A FRAMEWORK FOR POST IMPLEMENTATION EVALUATION OF ECRM IN TELECOMMUNICATION SECTOR: THE CASE OF ORANGE KENYA

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ABSTRACT

This study presents electronic Customer Relationship Management systems (e-CRMs) through the investigation of multiple case studies in the telecommunication field literature. This study seeks to develop a framework for implementation of eCRM in the telecommunication sector in Kenya with special reference to Orange Kenya. The study's general objective was to develop a framework for implementation of eCRM in the telecommunication sector in Kenya. In order to investigate the role of electronic customer relationship management (eCRM) in the Kenyan telecommunications industry, the researcher adopted a case study research design. The target population therefore consisted of the following within Orange Kenya: Information Technology (IT) department staff; Hardware vendors; Maintenance Control Centre staff; Sales and Marketing staff; and Operations (Call Center) department staff. To overcome the limitations of this study the researcher employed stratified sampling and simple random sampling to select one hundred and three (103) respondents from the target population. This study collected both primary and secondary data relating electronic customer relationship management (eCRM) at Orange Kenya. Primary data was collected by use of a questionnaire. Secondary data was gathered from company reports, publications and other literature relating to eCRM within the Kenyan telecommunications industry. Descriptive statistics such as means, median mode and standard deviation was used to help in data analysis. The researcher then proposed a Conceptual Model for adoption of eCRM based on the study's research results.

Key Words: *framework, post implementation evaluation, ECRM, telecommunication sector, Orange Kenya.*

INTRODUCTION

The emergence of the internet and the widespread use of the web technology provide an opportunity for businesses to deploy technology features for electronic Customer Relationship Management (e-CRM). Companies today realize the fact that the customer is the driver for their success and survival, so companies seek to meet customers demand and their expectations by using new technologies available. Many companies are moving towards web-based customer services to reduce costs and provide real-time services to improve customer's convenience and satisfaction. In the past, companies used traditional ways to "interact" with customers by using direct mail, sponsorship, public relations, press releases, exhibitions, merchandizing, word-of-mouth and personal selling among others. Today, companies can manage customers' relations through the Internet in a more efficient and effective way, called e-CRM. The term electronic customer relationship management (e-CRM) is an approach that uses technologies such as (web sites, email, data capture, data warehousing and data mining) to maximize sales to existing customers and encourage continued usage of online services. The telecommunications industry is witnessing a fierce competitive market, where customers enjoy the privilege of switching from one service provider to another because customers want better services at lower prices. The telecommunications industry is experiencing an average between 10 percent and 67 percent annual churn rate, which can be informally defined as the process of customer turnover , and it costs 5-10 times more to recruit a new customer than to retain an existing one . There are several reasons that support the importance of adopting e-CRM practices in the mobile telecommunication sector. The fierce competition, new technologies, market changes forced companies to reposition themselves in order to survive. Many companies realized the value of retaining customers and benefits of customer loyalty. e-CRM can help companies decrease costs and streamline business processes. Understanding e-CRM and its importance will help companies in their operations; improve the relationship and satisfaction of their customers; and increase their market share. e-CRM can help companies move from customer acquisition to customer retention and then to customer extension. The objective of this paper is to present the e-CRM concept in general and within the mobile telecommunication sector (using Orange mobile company as a case example). A case study methodology will be adopted to show how orange moved toward this technology and addressed its features to develop and maintain better relationships with customers. Dyche (2001) (as cited in Fjermestad and Romano, 2003) insists that the goal of electronic customer relationship management (eCRM) systems is to improve customer service, retain valuable customers, and to aid in providing analytical capabilities. Furthermore, it is the infrastructure that enables the delineation of and increases in customer value, and the correct means by which to motivate valuable customers to remain loyal.

Electronic customer relationship management (eCRM) has also gained momentum in Kenya over the last few years, especially in the telecommunications industry which has experienced tremendous growth with the introduction of the mobile phone. The idea of developing an eCRM system for Orange was conceived in 2007 by the then Chief IT Officer (CITO) who talked to the top level Management who approved the project to automate Telephone Sales Offices and Maintenance Control Centers countrywide in order to revolutionize service provision of Landline, CDMA (Code Division Multiple Access), ADSL (Asymmetrical Digital Subscriber Line), ISDN (Integrated Digital Subscriber Line) and Data Services i.e. Kenstream, Kenpac, Jambonet and KenSat services. By embracing eCRM, Orange Kenya has provided quality service, minimized service turnaround time, curtailed theft of funds by staff under dealings with customers, circumvented manual billing procedures and improved its revenue collection from satisfied customers. The Management and internal users are now able to get tailor made reports and search the database for resources at the click of a button, something that could take longer before automation. Prior to eCRM implementation, the service was provided manually and was prone to delays, manual paperwork requiring many staff to provide service, poor record keeping, Manual filling and inefficient staff. This study therefore aims at a framework for implementation of eCRM in Telecommunication Sector, with emphasis on how eCRM has enhanced services at Orange Kenya. The telecommunication industry has developed in diverse ways depending on political, economic, cultural environments within each country. In fact the telecommunication industry faces multiple challenges and dramatic technological changes especially with the emergence of the Internet and mobile communication. Telecommunication companies need to restructure themselves and to compete with global companies in their home-base. With the growth of electronic commerce and moving toward online services, customers desired the ability to serve themselves without having face-to-face interaction. To achieve this demand and to satisfy customers, e-CRM system has the capability to address these requirements through digital media.

