

E-CRM Implementation Model for Small and Medium Enterprises in Developing Countries

Case Study: Village Power Uganda and Crystal Safaris



Uganda Martyrs University

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**E-CRM Implementation Model for Small and Medium
Enterprises in Developing Countries**

Case Study: Village Power Uganda and Crystal Safaris

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the Faculty of Science
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DEDICATION

This thesis work is dedicated to my wife, madam Babona, who has been a constant source of support and encouragement during the challenges of graduate school and life. I am truly thankful for having you in my life. This work is also dedicated to my parents, my late dad Anthony and my mum Bigwire Rose, who have always loved me unconditionally and whose good examples have taught me to work hard for the things that I aspire to achieve.

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In God we trust

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LIST OF ABBREVIATIONS

CRM	Customer Relationship Management
DOI	Diffusion of Innovation
E-CRM	Electronic Customer Relationship Management
ICT	Information Communication Technology
IS	Information Systems
IT	Information Technology
MPCU	Model of Personal Computer Utilization
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UTAUT	Unified Theory of Acceptance and Use of Technology

ABSTRACT

Several studies show that electronic Customer Relationship Management (e-CRMs) implementation have had a long history of failure (Myron, *et al.*, 2002; Sarkindaji, *et al.*, 2008; Almotairi, 2010; Mandic, 2011; Hashim and Abdullateef, 2013). The causes of failure have been cast in several directions. This study focused at the development of a model to improve Implementation of Electronic Customer Relationship Management (E-CRMs) in Small and Medium Enterprises. It investigated the challenges that SMEs in developing countries are facing in the implementation of e-CRMs. It also examined some of the commonly used IT Implementation models for e-CRMs with specific focus of identifying their strength and limitations. Based on the results of the examination, this study investigated the application of existing IT Implementation models/Approaches in developing an e-CRM Implementation model that is suitable for SMEs in developing countries.

Two case studies were selected for purposes of this study; Village Power and Crystal Safaris. These case studies were investigated with specific focus on gaining an in-depth understanding of the implementation of E-CRMs in Small and Medium Enterprises (SMEs). Questionnaires, focus group discussions, interviews and document analysis were the main instruments for data collection. Data was analyzed qualitatively using Colaizzi's 1978 framework for qualitative data analysis. The analysis of the results indicated that a number of factors that affect the implementation of technology were not well considered by these two case studies. Some of the challenges faced include; absence of risk managing planning, User resistance, insufficient resources, incomplete E-CRM roll out in the organization, insufficient assessment of the organization context, lack of- E-CRM implementation readiness assessment in the organization among others.

Based on the findings from this study, an E-CRM Implementation Model capable of improving the implementation of E-CRMs in SMEs was developed. In developing this model, focus was put on clearly specifying the different phases of E-CRM Implementation together with the key considerations for each phase. The Open Group Architecture Framework (TOGAF 9.1) was adopted as the overall guiding framework. Kwon and Zmud (1987) Implementation model was used as the foundation model for the development of the e-CRM Implementation model. The model that was developed by this study was evaluated for completeness using Likert's 5 Level rating scale. 12 e-CRM experts from Asia, Middle East and Africa participated in the evaluation exercise.

Though the proposed solution is expected to improve the implementation of E-CRMs for SMEs, there is need for ascertaining and confirming its ability and effectiveness in improving E-CRM implementation. In this regard, further research is needed to test and evaluate this model in live environments of various SMEs.

CHAPTER ONE: GENERAL INTRODUCTION

1.0 Introduction

World over, a number of Small and Medium Enterprises (SMEs) are struggling to improve relationships with their customers (Abu-Shanab & Anagreh, 2015). Customer Relationship Management (CRM) which is also commonly referred to as e-CRM due to the application of technology (Harrigan, Ramsey & Ibbotson, 2011) is now increasingly being considered by SMEs as one of the most critical activities for business success (Olupot, Kituyi and Noguera, 2014). Creating and maintaining relationships with customers is of particular importance for SMEs. Responding to customers with flexibility and adaptability is one of the key opportunities for SMEs to compete with large enterprises. In an effort to improve this relationship, SMEs have turned to the use of generic Internet-based technologies referred to as Electronic Customer Relationship Management Systems (e-CRM) (Harrigan, *et al.*, 2010). Despite the benefits that e-CRMs bring to SMEs, their implementation has not been very successful (King and Burgess, 2008; Almotairi, 2010; Garrido-Moreno and Padilla-Meléndez, 2011)

This study therefore, presents a model that can be used to successfully implement e-CRM in SMEs in developing countries. The model specifically focuses on assessment phase (pre-implementation), actual implementation, and post-implementation (measuring CRM performance). activities. Almotairi (2010) infers that one important factor for CRM implementation success is to approach the implementation process on the basis of phases instead of adopting CRM as one chunk. Kwon and Zmud (1987) Implementation model was used as the foundation model for the development of the e-CRM Implementation model. Several frameworks including; The Open Group Architectural Framework version 9.1 (The Open Group, 2011), Strategic Framework for Customer Relationship Management (Payne and Frow 2005), Eight Building Blocks of CRM: A Framework for Success (Radcliffe 2001), A framework of dynamic customer relationship management (Park and Kim 2003), The Priority Model for CRM System Success (Roh, *et al.*, 2005), CRM success framework (Richard, *et al.*, 2007), critical success factor model for CRM implementation (Silva and Rahimi 2007), CRM Strategy and Implementation Model (Payne and Frow 2006) were used to improve Kwon and Zmud Implementation model. To

gain an understanding of how e-CRMs are implemented in SMEs, this study made use of two case studies namely; Village Power Uganda and Crystal Safaris. Village Power Uganda (VP) is a Small and Medium Enterprise (SME) that provides modern energy solutions and a range of Solar Home Systems (SHS) between 10W - 1,000W to rural sub-saharan Africans. VP is affiliated to Swiss based company called Village Power AG (VP) that currently has operations in Uganda, Mozambique and Zambia. Village Power Uganda was launched in January 2014 and has the headquarters situated in Kampala. Hülsen, Koch and Huth, (2016). Crystal Safaris is a Tours and Travel Company, Small and Medium Enterprise (SME) that offers tailor made safaris to Uganda, Rwanda, Kenya, Tanzania and Zanzibar. Crystal Safaris was launched in 2003 and has 14 years of experience and has the headquarters situated in Kampala. These two small and medium enterprises were considered for this study because they have recently implemented e-CRMs.

This chapter presents the background, the statement of the problem, the general objective, specific objective, research questions, scope, significance, justification and definition of key terms.

1.1 Background of the Study

Customer relationship management (CRM) which is also commonly referred to as e-CRM due to the application of technology (Ortega, Martínez, De Hoyos, 2008) is one of the most critical activities of an organization. Payne and Frow (2005) broadly define CRM as “the cross-functional integration of processes, people, operations, and marketing capabilities that is enabled through information technology and applications”. Payne and Frow (2005) asserts that CRM objectives are to “creating improved shareholder value through the development of appropriate relations with important customers and customer segments”. The ability of CRM to create direct performance benefits for organizations has been widely documented by several scholars (Chen and Ching, 2007; Jayachandran, Sharma, Kaufman, and Raman 2005; Massad, Heckman and Crowston, 2006). Over the years, large firms have deployed dedicated CRM software applications as a practical means to build or extend their relationships with customers (Coltma, 2007; Massad, Heckman, and Crowston, 2006) and have realized tremendous benefits (Mohammed, 2013). SMEs have also not been left behind by this trend (Hülsen, Koch and Huth, 2016).

Small and medium-size enterprises (SMEs) have long been recognized as an important and integral part of every country's economy and are also the fastest-growing segment in most markets (Nasr and Pearce, 2012; Mwangi, Maina, Sejjaaka and Canney, 2014). To date there is no globally accepted definition of SMEs (Mouhallab and Jianguo, 2016). Kotelnikov and Kim (2010), defines an SME is a firm that employs a maximum of 250 people. According to OECD (2005) Small and medium enterprises (SMEs) is defined as independent firms which employ up to 250 employees. However, OECD notes that this number may vary across countries. Ernst and Young (2010) indicates that much as the definition of small enterprises is known, the definition of medium enterprises in Uganda is not well-known. This is because the upper boundary is not set as it depends mainly on the industry. However, the Bank of Uganda defines Small and Medium Enterprises as those employing 5 to 50 people "with the value of assets, excluding land, building and working capital of less than Ug.shs 50 million (US\$ 30,000), and the annual income turnover of between Ugshs.10-50 million (US\$6,000 - 30,000)" (Kasekende and Opondo, 2013). For this study, the OECD definition for SMEs shall be adopted.

Today, SMEs face a number of challenges that range from increased competition, rapidly changing market demands, technology change, and capacity constraints relating to lack of Information Communication Technology skills, poor infrastructure, lack of top management support, resistance to change, lack of knowledge, innovation, bureaucracy, tax disadvantage and creativity (Apulu, Latham and Moreton, 2013; Olupot, Kituyi and Noguera, 2014; Mouhallab and Jianguo, 2016). For many SMEs, their full potential has often not been fully realized due to factors that relate to their small scale. These factors include; lack of resources, lack of economies of scale, high transaction costs, limited networks and increased market competition from large multinational enterprises (Fatoki, 2014; Yoshino and Taghizadeh, 2016). Despite these substantial obstacles, many economies most especially in developing countries remain heavily dependent on SMEs particularly for employment generation (Harvie and Charoenrat, 2015). The process of globalization and regional integration has however not swept away SMEs but their role and contribution has over time changed and evolved. To address the challenges highlighted above, SMEs most especially in the developing countries have embraced e-CRMs. The e-CRMs that have been implemented in many of the developing countries have tended to take varying forms with multiplicity of features offering different services. Some of these include; ability to complain, e-

mail capabilities, information for first time users, mailing lists, chat rooms and bulletin boards among others (Feinberg and Kadam, 2002). In the developed countries however, the most applicable features of e-CRM include web technology features that addresses customers' needs to improve customers' loyalty and maintain better relationships with them (Harb and Abu-Shanab, 2009). In Uganda, most SMEs do not have web presence and as such the e-CRM features employed are not well known. These could possibly explain why the e-CRM Implementation rate in Uganda has remained low (Olupot, Kituyi and Noguier, 2014).

The Implementation of e-CRM most especially in the developing world has not been very successful. A survey that was conducted by InfoWorld about e-CRM customer satisfaction indicated that 77% of e-CRM projects fail to meet company goals (Apicella, 2001), The Economist Intelligence Unit puts the failure rate at 56% (Unit, 2007) while Forrester Research puts the failure rate at 47% (Band, 2008). Mandic (2011) reports that about 55-77% of e-CRM implementations are not successful and according to Sarkindaji, Richards and Jones, (2008) cited in Hashim and Abdullateef (2013) failure rate is at (70% to 90%), Myron, *et al.*, (2002) puts it at 60%. These statistics show that e-CRMs have had a long history of failure. Feinberg and Kadam (2002) suggest that e-CRM failure may be due to the implementation of features that executive believe affect customer satisfaction, but in reality, do not have any meaning at all. As a company become increasingly focused on customers and motivated by the demands of customers, the need to meet customers' expectations and retain their loyalty becomes important. Other causes of e-CRM Implementation failure as reported by Nguyen, *et al.*, (2007) include; lack of top management support, none aligning internal processes to organizational goals and focus on Return on Investment. Chalmeta (2006) points to thinking of CRM as a pure technology, lack of customer-centric culture, lack of readiness process and poor-quality data and lack of end-user involvement in design process as other causes of e-CRM implementation failures in SMEs in Developing countries. These factors had also been earlier highlighted by Kale (2004) who noted that Viewing CRM as a technology, lack of customer-centric vision, insufficient appreciation for customer life time value, poor support by top management, underrating the standing of change management, poor business process re-engineering and underestimating difficulties related to data mining and data integration were some of the critical factors affecting the successful implementation of e-CRMs in SMEs.

From the above discussion, it is clear that the implementation of e-CRM in SMEs in developing countries still face a number of challenges. Several IT Implementation models have been used in the implementation of e-CRMs in a number of SMEs in developing countries. These models include Technology Acceptance Model (TAM), Technology-Organization-Environment Model (TOE), Lewin's Change Model, Diffusion of Innovation Theory (DIO) Kwon and Zmud IT Implementation Model, Unified Theory of Acceptance and Use of Technology (UTAUT) and finally Information Systems Success Model. Despite the existence of these models, the implementation of e-CRMs in SMEs most especially in developing countries continue to fail (Feinberg and Kadam, 2002; Unit,2007; Band, 2008; Mandic, 2011). Most of these models do not address the aspect of difference in culture which is crucial to the successful implementation of e-CRMs. Secondly, these models do not clearly specify what must be done at each stage of the implementation process. There is therefore a need to conduct a study aimed at developing a model that can improve the implementation of e-CRMs in SMEs in developing countries. This will go a long way in improving the relationship between the SMEs and their clients hence increased customer satisfaction.

1.2 Statement of the Problem

The new global slump has hard-pressed SMEs to search for means to effectively and effectively manage their customers so as to remain competitive (Olupot, Kituyi and Noguera, 2014). These has led to the rise in the implementation of e-CRMs. However, as the e-CRMs see more prominence in the developed countries, many SMEs in the developing countries are finding it difficult to implement them. Studies on the Implementation of e-CRMs in developing countries have put failure rate of e-CRM implementation as high as 70% (Gray and Byun, 2001) between 50% and 70% (Morrel and Philonenko, 2001), from 60% to 80% (Kale, 2004). The Economist Intelligence Unit puts the failure rate at 56% (Unit, 2007) while Forrester Research puts the failure rate at 47% (Band, 2008). Mandic (2011) reports that about 55-77% of e-CRM implementations are not successful and according to Sarkindaji, Hashim and Abdullateef (2013) cited in (Richards and Jones, 2008) failure rate at (70% to 90%), Myron, *et al.*, (2002) puts it at 60%. The reason for failure of e-CRM Implementation as noted by several scholars include; viewing CRM as a

technology, lack of customer-centric vision, insufficient appreciation for customer life time value, inadequate support by top management, underestimating the importance of change management, poor business process re-engineering and underestimating difficulties related to data mining and data integration (Kale, 2004; Chalmeta 2006; Nguyen, *et al.*, 2007; Merkle Group, 2013; C5 Insight, 2014).

Looking at the problem of high failure rates of e-CRMs projects in SMEs in developing countries, it is clear that Implementation has been a challenge for quite some time. Several IT implementation models have been developed over the years but implementation failure rates continue to remain high. There is therefore a need to conduct a study that is aimed at developing a model that can be used to improve the implementation of e-CRMs in SMEs in developing countries. The model that will be developed by this is expected to address aspects of phased approach to implementation instead of one chunk, cultural diversity, stakeholder's involvement and business process re-engineering which are key to the successful implementation of e-CRMs most especially in developing countries. Secondly the proposed model will clearly specify what must be done at each stage of the implementation process. Most of the existing IT implementation models do not give clear guidance on what must be done at each stage of the implementation process. They only specify what must be thought about throughout the implementation process.

1.3 Research Objectives

1.3.1 Major Objective

The major objective of this study is to develop a model that will improve the implementation of e-CRMs in Small and Medium Enterprises of Developing countries.

1.3.2 Specific Objectives

- I. To investigate the challenges faced in the implementation of e-CRMs by SMEs in developing countries.
- II. To examine the IT Implementation models that are commonly used to implement e-CRMs in SMEs with a view of identifying their limitations.

- III. To Investigate the application of existing IT/IS Implementation models/Approaches and best practices in developing a model that can be used to improve the implementation of e-CRMs in SMEs in developing countries.
- IV. To evaluate the proposed model.

1.4 Scope of the Study

1.4.1 Geographical Scope

The study was conducted at Village Power Uganda and Crystal Safaris. VP is located at Village Power house, 31 Golf Course Road, Kampala, Uganda, while CS is located at Plot 433, Barnabas Rd, Kampala. At VP, the study was conducted in the Sales departments and the Customer care departments. As for Crystal Safaris, this study focused on Commercial and Customer Care units. The choice of these units within the chosen organization was based on the fact that they have not only been involved in the implementation of the respective e-CRM but are also currently using them.

1.4.2 Content Scope

This study focused on investigating the challenges that Village Power Uganda and Crystal Safaris faced in the implementation of their respective e-CRMs. Specific attention was put on understanding how the e-CRMs that are currently being utilized were implemented. This study also examined the IT implementation models that are commonly used in the implementation of e-CRMs in SMEs. The intention here was to identify the limitations of these models as far as the developing world context is concerned.

1.5 Significance of the Study

The benefits of e-CRM go across a broader range of business services, transactions, operations and performance. Most of SMEs are slowly appreciating the positive results of e-CRM as increased sales due to internet presence, better communication and linkages via electronic mail and efficient practices which improves coordination. This study is expected to benefit several categories of people including; owners, employees and customers of SMEs, Governments and researchers.

For owners, employees and customers of SMEs, the proposed model is expected to improve the implementation of e-CRMs. With the improved implementation of e-CRMs, SMEs are expected to experience effective communication with their customers, improved customization, improved market awareness, reduced marketing costs, improved loyalty of customers, increased sales capacity, increased profitability and performance. These will create customer base, competitive advantage hence boosting the growth of SMEs. With the growth of SMEs, Governments in the developing countries are expected to generate more taxes. It is also expected that the findings of this study will be used by future researchers to improve the implementation of e-CRMs in organizations. As for researchers, it is expected that the findings of this study will be used to carry out further research on the implementation of e-CRMs most especially in low resource settings.

1.6 Justification of the Study

SMEs play an important role in the development of the economy of developing countries (Abor and Quartey 2010) The recent global recession has pushed SMEs in developing countries to search for means to efficiently and effectively manage their customers so as to remain competitive (Olupot, Kituyi and Noguera, 2014). A number of SMEs most especially in the developing world are beginning to adopt e-CRM as a way of enhancing relationships with their clients (Sophonthummapharn, 2009; Rajan and Bhatnagar, 2009). Despite the benefits that e-CRMs bring to SMEs in developing countries, their implementation has had so many challenges. (Apulu, Latham and Moreton, 2013; Olupot, Kituyi and Noguera, 2014; Mouhallab and Jianguo, 2016). Mandic (2011) reports that about 55-77% of e-CRM implementations are not successful. Considering the high failure rate of e-CRM implementation in SMEs in developing countries, there is need to find ways of improving their implementation. This study is therefore one of the ways to tackle this problem.

1.7 Conclusion

This chapter laid down the foundation for this study by giving a background to the research problem (formulated in section 1.2) It also stated the objective of the study and the formulated research questions. A description of both the geographical and content scope were given. Brief statements on the significance and justification were also presented. Based on this foundation, chapter two, proceeds with a detailed review of all the literature related to the research problem.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

A lot has been written about e-CRM. This chapter presents a review of literature that is related to the research problem which shows that electronic Customer Relationship Management (e-CRMs) implementation have had a long history of failure (Almotairi, 2010; Mandic, 2011; Hashim and Abdullateef, 2013). This literature was used to gain a deep understanding of the concept under study. It will also be used to develop both the research instrument and the proposed solution to the research problem. It has been presented in sub-themes. The first section of this chapter looks at the challenges that SMEs in developing countries face in the implementation of e-CRMs. The second section gives a review of IT models that have commonly used in the implementation of e-CRMs. This chapter also gives a comparison of the commonly used e-CRM implementation models as well as the critical success factors for e-CRM implementation. An overview of IT/IS implementation frameworks and evaluation methods are also presented.

2.1 Definition of Key Terms as Used

In order to put the research into perspective, the key terms used and the context in which they are used are here given.

Customer Relationship Management (CRM): CRM is the integration of people, systems, and processes to attain customer fulfilment. CRM describes the strategic management of customer relationships using technological tools where appropriate. (Frow, *et al.*, 2011; Vella and Caruana 2012)

Electronic Customer Relationship Management (e-CRM): Electronic CRM is CRM that encompasses the use of technology to certify the organization objectives (Harrigan, Ramsey and Ibbotson, 2012).

Small and Medium Enterprises, (SMEs) : An SME is a firm that employs a maximum of 250 people. OECD defines Small and medium-sized enterprises (SMEs) as non-subsidary, independent firms which employ up to 250 employees. (OECD 2005; Kotelnikov and Kim 2010)

Model: A model is a pictorial or graphic representation of key concepts. It shows, (with the help of arrows and other symbols) the relationship between various types of variables e.g. independent, dependent, moderating, mediating variables etc. (Khan, 2015). It can also be defined as a systematic description of a system, a theory or a phenomenon that accounts for its known or inferred properties which may be used for further study of its characteristics. March and Smith, (1995) identify models with problem and solution statements. They are proposals for how things are or should be. Models Sets of propositions or statements expressing relationships between constructs.

Framework: A frame work is a real or conceptual guide to serve as support or guide, March and Smith, (1995)

E-CRM Implementation: Is a three phased approach which specifically focuses on pre-implementation, actual implementation, and post-implementation. Activities (Almotairi, 2010)

Actual implementation phase: Is where CRM is deployed. This stage focuses on applying the CRM success factors that enhance the success of CRM implementation and on linking these factors to CRM components to provide organizations with clear guidelines for responsibilities and structure for maintaining these factors (Almotairi, 2010).

Post-implementation phase; Provides a way for measuring CRM performance and to provide a feedback channel on CRM outcomes based on marketing and financial measurements (Almotairi 2010).

2.2 Challenges Faced in the Implementation of E-CRM by SMEs of Developing Countries

Although Electronic Customer Relationship Management was very useful in encouraging Small and Medium Enterprises' new goods, marketing existing goods, keeping their customers updated and distribution of information, most Small and Medium Enterprises faced challenges in implementing the technology. The topmost challenges were emphasized as absence of lack of Information Communication Technology skills, information about the Electronic Customer Relationship Management, lack of top management support and resistance to change, poor infrastructure (Olupot, Kituyi & Noguera, 2014), Each of these challenges have been discoursed hereunder.

Lack of knowledge about the Electronic Customer Relationship Management: Reynolds, Savage and Williams 2000; Mello, (2002) mentioned that for small businesses, mostly the owners and employees have limited technical knowledge or expertise and resources when it comes to implementing new technology in the organization. Lack of knowledge of Information Technology (IT) would led many organizations to postpone the implementation of the new innovation and may even influence the mindset of the owners that IT would not have any use to their organization. Insufficient resources will also cause CRM to fail midway as the cost for maintaining CRM system is reduced. These factors can be dodged by engaging experts in this field and provide adequate resources for a successful CRM system.

Lack of Information Communication Technology skills; Large organizations have enough resources to adopt ICT while on the other hand SMEs have limited financial and human resources to adopt ICT. Duan, *et al.*, (2002) identified lack of ICT skills and knowledge in SMEs as one of the major challenges faced by all European countries, particularly in the UK, Poland and Portugal, in their study. Houghton and Winklhofer, (2004) reported a sluggish reply of SMEs relating to acceptance of ICT. Shiels, *et al.*, (2003) found that characteristics of the firm and industry sector are contributory factors to the implementation and exploitation of ICTs by SMEs.

Kapurubandara *et al.*, (2006) have considered internal and external barriers that hinder implementation of ICT by SMEs in a developing country. The internal barriers include firm characteristics, owner manager characteristics, cost and return on investment, and external barriers include: social, infrastructure, cultural, legal, political and regulatory.

Poor infrastructure; There are very few studies about ICT implementation in developing countries Temtime, *et al.*, 2003; Kapurubandara, *et al.*, 2006; Mutula, *et al.*, 2006; Ssewanyana *et al.*, 2007; Yeh, *et al.*, (2007). Lal, (2007) investigating adoption of ICT in Nigerian SMEs, found that one of the major factors inhibiting ICT diffusion and intensive utilization is poor physical infrastructure. Olupot, and Mayoka, (2013) asserts that Infrastructure such as Hardware and software companies also need to improve infrastructure, particularly the e-commerce website to fix the bug problems and the slow pace of time that takes to use the website which has negatively impacted e-CRM Implementation.

Lack of top management support; Rogers (2010) stressed that top management support is the most important factor in creating a supportive condition and providing adequate resources for implementation of a new innovation. With the support of the higher management, CRM can be successfully implemented because funds used to maintain customer database, software and hardware are sufficient and employees will be given sufficient training to comprehend and deal with the complex system. In this challenging economy, the adoption of new innovation is essential as competition and tough rival increases (Mazurencu, Mihaescu and Niculescu-Aron 2007). By adopting CRM in an organization, it will help to create competitive advantage as businesses operation changes and able to outperform rival and get new businesses (Ramaseshan and Kiat 2008).

Mazurencu, Mihaescu and Niculescu-Aron (2007) pointed out that many board-level managers not dare to take the risk in adopting CRM in their organization because they do not know how and where to get started with this system and technology option also become one of the factor that the firms must consider when adopting new innovation. Board level managers should be clear of the form of CRM that suit their business so that the percentage of failure in implementing CRM system can be minimize. (Ramaseshan, and Kiat 2008) found out that top management support emerged

as the most important factor influencing adoption of CRM in SMEs followed by relative advantages. Other factors such as competitive pressure, government support, cost effectiveness and IT knowledge were found to be minor factors influencing adoption of CRM. All these issues must be considered when accepting CRM system in organization because every single factor will affect the implementation of CRM and cause major loss towards organization.

Resistance to change; Employee resistance is one of the major risks associated with e-CRM implementation. In most companies, e-CRM efforts often never get off the ground because they encounter such stiff resistance from IT. In some of those failed efforts, e-CRM is proclaimed a new cultural initiative. Similar to TQM in 1990s. It sounds great in theory. But what happens in practice is that management encounters so much resistance to Implementing e-CRM as a large change management initiative that it just fizzles out. A well-planned training program is one of the solutions to this. You cannot just put the system in and hope that people will figure it out by themselves. In order to eliminate or minimize the resistance to it, companies should also let the end-users become involved early in e-CRM implementation and spark a grass root movement (Xu, Yen, Lin and Chou, 2002).

In this way, people who are going to do the work will become evangelists for e-CRM. When you combine that movement with the top-down support from senior management, you can pull it off. Besides the end-users opinion are very important for defining the project requirement and design work flow (Robertswitt, 2000). It is also critical to involve the enthusiasts in each step of the development and testing, and to ask for their opinion and suggestion. Managing expectations as the key to acceptance.

2.3 Commonly Used IT Implementation Models for E-CRM

A number of theories are used in Information Systems research (Wade, 2009). The most used theories to explain user adoption and acceptance of technology are: the technology acceptance model (TAM), the theory of reasoned action (TRA), the theory of planned behavior (TPB), the unified theory for acceptance and use of technology (UTAUT), the diffusion of innovations theory (DOI) (Olivera and Martins, 2011) and the theory of Reasoned Action, The Priority Model for CRM System Success (Roh et al., 2005), CRM Strategy and Implementation Model (Payne and Frow 2006), Critical success factor model for CRM implementation (Silva and Rahimi, 2007). These are examined in the following subsections:

2.3.1 Technology Acceptance Model

The Technology Acceptance Model is generally considered as the most widely used model in the adoption and utilization of information systems in organizations (Lee, *et al.*, 2003 cited in Chang, *et al.*, 2010). The Technology Acceptance Model (TAM) as noted by Gagnon, *et al.*, (2010) was specifically developed to understand user's acceptance of information technology. The original version of TAM as observed by Gagnon, *et al.* (2010) is similar to the Theory of Reasoned Action, which discusses how attitude impacts behavior. However, latter versions of TAM differ from The Theory of Reasoned Action in that they decompose the attitudinal construct into two distinct factors namely; perceived ease of use and perceived usefulness. In our view, these two factors are key in influencing adoption and utilization of technology. Since the introduction of TAM in 1989, researchers have applied this model into several research streams (Chang *et al.*, 2010). These studies have culminated into two more extensions namely; TAM2 and TAM3.

TAM2 developed by Venkatesh and Davis (2000), added two more determinants to the original TAM: social influences and cognitive instrumental processes. The social influences include subjective norms and beliefs. On the other hand, the cognitive instrumental processes include job relevance, output quality, result demonstrability and perceived ease of use. TAM2 keeps the concept of perceived ease of use from the original TAM as a direct determinant of perceived usefulness. All of these additional elements are believed to influence the acceptance of technology. To give a further significance to 'perceived ease of use' TAM was further modified by Venkatesh and Bala (2008) to create TAM3.

They also added the dimensions of computer self-efficacy, perception of external control, computer anxiety and computer playfulness (Alomary and Woollard, 2015). Two variables have also been added, which are perceived enjoyment and objective usability. It is however important to note that TAM3 is constructed on a theoretical framework of four classifications which Venkatesh and Bala (2008) claim is a synthesis of all prior TAM research. These four classifications are individual differences, system characteristics, social influence and facilitating conditions Howard, *et al.*, (2010). TAM3 emphasizes that perceived ease of use is determined by computer self-efficacy, computer playfulness, computer anxiety, and perception of external control, perceived enjoyment and objective usability.

The perceived usefulness is determined by subjective norms, job relevance, result demonstrability and image. One challenge of using TAM3 to ensure technology acceptance is that it has too many variables and too many relationships between the variables. As a result, it can't be effectively utilized in real life situations to ensure the acceptability of a particular technology.

The models used for measuring technology acceptance, focus on volitional choices and were intended to explain only voluntary behaviour. However, it is clear that not all systems are used in volitional environments. As Brown *et. al.*, (2002) state: "When individuals must perform specific behaviours, the importance of their beliefs and attitudes as antecedents to the performance of those behaviours is likely to be minimized. They might not like performing the mandatory behaviour, but they do it anyway, because they are required to do so".