This study presents electronic Customer Relationship Management systems (e-CRMs) through the investigation of multiple case studies in the telecommunication field literature. Khoury (2005) explained the e-CRM system in his book through many cases, one of these cases is Turkcell. Turkcell started its operations in 1994 in Turkey as the second mobile phone company in the country; it was granted a grand prize for International Customer Centricity Standards (ICCS), by the CRM Institute in Turkey which rewards companies for successful projects in the field of CRM. Turkcell offers several services including voice, SMS, MMS, WAP, GPRS, Voice Mail, Office Mobile Service, Roaming, Loyalty Program, and many other services. For their CRM program, the Turkcell team identified essential projects like Sales Force Automation, Customer Segmentation, Churn Analysis, and Information Communication Technology (ICT) application of on-line customer services. Turkcell saw the Internet as a way of building and managing relationship with customers, in June 2004 more than 200000 individual subscribers were using Turkcell online services center to pay their bills, subscribe to service packages, monitor their accounts/statements, and make other transactions related to their accounts. Turkcell online services center reflects Turkcell's segment-based marketing strategy, where the menu titles and information are personalized to match the customer's segment in order to meet the customers need and expectations.

Wright, Stone and Abbott (2002) in their study examined three case studies among the European telecommunications companies to illustrate the concept of CRM, focusing on how information technology in the form of the Internet and business intelligence solutions have enabled large businesses to focus on the customer as well as on their products and sales levels. Each company in the cases had used new ways to reach customers through system harnessed to the Internet. The cases depicted changes in marketing thinking and tactics towards customer acquisition and retention. Starting with a given Telecommunications company; the activities of the company are telecommunications services, mobile communications, satellite communications, networking solutions, Internet service provisioning, and others. It used a business intelligence solution that included data mining techniques to drill down through the enormous amounts of data collected in their databases. This step helped gain improved knowledge of customers and prospects key areas related to CRM like: increased customer retention, cross-selling, attrition and loyalty building. The company business intelligence solution is still very new and the CRM projects needs the efforts of the entire company to participate in improving it.

PROBLEM STATEMENT

While there are well-known and significant success stories, failure rates of eCRM projects implementation maybe as high as 70% (Gray and Byun, 2001), between 50% and 70% (Morrel and Philonenko, 2001), from 60% to 80% (Kale, 2004). It is documented in a significant number of articles that most problems in eCRM implementation are not technical (Achuama and Usoro, 2008; Rigby and Ledingham, 2004). Instead, common problems include organizational change and fluctuation, inconsistent and inaccurate customer data, and changes which affect the business, for example mergers. It is asserted from the literature that eCRM is a concept that has been developed in a western (Developed) environment (Sanzogani et al, 2008). Nevertheless, taking to consideration the dynamic nature of business and increasing pace of globalizations which lead to increasing transfer of products, service as well as knowledge and expertise's, eCRM becomes popular in different part of the world including developing countries for local organizations and multinational organizations (Sage, 2006). Identifying successful implementation eCRM projects and studying them is one method to minimize the percentage of failure in these projects. Such approach is believed to overcome different types of obstacles when implementing eCRM such as focusing on the technological side of eCRM and neglecting other components of eCRM such as people and business processes. eCRM implementation in developing countries suffers from a shortage of academic and practical literature compared to the situation in developed countries. Studies that focus on eCRM implementation failure and success in developing countries and do not provide CRM frameworks for successful implementation in developing countries. This study seeks to develop a framework for implementation of eCRM in the telecommunication sector in Kenya with special reference to Orange Kenya.

RESEARCH OBJECTIVE

The study's general objective was to develop a framework for implementation of eCRM in the telecommunication sector in Kenya.

SPECIFIC RESEARCH OBJECTIVES

1. To investigate the effects of deployment of electronic customer relationship management (eCRM) on customer churn.
2. To investigate the effects of deployment of electronic customer relationship management (eCRM) on increased sales and customer lifetime value.
3. To determine whether the deployment of the electronic customer relationship management (eCRM) has reduced operational costs.

4. To develop framework for successful implementation of ECRM in telecommunication sector.
5. To analyze existing models for implementation of ECRM in telecommunication sector.

LITERATURE REVIEW

The difference between CRM and e-CRM

According to Khoury (2005) CRM is the strategic use of information, people, processes, and technology to manage the relationship with customers in every business area (marketing, sales, services, and support). On the other hand, Internet and e-business are accountable for the "e" in the e-CRM term. E-CRM expands the traditional CRM techniques by integrating technologies of new electronic channels, such as web, e-mail, and wireless into the traditional processes of CRM.

Consequently it is important to note the differences between CRM and eCRM which are subtle, but important. E-CRM allows organizations to always operate in real-time and more than that, interactions with customers are transparent so that organizations are able to draw conclusions on customer behavior and measure the success of activities. Unlike conventional CRM processes, e-CRM processes imply high automation of interaction (Chaffey et al., 2009). They further point out that eCRM is more than technology. It requires socio-cultural efforts on the part of the company to make it a reality.

Table 1: The differences between CRM and eCRM

	CRM	eCRM
Customer Data	• Data Warehouse • Customer Information • Transaction history • Product Information	• Web house • Customer information • Transaction history • Product Information • Click stream • Content Information
Analysis of customer characteristics	• Transaction analysis • Customer profile • Past transaction History	• Transaction analysis • Customer profile • Past transaction history • Activity Analysis • Exploratory analysis (Navigation, Shopping Cart, Pattern e.t.c.)
Customer service	• Target Marketing • Static Service • One-way Service • Time and Space Limits	• 1-to-1 Marketing

Source: Pan and Lee (2003)

Electronic Customer Relationship Management (eCRM)

Romano and Fjermestad (2001-2002) suggest that successful eCRM requires attracting and keeping economically valuable customers while repelling and eliminating economically invaluable ones. Winer (2001) asserts that CRM is the new "mantra" of marketing. The traditional focus of marketing was the acquisition of new customers; however this has shifted to customer retention (Grönroos, 1994). Relationship building and management have become core principals of modern marketing approaches in both research and practice (Dwyer and Shurr, 1987) as the paradigm in marketing strategy has shifted from "marketing mix" to "relationship marketing" (Grönroos, 1994).

The key point is that eCRM takes on many forms depending on the organization's objectives. eCRM is not only about technology or software (Rigby *et al.*, 2002) it is about aligning business processes with customer strategies supported with software and technology. In short it is about business change. Rosen (2001) suggests that eCRM is about people, processes, and technology. The people and the process issues are paramount to success. How do we design systems that focus on people and processes? There are two sets of principles, which can aid in this regard, usability and resistance. The next section reviews the general usability and resistance principles in the context of eCRM.

Electronic customer relationship marketing (eCRM) emerges from the internet and web technology to facilitate the implementation of CRM (Azila and Noor, 2011). Dyche (2001) (as cited in Fjermestad and Romano, 2003) suggests that there are two main types of eCRM: operational eCRM and analytical eCRM. Operational eCRM is concerned with the customer touch points. These can be inbound contacts through a telephone call or a letter to a company's customer service center or outbound contacts such as a sales person selling to a customer or an e-mail promotion. Thus, customer touch points can be everything from in-person, Web-based, e-mail, telephone, direct sales, fax, etc. Analytical eCRM requires technology to process large amounts of customer data. The intent is to understand, via analysis customer demographics, purchasing patterns, and other factors so as to build new business opportunities.

Rosen (2001) (as cited in Fjermestad and Romano, 2003) suggests that eCRM is about people, processes, and technology. The people and the process issues are paramount to success. How do we design systems that focus on people and processes? There are two sets of principles, which can aid in this regard, usability and resistance. The next section reviews the general usability and resistance principles in the context of eCRM. Fjermestad and Romano (2003) suggest that successful eCRM requires attracting and keeping economically valuable customers while repelling and eliminating economically invaluable ones. They assert that CRM is the new mantra of marketing. The traditional focus of marketing was the acquisition of new customers; however this has shifted to customer retention. Relationship building and management have become core principals of modern marketing approaches in both research and practice as the paradigm in marketing strategy has shifted from marketing mix to relationship marketing. Relationship marketing emphasizes building relationships that lead to customer retention and long-term customer loyalty, in juxtaposition to traditional transactional marketing, in which making a one-time, immediate sale to the customer is the primary. Electronic customer relationship management (eCRM) has become the latest paradigm in the world of customer relationship management and that recent business surveys suggest that up to 50 per cent of such implementations do not yield measurable returns on investment. They further report that a secondary analysis of 13 case studies suggests that many of these limited success implementations can be attributed to usability and resistance factors (Fjermestad and Romano, 2003).

Scullin et al. (2011) notes that marketing concepts and definitions have remained relatively unchanged until recently and that electronic customer relationship management (eCRM) has forced marketing managers to reevaluate how, when and to what extent they interact with their customers. They further note that electronic customer relationship management (eCRM) is the latest technique companies are using to increase and enhance their marketing skills and capabilities. Velarde (2011) undertook a study on how McCain's eCRM strategy (how McCain Foods used electronic customer relationship marketing (eCRM) to establish and track value) and describes how, in 2008, McCain Foods embarked on an electronic customer relationship marketing (eCRM) programme as a means of to establishing and tracking value in terms of purchase frequency and sales revenues, through comparing like-for-like segmentation with supermarket data, and reports that the effects of an eCRM programme become clear when it becomes possible to track a customer, from first "moment of truth", such as sight of a particularly striking advertisement, all the way through to lifetime value, via a checkout mechanism.

E-CRM Systems

The concept e-CRM started in the mid- 1990s by the emergence of the Internet, web browsers, and other electronic touch points such as e-mail, call centres and direct sales. E-CRM has become a requirement for companies in order to compete and gain competitive advantage. Anumala (2007) identified that the aim of e-CRM is to improve customer services, retain valuable customers, and motivate valuable customers to remain loyal. According to Grönroos (1994) service firms by their inherent characteristics of inseparable production and consumption possess the elements necessary to forge relationships with consumers. Because most companies offer almost the same core product/services, differentiation will be of greater interest to companies with the strongest capability to develop long-term consumer relationships (Zineldin, 1999). Consumers perceived that service quality, satisfaction and value have played an important role in service management (traditionally) in the context of online businesses, so a holistic and multi-purpose view of the whole relationship is required (Holmlund & Strandvik, 1999; Luck & Lancaster, 2003).