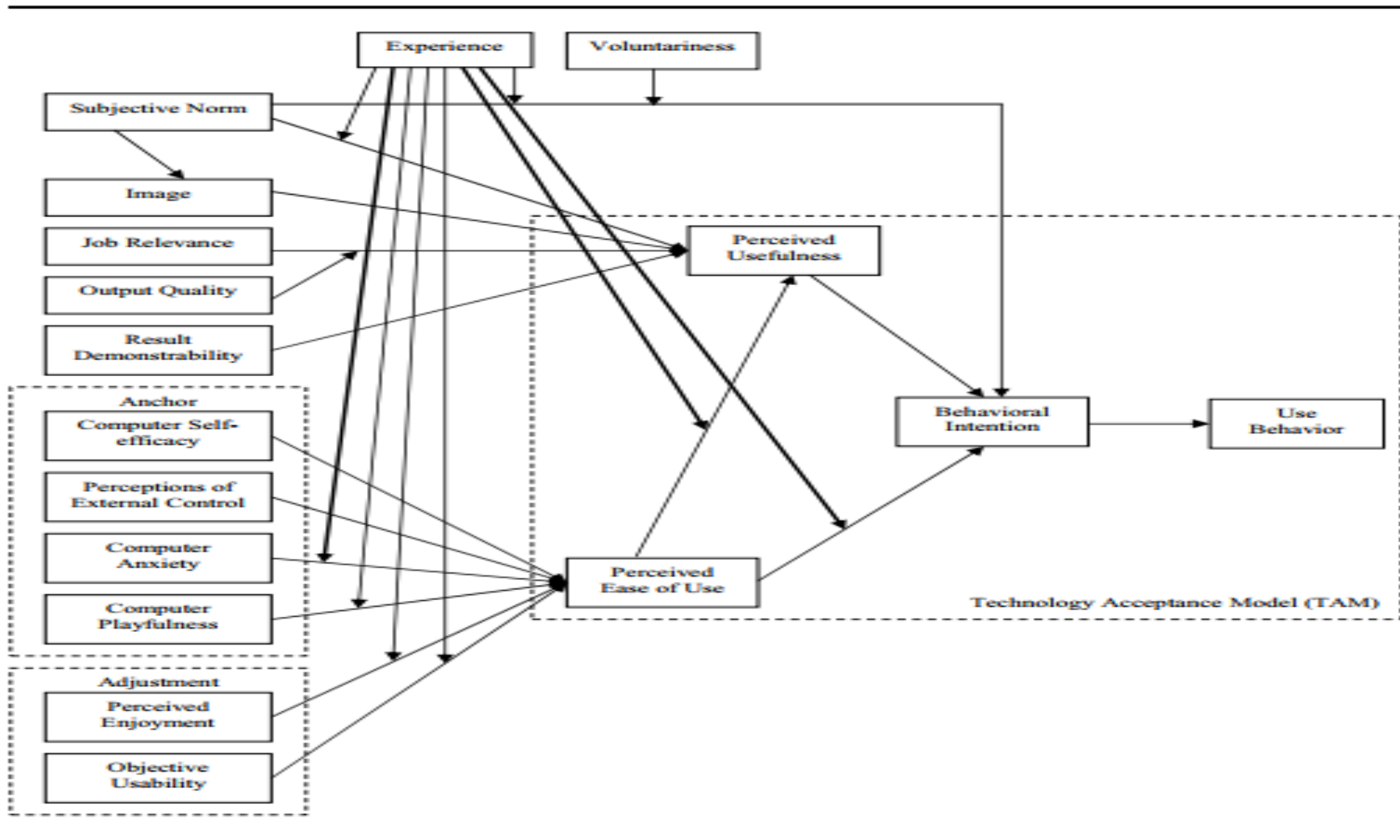


Figure 2:1: Technology Acceptance Model

Source: Venkatesh and Bala (2008)

2.3.2 The Theory of Planned Behavior (TPB)

Developed by Ajzen (1991), the theory of planned behavior is an improved version of the Theory of Reasoned Action by Ajzen and Fishbein (1980). TPB is used to study how a person's *intention* to use new technology is affected by his/her *attitude*, *behavior control* or *subjective norm*. According to Abugabah, Sanzogni and Poropat (2009), TPB is a successful model that has been used by researchers to predict behavior towards various situations such as new technology. The authors also suggest that TPB could be used to examine new technology adoption and utilization since it concentrates more on the user of the technology rather than the technology its self. However, Constantiou, Lehrer and Hess (2014) argue that the theory focuses on the intention to use the system rather than, actual use and the value of technology, which also largely determine technology adoption and utilization

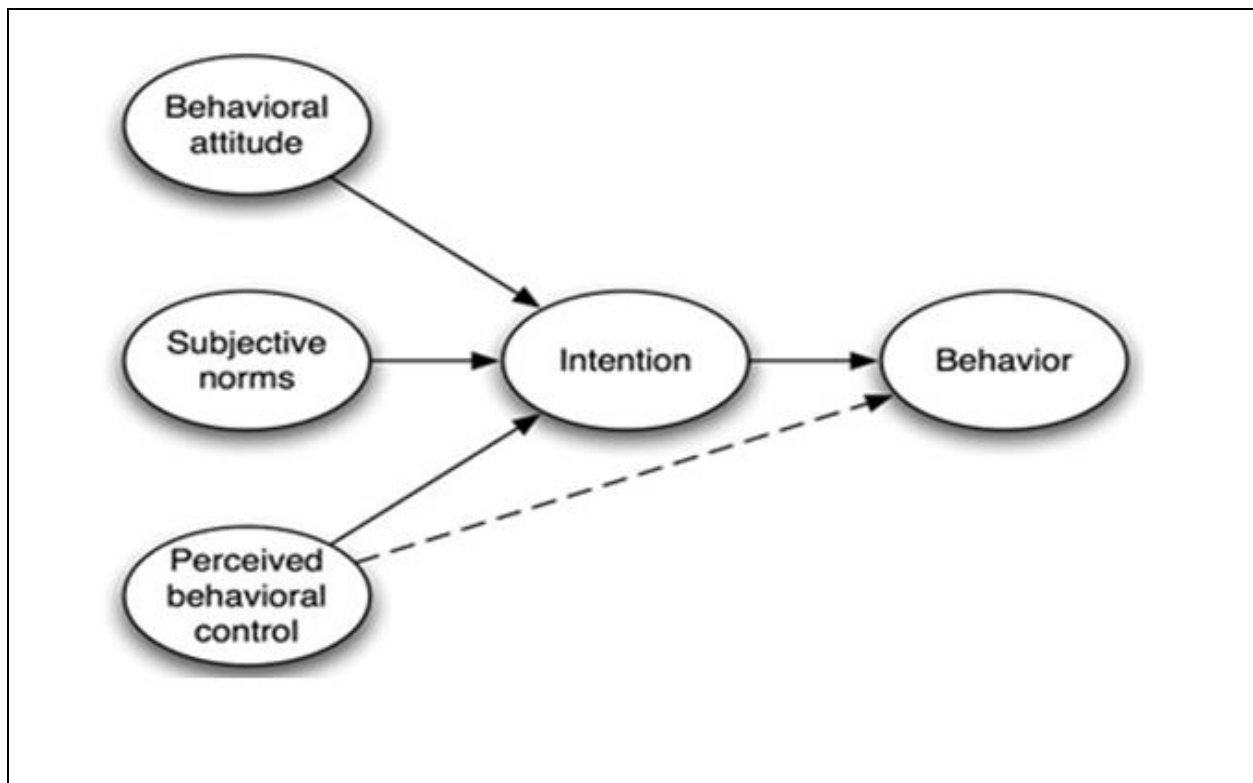


Figure 2.2: Theory of Planned Behavior

Source: Ajzen (1991)

2.3.3 Unified Theory of Acceptance Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a unification theory that was developed by Venkatesh, *et al.*, (2003) as an effort to further improve technology acceptance. UTAUT is an integration of eight acceptance models and theories which include TRA, TAM, the motivational model, TPB, combined TAM-TPB, the model of PC utilization, innovation diffusion theory and social cognitive theory.

According to Alomary and Woollard (2015) this model consists of four key elements that include; performance expectancy, effort expectancy, social influence and facilitating conditions. Performance expectancy is defined as 'the degree to which an individual believes that using a technology will help him or her attain gains in job performance' whereas Effort expectancy is defined as 'the degree of ease associated with the use of a technology. Social influence is on the other hand defined as 'the degree to which an individual perceives that important others believe that he or she should use the new technology and enabling situations is defined as' the mark to which an individual trust that an organizational and technical set-up exists to support use of the new technology (Morris *et al.*, 2003 cited in Alomary and Woollard, 2015). Apart from the four key main constructs, UTAUT also has three additional constructs namely; anxiety, perceived credibility and attitude toward using a new technology or innovation.

These constructs are however theorized not to be direct determinants of intention (Morris *et al.*, 2003). It is gender, age, experience and voluntariness of use that are presumed to mediate the impact of the four key constructs on usage, intention and behavior (Morris *et al.*, 2003). This model can be used in helping to predict how prospective users are likely to behave towards a new technology. However one criticism it has is that it has too many independent variables for predicting intention and behavior (Bogozzi, 2007). Despite the criticism, this model has been considered to be more robust than other technology acceptance models in evaluating and predicting technology acceptance (Venkatesh *et. al.*, 2003) which is a key element in effective adoption and utilization of an innovation.

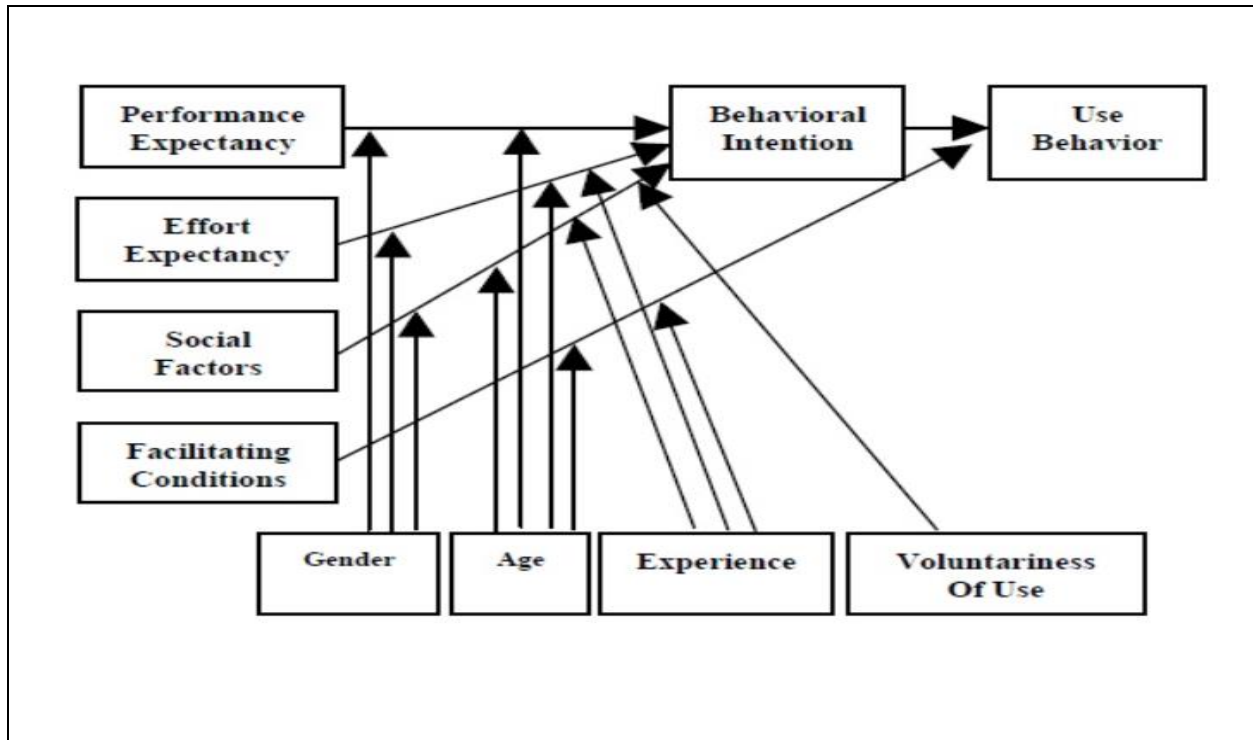


Figure 2.3: Unified Theory of Acceptance and Use of Technology

Source: Venkatesh et al. (2003)

2.3.4 Diffusion of Innovation Theory (DOI)

The process of taking-on new inventions has been studied for some time and one of the most widespread adoption models as defined by Rogers (2003) is the Diffusion of Innovations theory (DOI) (Sahin, 2006). This theory has been used as a framework in a number of disciplines including political science, public health, history, economics, communications and technology among others (Stuart, 2000 cited in Sahin, 2006). Roger's DOI has been found by some scholars as the most appropriate model for the adoption of technology in organisations (Medlin, 2001 cited in Sahin, 2006). Rogers (2003) sees acceptance as a decision of complete use of an invention as the best course of option available and rejection as a decision not to take-on an innovation. Rogers' innovation theory decomposes the diffusion of an innovation in terms of the innovation, communication channels, time and social systems. The key components of Roger's theory are discussed here under.

Innovation:

Rogers (2003) describes an innovation as an idea, practice or project that is perceived as new by an individual or as a unit of adoption. According to Rogers, an innovation may have been invented long time ago but if individuals perceive it as new then it may still be an innovation for them. In our view, this perception by the prospective users of an innovation has a critical impact on the acceptance and eventual utilization of an innovation. Uncertainty is an important obstacle to the adoption of any technology. A new technology may create uncertainty among individuals or an entire social system especially if they are unaware of the impact that the new technology may have on their work routines and control. In order to reduce uncertainty of adopting an innovation, it is important that individuals are informed about its consequences. Consequences can be classified as desirable or undesirable (Rogers, 2003). This makes them aware of all the advantages and disadvantages of the innovation and therefore allows them time to prepare for change. This need for awareness is in line with what is emphasized in the Unfreezing stage of Lewin (1947) Change model.

Communication Channels:

The second component of Rogers' DOI is the communication channel. Rogers (2003) defines communication as a process in which participants create and share information with one another in order to reach a mutual understanding. Rogers' perception of communication is in line with what Bouman *et al.* (2005) defines as communication. The two authors observe that for communication to take place, a channel must exist. In order for a technology to be effectively adopted and utilized, there is need for effective communication between the promoters of the technology and the individuals or social systems. Many times, innovations have either been resisted or under-utilized because of poor understanding of their value.

Time:

Rogers (2003) observes that the time aspect is normally ignored in the diffusion of most innovations. He argues that the time aspect should be included in all diffusion of innovations projects. This is because the innovation-diffusion process and the rate of adoption all include a time dimension. The rate of diffusion of a technology is normally influenced by the characteristics of the individuals within a social system. Innovators, (individuals who engage in research and search of new ideas or those who often adopt new technologies at an early stage), early adopters (individuals who adopt technology at a relatively early stage), early majority (individuals who adopt the technology at the rate of an average person or organisations), late majority (those often skeptical about whether the technology works and often wait till the average persons have adopted the new technology) and the laggards (a conservative group that are often suspicious of the new technology and may adopt the new innovation at a much later stage) all adopt new innovations at

different rates. It is for this reason that we argue that promoters of new innovations must always factor in the characteristics of the various adopters when determining the time it will take for the diffusion of the innovation. This is in line with what is suggested in Lewin (1947)'s Change model that the Freezing stage should not be rushed. However, it is important to note that the rate at which technology becomes obsolete keeps rising every other day and therefore promoters of new innovations should have it in mind when planning technology diffusion.

Social system:

The last component of the Rogers' DOI is the Social System. Rogers (2003) describes a social system as a set of unified units involved in joint problem solving to accomplish a common goal. Since the diffusion of innovation takes place in a social system, it is normally influenced by the structure of the social system. The characteristics of the different individuals within a social system have a bearing on the adoption and utilization of an innovation. This is further emphasized by Rogers (2003) who claims that the nature of a social system affects the rate of diffusion of an innovation. Therefore it is important that in the process of diffusing an innovation, focus is put on the skill set and behavioral traits of the different individuals within the social system.

Diffusion of innovations theory is often simplified to concentrate solely on a product or innovation. Little attention has been paid on the complex cultural, economic, technology and other factors that determine how the product is adopted into society. Diffusion research focuses only on a few selected innovations and often fails to advance to draw important conclusion on the larger theory.

2.3.5 Theory of Reasoned Action (TRA)

The Theory of Reasoned Action (TRA) was first formulated by Ajzen and Fishbein in 1975 and later improved in 1980 (Ajzen and Fishbein, 1980 cited in Alomary and Woollard, 2015). TRA resulted from an attitude research that tried to estimate the discrepancy between attitude and behavior. The key fundamentals of TRA come from the field of social psychology. Social psychologists tries, among to explain how attitude affects behavior, which in our view is equally very important in the adoption and utilization of a technology or an innovation.

TRA has been widely used in technology adoption as well as in a number of other research studies as a foundation to such studies. It was used to a certain extent as a starting point for other theories such as the Technology Acceptance Models (Alomary and Woollard, 2015) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Otieno et. al., 2016).

TRA can be extended to conceptualize the human behavioral pattern in the decision-making strategy on the adoption and utilization of a new innovation or technology which happens to be the focus of this study. It is capable of explaining whether individual behavior such as utilization of new innovation is driven by behavioral intentions, where behavioral intentions is a function of an individual's attitude towards a technology.

It is however important to note that TRA has not been extensively utilized in the evaluation of technology adoption and utilization (Otieno *et al.*, 2016) but has mainly been used in finding user actions and attitudes in issues to do with online purchase, Internet use, security, household computer use, and online privacy, and trust (Ajani,1991 cited in Otieno,2016). Social psychologists suggest that attitude influences behavior and that attitude and behavior are positively correlated, giving the reason for applying TRA in the adoption and utilization of technology.

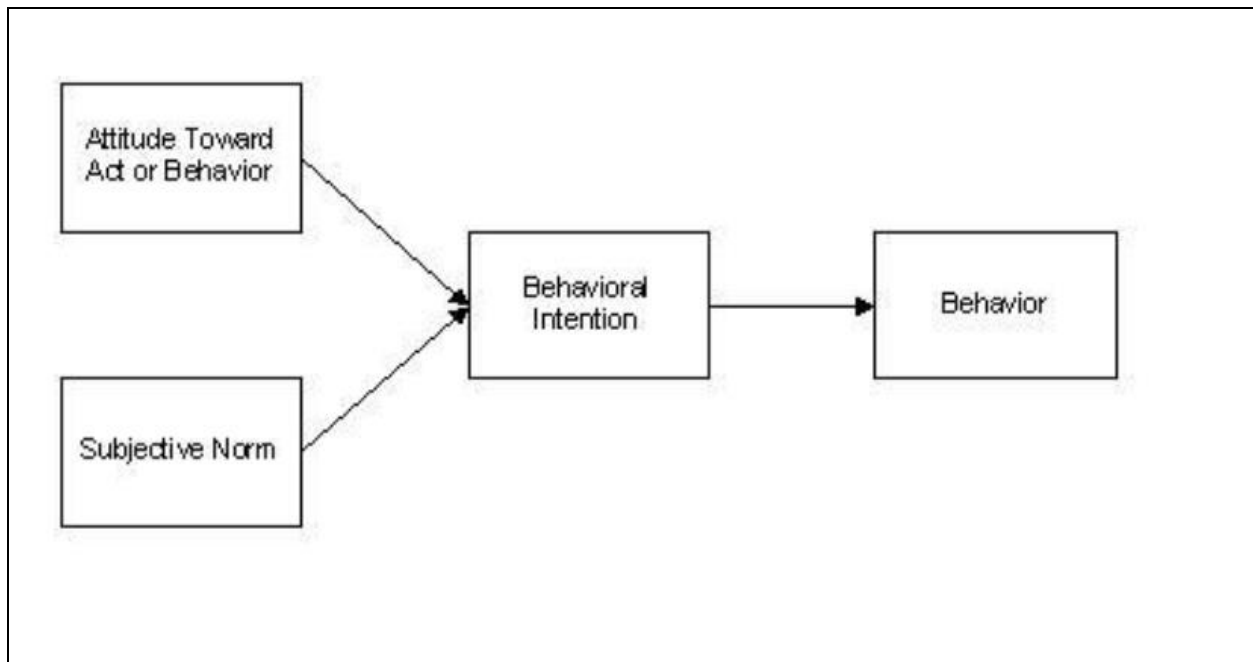


Figure 2.4: Theory of Reasoned Action
Source (Fishbein and Ajzen, 1975)

2.3.6 The Priority Model for CRM System Success

The model was developed by Roh *et al* (2005). Targeting to examine variables that influence CRM systems success, the model was built based on three components: first, CRM initiatives: process fit, customer information quality, and system support; second, intrinsic success: efficiency and customer satisfaction; and third, extrinsic success: profitability as shown in Figure 2.4. The model focuses on the casual relationship among these three initiatives and examines the relationship among these constructs.

The model offers expressive suggestions for developing multi-dimensional measures of factors that affect the success of CRM. Unlike previous frameworks, the priority model discussed and measured the success factors that influence CRM implementation. On the other hand, the model did not provide a wide range of success factors that influence whole organizations as CRM is considered an organization-wide project that has a strategic nature. In addition, the model limited extrinsic success on effectiveness and ignored other success extents that assess the performance of the CRM implementation such as the market share. Finally, the model has not contributed to the measurement of the implementation process in different stages/phases as an on-going project.

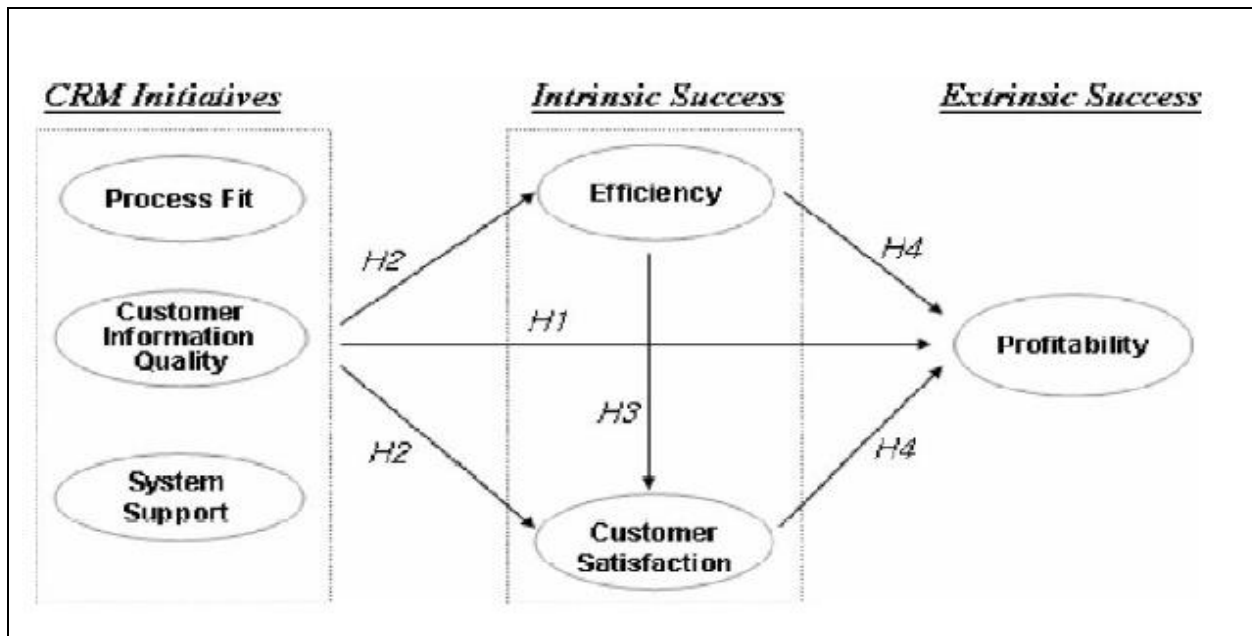


Figure 2.5: The Priority Model for CRM System Success

Source: Roh et al., (2005)

2.3.7 CRM Strategy and Implementation Model

Additional involvement in the field of evolving a CRM framework was steered by Payne and Frow (2006). Similar to the previous framework provided by the same authors, the framework for CRM implementation addressed the scope of strategic CRM and the need for developing its strategy. Adding to the initial framework, the researcher further made an addition of a valuable stage of readiness assessment which is a requirement for organizations before getting involved in the process of implementing CRM. As it was pointed out in the causes of CRM failure, such a stage would reduce the failure percentage and enhance CRM success by ensuring the availability of CRM requirements. In addition to the CRM readiness assessment stage, the five processes took place. In this framework, the authors combined the processes of: value creation, multi-channel integration, and information management as enabling processes. Additionally, employee engagement was emphasized on as shown in figure 2.7. The framework delivers the greatest form of framework to support the definition of CRM as stated in this research. There is still a requirement for settling CRM success more clearly in terms of linking these success factors to CRM components as well as the need for measuring CRM success from different perspectives as an indicator for implementing the success factors efficiently.

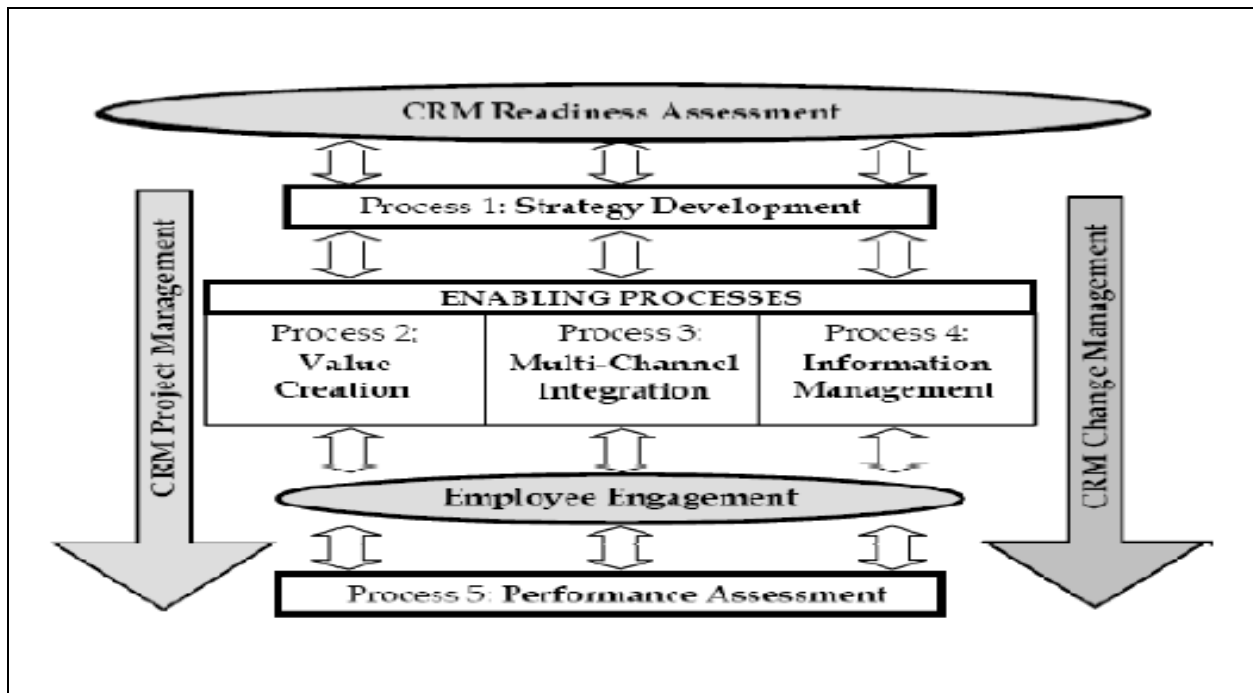


Figure 2.6: CRM Strategy and Implementation Model
Source: Payne and Frow (2006)

2.3.8 Critical Success Factor Model for CRM Implementation

Assimilating critical success factors within a CRM framework was a technique taken by a number of researchers. For example, Silva and Rahimi (2007) developed a critical success factor model for CRM implementation. The model was built on base of assessing required factors for CRM success and drawn from Critical Success Factors (CSF) model in Enterprise Resource Planning (ERP) implementation and project management (PM). Based on Somers and Nelson’s (2001); Holland and Light (1999); Slevin and Pinto’s (1987) models, the CSFs model for CRM identified 13 critical success factors within two categories as shown in figure 2.6:

<i>Strategic CSF</i>	<i>Tactical CSF</i>
CRM philosophy	Client consultation
Project mission	Connectivity
Top management commitment	Skilful personnel
Project schedule and plan	Technical tasks
	Client acceptance
	Monitoring and feedback
	Communication
	Troubleshooting
	BPS and software configuration

Figure 2.7: critical success factor model for CRM implementation

Source: Silva and Rahimi (2007)

The study provided an understanding method to addressing victory in implementing CRM. In illustration, it explored three important terms: CRM, ERP, and CSFs. Nevertheless, analyzing the framework reveals some limitations. The study did not provide any path of integrating the CSFs into the implementation process as it only listed a number of CRM success factors with no logical linking of these factors to the CRM implementation process. It also did not adequately explain the choice of the identified CSFs rather than their linkage with successful ERP implementation.

2.4 Comparison of the Commonly used IT Implementation Models for E-CRM

The models were compared on the basis of constructs that determine individuals' intention to use the system, the level of application and the development intention as illustrated in the following *table 2.1*:

Table 2.1: Comparison of commonly used IT Implementation models for e-CRM

Model	Development Intention	Constructs	Limitations	Author
Theory of Reasoned Action (TRA)	Prediction and explanation of individual Behaviour	Subjective Norm Attitude towards behavior	Does not explain how the decision to a particular behavior is arrived at	Ajzen and Fishbein (1980) Botha and Atkins (2005)
Theory of Planned Behavior (TPB)	Understanding human attitude and predicting behavior	Subjective Norm Attitude towards behavior Perceived behavioral control	Assumes people are rational and will make decisions based on the common good. Ignores other factors such as economic, demographics and personality Timeframe between the intention to perform a certain behavior and the actual behavior is not addressed.	Ajzen (1991) Venkatesh et, al. (2003) LaMorte (2016)

Technology Acceptance Model	Evaluation of IT Acceptance and Use	Perceived Ease of Use Perceived Usefulness	Does not provide a mechanism for measuring actual IT usage Different interpretation of defined constructs by different researchers	Venkatesh et, al. (2003) Lee et, al. (2003) Holden and Karsh (2010)
Unified Theory of Acceptance and Use of Information Technology	To explain user intention of an IS and subsequent usage behavior	Performance Expectancy Effort Expectancy Social Influence Facilitating Conditions	Not known	Williams, Rana and Bwivedi (2015) Venkatesh et, al. (2003)
Diffusion of Innovation Theory (DOI)	Explains how, why and at what rate new ideas and technology spread through cultures operation at individual and firm level.	Communication channels Social Systems	Focuses on individual adopters and ignores other factors such as social structures Associates innovation with progress while ignoring other possible means of resolving the problem	Rogers (1995) Olivera and Martins (2011) Botha and Atkins (2005) Kole (2000)

2.5 Critical Success Factors for E-CRM Implementation in SMEs of Developing Countries

The CSFs have received increased popularity in different fields of study and have been cited by many researchers such as Holland and Light (1999) ,Slevin and Pinto (1987) and Da Silva and Rahimi (2007). Thus, identifying CRM success factors is a critical issue to ensure successful implementation but more importantly it is required to link these factors to implementation process and manage them. In order to find the CSFs for CRM implementation it is important to define what success factor means. According to Pan, Ryu and Baik, (2007), the success factors is defined as the generic ingredient that has to be the essential part of any successful CRM implementation. Besides, Esteves and Pastor, (2001) have identified that success factors are: “the limited number of areas that when satisfactory will successfully improve the organization’s competitive performance”. However, according to Croteau and Li (2003), there is no one universal procedure to collect and analyze CSFs. Hence, many research studies have applied diverse methods to identify these factors such as interviews followed by questionnaires and others.

These success factors varied from wide and general to more specific and technical ones. Table 1 summarizes the CSFs applied to the SMEs context in two categories: organizational success factors and strategic/technical success factors. Organizational CSFs are related to those tasks that have to be established by the top management or senior executives; while strategic/technical CSFs are related to those tasks that have to be performed by the IT specialist or professionals guided by a manager who leads the established strategy. It is clear that the main objective of CRM research in the SMEs context is focused on establishing it in a simple and practical manner from the beginning and supporting it later with systems integration and task specialization. However, the adoption of a CRM software tool in any SME strongly depends on the cultural factors and economics of the country; thus it is impossible to state that the CSFs identified in Table 2: could be adopted in any environment. However, they can be considered as “base characteristics” that can be useful to start the development of a software tool for supporting CRM implementation, and later be complemented with others that address the peculiarities of the industry where it will be applied Almotairi (2010).

Table 2.2: Summary of previous studies on CRM success factors in SMEs CRM

Variable	Source
Organizational CSFs	
System architecture	Alt and Puschmann, (2004)
Motivate staff	Chalmeta, (2006)
Top management commitment; Customer service; Customer information management; Information Systems integration; Customer contact management	Mendoza, Marius, Pérez and Grimán, (2007)
Communication	Da Silva and Rahimi, (2007)
Employees acceptance; Organizational culture	Eid, (2007)
Customer involvement	Pan, Ryu and Baik, (2007)
Willingness to share data	King and Burgess, (2008)
CRM processes clearly defined; Technological formation	Pan, Ryu and Baik, (2007)
Keep old customers, identify new customers; Establish training mechanisms	Min, Hui and Xuwen, (2011)
Strategic/technical CSFs	
Align business and IT operations; Measure, monitor, and track	Mankoff, (2001)
Top management support	Goodhue, Wixom and Watson, 2002; Croteau and Li, 2003
Gain board awareness of strategic potential of IT; Organize around customer	Wilson, Daniel and McDonald, (2002)
Software customization	Siebel Systems, (2004)
Systems integration	Chen and Chen, (2004)
Customer information quality	Roh, Ahn and Han, (2005)
Understanding of customer behavior; Extensive IT support	Salomann, Dous, Kolbe. and Brenner, (2005)
Interdepartmental integration, Sales automation	Zheng, Pan, Ren and Fang, (2008)
Customer satisfaction	Yanhua and Shaojie, (2008)

Under this premise, CRM has been globally implemented by organizations from different economics and regions. Comparing the availability and richness of literature related to the CRM implementation in developed countries with the availability of such literature in developing countries, there is a gap that is favourable to the first ones. However, and according to Ali, Brooks, Alshawi and Papazafeiropoulou, (2006), a lack of literature exists related to global CRM implementation and the impact of the cultural factors. In general, it is possible to affirm that a lack of research studies exists about CRM implementation in developing countries and, consequently, a lack of frameworks that manage the CRM implementation in these countries and that recognize, at the same time, their cultural differences with the developed ones. Nevertheless, research by Wagner, Cheung, Lee and Ip, (2003); Al-Alawi, 2004; Ozgener and Iraz (2006), Achuama and Uoro 2010, Altomairi 2010; Sanzogni, Whunghuriya and Gray, 2008, enable us to identify some common barriers that can affect CRM implementation in developing countries organizations.

2.6 Theoretical Frameworks

Frameworks for e-CRM implementation have received considerable academic attention in the recent years (Payne and Frow, 2005; Gartner, 2001; Park and Kim, 2003; Richard et al., 2007; Haren, 2011). As a response to the need to address the issue of the high failure rate of CRM projects, many researchers have developed a series of frameworks for e-CRM implementation. Also a number of IT Implementation frameworks such as TOGAF has been developed not only to improve implementation of e-CRM but also other IT solutions. The importance of these frameworks is coming from the fact that the absence of developing CRM frameworks in which to achieve success, could contribute to the disappointing outcomes of CRM implementations (Grabner-Kraeuter and Moedritscher 2002). For purposes of this study, we reviewed the e-CRM frameworks listed in table Table 2.3 hereunder. The decision to review these frameworks was motivated by the fact that they are the most commonly used e-CRM implementation frameworks (Almotairi, 2010).

Table 2.3: CRM frameworks

Framework	Scholar	Focus
Strategic Framework for Customer Relationship Management	Payne and Frow (2005)	Strategic CRM key cross-functional CRM processes
Eight Building Blocks of CRM: A Framework for Success	Gartner (2001)	Strategic CRM CRM success components
A framework of dynamic customer relationship management	Park and Kim (2003)	Customer information Management
CRM success framework	Richard <i>et al</i> (2007) CRM	Success Technology adoption Customer relationship Strategy
The Open Group Architectural Framework (TOGAF 9.1)	The Open Group (2011)	Any organization wishing to align its business processes with Information Technology

2.6.1 Strategic Framework for Customer Relationship Management

Payne and Frow (2005) as cited in Almotairi (2010) have developed a strategic framework for CRM. The framework is an attempt to get a clear understanding of CRM at its strategic level by focusing on determining the key cross-functional for CRM implementation. The tactical nature of CRM was emphasized in order to overcome the problem, considering the narrow definition of CRM as a pure technological concept. To achieve the research's objective, the researchers have identified five processes: five key cross-functional CRM processes: a strategy development process, a value creation process, a multi-channel integration process, an information management process, and a performance assessment process. Figure 2.1 illustrates the framework.

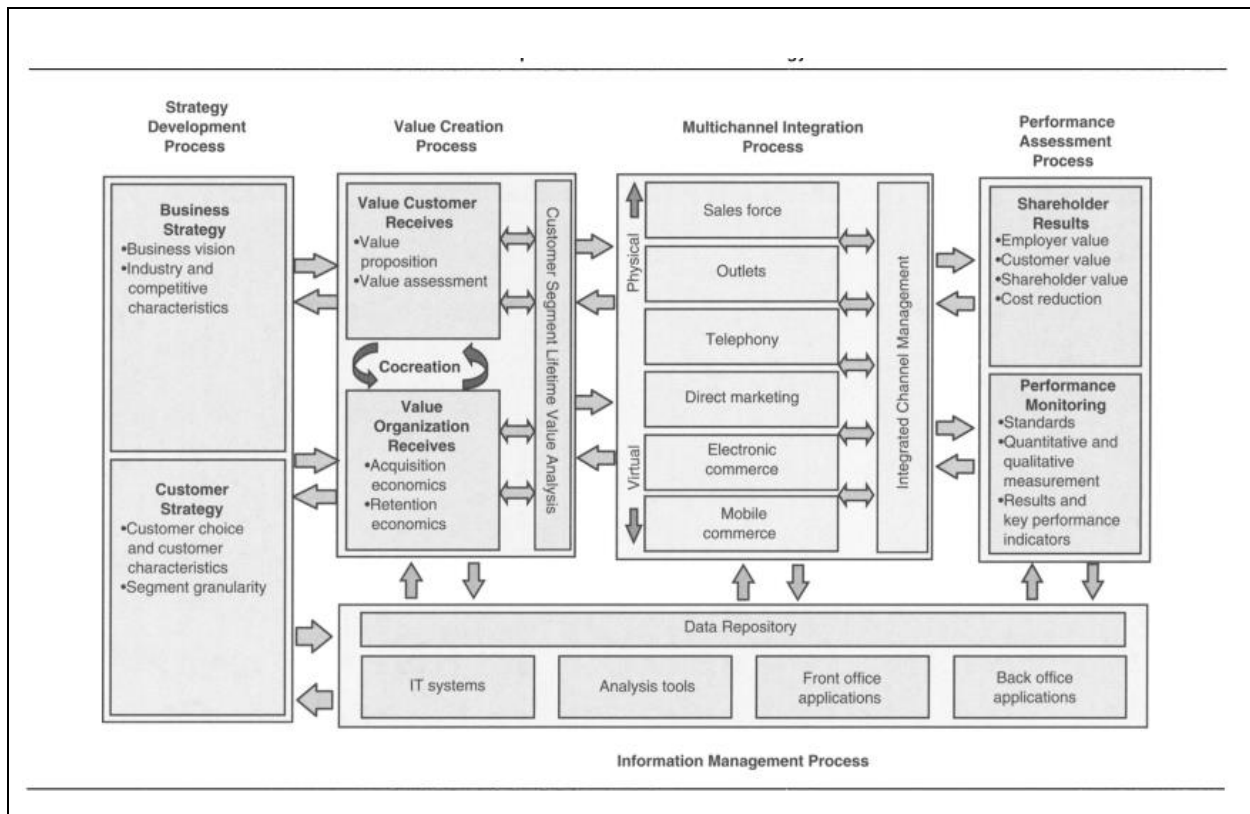


Figure 2.8: Strategic Framework for Customer Relationship Management
Source : Payne and Frow (2005)

Although the framework has brought the concept of the CRM strategy to the attention of managers and has gone in details on explaining the important processes of the CRM, it has not combined the required factors to ensure the success of the CRM implementation except for considering the strategy process. Nevertheless, the framework was limited to large-sized organizations in terms of not addressing issues related to small- or medium-sized organizations in addition to non-profit organizations. As a result, the framework provided a rich but yet complicated base for CRM implementation at the cost of focusing on some basic phases that are needed by smaller and less complicated organizations.

2.6.2 Eight Building Blocks of CRM: A Framework for Success

Gartner, (2001) the pioneer of CRM, published a CRM framework called “Eight Building Blocks of CRM: A Framework for Success” in 2001 and then published a management update of the framework on 2003. The framework combines eight blocks or components for CRM success, namely: CRM Strategy, CRM Vision, Organizational Collaboration, CRM Processes, Valued

Customer experience, CRM Information, CRM Technology, and CRM Metrics. Supporting the framework of Payne and Frow (2003), Gartner's framework emphasizes the need to consider the role of CRM strategy as a major key factor that determines the success of CRM implementation.

According to the framework, business enterprises need to adopt the approach of considering CRM as a business strategy involving the whole business and therefore should be approached at an enterprise level. In addition, the framework addressed the need of organizations to create a balance between the requirements of the enterprise and the customer by linking the customer's experience and organizational collaboration. An important contribution for the framework is addressing the need of the assessment of the existing capabilities and defining the requirements for CRM implementation. Despite the worth of the framework in inner education and debate in developing CRM strategy, the framework did not specifically identify success factors related to CRM components that are needed to ensure CRM implementation success.

Additionally, the framework did not provide sufficient explanation for CRM implementation phases and the path of the implementation process. Figure 2.2 shows the framework. However, the framework did not method the need of structure redesign and the need of feedback on the CRM routine.



Figure 2.9: Eight Building Blocks of CRM: A Framework for Success

Source: Gartner (2001)

2.6.3 A Framework of Dynamic Customer Relationship Management

Customer information system as a bottom-line for developing a CRM framework was the method deployed by Park and Kim (2003). Their framework aimed to link marketing with information strategy. According to the framework managing customer relationship depends on identifying customers as they can be classified into “identified” and “core” customers. Phases of the framework are three which includes acquisition; the organization finds its customers by collecting data about them; retention, the company turns ordinary customers to important customers by building impartial relationships through relation value analysis; third is that of expansion; customers play the role of expanding the company’s customer base. Even though the framework emphasized the use of defining customers and built a solid system for customer information, it did not approach the success factors of CRM implementation. It also is limited in scope on the components of CRM, particularly components such as the human and organizational factors were not addressed. Figure 2.3 shows the framework.

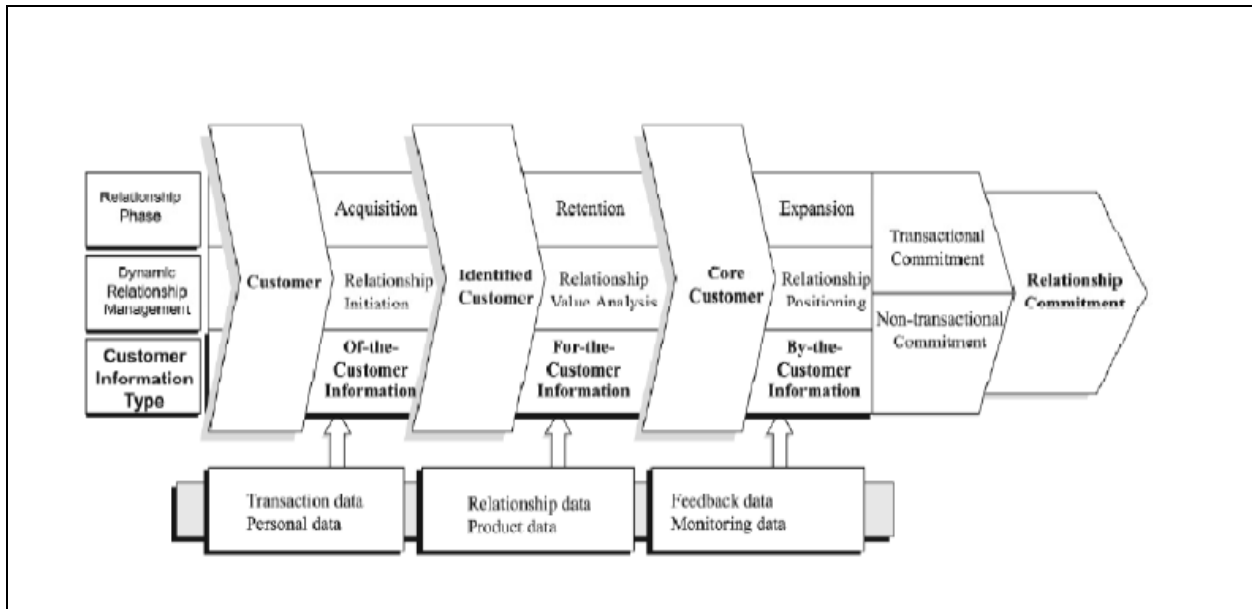


Figure 2.10: A framework of dynamic customer relationship management

Source: Park and Kim (2003)

2.6.4 CRM Success Framework

Another framework that replicates the emphasis on the practical nature of CRM was provided by Richard *et al* (2007). The framework offers a model for observing variation in CRM technology contribution. According to the study, companies that are more market – oriented and more technology – oriented are more successful in adopting more appropriate CRM technology and implement that technology more successfully than organizations that are less market and technology oriented. As shown in figure 2.5, the framework links the market orientation with technology adoption and with the overall relationship strength between the firm and the customer positively. It also links the level of CRM technology adoption with the overall relationship strength with the customer and with the relationships performance positively. It finally correlates relationship strength positively with relationship performance.

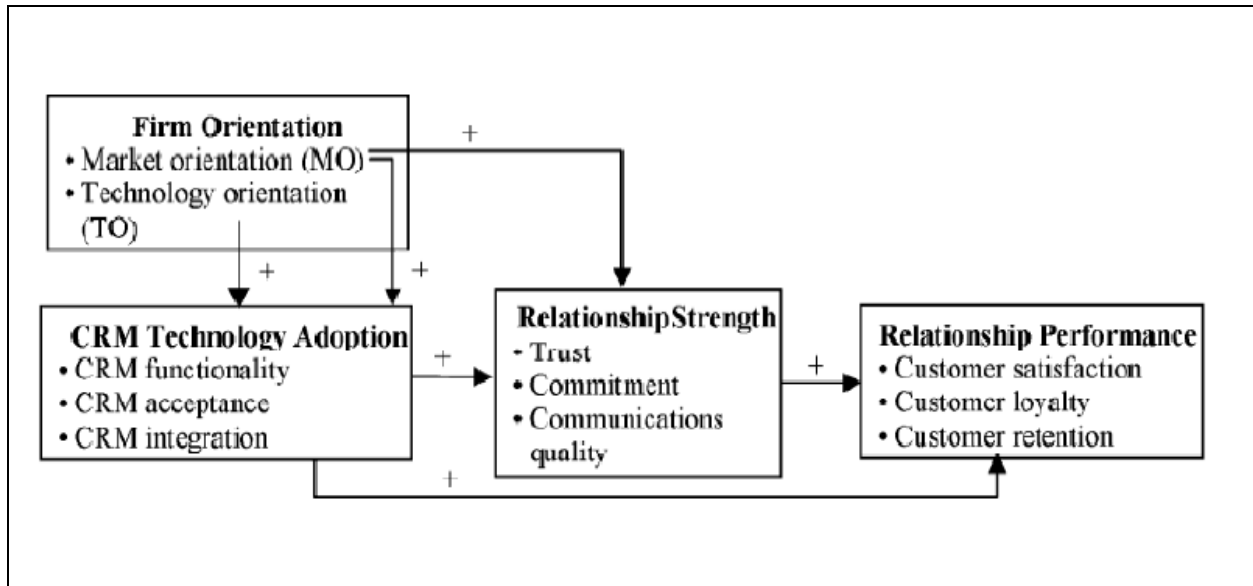


Figure 2.11: CRM success framework

Source: Richard et al (2007)

The framework set a base for forthcoming implementing CRM as a technological tool with some suggestions for market location. However, the model was only limited on two types of orientations market and technology and was not based on the most important orientation that is based on the customer. The framework did not offer a wider scope of pending CRM as business strategy. Finally, the success factors influencing CRM success was not highlighted in the framework.

2.6.5 The Open Group Architectural Framework (TOGAF 9.1)

The Open Group's Architectural Framework is presently taken as one of the extensively used IT frameworks (ARIS, 2009). This framework allows corporate architects and stakeholders alike, to design, build and evaluate a flexible IT architecture for an enterprise (Minoli, 2008). TOGAF is intended to care for the following architectures: Application, Data, Business, and Technology (Minoli, 2008). TOGAF describes itself as a 'framework', but it is crucial to note that the framework's most prominent segment is its recipe for creating an IT architecture, namely, the Architecture Development Method (ADM). TOGAF is considered as an outstanding tool for business because of its comprehensive approach, depth and simplicity (Raynard, 2008). In contrast to other EA frameworks, TOGAF emphasizes on offering a practice that enables the creation of an IT architecture, while it "provides less detailed information concerning the result of the architecture products" (Ota and Gerz, 2011).

2.6.5.1 TOGAF's ADM

As previously mentioned, one of TOGAF's key elements is the Architecture Development Method (ADM), which states the process for developing an EA project (Tang, Han and Chen, 2004). TOGAF's ADM focuses on developing an organization-specific Enterprise Architecture that addresses business requirements (Minoli, 2008). This ADM provides a reliable, proven way of developing the architecture and architectural views that enable the architect to ensure that a complex set of requirements are adequately addressed (Minoli, 2008).

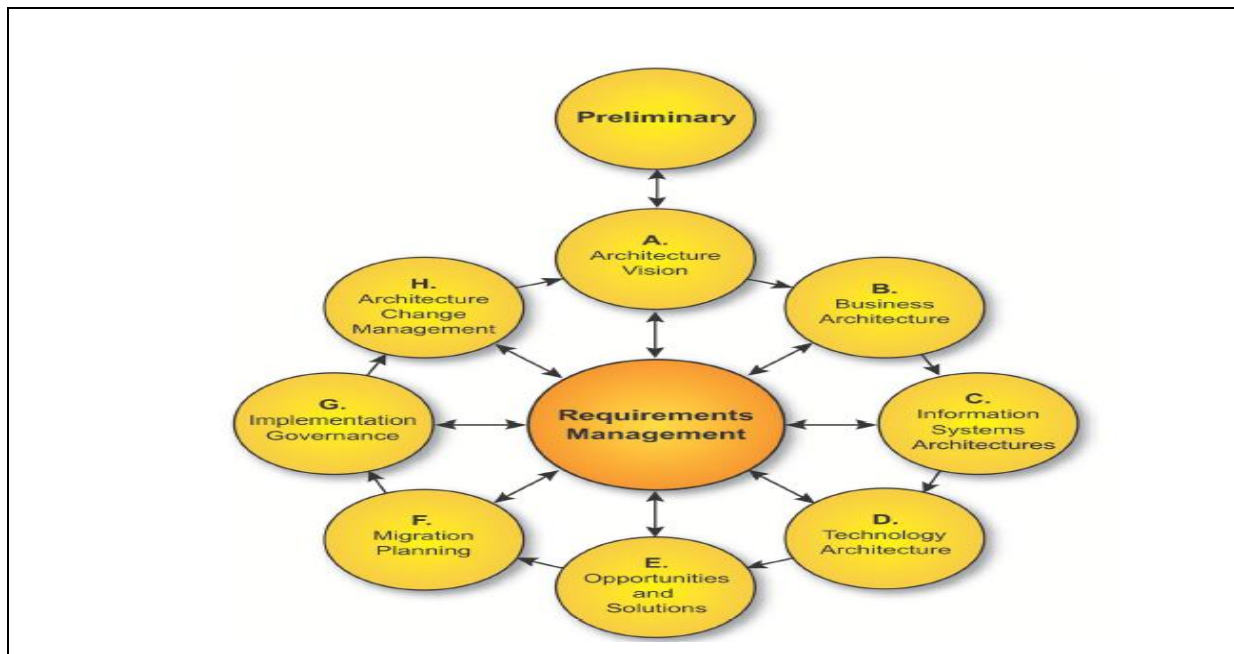


Figure 2.12: TOGAF's ADM
Source: The Open Group (2011)

The ADM specifies numerous architectural phases (as shown in Figure 6), namely: Preliminary framework and principles: A: Architecture Vision, B: Business Architecture, C: Information Systems Architecture, D: Technology Architecture, E: Opportunities and Solutions, F: Migration Planning, G: Implementation Governance, H: Architecture Change Management, whilst also providing cross-phase summaries on Requirements Management, which is linked to phases A to H. Josey *et al.*, (2011). During the first phase, the organizational issues, administrative issues and the scoping issues are set up (Johnson and Ekstedt, 2008). Subsequently, the vision of the architectural activity is presented during the second phase Johnson and Ekstedt, (2008). The ADM also provides a narrative of each of the phases mentioned above, in terms of objectives, approach,

inputs, steps and outputs Wout, *et al.*, (2010). In addition, the framework includes the Enterprise Continuum, which is a virtual repository of all architectural assets Tang, *et al.*, (2004). The previously discussed several frameworks were selected for use within this study, due to the fact that they were considered as one of the most commonly utilized standard frameworks.

2.6.6 Summary of Frameworks and Models

The frameworks and models that have been discussed represent the theories and approaches that are commonly used in the implementation and use of IS/IT solutions. They identify the various factors that influence IS/IT implementation and use (Raza, 2011), however, they ignore other elements such as routine use and optimization. The different models provide a basis for understanding organization context, project context, IS/IT Context and user context. While some frameworks/models have focused on examining user behavior, others have focused on how the IS/IT artefact is implemented. However, very few implementations approach with the exemption of TOGAF have emphasized the need for IT-business alignment which is crucial in e-CRM implementation. Also, most of these approaches are generic in nature and therefore require to be customized to suite the different types of IS/IT implementation. Another aspect that seems to be lacking in almost all the IS/IT implementation approaches that have been reviewed by this study is monitoring and evaluation.

Monitoring is the continuous assessment of a project in relation to the agreed implementation schedule. It is also a good management tool which should, if used properly, provide continuous feedback on an IT implementation project as well assist in the identification of potential successes and constraints to facilitate timely decisions. Evaluation on the other hand can be looked at as a process which determines as systematically and as objectively as possible the relevance, effectiveness, efficiency, sustainability and impact of activities in the light of a project performance, focusing on the analysis of the progress made towards the achievement of the stated objectives. For most IT projects, evaluation is not given emphasis, as what is normally considered is monitoring

2.7 Evaluation Methods for IS/IT artifacts

Information systems/Information Technology (IS/IT) is build and evaluated on artifacts that address particular business needs. The design of artifacts can be described as having two phases repeated in an iterative pattern: the development of the artifact and its evaluation. This is a process which involves frequent iteration between development and evaluation, rather than a procedural approach (Kuechler and Vaishnavi, 2008). An IS/IT researcher must therefore not only design an

artifact, but must also provide evidence that this artifact solves a real problem. IT artifacts are evaluated in relations to functionality, completeness, performance, consistency, accuracy, fit, reliability, usability with the organization, and other relevant quality attributes.

Hevner *et al.*, (2004) identifies evaluation as a crucial component of the research process; it requires researchers to demonstrate the utility, quality, and efficacy of a designed artifact using rigorous evaluation methods. The business setup starts the necessities upon which the evaluation of the artifact is based. This environment includes the technical infrastructure which itself is incrementally built by the implementation of new IT artifacts.

Gould and Lewis (1985) notes that evaluation, which in many ways is similar to a usability test, focuses on the usability of the artifact and how it is perceived by its users. There are a variety of methods currently in use to evaluate usability. Some methods make use of empirical data gathered from a group of potential users, while others rely on usability experts. Different evaluation methods apply to different stages of the design and development cycle. Some methods are intended to assess certain usability characteristics early in the process by evaluating the product specification, while other methods should be used to evaluate the final system.

The IS/IT community has struggled in the selection of methods by which to accomplish evaluation of an artifact (Cleven *et al.*, 2009). Due to the lack of descriptive techniques, IS/IT researchers are increasingly suggesting that non-traditional techniques be used for evaluation (Baskerville *et al.*, 2007). A number of IS/IT artifact evaluation techniques have been drawn by researchers, including analytics, observation, testing, experiments, descriptive analysis and more recently, action research (Baskerville and Myers, 2004).

The use of focus group methods to evaluate and refine design artifacts is relatively new to the IS/IT field (Mantei and Teorey, 1989). Although focus group methods can be very effective in the design, refinement and evaluation of the utility of an artifact, very few IS/IT researchers have so far embraced them. The good news however is that IS/IT researchers have begun to call for a broader variety of available empirical methods to improve relevance of research (Benbasat and Weber, 1996). As a result, in the IS/IT field we are seeing increased attention on the use of focus

groups for research (Baker and Collier, 2005). Similarly, the software engineering community has suggested a need for a wider availability of empirical methods to improve validity and generalizability of their designs (Kontio *et al.*, 2004). Thus, the field of software engineering has also suggested their use as an evaluation and knowledge elicitation technique (Kontio *et al.*, 2004). In addition, across the IT industry, focus groups are widely used in human-computer interface usability studies.

Stewart *et al.* (2007) cites several reasons as to why focus groups are the most appropriate evaluation technique for IS/IT projects. These include:

1. *Flexibility*- Focus groups allow for an open format and are flexible enough to handle a wide range of design topics and domains.
2. *Direct Interaction with Respondents*- The researcher is put into direct contact with domain experts and potential users of the design artifact. This allows for the researcher to clarify any questions about the design artifact as well as probing the respondents on certain key design issues.
3. *Large Amounts of Rich Data*- The focus group interactions produce a large amount of information in the form of qualitative and quantitative feedback. This rich data set allows deeper understandings, not only on the respondents' reactions and use of the artifact, but also on other issues that may be present in a business environment that would impact the design.

Looking at the reasons advanced by Stewart *et al.* (2007) for the use of focus groups, it is clear that focus groups can not only be used to evaluate the utility of an artifact but can also be used in the refining of the artifact. We therefore believe that focus groups are a highly relevant tool for refining and evaluating IT design artifacts.

2.8 Conclusion

This chapter detailed a review of all literature related to the research problem. It also stated the Challenges Faced in the Implementation of e-CRMs by SMEs in Developing Countries, commonly used IT Implementation Models for e-CRM. It also looked at a comparison of the commonly used IT Implementation models for e-CRM and the critical success factors for e-CRM implementation in SMEs of developing countries. In this chapter, Evaluation methods of IS/IT artifacts were also presented. Chapter three proceeds with a detailed description of the research methodology.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents a description of the research design, data collection and evaluation, sampling strategy, sampling population, data validation, data analysis, development of the proposed model, model evaluation, ethical considerations and challenges/limitations. that were used to achieve the research objectives. According to Bowling (2002), the choice of the appropriate research method is essential in the achievement of the study objectives.

3.1 Research Design

Research hinges on fundamental philosophical assumptions, what establishes a valid research, and which research method(s) is/are appropriate for the development of knowledge in a given study. In order to conduct and evaluate any research, it is therefore important to know what these assumptions are. This section defines the research design for this study. Polit and Beck (2012) define a research design as “the researcher’s overall for answering the research question or testing the research hypothesis”. (Burns and Grove, 2009) define a research design as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings”. The research design for this study is based on Sanders *et al.*, (2007) research onion which illustrates the key elements of a research design. Sanders *et al.*, (2007) research onion provides an effective progression through which a research methodology can be designed. Its worth lies in its adaptableness for almost any type of research methodology and can be used in a variety of contexts (Bryman, 2012). The proposed research design for this study is discussed here under.

Research Philosophy:

A research philosophy is the set of beliefs about the nature of the reality being examined (Bryman, 2016). It is the underlying definition of the nature of knowledge. The assumptions created by a research philosophy offer the explanation for how the research will be started (Flick, 2011). Research philosophies can be different on the areas of research and on the best way that might be used to obtain these goals (Goddard and Melville, 2004). These are not ne at odds with each other,

but the choice of research philosophy is defined by the type of information under investigation in the research project (May, 2011). Therefore, getting to understand the research philosophy being used can help explain the assumptions integral in the research process and how this fits the methodology being used.

Sanders *et al.*(2007) research onion highlights three main ontological frameworks that can inform a research process: Positivism, realism and Interpretivism. These frameworks can be defined in a different way but the assumptions are largely similar (Bryman, 2012). Positivism assumes that reality exists independently of the thing being studied (Briony,2006). Positivism is dependent on quantifiable observations that lead themselves to statistical analysis. Noted that “as a philosophy, positivism is in line with the empiricist opinion that knowledge stems from human experience. It has atomistic, ontological view of the world as including discrete, noticeable elements and events that interact in an observable, determined and regular manner (Collins, 2010). According to interpretivist approach, it is important for the researcher as a social actor to appreciate differences between people (Saunders *et al.*, 2012).

As opposed to the above two philosophies, the realism research philosophy relies on the idea of independence of reality from the human mind. As a branch of epistemology, this philosophy is based on the assumption of a scientific approach to the development of knowledge. Realism is divided into two groups: direct and critical. Direct realism is defined as “what you see is what you get” (Saunders *et al.*, 2012). Direct realism portrays the world through personal human senses. Critical realism, on the other side, argues that humans do experience the feelings and images of the real world. Direct realists accept the world as relatively unchanging. They focus on only one level only be it group, individual, or an organization. Critical realists, appreciate the use of multi-level study. Going with critical realism research philosophy as a Research, you have to appreciate the effect and interrelationship between the individual, the group and the organization.

This study therefore adopted the critical realism research philosophy. Critical realism is preferred because it simultaneously confronts the central concerns of both natural and social science regimes Zachariadis *et al.*, (2010) which happens to be the focus of this study.

Research Approach:

Saunders *et al.* (2000) counsel that when deciding on what research approach to adopt, the nature of the research topic must be put into consideration. They advise that if literature from which the theoretical framework of the topic can be defined already exists, then it is suitable to use deductive approach. They further advise that when researching a new topic with minimal literature then the inductive approach is deemed fit. Within the critical realism philosophy, this study will adopt the inductive research approach. Burney (2008) describes inductive approach as a reasoning that works by moving from specific premises or observation to broader generalizations and theories and involves some degree of uncertainty. The decision to use an inductive approach for this study is based on the fact that it allows the generalization of new theories from emerging data (Jebreen, 2012).

Research Strategy:

This Study adopted a case study research strategy. A case study can be taken as an approach for carrying-out research which contains an empirical investigation of a particular contemporary phenomenon within its real context using multiple sources of evidence' (Robson, 2002). The case study strategy will be used in this study because it gives room for a holistic analysis of a case in sufficient breadth and width in order to get insight into the larger cases (Oso and Onen, 2005). Additionally, it has been known to be appropriate in conditions where understanding the relations between information related technologies and organisation contexts are useful (Orlikowski and Baroudi, 1991). To overcome the limitations associated with a single case study, several case studies will be used. Case studies based on multiple sources of evidence have proven to be rated higher in terms of overall quality than those that relied on a single source of information (Yin, 1994; Baxter and Jack, 2008).

Research Methods:

A number of research methods have been suggested and documented. Hevner, (2004) cite qualitative, quantitative and mixed methods as some of the commonly used research methods in information systems research.

Qualitative research is linked to social constructivist paradigm stressing the socially created nature of reality (Elexie, 2002). It is mainly interested in analysing subjective meaning or the social production of issues, events, or practices by collecting non-standardised data and analysing texts and images rather than number and statistics (Flick, 2014). Qualitative research often involves a smaller number of participants and normally begins with the specific and moves towards general (inductive). In qualitative research, the data collecting process is personal, field-based and iterative or circular. As data are being collected and organized, patterns emerge. The data patterns can lead a researcher to pursue different questions in a manner similar to rolling a snowball downhill (Devault, 2009).

There are many good things associated with employing qualitative research approaches and methods. First of all, qualitative research approach produces a good explanation of participants' opinions, feelings, and experiences and interprets the meanings of their actions (Rahman,2017). Additionally, qualitative research helps the researcher to get a more realistic feel of the world that cannot be got in the numerical data and statistical analysis used in quantitative research (Elexie, 2002).

The weaknesses of the qualitative method include; sometimes leaving out contextual sensitivities, and focusing more on meanings and experiences (Silverman, 2010), focusing on the participants' experience rather than any other imperative issues in the context (Cumming,2001) and arriving to different conclusions based on the same information depending on the personal characteristics of the researcher

Bryman (2012) refers quantitative research as, a research approach that stresses quantification in the collection and analysis of data. This means that quantitative research attempts to investigate the answers to the questions starting with how many, how much, to what extent. In other words,

the method lays heavy stress on measuring something or variables existing in the social world. Payne and Payne (2004) infers that quantitative methods seek regularities in human lives, by separating the social world into empirical components called variables which can be represented numerically as rate, whose relations with each other can be explored by statistical techniques and accessed through researcher-introduced stimuli and systematic measurement.

One of the strong point of quantitative methods is that quantitative findings are likely to be generalized to a whole population or a sub-population because it involves the larger sample which is randomly selected (Briony,2006). In addition to sampling, data analysis is less time consuming as it uses the statistical software such as SPSS (Connolly, 2007). The weakness of quantitative research includes; ‘the researcher’s categories that are used may not reflect local constituencies’ understandings, the researcher’s theories that are used may not reflect local constituencies’ understandings and the researcher may miss out on phenomena occurring because of the focus on theory or hypothesis testing rather than on theory or hypothesis generation Johnson & Onwuegbuzie, (2004).

Mixed methods of research is a class of research where the researcher mixes both quantitative and qualitative research techniques, approaches, methods and concepts into a single study (Johnson and Onwuegbuzie, 2004). The key feature of mixed methods research is its methodological pluralism, which frequently results in superior research as it aims not to substitute the approaches but to draw from the strength and minimize the weaknesses of both qualitative and quantitative research methods (Johnson and Onwuegbuzie, 2004). In order to blend research in an active manner, researchers first need to consider all of the relevant features of quantitative and qualitative research. For example, the main features of traditional quantitative research are a focus on deduction, confirmation, theory/hypothesis testing, explanation, prediction, standardized data collection, and statistical analysis.

The core features of traditional qualitative research are induction, discovery, exploration, theory/hypothesis generation, the researcher as the primary instrument of data collection, and qualitative analysis (Johnson and Onwuegbuzie, 2004). Being able to gain an understanding of the weaknesses and strengths of these approaches, enables the research to mix the methods well what

(Johnson and Turner, 2003) called the principle of mixed research. The essential principle of mixed research states that “a researcher should collect multiple data using different strategies, approaches, and methods in such a way that the resulting mixture or combination is likely to result in complementary strengths and non-overlapping weaknesses”.