In a study of the current use of the Internet as a marketing tool in the hotel industry, Gilbert et al. (1999) present an argument for the application of the RM model as a framework for the development of hotel Web sites. They contend that hotels need a framework that can bridge the gap between simply connecting to the Web and harnessing its power for competitive advantage. However, the pursuit of the marketing objective will be constrained by the possibilities presented within the hotel's market area, the hotel's location and its current product positioning (Jeffrey and Barden, 2000). Drawn from previous literature, this study investigated perceived important E-CRM dimensions and features in managing consumer relations. Ab Hamid and McGrath (2005) reported 12 dimensions of E-CRM program namely: information quality, ease of navigation, consumer service quality, fulfillment, integrated marketing channels, online community, rewards, personalization level, site security, value-added services, perceived trust and price attractiveness.

Implementation of Electronic Customer Relationship Management (eCRM)

According to O'Reilly and Paper (2009) there are several characteristics of eCRM that determine the success or failure of eCRM within organizations. Literature identifies leadership as a critical success factor for eCRM implementation. For instance, in a study by Chen and Chen (2004), the researchers identify the need for initial management support as well as ongoing management leadership as demonstrated by consistent organizational commitment. This unwavering focus is touted to ensure corporate alignment of the eCRM initiatives throughout all levels of the organization. Additional research considers the use of incentives and training as key factors for combating resistance from associates and managers who will be users of the eCRM system or tool. Bentum and Stone (2005) (as cited in O'Reilly and Paper, 2009) support the positive role of effective leadership and highlight the need to align people and subcultures. Findings from this study refute the common claims by software vendors that there is a single path to CRM success. Instead, the authors suggest that there is no single CRM culture that exists, but that a communal and open corporate culture of communication yields the best results.

A second characteristic of eCRM success or failure identified by O'Reilly and Paper (2009) is business process issues. Such issues are commonly cited as reasons for CRM system failure, but are also the most under-researched. However, a few agreed upon notions regarding process do emerge. First, organizations with an existing offline culture of excellent customer care as demonstrated by service consciousness, a customer-centric organization, and customer-focused strategies are more likely to achieve CRM success. Second, as has been noted in previous research, companies with distinct contact with customers, who are in very competitive market spaces, and who value differentiation for products and services, are most ready for CRM. Third, strategic and thoughtful planning is also critical for CRM success. Without a sound business strategy that links directly to the expected outcomes of CRM, CRM systems and tools are unlikely to succeed. Strategic elements such as customer-related benefits, the consolidation of customer information, and improved response times are all mentioned examples that must be carefully planned and designed in order to be realized.

The third characteristic of eCRM success or failure includes systems integration and data (alignment between business and IT). This factor is commonly defined as the matching of business processes with the IT architecture. Failure to achieve alignment is one of the most cited reasons for CRM failure. While it is intuitive that the “system” must match the processes, integration issues have broad-reaching impacts. For instance, consideration for where data resides, the number of systems required for integration, the usability of, and resistance to the system by users, and the expected outcomes and system functionality are commonly overlooked (O'Reilly and Paper, 2009).

While tight systems integration is identified as a critical success factor, a technology's ability to be flexible (Szmigin et al., 2005) (as cited in O'Reilly and Paper, 2009) is also important. System flexibility allows system users to more readily adapt to customer data and trends, and ultimately deliver personalized marketing information to customers. However, the ability to design, develop, and deliver usable, fully integrated systems is difficult. Understanding this, it is important to continually measure and model customer sales, satisfaction and value, both in terms of absolute figures and trends. Lastly, the role and influence of vendors in the implementation of eCRM is another critical area according to O'Reilly and Paper (2009). They point out that while the majority of eCRM research embraces a company perspective lens, particularly the IT and/or the marketing departments responsible for implementation of eCRM strategies; in our review of the literature, it appears that vendors have remained backstage, silent, and unseen. Often vendors are referred to as extensions of management or are considered as an “eCRM software solution by company X, Y, Z.” There is a paucity of research regarding the motivations and insights of the vendors who sell, support, and develop eCRM systems.

Evolving role of Electronic Customer Relationship Management (eCRM)

Companies have continuously evolved from customer relationship management (CRM) strategy to electronic customer relationship management (eCRM). According to Pan et al. (2003) eCRM expands the traditional CRM techniques by integrating technologies of new electronic channels. E-CRM solution supports marketing, sales and service and with the advancement of Web-based technology, market dynamics are driving companies to adopt E-CRM. E-CRM cannot be separated from CRM as it needs to be integrated seamlessly. However, many organizations do have specific eCRM initiatives or staff responsible for eCRM. Both CRM and e-CRM are not just about technology and databases, it is not just a process or a way of doing things, it requires, in fact, a complete customer culture (Chaffey et al., 2009).

In order to investigate the evolving role of electronic customer relationship management (eCRM) at Orange Kenya, the researcher will develop a conceptual framework that highlights utility (service time, system errors and number of complaints) and automation (call response time, centralized database and reporting) as the independent variables in line with the study's specific research objectives. The dependent variables will be reduced customer churn, increased sales & customer lifetime value and reduced operational costs due to increased customer loyalty, more effective marketing, improved customer service and support, and greater efficiency and cost reduction at Orange Kenya.

RESEARCH METHODOLOGY

Research design

In order to investigate the role of electronic customer relationship management (eCRM) in the Kenyan telecommunications industry, the researcher adopted a case study research design. A case study is an in-depth investigation of an individual or a group or an institution with a primary motive to determine factors and relationships that have resulted in the behaviour of the study (Robson, 2002). The researcher undertook a case study of Orange Kenya as it is one of the longest running telecommunications company in Kenya that has implemented eCRM between 2008 and 2010. The research design enabled the researcher to undertake an in-depth investigation a framework for implementation of electronic customer relationship management (eCRM) by looking into the investment, experiences, and value of eCRM at the company.