In order to satisfy the objectives of this study, a mixed methods research methodology will be adopted. The mixed method research methodology is preferred because it maximizes the strength and minimizes the weakness of both the qualitative and quantitative approaches (Johnson, 2004). This study followed the convergent mixed methods design in which either qualitative or quantitative approaches can be employed concurrently with one being the primary and the other secondary. (Creswell, 2003) posits that using one method after the other is advantageous as the secondary method helps in comparing the results to facilitate completeness.

Model Development:

To develop the e-CRM Model, this study made use of the design science methodology. Design Science is defined as problem-solving paradigm that seeks to create innovations that define the ideas, practices, technical capabilities, and products through which the analysis, design, implementation, and use of information systems can be effectively and efficiently accomplished (Hevner *et al.*, 2004).

The design science methodology is preferred because it aims to create and evaluate artifacts designed to solve identified organizational problems by enabling the transformation of the “present situation” into the “desired situation” (Hevner *et al.*, 2004 March and Storey, 2008) which is the main goal of this study

Figure 3.13 below shows how the Design Science methodology was adopted in the context of this study.

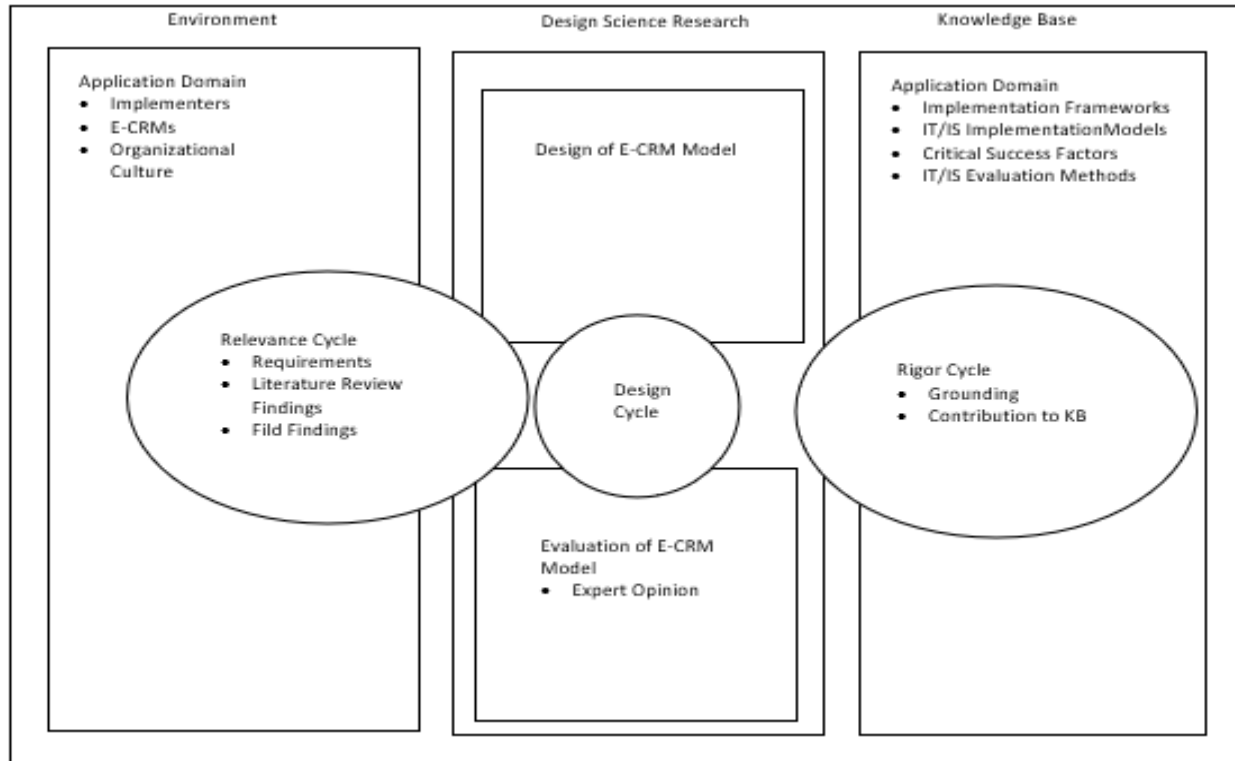


Figure 3.13: Design Science Methodology
Source: (Based on Hevner, 2007)

The box on the left part of figure 3.13 above represents the environment/ problem domain of this study. The application domain consists of the implementers, e-CRMs and organizational culture that interact to ensure effective customer relationship management. This study began by identifying the challenges, critical success factors and IT/IS implementation approaches that relate to e-CRM implementation. These were used as a guide in the development of the e-CRM Implementation model for SMEs in developing countries. The development of the model was based on existing IT/IS Implementation models and frameworks as indicated in Knowledge Base box on the right-hand side of figure 3.13.

To bridge the contextual environment of the research with the design activities, this study went through a series of activities that helped in both identifying the requirements for this research and also defining acceptance criteria for the evaluation of the research activities (Relevance Cycle). The design activities for this study included the design and evaluation phases of the intended artefact which in our case is the e-CRM Implementation model. The central Design Cycle represents the iterations between the core activities of building and evaluating the intended artifact. The box on the right part of figure 1 shows the core existing approaches that the study adopted to design the e-CRM Implementation Model to improve the implementation of e-CRMs in SMEs of developing countries. The Rigor Cycle shows the connections between the design activities with the knowledge base of scientific foundations, experience, and expertise that informed this study.

3.2 Sampling Population

Sampling population refers to the entire set of individuals, events or objects having a common characteristic about which generalization of findings will be made (Mugenda and Mugenda, 2003). In this study, the sampling population were mainly comprised of Top Managers, implementers of e-CRM and IT workers of selected Departments. e-CRM experts were employed by this study because they have a good understanding of the business processes that support the sharing of CRM information as well as the challenges faced. Implementers of e-CRM were employed by this study in this study because it is believed that they have sufficient knowledge on the business processes supported by the e-CRM systems as well as the challenges faced in trying to integrate them to share e-CRM information. As for IT workers, they will be employed in this study because they are believed to have a good understanding of how e-CRM data is managed. Policy makers were also employed by this study because they are believed to have a good understanding of the policies, guidelines and standards that have been put in place to facilitate sharing of e-CRM data.

3.3 Sampling Strategy

A sample is a portion of the population chosen to represent the entire population (Procter and Allan, 2007). The main aim of sampling is to capture data from a minimal group that can increase efficiency by permitting generalizations to be concluded about the entire population without necessarily having to examine the entire population. The choice of a sampling technique can affect the validity of the research therefore it should be undertaken with maximum rigor” (Procter and Allan, 2007).

This study adopted the purposive sampling technique- a non-probability sampling technique that is used to select respondents based on their understanding of the area under study (Bryman, 2016). This sampling technique was preferred because it helps in selecting key informants who have extensive knowledge and experience in the area one wants to study (Briony, 2006).The other reason why purposive sampling technique is preferred is that it can be very useful for situations where the researcher needs to reach a targeted sample quickly and where sampling for proportionality is not the main concern (Proctor and Allan, 2007). Respondents to this study will be intentionally selected based on their ability to provide useful information related to the research questions. The selection of participants will be based on what Cresswell describes as “criterion” sampling which requires participants to have experience of the phenomenon under study and are able to clearly describe their “conscious experience” (Cresswell, 1998). Implementers, users as well as policy makers who have an understating of e-CRM issues will specifically be employed by this study.

3.4 Data Collection and Evaluation

Data has been described as anything that is given as a fact (Walinda, 2013). Polit and Beck (2010) note that the goal of data collection is to generate data that is of exceptional quality. To facilitate this process varied collection and evaluation methods are required. In this study, a number of data collection and evaluation methods was used. These included; questionnaires, interviews, focus group discussions, observation and document review. The reason for using several data collection and evaluation methods is to take advantage of the benefits associated with triangulation.

In this study, data was collected from both primary and secondary data sources. Questionnaires, interviews and focus group discussions will be used to collect primary data. Primary data will be collected from implementers and users of e-CRM as well as policy makers within the Village Power and Crystal Safaris. Secondary data will be obtained from journals, internal documents of the case study companies and existing e-CRM Models from both the developed and developing countries.

Questionnaires:

Questionnaires were the main data collection instrument. Questionnaires will be used because they reduce chances of evaluator bias as the same questions are asked of all respondents, are cost effective and often have standardized answers that allow easy data analysis (Katebire, 2007). The questionnaires that will be used in this study will constitute both open-ended and close-ended questions and they will be designed in such a way that they are broken down into sections according to the information requirements. Also, they will be designed in such a way that they can be self-administered. Katebire (2007) notes that self-administered questionnaires are easy to administer, provide quick responses, and the analysis is faster. Respondents were encouraged to expand upon their answers to specific questions by providing explanations, rationale, and additional content. The questionnaires will be used on all respondents to this study.

Interviews:

One of the greatest popular and regularly used methods of gathering information from people about anything is by interviewing them (Macdonald and Headlam, 2008). Amin *et al* (2005) observes that interviews are useful since they fetch variety of ideas needed for a study. In this study, interviews will be used as a follow up method on issues that have either been left out or were not clearly explained by respondents in the questionnaires. This data collection method will be used in this study, because it helps to obtain in-depth information, and allows further probing (Briony, 2006). Although interviews are time consuming and rather expensive, they are advantageous in many aspects as they generally help to minimize non-responses (Katebire, 2007). This is not only likely to help in getting responses to unanswered questions in the questionnaires but will also help getting an in-depth understanding of some of the issues under investigation.

Focus Group Discussions:

According to Walliman (2011), focus groups can be seen as a type of group interview, but one that tends to concentrate in depth on a particular theme or topic with an element of interaction. The group is often made up of people who have particular experience or knowledge about the subject of the research, or those that have a particular interest in a study. Focus group discussions will mainly be used when collecting information from users and implementers of e-CRM in Uganda. They will be used on these two categories of respondents because they are many in number, making it convenient to extract opinions from a group rather than individuals which is time saving.

Document Review:

Document review is also a form of qualitative research where documents are interpreted by the researcher to give voice and meaning around the area of study (Schuh and Upcraft, 2001). Document analysis will be used to capture data that cannot readily be obtained using the other data collection methods. It will particularly be useful in helping to get an in depth understanding of the concepts under study.

3.5 Data Validation

The main purpose of data validation in research is to present information that is reliable (Radhakrishna *et al.*, 2012). For data to be reliable, it must be of good quality. Data quality is taken to be the grade to which data, including research processes such as data collection and statistical accuracy, meet the requirements of users (Vale, 2010). Among the critical aspects to consider when assessing data for quality are content validity and reliability (Radhakrishna *et al.*, 2012). In order to ensure content validity, the design of the research instruments will be based on questions used in similar studies. Hyman *et al.*, (2006) observe that using pre-existing questions provide accurate measures as they have already been pre-tested. The reliability of the research instruments was ensured by conducting a pilot study. The instruments were tested on a sample of the prospective respondents and thereafter adjustments were made basing on their feedback.

3.6 Data Analysis

Although this study intends to adopt both quantitative and qualitative data collection methods, the data that was collected was predominantly qualitative in nature. The questioners that were used mainly contained open ended questions and as such generated qualitative data. Qualitative data analysis approach was therefore be used to analyze the collected data. Qualitative data analysis is defined as a range of techniques for sorting, organizing and indexing qualitative data (Grbich, 2012). Paulson (2009) and Silverman (2010) view qualitative analysis as an interactive process that is formed by the subject and the researcher 's social role such as age, gender experience, social class, ethnicity and biases. The authors note that qualitative analysis is not quantifiable, rather it is an iterative and interpretive process based on context.

Several approaches for qualitative data analysis are in existence but this study adopted Colaizzi's (1978) framework for qualitative data analysis. Colaizzi's (1978) framework is preferred because it helps to provide an exhaustive description of data (Shosha, 2012). The basic outcome of this framework is the description of the meaning of an experience often through the identification of useful themes. Themes is one way of relating large quantities of data in a shortened manner (Streubert-Speziale, 2006).

In this study, the data analysis process went through a number of phases. First, the responses from each respondent was reviewed in order to gain a general sense about the whole content. Each rejoinder, important statements that relate to the phenomenon under study will be extracted. These statements were recorded on a separate sheet noting their sources. Thereafter, meanings were formulated from these significant statements. The formulated meanings were then sorted into categories, clusters of themes and themes. Last but not least, the themes were integrated into an exhaustive description of the phenomenon under study. Once this was done, the researcher, went back to some of respondents to cross check with them whether what had been recorded is exactly reflects their responses.

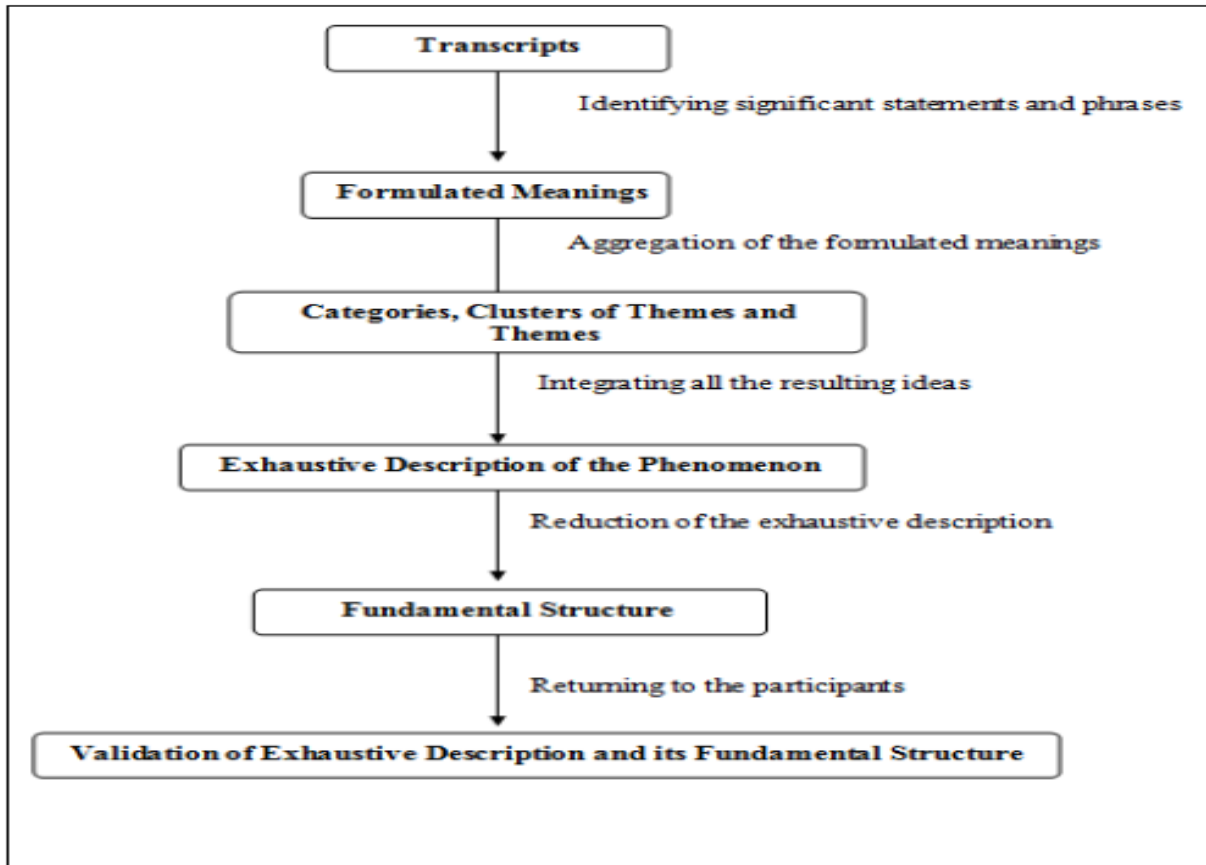


Figure 3.14: A summary of Colaizzi's strategy for phenomenological data analysis.
Source: (Shosha, 2012)

3.7 Development of Proposed Model

The development of the proposed model followed the design science development methodology as explained in section 3.1 under model development. TOGAF was adopted as the overall guiding framework for the development of the proposed model. The decision to use TOGAF was motivated by the fact that it was developed by over 300 of the leading IT companies in the world and represents best practice in the implementation and use of IT in Organizations (The Open Group, 2011). Kwon and Zmud (1987) Implementation model was used as the foundation model for the development of the e-CRM Implementation model.

Using Kwon and Zmud (1987) Implementation model as the foundation model allowed the development of a model that is consistent, reflects the needs of stakeholders and one that employs best practice for e-CRM Implementation. Key constructs of the proposed model were derived from data analysis results and the review of constructs in existing Implementation models and frameworks. In the review of the existing models and frameworks, specific attention was placed on the critical success factors for Implementation of e-CRMs.

3.8 Model Evaluation

The evaluation of the proposed e-CRM Model was done by exposing it to e-CRM experts for purposes of accessing its completeness. An evaluation questionnaire which consisted of the different constructs of the proposed model was given to 20 e-CRM experts in Jordan, Kuwaiti, Dubai, Bangladesh, India, Bahrain Nigeria, Ghana, Egypt, Tanzania, Kenya and Uganda (Appendix 5). The experts that were employed in the evaluation process were those that had been in the implementation of e-CRMs for a period of at least 10 years. This was ascertained from their respective curriculum Vitea. Evaluators of the proposed model were asked to give their opinion of the different constructs using Likert's 5 level rating scale.

3.9 Ethical Considerations

Ethics in research is important in any research endeavor and requires that researchers should protect the dignity of their subjects and publish well the information that is researched (Fouka and Mantzorou, 2011). Respect for persons and informed consent are important ethical principles in research (Akaranga and Makau, 2016). Therefore, it is important that respondents voluntarily give their consent to their participation in a study. Permission to conduct this study will be sought from management of the selected case studies. Respondents were informed about the purpose of the study and how their contribution is likely to contribute towards the delivery of quality e-CRM in developing Countries. They were also informed about their right to opt out of the study any time they felt so. Furthermore, respondents will be assured of confidentiality and anonymity (Nieswiadomy, 2007; Fouka and Mantzorou, 2011).

3.10 Challenges/Limitations of the Study

This study encountered several limitations that future studies should take into consideration. First, there was some difficulty in administering questionnaires and getting appointments for interviews and focus group discussion. To offset this challenge, the researcher continuously engaged the respondents to ensure that questionnaires are answered and appointments for interviews and focus group discussions are fixed.

3.11 Summary of Reviewed Literature

Literature about Implementation challenges exists. It was also found out that a lot of literature is written about Implementation models. Also reviewed is literature on critical success factors. Several CRM Implementation models exist; however, these models do not clearly spell out what should be done at every phase of implementation process.

3.12 Conclusion

This chapter described the methodology that was used in this study. It gave a detailed description of the research design and the reasons for the choice of that approach. It also reported on the study population, sampling techniques and procedures. A description of how data will be collected and analyzed was given together with the justification of the techniques that will be used. Last but not least, this chapter presented a brief explanation of how the e-CRM implementation model will be developed.

CHAPTER FOUR: FINDINGS AND ANALYSIS

4.0 Introduction

This chapter constitutes four major sections with the first section giving the background characteristics of the respondents for this study. The second section provides an overview of the two selected case studies, highlighting their business capabilities and e-CRMs used. The third section gives an analysis of e-CRM Implementation in the two case studies.

4.1 The Respondents

This section describes the various categories of respondents that were involved in this study and the methods of data collection that was used on each category. The distribution of the respondents is reflected in Table 4.1 below.

Table 4.1: Categories of Respondents Identified in the Study

		Village Power	Crystal Safaris
Data Collection Method	Category	Number of Respondents	Number of Respondents
Interviews	Top Management	2	3
	External Users (Customers)	13	14
Questionnaire	IT Personnel	2	3
	Internal Users (Staff)	11	13
Respondents per case study		28	33
Total Respondents		61	

Source: Field findings

A total of sixty-one respondents representing the two selected case studies were deployed in this study. For both VP and CS, these included; Top Management, IT Personnel, External Users (Customers), and the Internal Users (Staff). The Top Management from the VP case study included Country Director (1), Director Sales (1), Finance Manager (1), while Top Management from CS Included CEO (1), Customer Care Manager (1). These were considered for this study because of their major involvement in decision-making for IT investments and as such have information about strategies undertaken to ensure the effective Implementation of the e-CRMs. The Internal users and External users (Customers) from VP included Internal users-staff (11), External Users-

Customers (13) while the Internal users and External users (Customers) from CS included Internal users-staff (13), External Users-Customers (24) were considered for this study because they participate in the e-CRMs implementation and therefore are in position to explain issues around implementation. The decision to engage the IT personnel in this study was based on their key involvement in the implementation of the e-CRMs.

4.2 The Case Studies

4.2.1 Village Power Uganda

Village Power Uganda (VP) is a Small and Medium Enterprise (SME) that provides modern energy solutions and a range of Solar Home Systems (SHS) between 10W - 1,000W to rural sub-Saharan Africans. VP is affiliated to Swiss based company called Village Power AG (VP) that currently has operations in Uganda, Mozambique and Zambia. Village Power Uganda was launched in January 2014 and has the headquarters situated in Kampala. (Hülßen, Koch and Huth, 2016). To deliver these services, VP utilizes one major system namely; Dash Board system. The Dash Board System handles customer relationships mostly in form of data from customers who make instalment payments for products (PAYGO). The Dash Board is used for managing data for Sales processes and procedures. It also supports finance and accounting, stores and stock management and information reports access.

Vision

Empower 5 million people by 2030

Mission

Partnerships that count, Results that matter.

4.2.2 Crystal Safaris

Crystal Safaris is a Tours and Travel Company based in Uganda offering tailor made safaris to Uganda, Rwanda, Kenya, Tanzania and Zanzibar with 14 years of experience.

Activities at CS includes; Mountain Gorilla trekking in Uganda and Rwanda, chimpanzee and tracking and habituation experience, Birding, Wildlife and scenery, mountain climbing, white water rafting on the River Nile, Fishing, photographic tours, cultural tours, volunteer tours, educational trips, beach and honeymoon holidays and incentive tours. CS provides the above

services to private individuals, groups, families and business executives. CS utilizes One major systems namely; nsTavel CRM Software The system handles and processes products and services that ensure the best terms of Return on Investment (ROI) helping the customers to improve and automate their daily business operations, to access and analyze their data, to distribute their products via online systems and third-party channels. This feature rich software gives clients an edge in the competitive Travel and Tourism industry.

Vision

Be the most trusted tour and travel company in the region

Mission

Helping people travel smart and many more.

4.3 Pre-Implementation Process

In order to gain an in-depth understanding of how e-CRMs are Implemented in SMEs, this study sought to first of all investigate the Pre-Implementation process of both Dash Board and the nsTravel CRM software that had been implemented at Village Power Uganda (VP) and Crystal Safaris (CS) respectively. Various factors that influence information technology implementation at the pre-implementation stage were investigated. Kale (2004), Chen and Chen (2004), Chalmeta (2006) and Nguyen *et al.* (2007), note that some of the key issues that must be reflected upon during the pre-Implementation process of any IT system include; management commitment, management support, project planning and management, user commitment to change and user attitude towards change. These issues in relation to the implementation of both the Dash Board and nsTravel CRM software are discussed hereunder.

Management Commitment:

Bakås and Van, (2011) observe that top management has an impact on any IT implementation. They argue that management is responsible for all decisions that relate to both daily operational functions and future investments. DashBoard System like the nsTravel System was internally funded and as such management played a key role in its implementation process. This is evidenced by the responses from the various participants to this study. Responses from the two case studies indicated that management was very committed to the implementation process of their respective e-CRM. The reasons for management's commitment to the implementation of the two systems as

reported by several respondents included efficient processing of customer data, a wide geographical reach, and cost-effective form of interaction between the organization and its customers. In an interview with the VP Country Director, she had this to say;

*“Management and all Heads of departments were fully committed to the implementation of DashBoard . Infact we gave priority to the implementation of DashBoard to the level of fully funding its implementation and did encourage all employees to give it full acceptance and corporate with the Implementation Team”
(Interview held at VP on 23 February, 2018)*

The response of the VP Country Director was collaborated by the CS Customer Care Manager who reported that the level of management commitment towards the nsTravel system implementation process was very good. He further added that it enabled CS to make the right steps towards the nsTravel system Implementation targets.

These views align with Blass, Corbett and Delmus (2011) who assert that top management’s commitment is key to the successful implementation of any Information Technology. They argue that commitment of top management enhances the removal of internal economic and organizational barriers that other employees would find difficult to overcome. Furthermore, Cascio, Mariadoss and Mouri (2010) note that even when all employees are committed to the adoption of a technology, the lack of top management commitment can still hurt the adoption process. This may result into lower employee acceptance levels as the tone of being committed has to start from the top.

Management Support:

To further examine the Implementation of the two e-CRMs, this study assessed the support of management in this process. Top management support has been reported as one of the critical success factors in the successful Implementation of any technology (Nguyen *et al.* 2007). In a focus group discussion held with the VP Internal Staff, it was revealed that management was supportive of the Implementation process. During the discussion, a Customer Care Officer mentioned that management provided the necessary help and resources that were required for the Dashboard Implementation. She further added that management support was key in helping Customer Care department employees learn the system fast. This resulted into quick migration

from the old Excel Sheets to the new e-CRM. However, one IT officer expressed a different view from the other focus group members. He noted that management did not provide sufficient resources to cover all the requirements for the different departments. In his exact words he said;

“If all resources and help were provided by management, I think we would have all the modules of Dashboard system working and there would be no work-around in some of the departments as is the case now” (FDG held at VP on 23 February, 2018)

The above responses indicate that the different stakeholders to the Dashboard project had differing opinions concerning the amount of financial support that was provided by management. Mwangi, Maina, Sejjaaka and Canney (2014) cite financial issues as a disincentive for SMEs to Implement e-CRMs. Despite the differing opinions on the financial support provided, there was a general agreement among all the respondents that management provided sufficient support for the DashBoard project.

Respondents from CS generally indicated that management support for the nsTRAVEL system was sufficient. They reported that as a result of this support, critical resources such as skilled man power to train users, funding, and training facilities as well as the relevant internal human resource were available. However, one of the Travel Agent indicated that she was not sure whether management support had been sufficient in the nsTRAVEL project. She noted that management did not effectively communicate with the system Implementation team about the challenges the end users were facing. In her own words, she said;

“Management did not sufficiently explain to the nsTRAVEL system Implementers about the problems that we were facing as Agents during the Implementation process. This resulted into us having to practice a lot on the system which negatively impacted on service delivery” (Interview held at CS on 08 March, 2018)

The Agent’s response indicates that not everyone at CS was happy with the Management team’s ability to communicate effectively with the system Implementation team. Lewis (2006) advises that effective organizational communication during IT Implementation is necessary to sustain the momentum of potential users by managing expectations.

Project Planning and Management:

Few projects fail for technical reasons but rather most fail because they are not effectively managed (Scottish Qualifications Authority, 2014). Piskar and Faganel (2009) in their study about the Successful CRM implementation in a Service Company reported that Project planning and management was the highest rated factor in the success of e-CRM Implementation. In an interview with one of the VP managers, it was reported that VP management had a Dashboard Implementation team, Implementation plan, training schedules as well as the Dashboard objectives in place and these were communicated to staff. The communication channels used included; staff meetings, departmental meetings, training sessions, e-mail circulars and memos. The requirement to setup a system's implementation team is in agreement with Kerzner and Kerzner (2017) who advise that a multidisciplinary team should be formed during the planning and management phase of an IT project. They add that the system implementation team's role should not stop at managing the development and deployment of the new system but must also cover the overall management and governance functions of the project.

When asked in an interview about how helpful it was to have an Implementation plan for the Dashboard, one manager from VP reported that;

“The implementation plan was actually very helpful to us. All employees were able to know what was going to happen, when it was to happen, what was expected of them and the new skills required of them. Our Implementation plan clearly indicated the resources required for the Dashboard Implementation process and their sources” (Interview held at VP on 24 February, 2018).

This is in agreement with Archibald (2003) who points out that good planning is a key requirement for any project to achieve the desired results on schedule and within the specified cost.

Respondents from CS reported that the organization had a well-documented project plan that was shared with all project stakeholders. They added that their project plan contained a risk management strategy, a stakeholder engagement plan as well as Standard Operating Procedures. This possibly explains why the CS e-CRM was better Implemented than the VP e-CRM. This is evidenced by the few complaints raised by the respondents about the system. Watt (2014) notes that project planning is the heart of the project lifecycle and tells everyone involved where they are going and how they are going to get there. Hughes (2012) however advises that having good

plans in place is not sufficient for project success but monitoring and effective control of the project is needed to fulfil the plans and achieve the agreed objectives. Someone has to take responsibility for controlling the work in accordance with the plans. The advice given by Hughes (2012) seemed to have followed well by the team that as implementing nsTravel. In an interview with one CS Manager, he said that;

“During the initiation stage of the nsTRAVEL project, a project leader was identified whose major role was to ensure that the project was delivered as planned., various stakeholders to take part in the project were identified and engaged and the project sponsor also took the decision to proceed with the project by providing the necessary funding. These contributed to the smooth take off of the nsTRAVEL project at CS” (Interview held at CS on 08 March, 2018).

User Commitment to Change:

McLeod *et al.*, (2016).cite user commitment as an important factor in the Implementation process of an information system. Respondents from both VP and CS reported that despite the resistance to change by a few colleagues, the majority were committed to changing to the new e-CRMs. The main reason for their commitment was due to the fact that they were well prepared through the various meetings and awareness campaigns, which gave them insight of how the new e-CRMs were going to help them improve on their productivity and efficiency. This made it easy for them to adjust their work routines to suite the functionality of the new e-CRMs. However one of the VP Staff reported that some of the employees had to forfeit their days off to focus on learning the DashBoard. She further mentioned that these employees found some difficulty in changing their daily programs to suite the DashBoard training schedule. Some Customer Care Agents at VP also indicated that the system was complex and not user friendly, adding that some missing programs implied that they had to keep requesting for help all the time thus affecting their efficiency. All these issues negatively impacted on some of the VP employees’ commitment to change. At CS, one of the Agents reported that it was not very difficult for him to adjust his work routines to suite the nsTRAVEL system. He further said that much as he had to learn certain new steps in the new system his commitment towards the nsTRAVEL, never waned. Commitment to change was further demonstrated by one of the CSs outlets who revealed that she had to stay long hours at the place of work to train other users on how to use the new system and also catch up with her daily assignments. This is in line with Anderson and Anderson (2009) who advise that employees are

more likely to commit to change when they have the full story about what is causing it, and they tend to resist change when they don't see the rationale for it. Considering that for both organizations there were a few employees who did not demonstrate commitment to change, it can be argued that both organizations did a good job in trying to achieve the full commitment of all stakeholders. This is evidenced by the reported continuous engagement through awareness campaigns and training workshops that were conducted.

It is however important to note that the e-CRM Implementation process at both VP and CS did face some challenges that negatively affected some employees' commitment to changes as reported by the personnel in both organisations. They reported that some of their colleagues did not want to change their work routines. One VP IT Officer said that; "Some members of staff were used to paper work and they seemed more comfortable with that, and so they were a bit resistant to learning how to use the system." Olupot and Mayoka (2013) note that user resistance to change is one of the major causes of e-CRM failures in SMEs. One of the CS Agent collaborated this argument by saying;

"Some people were negative as it is always with new things and therefore it had to cost Management money and time through extra trainings and sensitization programs to get such people onboard." (Interview held at CS on 08 March 2018)

Another challenge that was faced by both VP and CS as reported by majority of the respondents to this study was the transfer of data from the old system to the new system. At VP, respondents reported that data was lost during the data migration process. Goldenberg (2002) argues that the e-CRM related errors results in data being lost leading to loss of information integrity. Such occurrences can negatively impact on the user commitment to change to the new system. Velimeneti (2016) advises that before the system goes live, there is need to carry out rigorous data testing. He cites characteristics such as the number of records, format of the data in the target system and maintenance of the integrity and quality of the data among others. It is therefore important for system users to be involved in verifying data and ensuring that it's fit for use. This would be one way of increasing the user's willingness of using the new information system.

User Attitude Towards Change:

Attitude towards a new technology is influenced by a potential user's assessment of the perceived usefulness, perceived ease of use, trust, security and demographic characteristics of the potential user (Maduku, 2010). Therefore, in this swiftly developing environment, organizations cannot ignore the effects of employee attitudes toward change on their own success (Chaudhary, Luss and Shriram, 2015). Chaudhary, Luss and Shriram (2015) assert that the way employees feel about changes at work may be influenced by their own attitudes toward change, the changes themselves or the way the changes are managed. Employees at VP and CS felt that the respective DashBoard and nsTRAVEL system related changes were well managed. This influenced their good attitude towards the change to the new systems. In an interview with one VP Manager, it was revealed that events such as demonstrations by the vendor on the new DashBoard, visitation to facilities where this system is functional, the provision of staff training as well as the general look and feel of the system influenced their attitude towards the system. This was collaborated by another VP Manager who reported that a dummy system was setup for the users to experience the functionality of the system. Respondents from CS reported the same factors as VP respondents that led to their positive attitude towards the new system. One of the CS Managers revealed that Management was fully involved in all the planning and execution of the changes in the system routines. He said that Management made a heavy investment into the nsTRAVEL system Implementation and ensured a smooth transformation process. In a Focus Group Discussion one of the Customer Care Agent had this to say;

“We were all involved in the system Implementation process. Management ensured that we contributed towards the system requirements. We also participated in the testing of the system before implementation. We therefore easily got ourselves acquainted with the system before use.” (FDG held at CS on 08 March 2018)

All these activities could have contributed to the general view among the VP and CS employees that the new e-CRMs would be able to resolve the major challenges that their respective organizations were facing then. Some of the challenges as mentioned by several VP respondents included; long manual handling of customer debts especially while the search for the customers who have overdues. The CS Agent reported hotel booking problem whereby requests could not be made using the old system and the other being retrieval of customer background information. The general view of the VP employees as shared by the CS employees as well, was further confirmed in an interview with the VP Country Director who said that; *“The DashBoard is all inclusive. For*

instance, it can capture activities from reception to sales manager to store requests and to accounts.” One of the CS Customer Service personnel said that; “The nsTRAVEL system was easy to learn and to use and the customer information flow was well organized, which greatly improved our service delivery.”

These views are aligned to the Theory of Reasoned Action (TRA, 1975) that states that attitude toward a behavior is determined by beliefs about the consequences of the behavior. Therefore basing on the views expressed by the employees of VP and CS, it can be argued that the positive attitude towards the adoption of the e-CRMs both at both organizations was determined by the users’ beliefs that these systems would improve their productivity and efficiency.

User Involvement and Participation:

According to Bano and Zowghi (2015), getting people involved in the project early enough and all the way through results into user buy-in. Ghobakhloo *et al.* (2012) further asserts that user buy-in can break or make the project and could affect the IT Implementation process. Stewart *et al.* (2000) also advise that user involvement and participation should be initiated from the commencement of an IT project and should continue throughout the subsequent phases till the new technology is fully Implemented.

Both the VP and CS respondents to this study indicated that they were involved in the e-CRMs’ Implementation process in their respective organizations. They reported that they participated in various e-CRM Implementation activities such as system pre-evaluation, vendor presentations and demonstrations, benchmarking visits, requirements gathering and planning meetings. According to their responses, their participation was based on the belief that the e-CRMs would help them perform better at their workplace. This is in line with a Thakurta and Roy (2012) study which identifies perceived project importance and perceived ease of user participation to be the primary drivers behind user intention towards participation leading to involvement.

Whereas majority of the respondents at VP confirmed their involvement and participation in the e-CRM process, a few reported that they were not involved and did not participate in the e-CRM process. This was not the case for CS as earlier reported by one of the Agents who stated that

Management made an effort to involve all employees in the entire process. Asked for a reason for not participating in this process the VP Finance Manager responded that; *“The IT department is always responsive.”* Another response from the VP Agent was that *“That is the responsibility of the IT department. We have different activities depending on department.”*

Judging from the above responses it is clear that the levels of ownership of the e-CRMs in these two organizations differed. At VP unlike CS, there was a lack of ownership of the DashBoard from some of the employees, with a tendency to think that the DashBoard belonged to the IT department and not the organisation at large. This could have negatively impacted on the DashBoard Implementation. Berg (2001) points out the necessity of a sense of ownership among system users as a necessary precursor of successful IT Implementation. He further adds that creating this state of ownership occurs via activities and opportunities that can influence the employees’ attitudes.

4.4 Actual Implementation Process

Actual implementation refers to a situation where CRM is deployed and the CRM success factors that enhance the success of CRM implementation are applied (Almotairi 2010). In order to gain an in-depth understanding of how e-CRMs are Implemented in SMEs, this study also sought to investigate the actual Implementation process of both Dash Board and the nsTravel CRM software.

In the actual implementation phase, the model aimed to provide a flexible guideline for organizations that allow them to enhance their CRM projects implementation by focusing on some of the key issues that must be reflected upon during the system actual-implementation process include; Technology- Task fit, Complexity and Training, User Satisfaction with the system, , Trialability, Relative Advantage. These issues in relation to the Implementation of both the Dash Board and nsTravel CRM software are discussed hereunder.

Technology Task fit, Complexity and Training

Goodhue (1988) cited in Osang (2015) defines task-technology fit (TTF) as the degree to which a technology assists an individual in performing his or her tasks. Osang (2015) argues that the relationship between task technology fit and system utilization is based on the fact that the better the fit, the more the tendency for users to like the system and therefore utilize it more. There was

a differing opinion among the respondents of the two case studies that were adopted by this study, about how well the new e-CRMs fitted their work routines. CS respondents reported that;

“the nsTRAVEL system fitted well in their routine. They attributed this fit to the close similarities between the old and new systems” (Interview held at CS on 08 March, 2018).

On the other hand, the VP Sales staff reported that;

“The DashBoard did not fit well with their work routines. They felt that they required more time and effort to alter their current work process flows to align with the processes built into the system” (Interview held at VP on 23 February, 2018).

However, one VP staff reported that;

“The DashBoard fitted her work routine. She felt that the DashBoard had helped her in improving her individual efficiency and productivity” (Interview held at VP on 23 February, 2018).

Goodhue and Thompson, (1995) cited in Baas, (2010) argues that ‘better’ tools not necessarily increase productivity, but that the ICT tools must show fit with someone’s task portfolio. They add that employees with different work routines exhibit different demands on ICT tools. Therefore heavily investing in technologies which are not utilized because they show no fit with the user’s task routines will not result in increased use. Overall there was a general consensus among the respondents from the two case studies that the new e-CRMs simplified work and made customer records access faster.

From the e-CRM complexity and training perspective of both VP and CS, all respondents agreed that the systems were easy to learn and to use. VP respondents reported that sufficient training was also received, as earlier mentioned. However, one Customer Service personnel from CS reported that more frequent and continuous training sessions were required for employees to master the new routines in the nsTRAVEL system. Reasons such as the user friendly interface, availability of good IT technical support, similarity with the old system and the frequent training received from knowledgeable trainers were cited by respondents from both organisations as having led to increased utilization of the e-CRMs. Alghmadi (2015) adds that the increased burden placed on users to learn new systems decreases their use and lowers the potential for achieving the set organization goals.

User Involvement and Participation:

Various scholars have suggested that user involvement and participation will have an impact on information system Implementation and therefore system success (Stalker, 2014; Bano and Zowghi, 2013; Ghobakhloo, *et al.*, 2012). Roubiah and Hamdy (2009) argue that the contribution of user participation/involvement in an information system project increases system usefulness and system usability. Respondents from both VP and CS reported that their involvement and participation in their respective eCRM implementation processes was majorly through attending regular training workshops. Others took part in information systems testing, training of colleagues and providing of feedback to Management and the technical team. The IT teams for both organisations were involved in the setup and configuration of the eCRMs; which equipped them with necessary skills to support the electronic customer relationship management systems. All these activities greatly contributed to the improved implementation of the new eCRMs. In one of the focus group discussions, one of the CS Customer Service personnel reported the main reason for her involvement and participation as being that she believed that the new system was capable of improving her productivity. In another focus group discussion that was conducted at VP, one of the Sales Offices revealed that she initially was not excited nor interested in the new eCRM because she thought it was complex. That attitude negatively affected her involvement and participation in the eCRM implementation process. Kimani and Namusonge (2015) and Angelo (2015) argue that user involvement and participation play a key role to the successful implementation of an information system. They add that with user involvement and participation comes the ability of users to air their views with regards to the project. This in our view can lead to the sustainability of the project since users will have owned it.

Trialability:

Rogers (1995) defines trialability as the degree to which innovations can be tested on a limited basis. Various studies have found that trialability has a positive effect on the intention to use a system. Lee, Hsieh and Hsu (2011) argue that when employees have more opportunities to try out an information system, then they are more likely to view it as being easier to use. It is important that Managers provide employees with organizational support for trying out the information systems prior to their roll out. One VP Manager reported that Management ensured that a dummy Dashboard was setup and used alongside the old system with an aim of assessing the usability of

the new Dashboard. This according to him went a long way in giving confidence to the employees involved in the trialability process and getting an idea of what to expect after the complete Dashboard roll out. CS respondents also reported that they were involved in testing the nsTRAVEL system before its roll out. An CS Officer said that during the system testing, he was able to familiarize himself with the system as well as foresee changes in his work routine.

This view was collaborated by the CS Customer Service personnel who reported that the testing helped prepare her for the go-live system. In a focus group discussion with the VP personnel, it was revealed that not all employees were given the opportunity to try out the new Dashboard before its roll out. This was in contradiction with a view from Hambling and Goethem (2013) that information system trialability should involve all actual users of the system. They add that if all users are not involved, then there would be a likelihood of facing system problems that were not considered by those that were involved.

Relative Advantage:

Rogers (1995) defined relative advantage as the degree to which “an innovation is perceived as being better than the idea it supersedes”. According to Rogers and Shoemaker (1973) cited in Kimani and Namusonge (2015), users decide to adopt a given technology if they know the technology’s relative advantage or the benefits that a new technology offers to them. Majority of the respondents from both organisations reported that they found utilizing the e-CRMs more advantageous to their job. They cited attributes such as their ability to achieve efficiency and effectiveness in their roles, which were not existing before. Furthermore they added that the quality of their work was greatly improved with the use of the e-CRMs and were now producing work with minimal errors and in a timely manner. These responses align with Brdese, Corbitt and Pittayachawan (2013)’s view that relative advantage is a contributor to IS utilization. When asked how advantageous the Dashboard was, one VP Manager said that the system had improved their operations. He however noted that there were still some problems with the system’s performance due to the vendor not completing some of the crucial features. This response from the VP Manager indicates that he was not fully satisfied with the Dashboard and therefore unable to fully realize and experience the relative advantage it brings. Such experiences can negatively impact on the utilisation of an information system by employees. Other advantages of the Dashboard as reported

by several VP respondents included bill tracking, debtors management, centralized patient information access, paperless work environment, better information storage and shorter patient queues. Also CS respondents reported reduced paper work and reduced movements from one office to another in such of information as some of the advantages they were getting from the nsTRAVEL system. They said that the system has also improved their quality of work by reducing on mistakes. Shih and Lee (2007) cited in Lee, Hsieh and Hsu (2011) note that research has consistently found that the perceived relative advantages positively affected the users' intention to use a system. The added that when users perceive higher relative advantages of a system, they perceive a higher level of usefulness of the system. Venkatesh and Davis (2000) cited in Leal and Albertin (2015) also point out that a perceived positive image of an innovation will positively influence its relative advantage and therefore its use.

4.5 Post Implementation Process

The purpose of this process is to complete the cycle of CRM implementation by measuring the impact of CRM on the performance of the SMEs and provide a feedback channel to check improvement of and learning from e-CRM implementation.

Management Support:

Top Management support has been cited as one of the key factors for successful information system post Implementation. (Stalker, 2014; Kruse *et al.*, 2016). VP and CS respondents to this study reported that top management was supportive in the post Implementation process of the e-CRMs in their respective organizations. Respondents from the two case studies said that Management ensured that employees were well trained on the new systems' use. In the case of VP, the CS vendors were on ground to carry out the training sessions which equipped users with more skills and confidence to use the system. At CS, one of the respondents revealed that by going over and over what they had learned as well as using case scenarios they were able to greatly improve the utilisation of the nsTRAVEL system.

Stalker (2014) advises that users must be trained if they are to get their work done efficiently and effectively with the system. He adds that the more comfortable the users are, the more likely they are to integrate the system into their work processes. The other strategy that VP Management

employed to improve DashBoard routinization and Infusion was rewards and recognitions whereby users were evaluated and active users of the DashBoard rewarded for their effort. This encouraged others to get onboard and start using the system actively. VP Management also ensured that technical support was always available to the users by paying overtime hours to the VP IT team.

The CS Finance Officer reported that Management ensured that there were sufficient resources to promote the system Infusion. According to this officer, additional computers were procured and staff recruited to support the post Implementation process. Furthermore, in support of the system post Implementation process, Management ensured that there was effective communication within and among all the various teams. This clearly indicated that top management was fully committed to promoting the Infusion of the system. Alghamdi (2015) asserts that lack of communication can contribute to a resistance in changing over to new e-CRMs. This resistance can deter the Infusion of an e-CRM in any organization. In an interview with one of the managers at VP, it was revealed that management kept staff informed about the entire process from the beginning to the end. A VP Customer Care officer collaborated the views of other VP respondents to this study by saying that;

“The communication during the post-Implementation process was effective because they (system Implementation team) always kept on coming to sort out complicated issues. And the communication between management and the system Implementation team meant the Implementation team got to know the changes that needed to be made for the successful running of the system.” (Interview held at VP on 23 February, 2018)

The same view was also echoed by the CS Customer service personnel who said that

“Management’s ability to communicate effectively within the organization during the entire system Post-Implementation process helped in addressing the different challenges the users were facing while using the system.”

Overall, the respondents from both organizations felt that the support that top management provided during the post-Implementation process increased e-CRM use among employees. There was continuous improvement of the systems as various errors were being identified and resolved.

User Satisfaction with the System:

There are various factors that may lead to user satisfaction of an information system. Osang (2015) advises that the TTF construct has been identified to influence user satisfaction with a given system. He argues that when the fit of a technology is high, users will be satisfied with the technology. Goodhue (1988) cited in Osang (2015) has defined user satisfaction as a fit between personal needs and the benefits of using a system and would be measured by an assessment of how a user feels about a system. Majority of the respondents at both organisations reported that they were satisfied with the e-CRMs and felt that they were in control and had high confidence while using them.

They cited factors such as availability of the system 24/7, ease of use, ease of access from any computer, improved access to Customer information among others; as having contributed to their satisfaction with the e-CRM systems in their respective organisations. However, at VP, there were a few respondents who felt they lacked confidence and control while working with the DashBoard. They attributed such feelings to some of the processes missing from the new system, lack of flexibility for the default fields and system errors that often delayed customer service. One of the VP. According to Vries, Midden and Bouwhuis (2003), trust and self-confidence are considered to be crucial in people's decision to rely on a complex automated system to perform tasks for them and therefore impact on its utilisation.

4.6 Summary of Findings and Way Forward

The focus of this study was to improve the Implementation of the e-CRM Systems for SMEs; by developing an Implementation model that would be fit for this purpose. Results of the analysis of the findings from the two case studies generally indicated demonstrated efforts by both organizations for a successful Implementation of their respective e-CRMs. Overall, there was strong Management Commitment and Support for the e-CRMs and also management provided financial support for activities such as employee training, trainers' facilitation as well as the required IT infrastructure for the e-CRMs. Communication of the entire project was also a key factor in the Implementation of these e-CRMs, with various communication channels such as departmental meetings and emails being used.

This greatly influenced employees' attitudes, commitments and perceptions towards these new e-CRMs and as a result, contributed to their Implementation. The levels of employee involvement and participation were also high with majority of employees demonstrating that the new e-CRMs were fit for purpose, easy to use and had a high relative advantage over the old systems they had been using.

However, there were a number of factors that affect the Implementation processes of technology that were not well considered during these two processes. Whereas both case studies considered some aspects of project planning and management, the issue of risk management planning, which is critical to successful Implementation of IT innovations was not considered at all. Insufficient requirements gathering as well as the lack of business process mapping were other factors that negatively impacted on the e-CRM Implementation. In one of the case studies, this led to the incomplete roll out of the system with some departmental modules pending or incomplete. This issue further affected employee satisfaction with the system as it could not fully perform all functions. Challenges such as employee resistance to changing to the new system as well as data transfer from the old system to the new system were experienced along the way. In addition, some of the employees who were key to the project success also had a wrong attitude of thinking the e-CRMs belonged to the IT department and therefore there was no need for them to get involved or even participate.

Looking at the Implementation processes followed by the two case studies, it is clear that the methodology used was not inclined to any specific IT Implementation model. Both case studies seemed to rely on the expertise of their respective e-CRM vendors. Theoretically, a number of technology Implementation models have been developed to explain and predict user behaviors and intentions as well as improve user acceptance of IT innovations. Oliveira and Martins (2011) note that the most widely used IT Implementation models include; the diffusion of innovation (DOI) theory published by Rogers (1995), the theory of reasoned action (TRA) (Ajzen and Fishbein, 1980), the theory of planned behavior (TPB) (Ajzen, 1991), technology acceptance model (TAM) (Davis, 1989) and the unified theory of acceptance and use of technology (Venkatesh *et al.*, 2003). However, despite their existence and designated purpose, these models have various weaknesses as indicated in Table 2. One weakness that almost cuts across all of them is that they do not clearly

specify what SMEs should do during the different Implementation stages of a given technology or innovation. Further still, many of them never emphasize Infusion of e-CRMs. This could possibly explain the Implementation failures of e-CRMs in SMEs. There was therefore need to develop a model that clearly articulates what SMEs must do during each stage of Implementation if they are to improve e-CRM Implementations. Furthermore, it is important that this model is evaluated for purposes of confirmation of its fitness for purpose.

4.7 Conclusion

This chapter presented an analysis of the findings from the two case studies. From the results, there is still an indication of a gap when it comes to the clear guidance about what activities should be carried out during the different stages of e-CRM Implementation. Having these clearly defined for this purpose will go a long way in improving the Implementation of e-CRMs in SMEs. Chapter five presents the proposed e-CRM Implementation model for SMEs.

CHAPTER FIVE: PROPOSED E-CRM IMPLEMENTATION MODEL

5.0 Introduction

This chapter presents the proposed e-CRM Implementation model for SMEs of developing countries. It also presents the evaluation results of the proposed model by e-CRM experts. The proposed model is expected to guide SMEs in the process of Implementing e-CRM Systems. To develop the proposed model, TOGAF was employed as the overall guiding framework. Kwon and Zmud (1987) Implementation Model was adopted as a foundation model for the development of the proposed e-CRM implementation model. Kwon and Zmud (1987) was adopted because unlike other IT implementation models, it provides a phased approach to the implementation of IT solutions. This is critical in the implementation of e-CRMs because it is always important to evaluate every stage of the implementation. Mankoff (2001) and Almotairi (2010) cite the use of a phased rollout schedule a critical success factor in the implementation of e-CRMs. To develop the e-CRM implementation model, the six stages of Kwon and Zmud (1987) model were grouped into three major phases names pre-implementation, actual implementation and post implementation.

Several frameworks and models including; The Open Group Architectural Framework version 9.1 (The Open Group, 2011), Strategic Framework for Customer Relationship Management (Payne and Frow 2005), Eight Building Blocks of CRM: A Framework for Success (Radcliffe 2001), A framework of dynamic customer relationship management (Park and Kim 2003), The Priority Model for CRM System Success (Roh *et al.*, 2005), CRM success framework (Richard *et al.*, 2007), critical success factor model for CRM implementation (Silva and Rahimi 2007), CRM Strategy and Implementation Model (Payne and Frow 2006).

Other IT models that were used in the development of the proposed model included, TPB, TAM, DOI, UTAUT, and Lewin's Change Model. Important to note also is that other constructs of the developed model were identified based on the critical success factors for the Implementation of e-CRMs. Constructs picked from the above models and frameworks are discussed in the description of the model.

5.1 Proposed e-CRM Model

The proposed e-CRM Model is categorized into three major phases namely pre-implementation, actual implementation and post-implementation. The pre- implementation phase is further broken down into two phases namely; e-CRM Initiation, e-CRM Adoption. On the other hand, the actual e-CRM implementation phase was broken down into two phases including Adaptation and Acceptance while the last phase, post-implementation (measuring CRM performance) was broken down into two phases including Routinization and Infusion. This model has been evaluated for completeness using expert judgement.

It is however important that this model is tested in several SMEs for purposes of verifying its effectiveness in different environments as each organization environment is different. While additional components may be required for some SMEs, others may not be relevant. The proposed model was developed based on Kwon and Zmud (1987) Implementation model as guiding foundation model. It was built using different constructs from the different existing e-CRM Implementation models, organizational change models as well as critical success factors for e-CRM Implementation.

Figure 5.15 below illustrates a graphical representation of the proposed e-CRM Implementation Model.

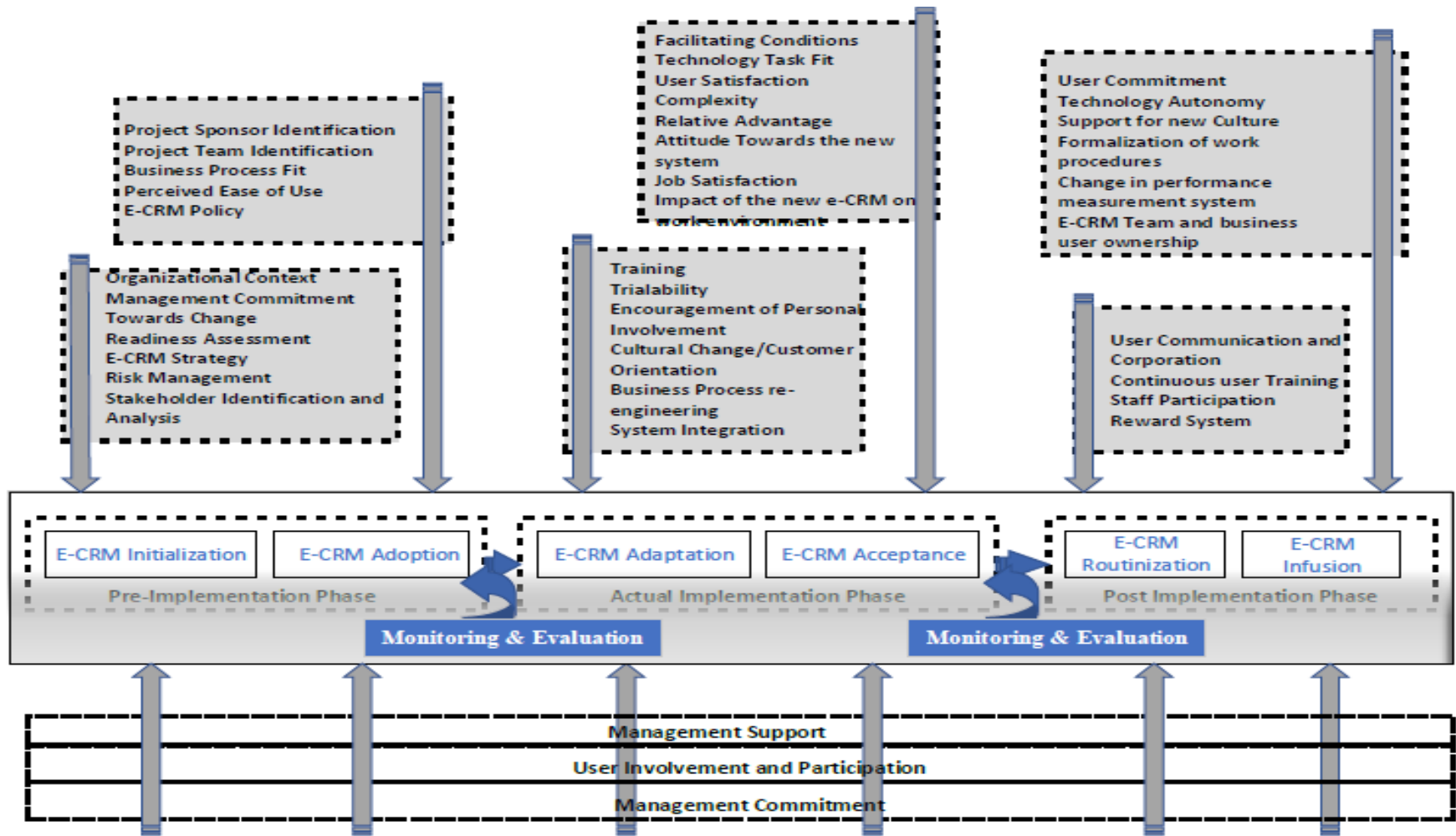


Figure 5.14: Proposed e-CRM Implementation Model

5.1.1 Description of the Proposed Model

The next three sections of this chapter contain an in-depth discussion of the three major phases of this study. These include; assessment phase (pre- implementation), actual implementation, and post-implementation (measuring CRM performance). Under each of these phases are the respective factors that an organization needs to take into consideration during the Implementation process.

5.1.1.1 The Assessment Phase (Pre-Implementation)

The e-CRM pre-Implementation phase comprises of two major sub-phases namely Initiation and adoption sub-phase. The respective phases are discussed hereunder.

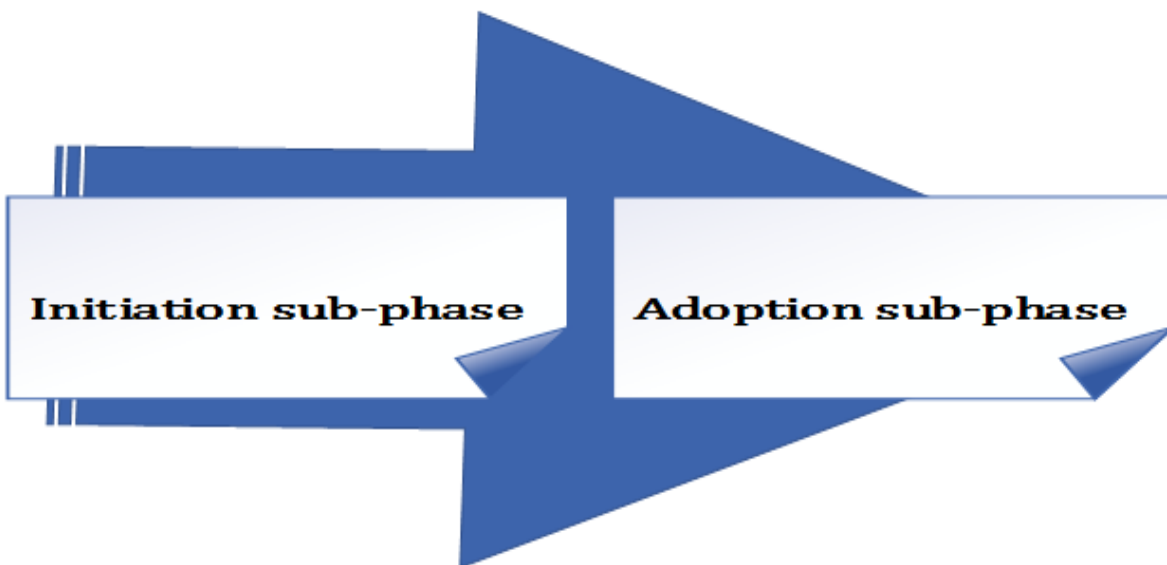


Figure 5.15: Pre -implementation phase

5.1.1.1.1 The E-CRM Initiation Sub-phase

Initiation is the first phase of any technology Implementation process (Rasmussen and Hall, 2015). It is the stage at which an organization scans through the problems at hand, the available opportunities and the entire organizational environment (Matta, Koonce and Jeyaraj, 2011). Rogers (2003) notes that during the initiation phase, an organization learns about the innovation, its capabilities, advantages, disadvantages as well as its compatibility and suitability. The initiation stage results into the creation of an overall initial attitude towards the innovation which leads to

the conception and the development of a plan (Kamal, 2006 cited in Matta, Koonce and Jeyaraj, 2011). In order to achieve successful e-CRM Implementation, there is need to look at a number of issues. Various aspects that need to be considered during this phase are discussed below.

Management Commitment Towards Change:

Management Commitment has been identified in the literature as a critical factor for successful implementation of e-CRM (King and Burgess, 2007; Da Silva and Rahimi, 2007; Pan and Baik 2007; Alt and Puschmann, 2004; Saloman *et al.*, 2005). Top management commitment means implementation of e-CRM as a business strategy that integrates the organizations strengthen the relationships with its customers. Granting such commitment will facilitate the implementation of e-CRM as this process requires a significant amount of resources that cannot be adequately secured without the support of the higher-level management. The commitment to the e-CRM implementation is required not only by itself, this commitment should be translated into directing, inspiring, and motivating employees (Peelen *et al.*, 2006).

Consequently, the Commitment of top management should be reflected in developing the strategy of CRM based on the vision of transforming/enhancing the focus of the organization to a customer-centric strategy. Accordingly, top management commitment should concentrate on the various stages of the process of implementing CRM (Silva, 2007). As a Critical Success Factor for E-CRM Implementation Cascio, Mariadoss and Mouri (2010) note that even when all employees are committed to the take on of a technology, the lack of management commitment can hurt the Implementation process. This may result into lower employee acceptance levels as the tone of being committed has to start from the top.

Organization Context:

Assessment of an organization's context is one of the key aspects that any e-CRM Implementation team must consider during the initiation phase. According to Glushko (2008) organization context is key in determining how ready an organization is to take on a new systems or applications or methods. He further adds that it determines the influence and priority of stakeholder roles and individuals in the adoption of the new innovation. Therefore, in assessing whether an organization is ready to take on an e-CRM, there is need for a deeper understanding of various attributes that

have the potential to affect performance, attitudes and behavior. These include attributes such as organization climate, work group characteristics, job characteristics, satisfaction level with current system, attitude towards change. All these attributes relate to the issues that the TRA and TPB models emphasize in the take on of any innovation. Each of these attributes is discussed here under.

Organization Climate

Organization climate is mainly concerned with the environment in which a technology innovation is going to reside. It involves organization culture, goals, nature of leadership, management relationships with staff, reward systems, organization politics and technology environment (Kalegai, 2005). Understanding these aspects within an organization is very important for the successful Implementation of any e-CRM. These aspects are not only directly linked to an organization's commitment to embrace the new innovation but also its capacity to take it on. Deeper understanding of the organization climate helps the e-CRM Implementation team plan better to overcome any inherent difficulties that may arise. On the contrary, if these aspects are not considered there will be resistance to the Implementation process.

Workgroup Characteristics

Work groups are gaining importance in many organizations and they present many potential risks and opportunities, so there is a need to understand their characteristics if organizational effectiveness is to be attained (Campion and Medsker, 1993). Therefore, investigating the unique characteristics of these work groups when Implementing a new e-CRM can help the Implementation team in shaping the implementation process in a way that would best fit the group. Lewin (1947) emphasizes the importance of considering group activity while considering a new innovation in the organization. Here, the group routines and norms are transformed rather than changing individuals which may not be sustainable.

Job Characteristics

Lakshmil and Vanithmani (2010) state that many studies have showed that job characteristics are primary determinants of work outcomes. They add that the way a job is designed would have an impact upon the attitudes, beliefs, and feelings of the employee. All these would have an impact on the successful Implementation of e-CRM Morris and Venkatesh (2010) also advise that researchers and practitioners should not only focus on system design but must also have a deeper understanding of the new system impact on the day to day jobs of the affected employees.

Satisfaction with the current system

There are various factors that may lead to user satisfaction of an information system. The level of satisfaction with the current system among users provide useful insights into what will motivate users to adopt the new IS (Statnikova, 2005). His study further confirms the relationship between satisfaction with the old system and the successful adoption of the new IS. TAM emphasizes the need to assess the perceived usefulness and perceived ease of use of a technology to determine its acceptance within an organization. (Venkatesh *et al.*, 2003). Goodhue (1988) cited in Osang (2015) has defined user satisfaction as a fit between personal needs and the benefits of using a system and this satisfaction would be measured by an assessment of how a user feels about a system. Osang (2015) also argues that when the fit of a technology is high, users will be satisfied with the technology. Therefore, during the Implementation of a new e-CRM, there is need for an assessment of those factors that may be contributing to the high satisfaction of the old system for these to be considered in the initial stage of the new system adoption.