Target population

The target population therefore consisted of the following within Orange Kenya: Information Technology (IT) department staff; Hardware vendors; Maintenance Control Centre staff; Sales and Marketing staff; and Operations (Call Center) department staff.

Sampling Procedure

To overcome the limitations of this study the researcher employed stratified sampling and simple random sampling to select one hundred and three (103) respondents from the target population. The researcher categorized the respondents into five (5) strata namely: Information Technology (IT) department staff; Hardware vendors; Maintenance Control Centre staff; Sales and Marketing staff; and Operations (Call Center) staff. Simple random sampling then used to proportionately select respondents from each stratum at 90% representative of the study's population. According to Mugenda and Mugenda (2003) a good sample population should be between 10% to 30% of the entire population, this study selected 90% of the entire population, which is far above the recommended threshold of 30%. Due to the small number of employees in some departments, in departments with less than 30 respondents, all the employees were interviewed except for Call Centre staffs who are 60 in number; I envisage interviewing only 50% of them, that's 30 staff.

Data Collection

This study collected both primary and secondary data relating electronic customer relationship management (eCRM) at Orange Kenya. Primary data was collected by use of a questionnaire. The questionnaire contained open and closed ended questions and was divided into two sections, A and B. Section A focused on the profile of the respondent while section B contained questions on the research objectives. The questionnaire was dropped and picked from the respondents after a reasonable period of time. Secondary data was gathered from company reports, publications and other literature relating to eCRM within the Kenyan telecommunications industry.

Data Analysis

Before processing the responses, the completed questionnaires were edited for completeness and consistency. A content analysis and descriptive analysis were employed. The content analysis was used to analyze the respondents' views about a framework for implementation of eCRM in telecommunication sector. The data was coded to enable the responses to be grouped into various categories. Descriptive statistics such as means, median mode and standard deviation was used to help in data analysis. Tables and other graphical presentations as appropriate were used to present the data collected for ease of understanding and analysis. A multivariate regression model was applied to determine the relative importance of each of the variables with respect to an implementation of eCRM in telecommunication sector.

RESEARCH RESULTS

The study found that items that best reflect the importance of the particular factor in the implementation of eCRM in the organization were trade, number of complaints, system errors as, centralized data base, call response time, service time and reporting. The validity of various statements in regards to the customer churn at the organization, the study found that there were increased positive customer feedback, increased repurchase orders, customer retention and increased customer base. The study revealed that the key factors that affect the implementation of eCRM at Orange Kenya were; people, processes and technology. On rating various statements in regards to the customer sales and lifetime value at the organization, the study found that customer period with company, increased service cessations as and increased customer sales volumes. The study further revealed that a decreased customer compliment was rated as very invalid. The study found that respondent strongly that eCRM at Orange Kenya has had a positive return on investment and has achieved the desired results.

On the rating validity of each statements as regards to reduction of operational costs at the organization, the study found that the following statement were regard as valid, Reduced expenditure, Improved cash flow for department, Increased movement of products and Reduced salaries and overhead costs. The study further revealed that respondent rated the current organization's performance with regards to eCRM as profitable and growing. The study also established that the support that the management should adopt to improve eCRM at the organization were; staff training, financial investment, outsourcing, technological investment and re-structuring.

On the rating various aspect individual factors on the implementation of eCRM, the study found that executive's internet experience has an effect on the implementation of eCRM application , executive's self-efficacy has an effect on the implementation of eCRM application, executive's innovativeness has an effect on the implementation of eCRM application, executive’s attitude towards eCRM has an effect on the implementation of eCRM application and executive's subjective norm has an effect on the implementation of eCRM application.

On various aspect of various aspect organizational factors on the implementation of eCRM, the study found that firm's size in regard to total capital investment has an effect on the implementation of eCRM application, respondent agreed that Business experience has an effect on the implementation of eCRM application, technological expertise has an effect on the implementation of eCRM application, financial resource has an effect on the implementation of eCRM application and firm's size in regard to number of employees has an effect on the implementation of eCRM application.

From the findings on various aspect technological factors on the implementation of eCRM, the study found that observability has an effect on the implementation of eCRM application , that compatibility has an effect on the implementation of eCRM application, perceived relationship marketing functionality has an effect on the implementation of eCRM application, perceived easiness has an effect on the implementation of eCRM application, trial ability has an effect on the implementation of eCRM application and perceived advantage has an effect on the implementation of eCRM application.

From the findings on various aspect environmental factors on the implementation of eCRM, the study found that competitive pressure has an effect on the implementation of eCRM application as, customer pressure has an effect on the implementation of eCRM application, external support has an effect on the implementation of eCRM application, Governmental encouragement has an effect on the implementation of eCRM application and industry pressure has an effect on the implementation of eCRM application.

From the findings on the influence of various aspect of Perceived Environmental Uncertainty on the adoption of ECRM, the study found that compared with rival firms, our organization has more difficulty in predicting business and technological obsolescence, they believe that believe that it is difficult for our organization to foresee the likelihood and determine the impact of potential security risks that may threaten the survival of the organization, they believe that our organization cannot identify and interpret the sources and potential consequences of environmental volatility and they believe that their organization cannot anticipate the business and computer risks resulting from changes in the technological and business environments.

On the influence of various aspect of Perceived Gain in Competitive Advantage on the adoption of ECRM, the study found that the adoption of ECRM management makes our organization more efficient than other firms , they believe that the adoption of ECRM makes our business processes more efficient than other firms, they believe that the adoption of ECRM allows our organization to manage our resources better than other firms and they believe that the adoption of ECRM allows our organization to generate more business opportunities than other firms .From the findings on the influence of various aspect of Availability of Resources on the adoption of ECRM, the study found that our organization has a more flexible infrastructure to efficiently support ECRM adoption, respondent agreed that compared with other firms, our organization has more efficient and streamlined business processes that could result in successful adoption of ECRM and compared with other firms, our organization has more human resources that could be used for ECRM .

On the influence of various aspect of top management support on the adoption of ECRM, the study found that the senior management of our organization demonstrates support for ECRM adoption, that the senior management of our organization is involved in the decision-making process of ECRM adoption, that the senior management of our organization establishes processes and standards to monitor ECRM adoption and the senior management of our organization formulates a strategy for the introduction of ECRM adoption.

From the findings on the influence of various aspect of IT Capability on the adoption of adoption of ECRM, the study found that our organization has strong IT leadership, respondent agreed that our organization has enough experience with IT, our organization has competent IT staff , our organization has strong IT planning capability, our organization has established a security policy, objectives, targets, and processes relevant to managing risks and improving ECRM in order to deliver results in accordance with the organization's overall policies and objectives, our organization perceives the importance of strategic use of IT and our organization has implemented and operated information security, policy, controls, and processes.

From the findings on the influence of various aspect of cultural acceptability on the adoption of ECRM, the study found that our organization is dynamic to be first with competitive actions, outcomes and achievements and our organization is committed to innovation and change, that our organization emphasizes growth through acquiring new resources and standards, our organization is willing to take risks, our organization is willing to change formal rules and policies and our organization has assessed and measured process performance against security policy, objectives and practical experience and reported the results to management for review .

CORRELATIONS ANALYSIS

Table 2: Correlations

		Implementation of eCRM	Perceived Environmental Uncertainty	Perceived Gain in Competitive Advantage	Availability of Resources	Top Management Support	IT Capability	Cultural Acceptability
Implementation of eCRM	Pearson Correlation	1	.668**	.5275**	.543	.715**	.608**	.371
	Sig. (2-tailed)		.000	.000	.000	.059	.075	.005
	N	103	103	103	103	103	103	103
Perceived Environmental Uncertainty	Pearson Correlation	.668**	1	.107	.327**	-.014	.293	-.080**
	Sig. (2-tailed)	.000		.079	.000	.815	.000	.186
	N	103	103	103	103	103	103	103
Perceived Gain in Competitive Advantage	Pearson Correlation	.575**	.107	1	.009**	.478	-.026	.184**
	Sig. (2-tailed)	.000	.079		.878	.000	.670	.002
	N	103	103	103	103	103	103	103
Availability of Resources	Pearson Correlation	.543**	.327**	.009	1**	.053**	.577	.225**
	Sig. (2-tailed)	.000	.000	.878		.381	.000	.000
	N	103	103	103	103	103	103	103
Top Management Support	Pearson Correlation	.715	-.014	.478**	.053	1	.258**	.206
	Sig. (2-tailed)	.059	.815	.000	.381		.000	.001
	N	103	103	103	103	103	103	103
IT Capability	Pearson Correlation	.608	.293**	-.026	.577	.258**	1	.232
	Sig. (2-tailed)	.075	.000	.670	.000	.000		.000
	N	103	103	103	103	103	103	103
Cultural Acceptability	Pearson Correlation	.371**	-.080	.184**	.225**	.206	.232**	1**
	Sig. (2-tailed)	.005	.186	.002	.000	.001	.000	
	N	103	103	103	103	103	103	103

From the correlation results it was found that Perceived Environmental Uncertainty, Perceived Gain in Competitive Advantage, Availability of Resources, Top Management Support, IT Capability and Cultural Acceptability had positive strong relationship with adoption of implementation of eCRM as shown by positive correlation coefficient which were found to be statistically significant except for cultural acceptability and availability of resource which were found not to be significant but were positively associated with implementation of eCRM

Hypothesis testing using ANOVA

The critical value established from the student distribution table at 5% significance level and 102 degree of freedom was 1.967.

Hypothesis 1: *The greater the level of environmental uncertainty perceived by an organization, the greater the likelihood that the organization will conform to institutional pressures; peer influence and supervisory authority influence to implement eCRM.*

On comparing the critical value and the calculated value ($1.498 < 1.967$) the calculated value is less than the critical value, this lead to the acceptance of the hypothesis that the greater the level of environmental uncertainty perceived by an organization, the greater the likelihood that the organization will conform to institutional pressures; peer influence and supervisory authority influence to implement eCRM.

Hypothesis 2: *The greater the gain in competitive advantage perceived by an organization, the greater the likelihood that the organization will conform to institutional pressures peer influence and supervisory authority influence to implement eCRM.*

On comparing the critical value and the calculated value ($1.159 < 1.967$) the calculated value is less than the critical value, this lead to the acceptance of the hypothesis that the greater the gain in competitive advantage perceived by an organization, the greater the likelihood that the organization will conform to institutional pressures peer influence and supervisory authority influence to implement eCRM.