Attitude towards Change

Understanding the employee attitude towards change is another aspect that must be thought about in the initial stage of the Implementation of an e-CRM. This is in line with Lewin (1947)'s model that emphasizes the importance of change management during the unfreezing stage of new innovations in organizations. In this rapidly evolving environment, organizations cannot afford to ignore the effects of employee attitudes towards change. Chaudhary, Luss and Shriram (2015) asserts that the way employees feel about changes at work may be influenced by their own attitudes toward change, the changes themselves or the way the changes are managed. Vakola and Nikolaou (2005) cite good and effective work relationships, handling conflicts effectively, building

supportive work relationships and communicating effectively as being very important in influencing attitudes towards change. They also add that other aspects such as increase in work load which the organizational change may create should be closely examined by the organizations. Whereas this can be easily attributable to the change, it can also make the change unattractive and problematic leading to non-supportive attitudes towards the new technology adoption.

Readiness Assessment:

Understanding the likelihood of a successful technology take on before embarking on its implementation can help an organization invest wisely in new technologies. Omosigbo and Abeysinghe (2012) assert that many organizations fail to reap the benefits of new technology after its adoption simply because they were unprepared for its take on. According to Liljander *et al.* (2006), Technology Readiness assessment is one of the critical success factors that affects users' attitudes towards systems adoption.

They add that there is need to assess the user's mental readiness to accept the new technology. Also Lewin (1947)'s change model points the need to assessing an organization's readiness before embarking on any change. Organizational readiness that includes factors such as clarity of mission, openness to change and effective communication, and lastly motivational readiness that includes a clear need for change as well as the benefits that the change will bring. Various aspects that need to be considered during this phase are Resources, Skills and technology Infrastructure.

E-CRM Strategy:

Anderson and Kerr (2001) define an E-CRM strategy as an extensive plan for achieving the goal of creating, maintaining, and expanding reciprocal beneficial customer relationships. A clear CRM strategy has been recognized as an essential part of any successful implementation of e-CRM projects (Gartner,2001; King and Burgess, 2007; Chalmeta, 2005; Mendoza *et al.*, 2006). Lindgreen (2004) however counsels that in order to realize an E- CRM, it is important that the commitment of top management is sought.

Apart from providing sufficient resources, an E-CRM strategy emphasizes customer management orientation, Integration and alignment of organizational processes, Information apprehension and configuration of technology, and Creation of CRM strategy implementation plan (Coltman, 2007) which are key to successful implementation of E-CRMs. Gartner's framework emphasises the need to consider the role of CRM strategy as a major key factor that determines the success of CRM implementation (Gartner 2001).

Risk Management:

Risk management is key to the initial phase of the e-CRM Implementation stage. Risk management is about making decisions that contribute to the achievement of an organization's objectives. Watt (2014) advises that no matter how well one plans, any project can always encounter unexpected problems of different kinds. It is therefore necessary that risks to e-CRM Implementation are identified and mitigation measures put in place early enough into the project. The mitigation measures should cover both the original and residual risks.

Berg (2010) argues that risk management is an integral component of good management and decision-making at all levels of an organization. Since risk management is directed at uncertainties related to future events and outcomes, all planning exercises for e-CRM Implementation should include some form of risk management. As a CSF, the issue of risk management planning is looked at as aligning business and IT operations; Measure, monitor, and track, which is critical to successful Implementation of IT innovations, Mankoff, (2001)

Stakeholder Identification and Analysis:

Stakeholder identification involves determining who your project stakeholders are and their key groupings. During the stakeholder identification process, the most powerful stakeholders are identified early and their input used to shape the adoption process (The Open Group, 2011). Aapaaj and Haapasalo (2014) advise that because the stakeholders define the characteristics of the proposed project, most challenges stem from the requirements they place on the project and therefore identification of which types of stakeholders are going to be part of the project is very critical. Mayers (2005) adds that stakeholder analysis helps in highlighting challenges, developing capabilities as well as tackling any inequalities.

All this helps in gauging the level of support or opposition that may be received during the e-CRM Implementation as well as predict any behavior once the new system has been adopted. The Open Group (2011) advises that support from the more powerful stakeholders can help win more resources, thus making the adoption process more likely to succeed.

5.1.1.1.2 The E-CRM Adoption Sub-phase

Hall and Khan (2002) define technology adoption as an option to obtain and use a new discovery or novelty. Rogers (1995) define a specific decision to adopt a technology as a decision to make full use of an innovation as the best course of action available. It is the stage at which an organization takes a decision on the solution. These are several factors that an organization should consider if it is to achieve successful adoption of e-CRM. These are discussed hereunder.

Project Sponsor Identification:

One key factor in the success of any project is the leadership and motivation (University of Manchester, 2013). Identifying a project sponsor in the early stages of an e-CRM Implementation process helps in the mobilization of resources as well as ensuring stakeholder buy-in. PMI (2012) emphasizes the need to identify a project sponsor who has a vested business interest in the project from kickoff to close and who will ensure that the User's strategic project objectives are identified, preserved and realized in successfully completing the project. Such a project sponsor will ensure that users' aspirations, the project requirements and the organization's long-term vision remain aligned.

Project Team Identification:

Another key success factor that should be considered at the initiation phase of an e-CRM project is the assembling of an efficient project team. Grevendonk, Taliesin and Brigden (2013) advise that putting together a project team should be one of the very first steps in setting up a new project. Newton (2015) asserts that the people who make up a project team are very important to the success of a project. He adds that these must possess knowledge, experience and the motivation to get the job done on time and within budget, otherwise all the other planning would be wasted.

The completion of a project requires input from a variety of groups including the client, the project team, the parent organisation, the producer and the end user. Each party has a role in defining and determining success. They all have specific tasks and responsibilities that they must fulfil in order to achieve success Kumar (1989).

Business Process fit

The aim of a Business Process fit is to assess the current business process for the purpose of finding improvements and opportunities for improvements (Zigiari, 2000). In the initial stages of e-CRM Implementation, it is important that the business processes are reviewed as this will help the Implementation team identify areas where improvements are needed. According to TOGAF (2011), organizations should always carry out a review of their business processes for purposes of understanding their current status which is key to Business-IT alignment. Hoyt (2011) notes that Business Process Reviews can help in the identification and management of risks leading to smoother adoption of a technology. However in the review of business processes, it is important that the e-CRM Implementation team assesses whether they are in line with the mission and vision of the SMEs.

Management Support:

Top management support has been cited as one of the key factors for successful information systems adoption (Kruse *et al.*, 2016). In the initial phase of e-CRM implementation, it is important that the implementation team ensures management commitment and support. Ghobakhloo *et al.*, (2012) argue that the IT adoption process is affected by top management because all decisions including investment decisions are made by them. Blass, Corbett and Delmus (2011) further add that management commitment and support can make the system adoption process much faster and easier.

Further, the Theory of Planned Behavior (Fishbein and Ajzen, 1975) and Theory of Reasoned Action (Ajzen, (1985) posit that for there to be successful adoption, user behavior should be controlled and responsible person should be involved in the implementation process. There is therefore need for management support in the implementation of E-CRM in addition to addressing individual user social factors such as attitude and beliefs that influence adoption.

User Involvement and Participation:

The process of buy-in from the key participants in an Information Systems implementation project normally begins during the adoption phase (Statnikova, 2005). According to Bano and Zowghi (2013), getting people involved in the project early enough and all the way through results into user buy-in. Ghobakhloo *et al.* (2012) further asserts that user buy-in can break or make the project and could affect the IT adoption process. Stewart *et al.* (2000) also advise that user involvement and participation should be initiated from the commencement of an IT project and should continue throughout the subsequent phases till the new technology is fully adopted. Further, the Theory of Planned Behavior (Fishbein and Ajzen, 1975) and Theory of Reasoned Action Ajzen, (1985) posit that for there to be successful adoption, user behavior should be controlled and responsible person should be involved in the implementation process. There is therefore a need to involve users in the implementation process of e-CRMs. This has been collaborated by Hindriks (2005) and Fjermestad and Romano (2003) who note that involving users in the E-CRM implementation can reduce user resistance.

Perceived Ease of Use:

Attitude is a critical variable that affects a user's acceptance of a new e-CRM. One of the key factors that influences attitude towards a new technology is its perceived ease of use (Maduku, 2010). Therefore, in this rapidly evolving environment, organizations cannot afford to ignore the effects of employee attitudes toward change to the new system (Chaudhary, Luss and Shriram, 2015). End-users with little technical knowledge of computers are likely to experience computer anxiety and therefore have negative attitudes if expected to suddenly perform a considerable amount of their work using the new system (Perl and Griffin, 2009). This raises the importance of user training and awareness campaigns during the acceptance phase. For the case of e-CRM, perceived ease of use is a key factor that influences adoption. Therefore, the SMEs implementing e-CRM should ensure that they carry out activities that increase perceived usefulness, perceived ease of use, for there to be successful adoption of e-CRM in their organizations.

E-CRM Policy:

E-CRM Policy requirement is line with the top management support CSF, where an e-CRM policy is required to guide usage. The most important features of e-CRM information systems are the ability to ensure customer privacy, presence of a Frequently Asked Questions tool, and high speed, (Olupot and Mayoka, 2013).

Additionally, Government should set up relevant policies to govern the use of ICTs and the Internet in business. Establishment of an e-CRM policy would foster its adoption since most SMEs do not want to use e-CRM on the basis of lack of relevant policies and laws governing its usage. Issues of information security, high costs and top management support should also be taken care of if there is to be successful implementation of e-CRM information systems (Olupot and Mayoka, 2013)

5.1.1.2 Actual Implementation Phase

The e-CRM Actual Implementation phase comprises of two major phases namely adaptation and Acceptance phases. These phases should be considered by an organization if it is to achieve full Implementation an e-CRM. The respective phases are discussed hereunder.



Figure 5.16: Actual Implementation phases

5.1.1.2.1 The E-CRM Adoption Sub-phase

During this phase, organizational procedures are revised and new business processes are introduced. This means that current practices need to be well understood and new ones need to be structured in a way that will exploit the full potential of the new technology. Firstly, the essential changes that enable proper use of technology need to be established and then users need to be trained both in new procedures and in the IT application. The outcome of this phase is when the new application becomes ready for full use in the organization (Cooper and Zmud, 1990). The importance of this stage is to preparing the organization and its users for the use of the new system. This is a time when management commitment to the project, users' involvement and user participation recognized during the adoption phase, needs to be effectively utilized. To do so, the implementation project should be carefully planned. Cooper and Zmud (1990)

User Training:

Training is another factor that plays an important role in new system implementation which involves user training and education about new system (Zmud and Cox, 1979). Cautious planning and implementation of a training program may enable acceptance of the system by users. Torkzadeh and Dwyer, (1994) infers that training influences system usage by building confidence in the new system use, thus increasing users' satisfaction. Getting people educated/trained and keeping them informed throughout the implementation process must be addressed if the benefits of the new system are to be achieved (Dorobăț *et al.*, 2010). Some of the contributors that will support this success factor include top management support, availability of a training budget, curriculum and schedule, user training needs analysis as well as user commitment to the training itself (Esteves *et al.*, 2002). The importance of the training and education for the end users on the use of the CRM systems have been emphasized by many researchers including; Zhedan *et al.*, (2007), Caldeira *et al.*, (2008) and Maleki and Anand (2008). These authors argue that because the CRM systems are more sophisticated than other Information Systems, training of users is key. They further add that the training programs should be initiated with the cooperation of the vendors of the CRM systems in the form of seminars, workshops, presentations, or conferences. According to these authors such trainings produce qualified personnel for the effective and successful implementation of CRM systems.

Management Support:

E-CRM entails application of client-centric business strategies, a re-model of functional activities and work processes. It is the duty of the top management to upgrade the systems and to implement new technologies. Management support, just like any other technology led initiatives, is an important success factor. Prior researches (Irani and Love, 2001; Law and Ngai, 2007; Wagner, 2004) found a significant relationship between top management support and technological innovation.

Trialability:

Rogers (1995) defines trialability as the degree to which innovations can be tested on a limited basis. Various studies have found that trialability has a positive effect on the intention to use a system. Lee, Hsieh and Hsu (2011) argue that when employees have more opportunities to try out an information system, then they are more likely to view it as being easier to use. Add more, the importance and model

Encouragement of Personal Innovation:

Rogers (2003) describes an innovation as an idea, practice or project that is perceived as new by an individual or as a unit of adoption. According to Rogers, an innovation may have been invented long time ago but if individuals perceive it as new then it may still be an innovation for them. In our view, this perception by the prospective users of an innovation has a critical impact on the acceptance and eventual utilization of an innovation. Uncertainty is an important obstacle to the adoption of any technology. A new technology may create uncertainty among individuals or an entire social system especially if they are unaware of the impact that the new technology may have on their work routines and control. In order to reduce uncertainty of adopting an innovation, it is important that individuals are informed about its consequences. Consequences can be classified as desirable or undesirable (Rogers, 2003). This makes them aware of all the advantages and disadvantages of the innovation and therefore allows them time to prepare for change. This need for awareness is in line with what is emphasized in the Unfreezing stage of Lewin (1947) Change model.

Cultural Change/Customer Orientation:

Organizational culture is a key factor in the successful implantation of any e-CRM. Al Duwailah, and Ali (2013) infer that organizational culture is a pattern of basic shared assumptions, values, and norms that group learns as it solves its problems of external adaptation and internal integration. These authors add that these assumptions and values can be taught to new members as a correct way to perceive and think about problems. Schein (2004) perceives organizational culture as tacit and unwritten rules that are needed to get along in the organization. e-CRM) is an information technology (IT)-enabled business strategy rather than an IS and therefore it requires cultural change from a product or process-focused culture to customer orientation (Al Duwailah and Ali, 2013).

In the implementation of e-CRMs, it is important that SMEs develop a customer-oriented culture (Lindgreen *et al.*, 2006). A customer-oriented culture is essential for the quality and extension of customer-knowledge creation and dissemination (Tzokas and Saren, 2004), which in turn is a pivotal concept in relationship marketing. Bentum and Stone, (2005) and Iriana and Buttle, (2006) further add that in the implementation of e-CRM, it is important to stress the importance of customer-focused behaviors, information and knowledge sharing, cross-functional teams, performance-based rewards, supportive relationships, adaptive and responsive attitudes to change, and a higher degree of risk-taking and innovation.

Business Process Re-engineering:

Hussain *et al.*, (2014) asserts that regular leadership actions consistent with organizational environment, collaborative working, Information Technology and Top management commitment could promote coherence in organizational members' readiness perceptions. Evaluating BPR readiness can address strong points, weak points and risks, and hence the ranking/level of readiness in the organization. The objective of a Business Process Review (BPR) is to evaluate the current business process for the purpose of identifying enhancements and opportunities for improvements (Zigiaris, 2000). In the initial stages of e-CRM Implementation, it is important that the business processes are reviewed as this will help the Implementation team identify areas where improvements are needed. According to TOGAF version 9.1 (The open Group, 2011), organizations should always carry out a review of their business processes for purposes of

understanding their current status which is key to Business-IT alignment. Hoyt (2011) notes that Business Process Reviews can help in the identification and management of risks leading to smoother adoption of a technology. However, in the review of business processes, it is important that the e-CRM Implementation team assesses whether they are in line with the mission and vision of the SMEs.

System Integration:

The system integration dimension contains of sub-factors such as functional integration, system compatibility, data integration, experience comparability to offline CRM and integration with other CRM channels. (Chen and Chen, 2004). How integrated an e-CRM is with the other system that users use is also a significant characteristic that shapes user satisfaction. This has been supported by Richard *et al* (2007) who emphasize the need to consider system integration as a key element in e-CRM implementation. System Integration represents the key differentiator for CRM. Integrating an e-CRM into the enterprise effectively leverages institutional knowledge of customers into actionable competitive advantage for their sales and service teams. Organizations that can leverage their existing information assets better can turn CRM from a tactical project into a key strategic initiative.

The E-CRM Acceptance Sub-phase

This can be well-defined as the obvious readiness within a user group to employ information technology for the tasks it is meant to support (Dillon and Morris, 1996). With millions of dollars being spent on information technology globally, one wonders whether such expenditures have produced the desired benefits to businesses. This raises a question as to whether e-CRMs are actually being accepted by their intended users; if the desired benefits are to be realized. Lack of user acceptance is a significant impediment to the success of new information systems (Gould *et al.*, 1991). Davis (1993) adds that user acceptance is viewed as the pivotal factor in determining the success or failure of any information system project. Where there is no acceptance, flexible users will opt for substitutes, while even the devoted users will likely manifest dissatisfaction and perform in an inefficient manner, negating many, if not all, the presumed benefits of a new technology (Dillion, 2001). Discussed below are some of the aspects that need to be considered during the acceptance of an e-CRM Implementation.

Facilitating Conditions:

Venkatesh *et al.*, (2003) describes enabling circumstances as the degree to which an individual believes that an organization and/or technical infrastructure is there for sustenance of their use of the system. It is one of the major constructs in TAM that is used to determine user behavioral intention towards technology use (Davis, 1986). Alraja (2016) argues that if employees are able to access the required resources, gain needed knowledge and have the necessary support to use the new system, then they are more likely to adopt it. Dillon (2001) advises that improvement factors such as sense of mastery, discretion, growth of knowledge, ability to act informally, requirement for certain skills, and enabling worker cooperation are likely to increase user acceptance in an organization and therefore should be maximized.

Technology Task-Fit

Goodhue (1988) cited in Osang (2015) describes task-technology fit (TTF) as the degree to which a technology supports an individual in executing his or her tasks. Osang (2015) argues that the relationship between task technology fit and system utilization is based on the fact that the better the fit, the more the tendency for users to like the system. When the new e-CRM being deployed demonstrates a fit with the employees' daily task routine, its acceptance by the employees will be much higher. This is in line with Technology Acceptance Model. (TAM) where factors like strong behavioral element, perceived usefulness, perceived ease of use and intention to adopt are evident, Davis (1989). Employees will foresee higher productivity and satisfaction at the time of the new e-CRM deployment.

According to Dwyer (2007), fit or goodness of fit, is a predictor of performance benefits from the use of information systems. If the new e-CRM is deemed task fit for purpose, it is highly likely that its desired benefits will be realized. It is for this reason that we propose that the new e-CRM should be assessed for fitness for purpose if it is to gain user acceptance.

User Satisfaction:

Goodhue (1988) cited in Osang (2015) has defined user satisfaction as a fit between personal needs and the benefits of using a system. This is measured by an assessment of how a user feels about a system. User satisfaction towards a system influences user attitudes which eventually determines their behavioral intention as suggested by the TPB model. Various factors can lead to user satisfaction of a given information system, one of which being TTF (Osang, 2015). Osang (2015) argues that when the fit of a technology is high, users will be satisfied with the technology.

Whereas e-CRMs have often been promoted as an efficient means to deliver high quality care through rapid information retrieval and efficient data management, they have experienced high levels of user resistance (Palm *et al.*, 2006). User satisfaction can lead to decisions that save money and increase service effectiveness (Alawneh, Al-Refai and Batiha, 2013). Isaac, *at el.* (2017) also argues that higher user satisfaction leads to higher actual system use and ultimately in increased individual and organizational performance. Bano and Zowghi (2013) cite user satisfaction as an important factor of information system success.

Complexity:

Complexity is considered as a key barrier of e-CRMs because an e-CRM's ease of use is a key element in the efficiency and acceptance of such systems (Van, Boonstra and Seo 2013). Miller and Sim (2004) argue that most physicians consider e-CRMs as challenging to use. The complexity problem associated with e-CRMs results users having to allocate time and effort if they are to master them as they have to learn how to use it effectively and efficiently. Once the system users perceive the system as complicated, they begin to see it as a burden and a waste of both personal and patient time, which will in the long run impact on the user acceptance of the system.

Therefore it is of great importance that e-CRM systems are user-friendly with considerations about the user interface, response time of the system, logical and efficient flow of tasks, ability to complete desired tasks, ease of data entry, and effects on an individual's time (Berg, 2001). TAM emphasizes the importance of the need to assess the ease of use of an innovation. E-CRMs can transform the way SME operate when these technologies are designed appropriately.

Relative Advantage

Rogers (1995) defines relative advantage as the degree to which an innovation is seen as being good compared the idea it supersedes. Rogers and Shoemaker (1973) cited in Kimani and Namusonge (2015) advise that users decide to adopt a given technology if they know the technology's relative advantage or the benefits that a new technology offers to them. If users are to accept the adoption of the new e-CRM, it should have attributes such as the ability to achieve efficiency and effectiveness in their roles, especially if they were not existing before with the old system. Furthermore, the new e-CRM should have the ability to improve quality of their work. This will clearly demonstrate the advantage and benefit of the new e-CRM being deployed.

Attitude Towards the new System:

Attitude is a critical variable that affects a user's acceptance of a new e-CRM. Attitude towards a new technology is influenced by a potential user's assessment of the perceived usefulness, perceived ease of use, trust, security and demographic characteristics of the potential user (Maduku, 2010). Therefore, in this rapidly evolving environment, organizations cannot afford to ignore the effects of employee attitudes toward change to the new system (Chaudhary, Luss and Shriram, 2015). End-users with little technical knowledge of computers are likely to experience computer anxiety and therefore have negative attitudes if expected to suddenly perform a considerable amount of their work using the new system (Perl and Griffin, 2009). This raises the importance of user training and awareness campaigns during the acceptance phase.

Job Satisfaction:

Organizations that need to be in the forefront in this cut-throat, competitive and rapidly changing business environment must ensure that employees are satisfied with their jobs. According to Carter (2011), job satisfaction is considered to be the measure of an employee's satisfaction or contention with their work. Careful consideration must be taken during the adoption process of a new e-CRM, to ensure that it brings about the desired job satisfaction.

Dessler (2010) infers that job satisfaction plays a critical role in determining an individual's performance. The users' acceptance of the new e-CRM results into them operating at good levels, which enables the organization compete favorably. Bulwana and Pellissier, (2017) add that

individuals that perform above their job profiles contribute to the organization attaining its strategic set targets. Koedel (2015) also argues that there is a link between job satisfaction and employee turnover. Therefore, it is important that the new e-CRM is seen to improve employee productivity.

Impact of the new e-CRM on work environment:

The Implementation of a new e-CRM into an organization comes with various changes, some of which may disrupt business as usual. These changes are bound to either positively or negatively impact an organisation and can influence user acceptance of the e-CRM. Guimaraes *et al.* (1996); Joshi and Lauer (1998); Turner (1984) cited in Statnikova (2005) emphasize the importance of understanding how the introduction of the new IS impacts user environment and psychological aspects of work. They cite particular factors such as satisfaction with the work itself, and satisfaction with interpersonal relationships such as communication and relationships with fellow employees.

5.1.1.3 Post Implementation Phase

The e-CRM Post Implementation phase comprises of two major phases namely Routinization and Infusion phases. These phases should be considered by an organization if it is to achieve full Implementation an e-CRM. The respective phases are discussed hereunder.

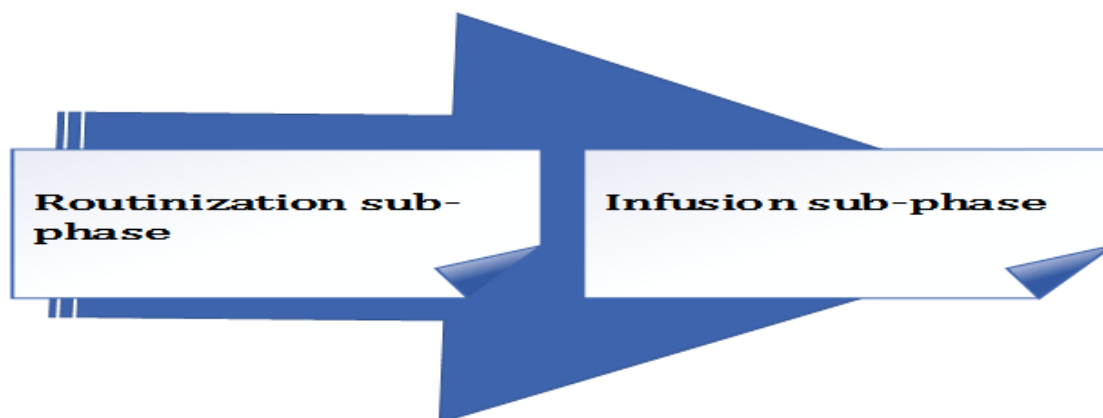


Figure 5.17: Post Implementation phases

5.1.1.3.1 Routinization Sub-phase

According to Bouisson (2002), routinization corresponds to the execution of behaviors or activities in the same way over time. During the routinization phase, the focus is mostly on organizational commitment to system use to the level that the information system is no longer perceived as new. Routinization characterizes an Information System's transition to normal part of work activity with other business processes aligned with it (Nickerson, Eng and Ho, 2003). Zmud and Apple (1989) cited in Touheed *et al.* (2013) advise that routinization is an important process in the success of an information system. Robert *et al.* (2009) add that one purpose of routinization in organizations is to reduce uncertainty. This is because during this phase, the e-CRM processes will be regarded as routine by the e-CRM users with minimal surprises. Discussed hereunder are some of the factors that are important for the success of the e-CRM routinization in organizations.

User Communication and Cooperation:

Considering that the routinization phase is where the system is no longer perceived as something out of the ordinary, the communication and cooperation between departments are of great importance if departments are to share knowledge about their experiences with the system (Krantz and Skold, 2013). Communication between the IT departments and business units can improve the IT users' cognition and understanding of the information technology as well as improve users' capacity of using the information system (Kefi and Kalika 2005; Chan and Reich, 2007 cited in Jing-hua, Kang and Xiao-wei, 2010). Therefore, the extent of communication among the different stakeholders of an e-CRM can have an impact on how often its respective users make use of it. If these levels are high, then this will result into high motivation for the new e-CRM use which will improve its performance in the organisation.

The Cooperation among the different stakeholders is another equally important aspect for consideration during the routinization stage of an e-CRM. User Cooperation will support e-CRM problem solving, information sharing and quick decision-making when it comes to work procedures related tasks. Jing-hua, Kang and Xiao-wei (2010) suggest that during routinization stage of the new information system, the grass-roots employees recommend improvements for optimization of the operational processes for enhancement. They add that managers can use the generated data from the information system to conduct prediction, decision-making and planning,

which can reduce operational costs and improve operational efficiency and quality through good decision-making and control. User cooperation results into team work among stakeholders and Laudon and Laudon (2012) emphasize that a team-oriented organization culture will result into team members working towards organizational goals and objectives.

Continuous User Training

Continuous User Training is another critical factor for consideration during the routinization stage of a new innovation in an organization. Sumner (1999) advises that organizations should carry out continuous in-house training for the users to understand how the system will change the business processes. He adds that it is vital that organizations invest time and money in continuous user training. Jing-hua, Kang and Xiao-wei (2010) emphasize that the variety of training received by users can help them master operations, skills and application methods of the information technology. Not only does continuous user training minimize mistakes that may result from lack of information and knowledge about the new e-CRM but it can also help the organization increase in retaining employees, employee loyalty gain, and boost organizational productivity. This is important for the new e-CRM as frequent turn-overs imply frequent training for new staff on the system, which may impede the progress of the e-CRM in the organization at this stage. Continuous user training can also help address e-CRM usage weaknesses as well as improve employee satisfaction and performance.

Staff Participation:

Organization strategies, regulations and standards are created and developed by top management. However, their success is heavily reliant on the active engagement and execution of staff in that organization. As the main users of the new e-CRM, staff attitude towards the new e-CRM as well as their IT competence becomes critical to the e-CRM performance (Somers and Nelson, 2001) otherwise the e-CRM could easily be faced with resistance during the routinization stage. This is mainly because the new e-CRM maybe perceived as a contradiction to the established ways and customs of working of the staff. Jing-hua, Kang and Xiao-wei (2010) advise that during the routinization stage, the habit and competence of using the e-CRM has been cultivated and therefore the staff become the leading actor for the e-CRM to penetrate the entire organization's work. This qualifies the need for vigorous staff participation during this stage.

Reward Systems:

The employee reward system is one method of motivating employees to change work habits and key behaviors while providing a systematic way of delivering positive consequences. Therefore if an e-CRM is to undergo routinization, there is need for a reward system for the high performers and innovators. Andersen (1995) suggests that the rewarding of the more innovative individuals in the use of a new information system can result into increased regular use of the new Information System. The reward system turns out to be attractive and therefore enticing to other employees who then start using the e-CRM more regularly. Murphy (2015) who counsels that reward management impacts performance by recognizing and rewarding good performance and by providing incentives to improve it. He adds that conveying a message that employees are valued within the organisation and that their performance and commitment matters fosters a positive environment which leads to high morale, motivation and ultimately high performance. A relevant and applicable reward system is crucial in driving home this message as it shows existing and potential new employees that the employer is serious about their interests.

5.1.1.3.2 E-CRM Infusion Sub-phase

Infusion has been typically considered as one of the post-Implementation Phases of an e-CRM and as one that refers to deeply and comprehensively embedding an IS in the work processes of an organisation (Cooper and Zmud, 1990 cited in Popovic, 2017). At this stage the system eventually becomes fully institutionalized in the organisation. For an IS to be fully institutionalized, all procedures and activities related to it should become habits, with users feeling very comfortable working with it (Govindaraju, 2012). e-CRM infusion in an organisation will establish a new way of working, which can be facilitated by aspects discussed below.

User Commitment:

Kim, Chan and Gupta (2016) argue that user commitment has a positive effect on IS infusion with this being mainly influenced by attributes such as task technology fit, technology self-efficacy, and task autonomy. Employees in the organisation are expected to commit themselves to the e-CRM usage as a normal activity for it to be successfully utilized. Whereas Govindaraju (2012) advises that organizational effectiveness can be obtained through the use of an IS in a

comprehensive and integrated manner; this effectiveness cannot be achieved without the commitment from the IS users. Support and ownership of the IS by the involved employees and other stakeholders are essential in integrating technology in the organisation (Walton, 1989).

Technology Autonomy:

Technology autonomy is another aspect with critical impact on IS infusion. An individual user having authority in using and regulating the system is required for e-CRM infusion otherwise excess user dependency on other factors can negatively impact on the level of user control. This may eventually deter the e-CRM infusion in the organisation. A high-level user control leads to a complete and fine-grained control over different aspects of the application (Ng, 2004). This supports the infusion stage as users are able to complete regular tasks more easily, efficiently and effectively.

Support for new Culture:

Organizational culture is the way that an organization's members relate to each other, their work, and the outside world (Govindaraju, Bruijn and Fisscher, 2002). The infusion of an e-CRM into an organisation can change the way people work and eventually lead to a different culture (Davenport, 2000). Therefore, infusion has a relationship with providing support for the new culture (Levinson, 1988). Culture changes may include some systems and procedures being integrated between departments or even the degree of formalization and power distribution. All these changes can bring about new ways of working or even changed roles. Whereas change is difficult, especially if the new ways of working seem so challenge the earlier business culture, Norris *et al.* (2000) cited in Govindaraju (2002), advises that it is of great importance that the new culture obtains support from all stakeholders in the organization. All stakeholders must change to take advantage of the new environment (Davenport, 2000) otherwise the success of the e-CRM may not be achieved by the organization. He further suggests facilitating mechanisms that may support the new culture include supporting policies, changes in measurement systems and opportunities for continuous training.

Formalization of Work Procedures:

According to Silva and Backhouse (1997) cited in Govindaraju (2012) the infusion stage of the IS in an organization is seen as a process to stabilize the system. Berchet and Habchi (2005) cite the lack of formalization of some work procedures during the stabilization stage, as one of the causes for the overflowing of key users' demands for maintenance. Work formalization is crucial at the infusion phase of an e-CRM as it allows coherence between the different work procedures and only valid demands for the maintenance of the system can be raised and attended to. This also brings about clarity of the defined roles for each employee therefore eliminating confusion and uncertainty; further supporting the infusion of the IS in the organization. Danish, Ramzan and Ahmad (2015) advise that formalized practices and procedures in an organization attract employees towards the organization. Adler and Borys (1996) cited in Danish, Ramzan and Ahmad (2015) add that it enhances motivation levels among employees and makes them more efficient. All these are critical factors during the infusion stage of an e-CRM which is heavily reliant on the work force of the organization. Villagarcia (2011) infers that formalization guarantees reliable indicators that can be used to control and evaluate a new technology and verify whether the organization is achieving its goals.

Change in Performance Measurement System:

According to Wolk, Dholakia and Kreitz (2009), a performance measurement system offers an effective way for organizations devoted to social impact to collect and make use of data about their programs and processes using different indicators. They add that performance measurement enables profit organizations collect data that can help identify potential improvements to their businesses. The infusion of an IS in an organization cannot leave the business processes the same, otherwise there will be no organization performance improvement (Govindaraju, Bruijn and Fisscher, 2002). When business process changes take place, they need accompanying changes in the arrangement of formal structures in the organization; such as performance measures (Davenport, 1998).

Nudurupati *et al.* (2010) advise that the lack of dynamic and sensitive performance measures in organizations leads to irrelevant, inaccurate and not up to date information. Considering that such information is critical for decision-making in an organization, it affects the organization in such a

way that it can't be responsive and agile in both its internal and external environments. Schneiderman (1999) cited in Nudurupati (2010) argues that in many companies, performance measures are too poorly defined. The poor definition of performance measures is likely to bring about confusion among different people, negatively impacting on the e-CRM infusion. It is therefore important that during the infusion stage of an e-CRM performance measurement systems with their respective indicators are reviewed and changed accordingly to align with the changes brought about by the e-CRM.

E-CRM Team and Business Users Ownership:

During the Infusion stage of the new e-CRM in the organization, the ownership of the e-CRM by both the IS people and the Business Users is very important. Govindaraju *et al.* (2002) emphasize the importance of these two groups working closely together during the utilization stage of the IS as a way of integrating the new technology into the organization. When both groups own the new e-CRM, then they are bound to work together towards its success. The user perception that the e-CRM belongs to the e-CRM team should not exist among business users but rather that the new e-CRM is for purposes of realizing the organization's goals and objectives. The lack of ownership by the two groups may hinder the active continuous improvement effort of the e-CRM within the organization due to the lack of one voice. It is therefore important that management ensures that both the e-CRM team and Business users take ownership of the new e-CRM.

5.2 E-CRM Model Evaluation

5.2.1 E-CRM Model Evaluation by Expert Opinion

We contacted 12 e-CRM experts asking them to participate in the evaluation of the proposed e-CRM implementation model that had been developed by this study. We received 10 responses with 2 promising to respond at a later date. This means that 83% of the experts that we had target returned their responses. The expert evaluation questionnaire was sent to all the 12 experts. These experts had been involved in the implementation, development and support of e-CRMs in both the Asia, middle East and Africa. Asia, Middle East and Africa were chosen as sources for our evaluation experts because they fit well in low resource setting context. We paid special attention to contacting people who had been involved with e-CRMs implementations in various projects for

more than 10 years. The 12 experts had a total experience of 160 years. The most experienced had an experience of 18 years. Of the remaining 11 experts, 6 had an experience of 14 years, 3 had an experience of 12 years while 2 had an experience of 11 years.

The questionnaire that was given to the experts had four sections as indicated in appendix 4. They were required to answer 1. Strongly disagree, 2. Disagree.3. Neither agree nor disagree, 4. Agree.5. Strongly agree. The frequency of their responses was measured using Likert’s 5 Level rating scale as indicated in the table below

1. Pre-implementation phase of an e-CRM implementation.

Evaluation results on a scale of 1-5 how important the experts regard the following factors for the successful completion of the pre-implementation phase of an eCRM implementation.

Factor	Frequency of the expert responses as per the five-level Likert scaling method									
	1	2	3	4	5	1	2	3	4	5
<i>E-CRM Initiation</i>										
Organisation Context	5	50%	0	0%	1	10%	3	30%	1	10%
Management Commitment Towards Change	0	0%	0	0%	0	0%	6	60%	4	40%
Readiness Assessment	0	0%	1	10%	1	10%	8	80%	0	0%
E-CRM Strategy	1	10%	0	0%	1	10%	5	50%	3	30%
Risk Management	1	10%	0	0%	1	10%	6	60%	2	20%
Stakeholder Identification and Analysis	1	10%	0	0%	0	0%	1	10%	8	80%
<i>E-CRM Adoption</i>										
Project Sponsor Identification	2	20%	0	0%	1	10%	1	10%	6	60%
Project Team Identification	2	20%	0	0%	1	10%	1	10%	6	60%
Business Process Fit	0	0%	0	0%	1	10%	3	30%	6	60%
Perceived Ease of Use	0	0%	0	0%	1	10%	2	20%	7	70%
E-CRM Policy	2	20%	0	0%	1	10%	1	10%	6	60%
<i>Monitoring and Evaluation</i>	0	0%	0	0%	5	50%	0	0%	1	10%

Table 5.1: E-CRM Model Evaluation Results – Pre-Implementation Phase

The key considerations for the Pre-implementation phase of an e-CRM implementation were given in table 5.3 as follows:

E-CRM Initiation:

Organisation Context; 50% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 10% of the respondents Strongly agree.) This means that 50% of the respondents did not agree with the fact that Organisation context is important in the pre-implementation phase of the e-CRM Implementation. This is in disagreement with Glushko (2008). He asserts organisation context is key in determining how readily new systems or applications or methods. He further adds that it determines the influence and priority of stakeholder roles and individuals in the adoption of the new innovation.

Management Commitment Towards Change; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 60% of the respondents Agree and 40% of the respondents Strongly agree. This means that 60% of the respondents Agree with the fact that Management Commitment Towards Change is important in the pre-implementation phase of the e-CRM Implementation. This is in line with, Morgan and Inks (2001) study in which he assesses the importance of management commitment towards change. In this study, Morgan reported that managerial commitment is key to successful implementation of an organizational change.

Readiness Assessment; 0% of the respondents Strongly disagree, 10% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 80% of the respondents Agree and 0% of the respondents Strongly agree. This means that 80% of the respondents Agree with the fact that Readiness Assessment is important in the pre-implementation phase of the e-CRM Implementation. This is in line with, Liljander, *et al.*, (2006) who asserts Technology Readiness is one of the critical success factors that affects users' attitudes towards systems adoption. They add that there is need to assess the user's mental readiness to accept the new technology.

E-CRM Strategy; (10% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 50% of the respondents Agree and 30% of the respondents Strongly agree.) This means that 50% of the respondents Agree with the fact that Readiness Assessment is important in the pre-implementation phase of the e-CRM

Implementation. This is in line with, (King and Burgess, 2007; Chalmeta, 2005; Mendoza, et al., 2006) A clear CRM strategy has been identified in the literature as an essential part of any successful implementation of e-CRM projects.

Risk Management; 10% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 50% of the respondents Agree and 30% of the respondents Strongly agree.) This means that 50% of the respondents Agree with the fact that Risk Management is important in the pre-implementation phase of the e-CRM Implementation. Berg (2010) argues that risk management is an integral component of good management and decision-making at all levels of an organization. Since risk management is directed at uncertainties related to future events and outcomes, all planning exercises for e-CRM Implementation should include some form of risk management.

Stakeholder Identification and Analysis; 10% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 80% of the respondents Strongly agree.) This means that 80% of the respondents Strongly Agree with the fact that Stakeholder Identification and Analysis is important in the pre-implementation phase of the e-CRM Implementation. Mayers (2005) Argues that stakeholder analysis is key to understanding who the winners and losers of the project. The Open Group (2011). Aapaoj and Haapasalo (2014) advise that because the stakeholders define the characteristics of the proposed project, most challenges stem from the requirements they place on the project and therefore identification of which types of stakeholders are going to be part of the project is very critical.

E-CRM Adoption:

Project Sponsor Identification; 20% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 60% of the respondents Strongly agree.) This means that 60% of the respondents Strongly Agree with the fact that Project Sponsor Identification is important in the pre-implementation phase of the e-CRM Implementation. PMI (2012) emphasizes the need to identify a project sponsor who has a vested business interest in the project from kickoff to close and who will ensure that the User's strategic project objectives are identified.

Project Team Identification; 20% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 60% of the respondents Strongly agree.) This means that 60% of the respondents Strongly Agree with the fact that Project Team Identification is important in the pre-implementation phase of the e-CRM Implementation. Grevendonk, Taliesin and Brigden (2013) advise that putting together a project team should be one of the very first steps in setting up a new project.

Business Process Fit; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 60% of the respondents Strongly agree.) This means that 60% of the respondents Strongly Agree with the fact that Business Process Fit is important in the pre-implementation phase of the e-CRM Implementation. Hoyt (2011) notes that Business Process Reviews can help in the identification and management of risks leading to smoother adoption of a technology.

Perceived Ease of Use; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 20% of the respondents Agree and 70% of the respondents Strongly agree.) This means that 70% of the respondents Strongly Agree with the fact that Perceived Ease of Use is important in the pre-implementation phase of the e-CRM Implementation. According to Davis, *et al.*, (1989), the key factors selected should be those that enhance perceived ease of use and perceived usefulness.

E-CRM Policy; 20% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 60% of the respondents Strongly agree.) This means that 60% of the respondents Strongly Agree with the fact that E-CRM Policy is important in the pre-implementation phase of the e-CRM Implementation. Olupot and Mayoka (2013) Argues that Issues of information security, high costs and top management support should also be taken care of if there is to be successful adoption of e-CRM information systems.

M & E:

Monitoring and Evaluation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 50% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 10% of the respondents Strongly agree.) This means that 50% of the respondents Neither agree nor disagree with the fact that E-CRM Policy is important in the pre-implementation phase of the e-CRM Implementation. Otieno (2000) argues that many projects in third world countries fail to be successfully completed due to several reasons. Among these are lack of understanding of the need for monitoring and evaluation.

2. Actual-implementation phase of an e-CRM implementation

Evaluation results on a scale of 1-5 how important the experts regard the following factors for the successful completion of the actual-implementation phase of an eCRM implementation.

Factor	Frequency of the expert responses as per the five-level Likert scaling method									
	1	2	3	4	5					
<i>E-CRM Adaptation</i>										
Training	0	0%	0	0%	0	0%	0	0%	10	100%
Trialability	0	0%	0	0%	1	10%	4	40%	5	50%
Encouragement of Personal Involvement	0	0%	0	0%	1	10%	4	40%	5	50%
Cultural Change/Customer Orientation	0	0%	0	0%	1	10%	4	40%	5	50%
Business Process re-engineering	0	0%	0	0%	0	0%	1	10%	9	90%
System Integration	0	0%	0	0%	0	0%	1	10%	8	80%
<i>E-CRM Acceptance</i>										
Facilitating Conditions	3	30%	1	10%	1	10%	3	30%	2	20%
Technology Task Fit	3	30%	1	10%	1	10%	3	30%	2	20%
User Satisfaction	0	0%	0	0%	1	10%	3	30%	6	60%
Complexity	1	10%	1	10%	0	0%	8	80%	0	0%
Relative Advantage	0	0%	0	0%	0	0%	8	80%	2	20%
Attitude Towards the new system	0	0%	0	0%	2	20%	3	30%	5	50%
Job Satisfaction	0	0%	0	0%	0	0%	8	80%	2	20%
Impact of the new e-CRM on work environment	0	0%	0	0%	0	0%	4	40%	6	60%
<i>Monitoring and Evaluation</i>	0	0%	0	0%	0	0%	1	10%	7	70%

Table 5.4: E-CRM Model Evaluation Results – Actual Implementation Phase

The key considerations for the Actual-implementation phase of an e-CRM implementation were given in table 5.4 as follows:

E-CRM Adaptation:

Training; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 100% of the respondents Strongly agree.) This means that 100% of the respondents did Strongly agree with the fact that Training is important in the pre-implementation phase of the e-CRM Implementation. Dorobăț, *et al.*, (2010) infers that getting people educated/trained and keeping them informed throughout the adoption process must be addressed if the benefits of the new system are to be achieved.

Trialability; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 40% of the respondents Agree and 50% of the respondents Strongly agree.) This means that 50% of the respondents did Strongly agree with the fact that Trialability is important in the pre-implementation phase of the e-CRM Implementation. Lee, Hsieh and Hsu (2011) argue that when employees have more opportunities to try out an information system, then they are more likely to view it as being easier to use.

Encouragement of Personal Involvement; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 40% of the respondents Agree and 50% of the respondents Strongly agree.) This means that 50% of the respondents did Strongly agree with the fact that Encouragement of Personal Involvement is important in the pre-implementation phase of the e-CRM Implementation. Rogers (2003) describes an innovation as an idea, practice or project that is perceived as new by an individual or as a unit of adoption..

Cultural Change/Customer Orientation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 40% of the respondents Agree and 50% of the respondents Strongly agree.) This means that 50% of the respondents did Strongly agree with the fact that Cultural Change/Customer Orientation is important in the pre-implementation phase of the e-CRM Implementation. Garcia, Pacheco and Martinez, (2012) asserts that CRM implementation has an impact of the cultural factors.

Business Process re-engineering; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 90% of the respondents Strongly agree.) This means that 90% of the respondents did Strongly agree with the fact that Business Process re-engineering is important in the pre-implementation phase of the e-CRM Implementation. Hussain, et al., (2014) asserts that regular leadership actions consistent with organizational environment, collaborative working, Information Technology and Top management commitment could promote coherence in organizational members' readiness perceptions. Assessing BPR readiness can address strong points, weak points and risks, and hence the ranking/level of readiness in the organization.

System Integration; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 80% of the respondents Strongly agree.) This means that 80% of the respondents did Strongly agree with the fact that System Integration is important in the pre-implementation phase of the e-CRM Implementation. Chen and Chen, 2004)) asserts that system integration dimension consists of sub-factors such as functional integration, data integration, system compatibility, experience comparability to offline CRM and integration with other CRM channels in terms of sharing resources.

E-CRM Acceptance:

Facilitating Conditions; 30% of the respondents Strongly disagree, 10% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 20% of the respondents Strongly agree.) This means that 30% of the respondents did Agree with while 30% Strongly Disagree the fact that Facilitating Conditions is important in the pre-implementation phase of the e-CRM Implementation. Alraja (2016) argues that if employees are able to access the required resources, gain needed knowledge and have the necessary support to use the new system, then they are more likely to adopt it.

Technology Task Fit; 30% of the respondents Strongly disagree, 10% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 20% of the respondents Strongly agree.) This means that 30% of the respondents did Strongly agree while 30% strongly disagree with the fact that Technology Task Fit is important in the pre-implementation phase of the e-CRM Implementation. Dwyer (2007), asserts that fit or goodness of fit, is a predictor of performance benefits from the use of information systems. If the new e-CRM is deemed task fit for purpose, it is highly likely that its desired benefits will be realized.

User Satisfaction; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 60% of the respondents Strongly agree. This means that 60% of the respondents did Strongly agree with the fact that User Satisfaction is important in the pre-implementation phase of the e-CRM Implementation. Osang (2015) argues that when the fit of a technology is high, users will be satisfied with the technology.

Complexity; 10% of the respondents Strongly disagree, 10% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 80% of the respondents Agree and 0% of the respondents Strongly agree. This means that 80% of the respondents did Agree with the fact that Complexity is important in the pre-implementation phase of the e-CRM Implementation. Berg, (2001) argues that it is of great importance that e-CRM systems are user-friendly with considerations about the user interface, response time of the system, logical and efficient flow of tasks, ability to complete desired tasks, ease of data entry, and effects on an individual's time

Relative Advantage; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 20% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 50% of the respondents Strongly agree. This means that 50% of the respondents did Strongly Agree with the fact that Relative Advantage is important in the pre-implementation phase of the e-CRM Implementation. Rogers and Shoemaker (1973) cited in Kimani and Namusonge (2015) advise that users decide to adopt a given technology if they know the technology's relative advantage or the benefits that a new technology offers to them.

Attitude Towards the new system; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 20% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 50% of the respondents Strongly agree. This means that 50% of the respondents did Agree with the fact that Attitude Towards the new system is important in the pre-implementation phase of the e-CRM Implementation. Maduku, 2010) infers that Attitude is a critical variable that affects a user's acceptance of a new e-CRM. Attitude towards a new technology is influenced by a potential user's assessment of the perceived usefulness, perceived ease of use, trust, security and demographic characteristics of the potential user.

Job Satisfaction; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 20% of the respondents Agree and 80% of the respondents Strongly agree. This means that 80% of the respondents did Strongly Agree with the fact that Job Satisfaction is important in the pre-implementation phase of the e-CRM Implementation. Maduku, 2010) infers that Attitude is a critical variable that affects a user's acceptance of a new e-CRM. Attitude towards a new technology is influenced by a potential user's assessment of the perceived usefulness, perceived ease of use, trust, security and demographic characteristics of the potential user.

Job Satisfaction; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 80% of the respondents Agree and 20% of the respondents Strongly agree. This means that 80% of the respondents did Agree with the fact that Job Satisfaction is important in the pre-implementation phase of the e-CRM Implementation. Maduku, 2010) infers that Attitude is a critical variable that affects a user's acceptance of a new e-CRM. Attitude towards a new technology is influenced by a potential user's assessment of the perceived usefulness, perceived ease of use, trust, security and demographic characteristics of the potential user.

Impact of the new e-CRM on work environment; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 40% of the respondents Agree and 60% of the respondents Strongly agree. This means that 60% of the respondents did Strongly Agree with the fact that Impact of the new e-CRM on work environment is important in the pre-implementation phase of the e-CRM Implementation. Guimaraes, *et al.* (1996); Joshi and Lauer (1998); Turner (1984) cited in Statnikova (2005) emphasize the importance of understanding how the introduction of the new IS impacts user environment and psychological aspects of work.

Monitoring and Evaluation:

Monitoring and Evaluation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 70% of the respondents Strongly agree. This means that 70% of the respondents did Strongly Agree with the fact that Monitoring and Evaluation is important in the pre-implementation phase of the e-CRM Implementation. Otieno (2000) argues that many projects in third world countries fail to be successfully completed due to several reasons. Among these are lack of understanding of the need for monitoring and evaluation.

3. Post-implementation phase of an e-CRM implementation.

Evaluation results on a scale of 1-5 how important the experts regard the following factors for the successful completion of the post implementation phase of an e-CRM implementation.

Factor	Frequency of the expert responses as per the five-level Likert scaling method									
	1		2		3		4		5	
<i>E-CRM Routinization</i>										
User Communication and Corporation	0	0%	0	0%	1	10%	0	0%	9	90%
Continuous user Training	0	0%	0	0%	0	0%	0	0%	10	100%
Staff Participation	0	0%	0	0%	1	10%	5	50%	4	40%
Reward System	0	0%	1	10%	5	50%	3	30%	1	10%
<i>E-CRM Infusion</i>										
User Commitment	0	0%	0	0%	0	0%	0	0%	10	100%
Technology Autonomy	0	0%	0	0%	2	20%	5	50%	3	30%
Support for new Culture	0	0%	0	0%	1	10%	2	20%	7	70%
Formalization of work procedures	0	0%	0	0%	1	10%	2	20%	7	70%
Change in performance measurement system	0	0%	0	0%	2	20%	5	50%	3	30%
E-CRM Team and business user ownership	0	0%	2	20%	1	10%	0	0%	7	70%
<i>Monitoring and Evaluation</i>										
	0	0%	0	0%	0	0%	0	0%	7	70%

Table 5.5: E-CRM Model Evaluation Results – Post implementation

The key considerations for the Post-implementation phase of an e-CRM implementation were given in table 5.5 as follows:

E-CRM Routinization:

User Communication and Corporation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 90% of the respondents Strongly agree.) This means that 90% of the respondents did Strongly agree with the fact that User Communication and Corporation is important in the pre-

implementation phase of the e-CRM Implementation. Francisco, *et al.*, (1995); Kefi and Kalika (2005); Chan and Reich (2007) cited in Jing-hua, Kang and Xiao-wei (2010) infers Communication between the IT departments and business units can improve the IT users' cognition and understanding of the information technology as well as improve users' capacity of using the information system.

Continuous user Training; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 100% of the respondents Strongly agree.) This means that 100% of the respondents did Strongly agree with the fact that Continuous user Training is important in the pre-implementation phase of the e-CRM Implementation. Jing-hua, Kang and Xiao-wei (2010) emphasize that the variety of training received by users can help them master operations, skills and application methods of the information technology.

Staff Participation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 50% of the respondents Agree and 40% of the respondents Strongly agree.) This means that 50% of the respondents did Agree with the fact that Continuous user Training is important in the pre-implementation phase of the e-CRM Implementation. Jing-hua, Kang and Xiao-wei (2010) advise that during the routinization stage, the habit and competence of using the e-CRM has been cultivated and therefore the staff become the leading actor for the e-CRM to penetrate the entire organization's work.

Reward System; 0% of the respondents Strongly disagree, 10% of the respondents Disagree, 50% of the respondents Neither agree nor disagree, 30% of the respondents Agree and 10% of the respondents Strongly agree.) This means that 50% of the respondents did Neither agree nor disagree with the fact that Reward System is important in the pre-implementation phase of the e-CRM Implementation. Murphy (2015) advises that reward management influences performance by recognizing and rewarding good performance and by providing incentives to improve it.

E-CRM Infusion:

User Commitment; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 100% of the respondents Strongly agree.) This means that 100% of the respondents did strongly agree with the fact that User Commitment is important in the pre-implementation phase of the e-CRM Implementation. Kim, Chan and Gupta (2016) argue that user commitment has a positive effect on IS infusion with this being mainly influenced by attributes such as task technology fit, technology self-efficacy, and task autonomy.

Technology Autonomy; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 20% of the respondents Neither agree nor disagree, 50% of the respondents Agree and 30% of the respondents Strongly agree.) This means that 50% of the respondents did agree with the fact that Technology Autonomy is important in the pre-implementation phase of the e-CRM Implementation. Ng (2004) Argues that a high-level user control leads to a complete and fine-grained control over different aspects of the application.

Support for new Culture; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 20% of the respondents Agree and 70% of the respondents Strongly agree.) This means that 70% of the respondents did strongly agree with the fact that Support for new Culture is important in the pre-implementation phase of the e-CRM Implementation. Govindaraju (2002), advises that it is of great importance that the new culture obtains support from all stakeholders in the organization.

Formalization of work procedures; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 20% of the respondents Agree and 70% of the respondents Strongly agree.) This means that 70% of the respondents did strongly agree with the fact that Formalization of work procedures is important in the pre-implementation phase of the e-CRM Implementation. Ahmad (2015) advise that formalized practices and procedures in an organization attract employees towards the organization.

Change in performance measurement system; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 20% of the respondents Neither agree nor disagree, 50% of the respondents Agree and 30% of the respondents Strongly agree.) This means that 50% of the respondents did agree with the fact that Change in performance measurement system is important in the pre-implementation phase of the e-CRM Implementation. According to Wolk, Dholakia and Kreitz (2009), a performance measurement system provides an efficient way for organizations dedicated to social impact to collect and make use of data about their programs and operations using different indicators.

E-CRM Team and business user ownership; 0% of the respondents Strongly disagree, 20% of the respondents Disagree, 10% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 70% of the respondents Strongly agree.) This means that 70% of the respondents did strongly agree with the fact that E-CRM Team and business user ownership is important in the pre-implementation phase of the e-CRM Implementation. Govindaraju, *et al.*, (2002) emphasize the importance of these two groups working closely together during the utilization stage of the IS as a way of integrating the new technology into the organization. When both groups own the new e-CRM, then they are bound to work together towards its success.

Monitoring and Evaluation:

Monitoring and Evaluation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 70% of the respondents Strongly agree.) This means that 70% of the respondents did strongly agree with the fact that Monitoring and Evaluation is important in the pre-implementation phase of the e-CRM Implementation. Otieno (2000) argues that many projects in third world countries fail to be successfully completed due to several reasons. Among these are lack of understanding of the need for monitoring and evaluation.

4. The entire implementation process of an e-CRM implementation.

Evaluation results on a scale of 1-5 how important the experts regard the following factors for the successful completion of the entire-implementation phase of an eCRM implementation.

Factor	Frequency of the expert responses as per the five-level Likert scaling method									
	1		2		3		4		5	
Management Support	0	0%	0	0%	0	0%	1	10%	9	90%
User Involvement and Participation	0	0%	0	0%	0	0%	2	20%	8	80%
Management Commitment	0	0%	0	0%	0	0%	0	0%	10	100%

Table 5.6: E-CRM Model Evaluation Results for Entire Implementation Process

The key considerations for the entire-implementation phase of an e-CRM implementation were given in table 5.6 as follows:

Management Support; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 10% of the respondents Agree and 90% of the respondents Strongly agree.) This means that 90% of the respondents did Strongly agree with the fact that Management Support is important in the pre-implementation phase of the e-CRM Implementation. Wagner (2004) found a significant relationship between top management support and technological innovation.

User Involvement and Participation; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 20% of the respondents Agree and 80% of the respondents Strongly agree.) This means that 80% of the respondents did Strongly agree with the fact that User Involvement and Participation is important in the pre-implementation phase of the e-CRM Implementation. Stewart, *et al.*, (2000) advise that user involvement and participation should be initiated from the commencement of an IT project and should continue throughout the subsequent phases till the new technology is fully Implemented.

Management Commitment; 0% of the respondents Strongly disagree, 0% of the respondents Disagree, 0% of the respondents Neither agree nor disagree, 0% of the respondents Agree and 100% of the respondents Strongly agree.) This means that 100% of the respondents did Strongly agree with the fact that Management Commitment is important in the pre-implementation phase of the e-CRM Implementation. Bakås and Van, (2011) observe that top management has an impact on any IT implementation. They argue that management is responsible for all decisions that relate to both daily operational functions and future investments.

5.3 Conclusion

This chapter presented the proposed E-CRM Implementation Model. In this chapter, some of the various aspects that are critical to the success of an E-CRM Implementation were explained. Furthermore, these were presented as constructs in the respective stages and phases of the proposed model. If these different aspects are considered in the respective stages and phases, there can be great improvement in the way E-CRMs are Implemented in SMEs and greatly reduce the e-CRM implementation failure rates. This chapter, also presented the evaluation results of the proposed model which was based on Likert's 5 level rating scale. Chapter six presents the conclusion of the study as well as some recommendations for future work.

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents the Summary of Findings, Conclusions and the Recommendations of this study. The summary of findings forms the basis for the conclusions and the recommendations. The conclusions constitute a summary of the most significant issues of the study and their perceived implications while the recommendations constitute proposals aimed at specifically improving eCRM Implementation.

6.1 Summary of Findings

This study aimed at improving the Implementation of eCRMs for SMEs. It mainly focused on investigating how eCRMs were implemented in SMEs. To gain a deep understanding of the challenges that SMEs face in the implementation of eCRMs two case studies were selected. The decision to use two case studies was motivated by the limitations of using a single case study to study a phenomenon. These case studies included; Village Power Uganda and Crystal Safaris. These two case studies were employed in this study because they have recently implemented eCRMs and therefore were in better position to provide useful experiences regarding eCRM implementation. To collect data, this study adopted the qualitative data collection methods. Questionnaires, Interviews, Focus Group Discussions and Document Analysis were used to collect data. Questionnaires were used as the main data collection method because they are cost-efficient, do not require as much effort from the researcher and often have standardized answers that allow easy data analysis (Katebire 2007).

The collected data was analyzed using Collaizi's (1978) framework for qualitative data analysis. The analyzed results indicated that SMEs face a number of challenges in the implementation of eCRMs. These challenges included; User resistance, absence of monitoring and evaluation, absence of risk management, insufficient resources, insufficient assessment of the organization context, lack of eCRM readiness assessment in the organization among others.

These challenges if resolved are considered as critical success factors for eCRMs in SMEs. Whereas some of the user perceptions towards eCRM implementation were positive, there are

those eCRM users that had negative perceptions and therefore had high chances of resisting the systems in their organizations. Our investigation further revealed that whereas there are existing CRM Implementation models that have been used for successful implementation, these have some limitations. One general observation is that whereas these models state the different constructs for consideration during the implementation of eCRMs, they are not specific on which factors to consider during each stage and phase of eCRM implementation. Providing the proposed model would go a long way in directing and guiding those organizations considering eCRM investments; hence meeting their goals and objectives.

To develop the proposed model, the study set out objectives which provided guidance. These objectives included;

- I. To investigate the challenges faced in the implementation of e-CRMs by SMEs in developing countries.
- II. To examine the IT Implementation models that are commonly used to implement e-CRMs in SMEs with a view of identifying their limitations.
- III. To Investigate the application of existing IT/IS Implementation models/Approaches and best practices in developing a model that can be used to improve the implementation of e-CRMs in SMEs in developing countries.
- IV. To evaluate the resultant artefact (Proposed model)

To achieve the first objective, this study reviewed all the literature that relates to the challenges that SMEs in developing counties face in implementing eCRMs. The findings from the literature review exercise were clearly documented in chapter two section 2.1. After documenting the literature, two case studies were identified and respondents were asked to the challenges that they faced in implementing their respective eCRMs. To collect data from the two case studies this study used questionnaires, interviews and focus group discussions. Questionnaires were mainly used to collect data from the lower level staff who included; Customer Care, IT, Stores and; Finance and accounts staff. Questionnaires were used on this category of respondents because they had time to respond to the questions and had been highly entrenched in the implementation process of the eCRMs in their respective organizations. This was particularly beneficial to this study as the researcher was able to get first hand and accurate information about the implementation process.

Interviews were used for both top management and customers. These two categories of respondents because they did not have sufficient time to respond to the detailed questionnaires. It is also important to note that interviews were also used on some of the low-level staff as a follow up on issues that had not been clearly explained in the questionnaires. This was very helpful as it enabled the researcher to not only gain an in-depth understanding of the responses from the questionnaires but also helped in verifying some of the information that had been given by the respondents. Focus group Discussions were mainly used to collaborate information from questionnaires and interviews. These included different categories of respondents and the discussions helped the researcher to capture the divergent opinions about the implementation process. The field findings were reported in chapter 4 of this report. The findings from both literature review and the two case studies not only provide the researcher with an insight of what challenges SMEs in developing countries were facing in the implementation of eCRMs but were also a good guide in developing the research instruments.

Objective two was mainly achieved through literature review. The researcher first used key words such as e-CRM, IT implementation model/framework, e-CRM success factors, SME and CRM to collect a number of journals. In total about 135 articles were downloaded. The researcher reviewed their abstracts to assess their relevance to the area under investigation. After review, 62 papers discarded and the rest were used. The results of the literature review indicated that there several IT implementation models/ frameworks and some of these had been used in the implementation of e-CRMs. One critical observation that came out prominently was that most of these models did not provide clear guidance on what the implantations should do at every stage of the implementation process. Most of the cite factors that must be considered without specifying when they should be considered. However, the ideas got from the description of the different models and frameworks were very useful in the development of the proposed model.

Objective three which was aimed at developed the proposed model was achieved by identifying a framework and a foundation model for the development process. TOGAF 9.1 was adopted as an overall framework. Kwon and Zmud (1987) IT implementation model was taken on as the foundation model for the development of the proposed model. Kwon and Zmud (1987) six stage model was modified into three phases namely; pre-implementation, actual implementation and post implementation. The monitoring and evaluation stage was also added at the end of every

phase. This model was improved using other implementation approaches such as Technology Acceptance Model (TAM), Technology-Organization-Environment Model (TOE), Lewin's Change Model, Diffusion of Innovation Theory (DIO) Kwon & Zmud IT Implementation Model, Unified Theory of Acceptance and Use of Technology (UTAUT) and finally Information Systems Success Model.

Objective four was achieved by identifying a group of e-CRM experts to provide an opinion about the relevance of the various factors that had been included in the proposed model. The choice of experts was grounded on their experience in the implementation of e-CRMs. Only people who had participated in e-CRMs for a period of not less than 10 years were considered. This was beneficial to the evaluation process as the research was able to get an expert opinion from experienced people. To evaluate the model. The researcher used Likerts 5 level rating scale. The evaluation results on average indicated that the proposed model had highlighted most of the critical success factors for e-CRM implementation. It is however important to not that this model was only evaluated for completeness. There is therefore a need to expose it to a live implementation to assess its suitability from different environments.

6.1.1 Limitation of the Study

The research was carried out within the Ugandan context, a country still developing technologically with most of the eCRMs are still relatively new or not yet implemented. As a result, it is possible that the findings may not be applied to technologically leading countries which have realized the potential of eCRMs.

This study was conducted with regards to the eCRM implementation process by concentrating on determining the factors that would explain eCRM implementation high failure rate in SMEs. As a result, it is possible that the findings may not be applicable to general eCRM take-on. There is thus need for further investigation into implementation of eCRMs by introducing other constructs that influence success in SMEs context.