Hypothesis 3: *The greater the availability of organizational resources, the greater the likelihood that the organization will conform to institutional pressures peer influence and supervisory authority influence to implement eCRM.*

On comparing the critical value and the calculated value ($0.507 < 1.967$) the calculated value is less than the critical value, this lead to the acceptance of the hypothesis that the greater the availability of organizational resources, the greater the likelihood that the organization will conform to institutional pressures peer influence and supervisory authority influence to implement eCRM.

Hypothesis 4: *The greater the top management support, the stronger the relationships between institutional influences peer influence and supervisory authority influence and implementation of eCRM.*

On comparing the critical value and the calculated value (0.909 < 1.967) the calculated value is less than the critical value, this lead to the acceptance of the hypothesis that the greater the availability of organizational resources, the greater the likelihood that the greater the top management support, the stronger the relationship between institutional influences peer influence and supervisory authority influence and implementation of eCRM.

Hypothesis 5: *The greater an organization's IT capability, the stronger the relationship between institutional influences peer influence and supervisory authority influence and implementation of eCRM.*

On comparing the critical value and the calculated value (1.907 < 1.967) the calculated value is less than the critical value, this lead to the acceptance of the hypothesis that the greater the availability of organizational resources, the greater the likelihood that the greater an organization's IT capability, the stronger the relationship between institutional influences peer influence and supervisory authority influence and implementation of eCRM.

Hypothesis 6: *The higher the cultural acceptability of innovation, the stronger the relationship between institutional influences peer influence and supervisory authority influence and implementation of eCRM.*

On comparing the critical value and the calculated value (1.045 < 1.967) the calculated value is less than the critical value, this lead to the acceptance of the hypothesis that the greater the availability of organizational resources, the greater the likelihood that the greater an organization's IT capability, the stronger the relationship between institutional influences peer influence and supervisory authority influence and implementation of eCRM. All the hypothesis were found to be statistically significant as the significance value were less than 0.05 an indication that the data used was statistically significant to make conclusion for the study

CONCLUSIONS

The suggested framework suitable for adoption of ECRM was derived from the literature, telecommunication industry and interaction with market forces theory of innovation diffusion and the study carried out on Orange in Kenya.

Peer Influence

Successful peer firms should adopt one or more frameworks for ECRM adoption. For our organization-wide ECRM design, we have followed the lead of successful peer firms in adoption ECRM frameworks. Organization-wide information ECRM policy design, we have followed the lead of successful peer firms in incorporating ECRM frameworks.