6.2 Conclusion

Having analyzed the challenges faced by the two selected case studies as well as those derived from literature review, one conclusion was arrived at. There was need to develop a model that clearly specifies the key issues that SMEs should take into consideration during the eCRM implementation process. Several CRM Implementation models exist; however, these models do not clearly spell out what should be done at every phase of implementation process. The model that has been proposed by this study clearly specifies the different phases of eCRM implementation together with the key considerations for each phase. It was based on Kwon and Zmud (1987) Implementation model which represents best practice for implementation of Information and Communication Technologies.

Key constructs of the proposed model were derived from data analysis results and review of constructs in existing implementation models and frameworks. In the review of existing models specific attention was placed on the critical success factors for implementation of eCRMs. We believe that if organizations consider the different aspects defined for each stage and phase, they are likely to extract maximum benefits from their eCRM investments while minimizing the associated challenges.

6.3 Recommendation for Future Work

Potential research areas for future research work have been identified as a result of the findings and limitations of this study. These are outlined below:

The developed model should be tested in live environments of various SMEs. This will go a long way in ascertaining and confirming the model's ability and effectiveness to improve eCRM implementation as stated in our main objective of this study.

In addition, other similar studies outside the eCRM field but within the ICT for Development domain should be conducted with an aim of attaining the benefits of applying information technology in the improvement of SMEs business.

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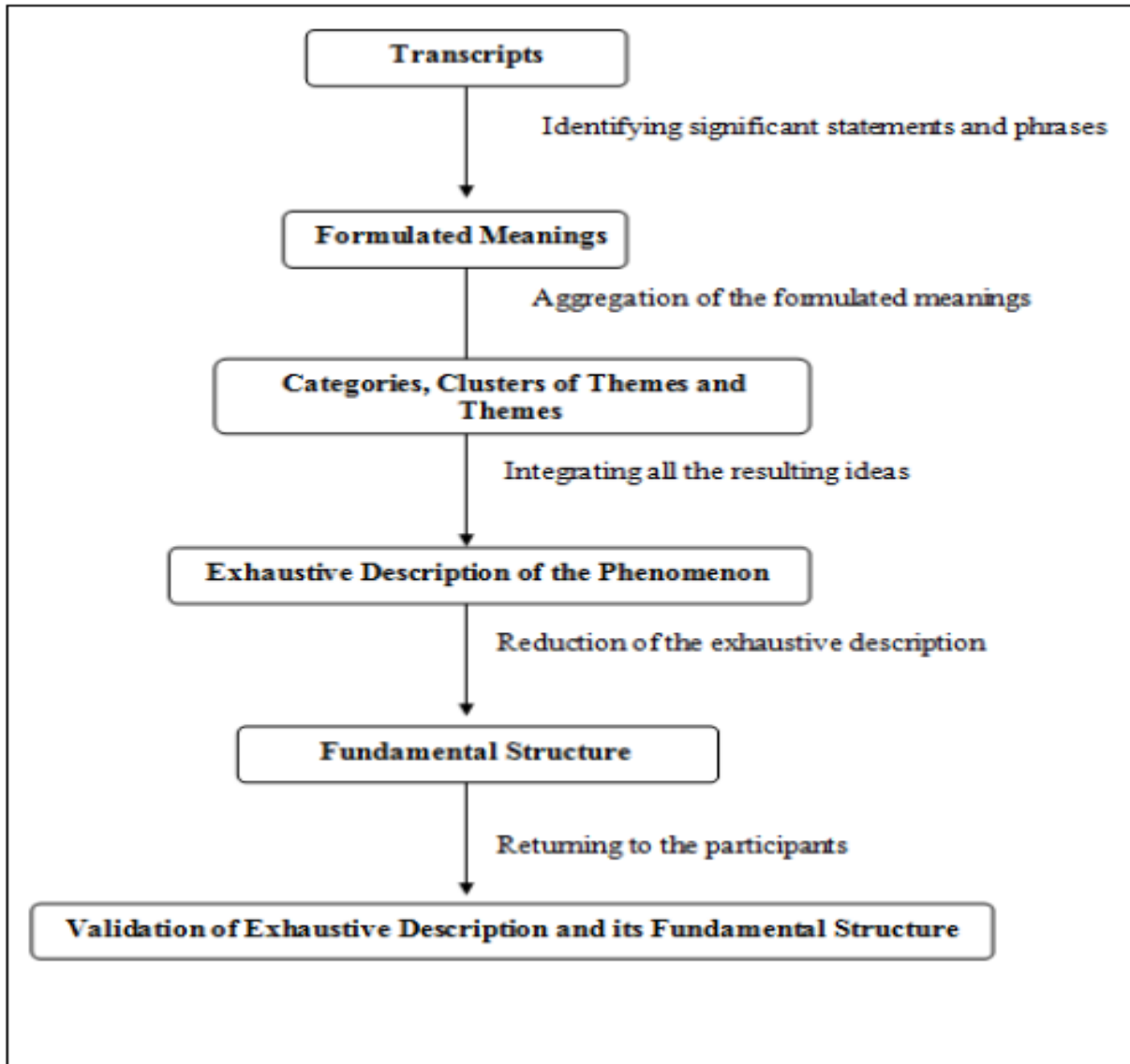
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APPENDICES

Appendix 1

Colaizzi's (1978) Framework



Appendix 2

Work Plan

Activity List (Work Breakdown Structure)

The table below gives a summary of the activities, the duration and the dates on which these activities commenced.

Activity	Activity Name	Activity Description	Duration	Start Date	End Date	Milestone
1	Concept Development	Writing a Concept	60 days	15-06-17	23-08-17	Concept
2	Proposal Development	Writing a Proposal	120 days	24-08-17	16-01-18	Proposal
3	Preparation	Preparation of data collection instruments	30 days	17-01-18	20-02-18	Data Collection instruments
4	Data	Data collection	15 days	21-02-18	09-03-18	Collected Field Data
5	Analysis	Data analysis	30 days	10-03-18	13-04-18	Data Analysis report
6	Constructs Identification	Review and analysis of existing models	15 days	14-04-18	01-05-18	Identified Constructs
7	Model development	Development of model	15 days	02-05-18	18-05-18	Proposed Model
8	Model Evaluation	Evaluation	20 days	19-05-18	11-06-18	Model Evaluation
9	Report writing	Research report writing	15 days	12-06-18	16-07-18	Research report

Table 6.7: Work Breakdown Structure

	i	Task Name	Duration	Start	Finish	Predecessors
1	✓	Concept Development	60 days	Thu 15-06-17	Wed 23-08-17	
2	✓	Proposal Development	120 days	Thu 24-08-17	Tue 16-01-18	1
3	✓	Preparation	30 days	Wed 17-01-18	Tue 20-02-18	2
4	✓	Data	15 days	Wed 21-02-18	Fri 09-03-18	3
5	✓	Analysis	30 days	Sat 10-03-18	Fri 13-04-18	4
6	✓	Constructs Identification	15 days	Sat 14-04-18	Tue 01-05-18	5
7	✓	Model development	15 days	Wed 02-05-18	Fri 18-05-18	6
8	✓	Model Evaluation	20 days	Sat 19-05-18	Mon 11-06-18	7
9		Report writing	30 days	Tue 12-06-18	Mon 16-07-18	8

Figure 5.19: Gantt Chart

Appendix 3

Sample Questionnaire

UGANDA MARTYRS UNIVERSITY

Village Power Uganda – Internal Staff Questionnaire

Preamble

My name is **Sekatwe Tom**, a Postgraduate student of Uganda Martyrs University, Nkozi. I am carrying out a study that is aimed at developing an **e-CRM Implementation Model for Small and Medium Industries in Developing Countries**. This study is part of the requirements for the award of a Master of Science Degree in ICT Management, Policy and Architectural Design

I am inviting you to participate in this study by completing the questionnaire below. If you choose to participate in this study, please answer all questions as honestly as possible. Participation is strictly voluntary and you may refuse to participate at any time. The data collected will provide useful information regarding the development of a model for effective implementation of e-CRM in small and medium enterprises of developing countries. If you would like a copy of this study, please let me know as I come to pick the completed questionnaire. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact me on Telno : 0752830051/0787665884. E_mail: tomsekatwe@gmail.com

Thank you for taking the time to participate in this study.

Yours Sincerely

Sekatwe Tom

SECTION A: Customer Relationship Management Service:

1. What customer Relationship Management Services does your Organization provide to its customers?

2. What role do you play in the provision of these services?

3. Can you please outline the tasks that you perform in the course of providing these services?

4. Who are the other major players within your Organization do you collaborate with in the provision of these services?

SECTION B: Attitude Toward Change:

1. Before Village Power Implemented the Electronic Customer Relationship Management (e-CRM) System, where you notified with the purpose of the System?
A. YES B. NO (Skip to qn 3)
2. If YES, how where you notified?

3. If NO, why do you think you were not notified?

4. Before the Electronic Customer Relationship Management (e-CRM) System was Implemented where you very sure that it will be able to solve the challenges that Village Power was facing in Managing its clients?
A. YES B. NO (Skip to qn 6)
5. If YES, what made you be sure that the Electronic Customer Relationship Management (e-CRM) System Village Power was going to implement would solve the challenges that Village Power was facing in managing its clients?

6. If NO, what made you hesitant in the new Electronic Customer Relationship Management (e-CRM) Systems ability to solve the client management challenges that Village Power was facing?

7. Were you satisfied with the process that Village Power went through to implement this Electronic Customer Relationship Management (e-CRM) System
A. YES B. NO (Skip to qn 9)
8. If YES what contributed to your satisfaction of the process that Village Power adopted to implement this Electronic Customer Relationship Management (e-CRM) System?

9. If NO, what aspects of the implementation process were you not satisfied with?

SECTION C: Commitment to Change

1. Where you willing to make the necessary changes in your work routines in order to make the Electronic Customer Relationship Management (e-CRM) System work?
A. YES B. NO (Skip to qn 3)
2. If YES, how difficult was it to make changes to your work routines in order to make the Electronic Customer Relationship Management (e-CRM) System work?

3. If NO, why where you not committed to making the necessary changes in your work routines in order for the Electronic Customer Relationship Management (e-CRM) System to work

4. Did Village Power encounter any problem in the process of Implementing the Electronic Customer Relationship Management (e-CRM) System?
A. YES B. NO (Skip to qn 6)

5. If YES,
 - i) What problems did Village Power encounter?

 - ii) How were these problems resolved by the Electronic Customer Relationship Management (e-CRM) System Implementation team?

6. If NO,
 - i) Why do you think there was no problems encountered during the Electronic Customer Relationship Management (e-CRM) System Implementation process?

 - ii) How effective was the System Implementation team in mitigating the anticipated risks that Implementation process faced?

7. In your Opinion, why do you think that work routines and procedures should have been an important consideration in assessing the usability of the Electronic Customer Relationship Management (e-CRM) System?

SECTION D: Management Commitment

1. Did Management of Village Power take an active role in preparing an Implementation plan for this Electronic Customer Relationship Management (e-CRM) System?
A. YES B. NO (Skip to qn 3)
2. If YES,.
 - i) Did Management Consult you when preparing the System Implementation plan?

 - ii) Were you able to make changes to the System Implementation plan?

3. If NO,
 - i) Why do you think that management did not take an active role in preparing this Electronic Customer Relationship Management (e-CRM) System Implementation Plan?

 - ii) In your Opinion, how different would the result be different if management had played an active role in preparing the Implementation plan?

4. Was the management of the Village Power enthusiastic about the Implementation of this Electronic Customer Relationship Management (e-CRM) System?
A. YES B. NO (Skip to Qn 6)
5. If YES,
 - i) How do you describe the level of management commitment in the Electronic Customer Relationship Management (e-CRM) System Implementation process?

 - ii) Do you think that Management had a good understanding of the Implementation process?

 - iii) Was management at all times in agreement with the Electronic Customer Relationship Management (e-CRM) System implementation team about the Implementation process?

6. If NO,
 - i) What in your opinion were the reasons for management’s lack of enthusiasm towards the Electronic Customer Relationship Management (e-CRM) System Implementation process?

 - ii) Do you think the results of the implementation process would have been different if management had been more enthusiastic towards the System Implementation process?

7. From the start, did management of the Village Power view this Electronic Customer Relationship Management (e-CRM) System as being important to their long term goals of Village Power?
A. YES B. NO (Skip to Qn 9)

8. If YES,
 - i) Why do you think that management of your Organization viewed this System as being important to the long term goals of Village Power?

 - ii) Do you think that management belief about this Electronic Customer Relationship Management (e-CRM) System contributed to your decision to use it

9. If No,
 - i) Why do you think management did not view this Electronic Customer Relationship Management (e-CRM) System as being important to the long term goals of the Village Power?

 - ii) Did management position about the importance of the Electronic Customer Relationship Management (e-CRM) System for the long term goals of Village Power influence your decision to use it?

SECTION E: Management Support:

1. At the time of the Electronic Customer Relationship Management (e-CRM) System Implementation, did management provide you with the necessary help and resources?
A. YES B. NO (Skip to Qn 3)

2. If YES, How important was this for the success of the Electronic Customer Relationship Management (e-CRM) System implementation process?

3. If No,
 - i) How do you think the results would have been different if management had provided the necessary help and resources?

 - ii) Why do you think there was no enough help and resources provided by management for the Electronic Customer Relationship Management (e-CRM) System implementation process?

4. Did Management encourage and support you to use this System?
A. YES B. NO (Skip to Qn 6)

5. If YES,
 - i) How did management encourage and support you to use the Electronic Customer Relationship Management (e-CRM) System?

 - ii) Do you think this was important for the success of the System Implementation process

6. If No,
 - i) Why do you think management did not encourage and support you to use the Electronic Customer Relationship Management (e-CRM) System?

 - ii) Would your decision to use the Electronic Customer Relationship Management (e-CRM) System have been different if management had supported and encouraged you to use the Electronic Customer Relationship Management (e-CRM) System?

7. Was management very effective in addressing problems to the System implementation team
A. YES B. NO (skip to Qn 9)

8. If YES, How do you think management's ability to communicate effectively with Electronic Customer Relationship Management (e-CRM) System Implementation team contributed to its successful implementation.

9. If NO, why do you think management was not effective in addressing problems to the Electronic Customer Relationship Management (e-CRM) System Implementation team?

10. In your Opinion, do you think that management was effective in supporting changes in existing work routines and process that were critical to the System implementation process
A. YES B. NO (Skip to Qn 12)

11. If Yes,
 - i) How did management support the new changes in existing work routines and process?

 - ii) How do you think that- this contributed to System acceptance?

12. If No, how did this affect the Electronic Customer Relationship Management (e-CRM) System implementation process?

13. Did management try to find a solution wherever difficulties arose during the implementation process?
A. YES B. NO (Skip to Qn 15)

14. If Yes, how effective was management in handling these difficulties?

15. If No. Why do you think management was not able to handle problems that rose during the Electronic Customer Relationship Management (e-CRM) System Implementation process?

SECTION F: User Involvement and Participation

1. As a prospective user of the System, were you interested and excited about it?
A. YES B. NO (Skip to Qn 3)
2. If Yes, did you feel the Electronic Customer Relationship Management (e-CRM) System would be both important and personally relevant to you?

3. If No, why were you not excited and interested in the implementation of this Electronic Customer Relationship Management (e-CRM) System?

4. Was your participation in the implementation of the Electronic Customer Relationship Management (e-CRM) System extensive?
A. YES B. NO (Skip to Qn 6)
5. If Yes,
 - i) I what way did you participate in the Electronic Customer Relationship Management (e-CRM) System Implementation process?

 - ii) What made you participate in the Electronic Customer Relationship Management (e-CRM) System implementation process?

 - iii) How did your participation influence your decision to use the Electronic Customer Relationship Management (e-CRM) System?

6. If No,
 - i) Why did you not participate in the implementation of the Electronic Customer Relationship Management (e-CRM) System?

 - ii) How do you think the Electronic Customer Relationship Management (e-CRM) System use could be different if you took an active role in its implementation?

SECTION G: Relative Advantage

1. Do you find using this System advantageous to your job/?
A. YES B. NO (skip to qn 3)
2. If Yes, in what ways does the Electronic Customer Relationship Management (e-CRM) System enable you accomplish your tasks quickly?

3. If No, why does the Electronic Customer Relationship Management (e-CRM) System not help you accomplish the task quickly?

4. Does the Electronic Customer Relationship Management (e-CRM) System enhance your effectiveness on the job?
A. YES B. NO (Skip to Qn 6)

5. If Yes, how does the Electronic Customer Relationship Management (e-CRM) System enhance your effectiveness to the job?

6. If No, why does the Electronic Customer Relationship Management (e-CRM) System not enhance your effectiveness to the job?

7. Does the Electronic Customer Relationship Management (e-CRM) System improve your quality of work?
A. YES B. NO (Skip to Qn 9)
8. If Yes, how does the Electronic Customer Relationship Management (e-CRM) System improve the quality of work that you do?

9. If No, why does the Electronic Customer Relationship Management (e-CRM) System not improve the quality of work that you do?

10. Does the Electronic Customer Relationship Management (e-CRM) System ease your job?
A. YES B. NO (skip to Qn 12)
11. If Yes, what aspects of the Electronic Customer Relationship Management (e-CRM) System make it easy for you to do your job?

12. If No, why doesn't the Electronic Customer Relationship Management (e-CRM) System ease your job?

SECTION H: User Satisfaction

1. Do you have a high level of confidence and control when working with the Electronic Customer Relationship Management (e-CRM) System?
A. YES B. NO (Skip to Qn 3)
2. If Yes, to what do you attribute the high level of confidence and control that you have while working with the Electronic Customer Relationship Management (e-CRM) System?

3. If No, what makes you lack the feeling of confidence and control while working with the Electronic Customer Relationship Management (e-CRM) System?

4. Is access to the Electronic Customer Relationship Management (e-CRM) System easy and convenient for you?
A. YES B. NO (Skip to qn 6)
5. If Yes, what makes the Electronic Customer Relationship Management (e-CRM) System easy and convenient to access

6. If No, what makes the Electronic Customer Relationship Management (e-CRM) System hard and not convenient to access?

7. Does this System have errors that you have to work-around
A. YES B. NO

8. If Yes,
- i) How has that affected your work effectiveness?

 - ii) Has it been hard for you to work around these errors?

9. Is the Electronic Customer Relationship Management (e-CRM) System Interoperable (Able to share Info with other Systems)
A. YES B. NO (Skip to Qn 11)
10. If Yes, how convenient and easy is it for you to integrate data from other System that use in your day-to—day work?

11. If No, how important is it for you that this System would have the ability to integrate its data with other Systems that you use?

12. Is this System flexible to changes and adjustments that result from new condition, demands or circumstances at your place of work?
A. YES B. NO (Skip to Qn 14)
13. If Yes, what makes the Electronic Customer Relationship Management (e-CRM) System easy to do what you want?

14. If No, what makes the System difficult to adjust to the changes at the way you work and the new conditions at your job?

15. Does the Electronic Customer Relationship Management (e-CRM) System overload you with more data than what you need to do your work?
A. YES B. NO
16. If Yes,
- i) Why do you think this happens? -----
 - ii) Does it usually take you more time to select a proper option?

 - iii) How irritating is it to you? -----
17. Does the Electronic Customer Relationship Management (e-CRM) System provide you with output that is complete and accurate?
A. YES B. NO (Skip to Qn 19)
18. If yes, how satisfied are you with this output?

19. If No, why is it that the output of the Electronic Customer Relationship Management (e-CRM) System does not fit what you require?

SECTION I: Trialability

1. Before committing the use of the Electronic Customer Relationship Management (e-CRM) System, did you have a chance to experiment on it on trial basis
A. YES B. NO (Skip to Qn 3)

2. If Yes,
 - i) How important was it for you to try out the Electronic Customer Relationship Management (e-CRM) System?

 - ii) Did it help you to make a decision about whether or not to continue using it?

3. If No, how do you think your use of this System would be different if you had an opportunity to experiment with it on trial basis before committing to its use?

SECTION J: Attitude towards computer and Innovations

1. Do you think that information Systems and services are important and valuable to you in the performance of your job?
A. YES B. NO (Skip to Qn 3)

2. If Yes,
 - i) How would you describe Village Power computer environment and its impact on your effectiveness and productivity to your job?

 - ii) Why do you find computer Systems and services an important and valuable aid to you in the performance of your job?

3. If No, why do you think computer Systems and services are not important and valuable aid to you in the performance of your job?

SECTION K: Technology-Task fit, Complexity and Training

1. Does the Electronic Customer Relationship Management (e-CRM) System that was implemented by Village Power fit well with your way of doing work?
A. YES B. No (Skip to Qn.3)

2. If yes,
 - i) What makes the Electronic Customer Relationship Management (e-CRM) System to fit well with your work routines and the way you like to work?

 - ii) How would you describe time and effort required to alter your process flow to align with the process built into the Electronic Customer Relationship Management (e-CRM) System?

3. If no, what aspects of your work routines are not compatible with the Electronic Customer Relationship Management (e-CRM) System?

-
4. Was the Electronic Customer Relationship Management (e-CRM) System easy for you to learn?
A. YES B. NO (Skip to Qn.6)

 5. If yes, what made the Electronic Customer Relationship Management (e-CRM) System easy for you to learn?

 6. If no,
 - i) what aspects of the Electronic Customer Relationship Management (e-CRM) System were difficult for you to learn?

 - ii) In your opinion, what should have been done to make the Electronic Customer Relationship Management (e-CRM) System easy to learn?

 7. On the overall, do you think that this Electronic Customer Relationship Management (e-CRM) System is easy to use?
A. YES B. NO (Skip to Qn.9)

 8. If yes, what makes the Electronic Customer Relationship Management (e-CRM) System easy to work with?

 9. If no, what makes the Electronic Customer Relationship Management (e-CRM) System difficult to work with?

 10. Did you receive any training on how to use the Electronic Customer Relationship Management (e-CRM) System that you are currently using?
A. YES B. NO (b) No (Skip to Qn.12)

 11. If yes,
 - i) How were you trained in the use of the Electronic Customer Relationship Management (e-CRM) System?

 - ii) In your opinion what made the training you received on the Electronic Customer Relationship Management (e-CRM)'s use sufficient and effective?

 12. If no, how were you able to use the Electronic Customer Relationship Management (e-CRM) System without any training?

Thank you very much

Appendix 4

E-CRM EXPERT EVALUATION QUESTIONNAIRE

Dear Sir/Madam,

My name is **Sekatwe Tom**, a Postgraduate student of Uganda Martyrs University. I am carrying out a study that is aimed at developing an **e-CRM Implementation Model for Small and Medium Industries in Developing Countries**. This study is part of the requirements for the award of a Master of Science Degree in ICT Management, Policy and Architectural Design

I have developed an eCRM implementation model for small and medium enterprises and I wish to invite you to kindly participate in its evaluation. Please answer all questions as honestly as possible. Participation is strictly voluntary and you may refuse to participate at any time. Your response will go a long way in helping in the evaluation of eCRM implementation model that has been developed by this study. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact me on Telno : 0752830051/0787665884. E-mail: tomsekatwe@gmail.com

Thank you for taking the time to participate in this evaluation.

Yours Sincerely

.

Sekatwe Tom

Date of Evaluation:

Title of Respondent:

1. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the pre-implementation phase of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
<i>E-CRM Initiation</i>					
Organisation Context					
Management Commitment Towards Change					
Readiness Assessment					
E-CRM Strategy					
Risk Management					
Stakeholder Identification and Analysis					
<i>E-CRM Adoption</i>					
Project Sponsor Identification					
Project Team Identification					
Business Process Fit					
Perceived Ease of Use					
E-CRM Policy					
<i>Monitoring and Evaluation</i>					

2. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the actual-implementation phase of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
<i>E-CRM Adaptation</i>					
Training					
Trialability					
Encouragement of Personal Involvement					
Cultural Change/Customer Orientation					
Business Process re-engineering					
System Integration					
<i>E-CRM Acceptance</i>					
Facilitating Conditions					
Technology Task Fit					
User Satisfaction					
Complexity					
Relative Advantage					
Attitude Towards the new system					
Job Satisfaction					
Impact of the new e-CRM on work environment					
<i>Monitoring and Evaluation</i>					

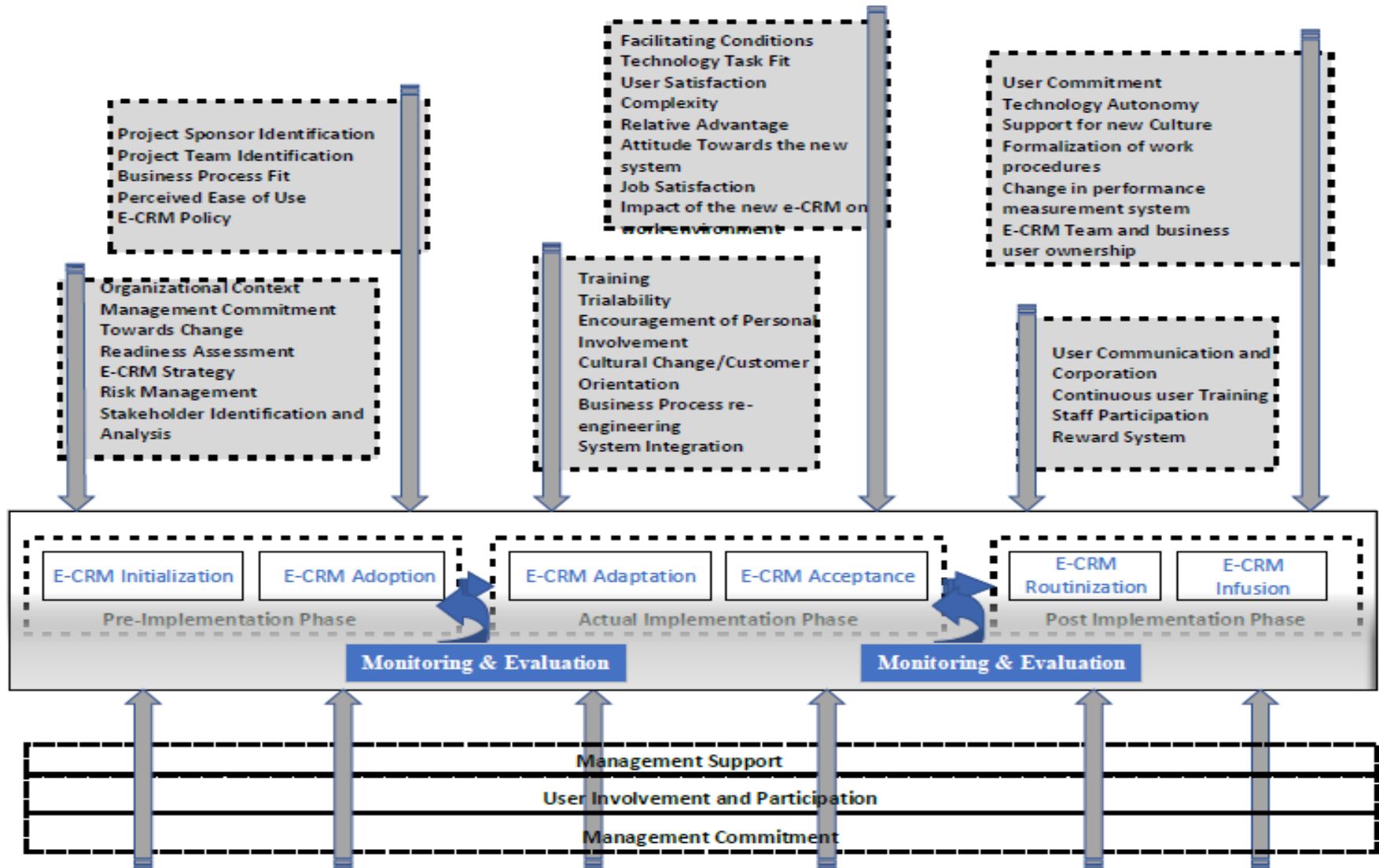
3. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the post-implementation phase of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
<i>E-CRM Routinization</i>					
User Communication and Corporation					
Continuous user Training					
Staff Participation					
Reward System					
<i>E-CRM Infusion</i>					
User Commitment					
Technology Autonomy					
Support for new Culture					
Formalization of work procedures					
Change in performance measurement system					
E-CRM Team and business user ownership					
<i>Monitoring and Evaluation</i>					

4. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the entire implementation process of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
Management Support					
User Involvement and Participation					
Management Commitment					

Developed e-CRM Implementation Model



Appendix 5

SAMPLE EVALUATION RESULT

The screenshot shows a Gmail interface with the search bar containing 'hkmusai@yahoo.com'. The left sidebar lists folders: Compose, Inbox (29,793), Starred, Important, Chats, Sent, Drafts (29), All Mail, Spam (47), and contacts including Tom, Mahmoud AL-Birotee, Rajesh Menon, kanya james, Mazin Abujoudeh, and Unknown. The main email view shows a message from Henry Kanywamusai to Tom, dated Jun 5, 2018, 10:12 AM. The subject is 'Re: Fwd: Model Evaluation | Expert Opinion'. The email body contains the following text:

Dear Tom,

Please find attached my response.

Regards
Henry J Kanywamusai

On Monday, June 4, 2018, 11:14:27 AM GMT+3, Henry Kanywamusai <hkmusai@yahoo.com> wrote:

Dear Tom,

Seen, I shall fill and revert ASAP.

Regards
HJK

On Monday, June 4, 2018, 10:15:40 AM GMT+3, Tom Sekatwe <tomsekatwe@gmail.com> wrote:

----- Forwarded message -----
From: Tom Sekatwe <tomsekatwe@gmail.com>

Gmail interface showing an email from Kamy James. The email subject is "Re: Model Evaluation | Expert Opinion". The sender is Kamy James <kamyajames3@gmail.com> and the recipient is Tom. The email content includes a greeting, contact information for Kamy James (M1: +256 752 730 419, M2: +234 809 419 0400), and a reference to a previous email from Tom dated Mon, Jun 4, 2018 at 9:30 AM. The previous email content is visible in a quote block.

Re: Model Evaluation | Expert Opinion Inbox x

Kamy James <kamyajames3@gmail.com> to me Thu, Jun 7, 10:09 AM

Sebo please see my respionse attached.

Best Regards;
Kamy James
M1: +256 752 730 419
M2: +234 809 419 0400

On Mon, Jun 4, 2018 at 9:30 AM, Tom Sekatwe <tomsekatwe@gmail.com> wrote:

Dear James

Attached is an Expert evaluation questionnaire for the proposed eCRM implementation model.

It is my kind request that you respond to it.

Regards

Tom

Date of Evaluation: 05/06/2018

Title of Respondent: Sr. Consultant, CRM-Implementation

1. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the pre-implementation phase of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.



Factor	1	2	3	4	5
<i>E-CRM Initiation</i>					
Organizational Context				X	
Management Commitment Towards Change					X
Readiness Assessment				X	
E-CRM Strategy					X
Risk Management					X
Stakeholder Identification and Analysis					X
<i>E-CRM Adoption</i>					
Project Sponsor Identification					X
Project Team Identification				X	
Business Process Fit					X
Perceived Ease of Use					X
E-CRM Policy					X
<i>Monitoring and Evaluation</i>					

2. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the actual-implementation phase of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
<i>E-CRM Adaptation</i>					
Training					X
Trialability				X	
Encouragement of Personal Involvement				X	
Cultural Change/Customer Orientation					X
Business Process re-engineering					X
System Integration					X
<i>E-CRM Acceptance</i>					
Facilitating Conditions					X
Technology Task Fit					
User Satisfaction					X
Complexity				X	
Relative Advantage					X
Attitude Towards the new system					X
Job Satisfaction					X
Impact of the new e-CRM on work environment					X
<i>Monitoring and Evaluation</i>					

3. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the post-implementation phase of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
<i>E-CRM Routinization</i>					
User Communication and Corporation					X
Continuous user Training					X
Staff Participation				X	
Reward System					X
<i>E-CRM Infusion</i>					
User Commitment					X
Technology Autonomy				X	
Support for new Culture					X
Formalization of work procedures					X
Change in performance measurement system				X	
E-CRM Team and business user ownership					X
<i>Monitoring and Evaluation</i>					

4. Please evaluate on a scale of 1-5 how important you regard the following factors for the successful completion of the entire implementation process of an eCRM implementation. You are required to answer 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree.

Factor	1	2	3	4	5
Management Support				X	
User Involvement and Participation					X
Management Commitment					X

Figure 6.20: Sample Evaluation Results