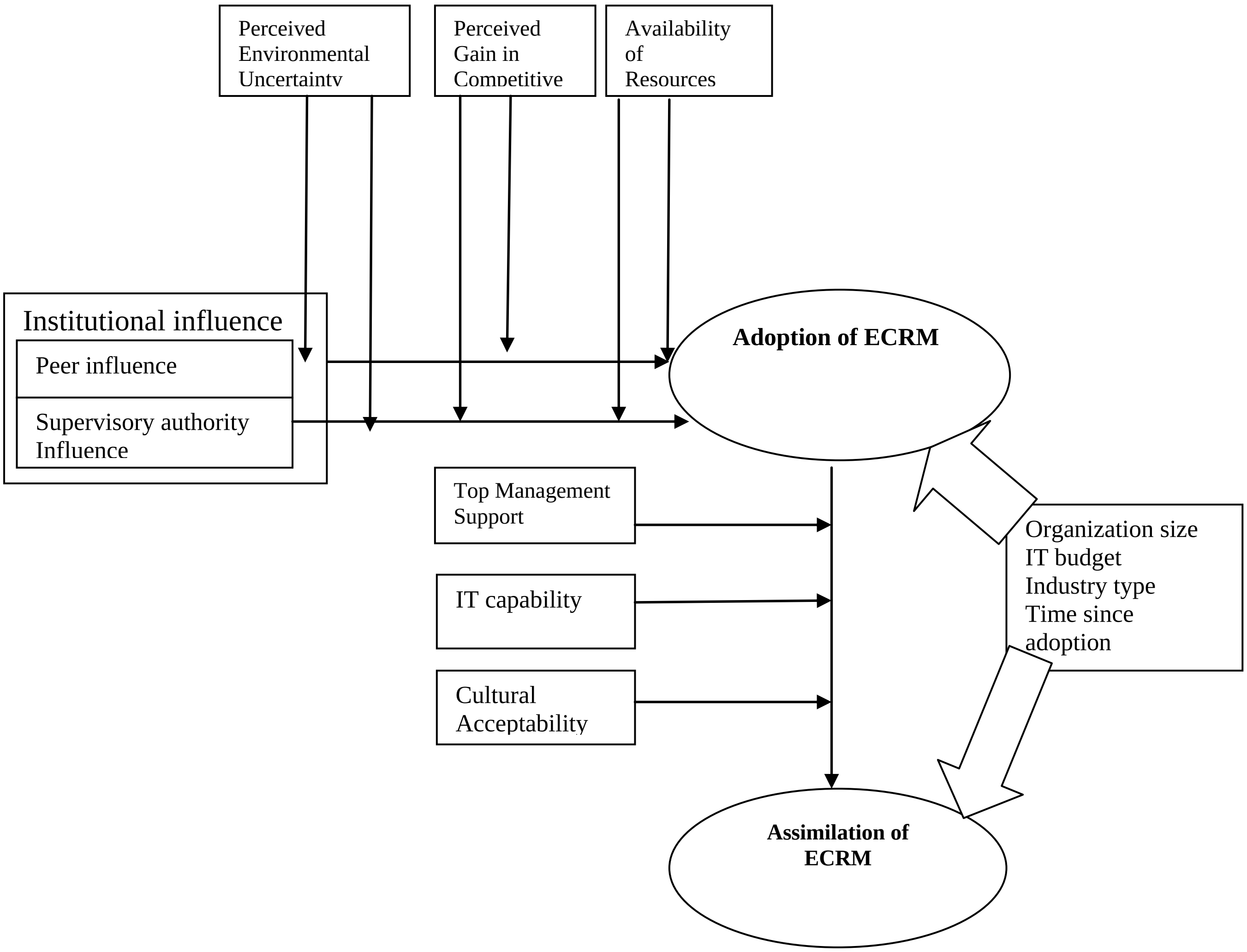

Figure 1: Proposed Conceptual Model for adoption of eCRM

Supervisory Authority Influence

Supervisory regulators have been proponents of ECRM. Supervisory regulators have pressured us to investigate the organization's ECRM. Supervisory regulators have pressured us to undertake the organization's ECRM.

Perceived Environment Uncertainty

Organization cannot anticipate the business and computer risks resulting from changes in the technological and business environments. Organization cannot identify and interpret the sources and potential consequences of environmental volatility. Compared with rival firms, Organization has more difficulty in predicting business and technological obsolescence.

Perceived Gain in Competitive Advantage

Adoption of ECRM makes our organization more efficient than other firms. Adoption of ECRM allows organization to manage our resources better than other firms. We believe that the adoption of ECRM makes business processes more efficient than other firms. Adoption of ECRM allows organization to generate more business opportunities than other firms.

Availability of Resources

In the adoption of EISA organization needs more human resources that will be used for ECRM. Organization should have more flexible infrastructure to efficiently support ECRM. Organization should have more efficient and streamlined business processes that can result in successful adoption of ECRM.

Top Management Support

Senior management of organization should demonstrate support for ECRM. Senior management of organization should formulate a strategy for the introduction of ECRM. Senior management of organization should establish processes and standards to monitor ECRM adoption. Senior management of organization should be involved in the decision-making process of ECRM adoption

IT Capability

There is need for organization to have strong IT leadership, organization should have strong IT planning capability, there should be enough experience with IT, organization should have competent IT staff and organization should perceives the importance of strategic use of IT.

Cultural Acceptability

There is need for organization commitment to innovation and change. Organization should be willing to take risks. Organization should emphasize growth through acquiring new resources and standards. Organization should be dynamic to be first with competitive actions, outcomes and achievements and organization should be willing to change formal rules and policies.

Adoption of Information ECRM

Organization should consider the adoption of ECRM. Organization should adopt ECRM. Organization should pay attention to adopt ECRM.

Assimilation of ECRM

There is need for organization to establish a ECRM policy, objectives, targets, and processes relevant to managing risks and improving ECRM in order to deliver results in accordance with the organization's overall policies and objectives. Organization should implement and operate information security, policy, controls, and processes. Organization should assess and measure process performance against ECRM policy, objectives and practical experience and reported the results to management for review. Organization should take corrective and preventive actions based on the results of the management review to achieve continual improvement of ECRM. Increased organizational effectiveness is obtained by implementing ECRM in a more integrated manner to support higher levels of organizational work.

RECOMMENDATIONS

Three critical economic factors were identified: environmental uncertainty, competitive advantages, and availability of resources. Indeed, these factors have been discussed in previous research on ECRM adoption and effectiveness. Environmental uncertainty: Every organization that we interviewed emphasized the importance of this in the adoption stage. When decision-makers fail to acknowledge or misinterpret the sources and potential consequences of environmental uncertainties related to ECRM management, the impact can be a serious decline in an organization’s performance or damage to its legitimacy in the institutional environment.

Competitive advantage: Another important concern consistently emphasized by interviewees was economic benefits. In the rapidly changing business environment, organizations need to create a competitive advantage to differentiate their products and services. Investment in ECRM can generate competitive advantages because of a stronger corporate image and enhanced customer confidence.

Availability of resources: From our interviews, we realized that available resources allow firms to fund an innovation, absorb the cost of unsuccessful implementation, and implement the innovation by exploring new ideas. Therefore, the availability of resources is particularly important when organizations consider to what extent they will fully invest in ECRM, a simple policy document or a full-scale enterprise implementation. From an organizational capability perspective, three important factors were derived including top management support, IT capability and cultural these factors were also mentioned most frequently as key organizational capability factors in prior studies. Top management support: All interviewees pointed out that top management support is a critical element of any successful innovation assimilation. Studies in ECRM also show that top management support has a positive impact on increasing ECRM effectiveness.

IT capability: As most interviewees mentioned, an organization manages its innovations through an IT infrastructure, that is to say a framework that connects different members of the organization with internal and external knowledge and processes. The usefulness and roles of IT in the assimilation process have been widely discussed in the literature. Cultural (organizational culture) acceptability: This factor was strongly and consistently recommended by all interviewees. Since diffusing administrative innovation in an organization is as much a social activity as it is a managerial and/or technical activity, cultural change is a prerequisite for its successful assimilation.

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