

## STUDY ON THE FACTORS AFFECTING ADOPTION OF ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT INFORMATION SYSTEMS IN UGANDAN SMES

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### **Abstract**

*The recent global recession has pushed businesses to search for means to efficiently and effectively manage their customers so as to remain competitive. This has led to the rise in the adoption and use of information technology in different business functions. These developments have yielded into the adoption of Electronic Customer Relationship Management (e-CRM). However, as this technology sees more prominence the developed countries, many initiatives in developing countries have failed. This study was intended to examine the factors that affect the adoption of e-CRM in developing countries. A case study was conducted in Uganda, in which 150 Small and Medium-sized Enterprises (SMEs) were purposively selected from 30 districts to participate in the study. A self administered questionnaire was used to collect data, which were then coded and analyzed using descriptive statistics.*

*Although the findings indicate that e-CRM was very beneficial in promoting SMEs' new products, marketing existing products, keeping their customers updated and sharing information, most SMEs faced challenges in adopting to the technology. The main challenges were highlighted as lack of knowledge about the e-CRM, lack of ICT skills, poor infrastructure, lack of top management support and resistance to change. The study gives some valuable recommendations for better adoption of e-CRM in SMEs.*

**Key words:** *e-CRM; e-CRM adoption, SMEs; Technology adoption, Uganda.*

**JEL Classification:** *M15*

### **I. INTRODUCTION**

The recent global recession has pushed businesses to search for means to efficiently and effectively manage their customers so as to remain competitive. This has led to the rise in the adoption and use of information technology in different business functions. One such business function is Customer Relationship Management (CRM). According to Chen and Popovich (2003) and Almotairi (2009), CRM is an integrated approach of managing customer relationships through a combination of important components namely people, process, technology, culture and relationship. Customer Relationship Management has been widely adopted by both large and small businesses worldwide with the primary goal of enhancing relationship between the organization and its customers (Sophonthummapharn, 2009; Rajan and Bhatnagar, 2009). The application of technology in customer relationship management has given birth to what is known as electronic Customer relationship Management or simply put as e-CRM (Ortega et al., 2008).

Adoption is the acceptance of new innovations or technology at a given period of time. Nguyen (2009) defines adoption as the decision to use a new technology. In this research, the concept of adoption is defined as a decision by an organization to accept and use technology enabled tools, methods and techniques for managing customer relations that were not previously used by an organization. To contextualize the adoption concept, different models have been put forward. Among these include adopter centered process oriented model (Pereira, 2002) that deals with individual perceptions and attitudes that form part of the adoption process; diffusion of innovations model (Rogers, 1995) that deals with user perceptions and attitudes towards adoption; theory of planned behavior (Fishbein and Ajzen, 1975) that deals with behavior, attitude and subject norm that can be used to determine adoption; theory of reasoned action (Ajzen, 1985) that deals with the attitude and subject norm and behavioral control that determine intention towards adoption; technology acceptance model (1986) used to predict the adoption of the technology based on the ease of use and usefulness of the technology; TOEM (Tornatzky and Klein, 1982; Tornatzky and Fleischer, 1990; Thong, 1999) that deals with Technology, Organizational,

Environmental and Management adoption factors; Inter Organization Relationship factors (Chong et al., 2009) that focuses on factors that facilitate technology adoption as a result of a relationship between two or more organizations. These include factors such as collaboration, communication, information sharing, and partner's power.

Ugandan SMEs, just like those in many other developing countries lack e-CRM systems. Rao (2011) argues that most SMEs in Africa do not have e-CRM systems in place. Further to this, a survey conducted by the Global Forum indicated that only 6% of SMEs in developing countries had successfully implemented e-CRM systems (Yuen, 2007). Although no clear reasons have been advanced e-CRM adoption failures in SMEs of most developing countries, researchers have suggested limited resources for implementing e-CRM systems such as skilled personnel, computer software and hardware as the major constraints. This study therefore sought to analyze the e-CRM situation in SMEs and identify the challenges faced and make some recommendations for improved adoption of e-CRM by SMEs in developing countries like Uganda. Specifically, the study set out to; 1) examine the current state of e-CRM usage by SMEs and identify the problem(s) faced and 2) identify the factors affecting adoption of e-CRM Information Systems in Ugandan SMEs..

## II. LITERATURE REVIEW

Uganda is one of the leading entrepreneurial countries in the world with the majority of its business ventures being in the category of SMEs. The Global Entrepreneurship Monitor ranked Uganda as the highest (TEA 29.2) and second highest (TEA 32.6) entrepreneurial country in the world respectively (GEM report, 2003, 2004). This means that SMEs significantly contribute to the economy of Uganda and therefore their success is critical to the Ugandan economy. SMEs in Uganda are estimated at approximately 1 million, accounting for 90% of the private sector (UNIDO, 2008). Majority of these SMEs are located in urban places (Towns) with Kampala taking the lion's share. The main SME sectors include trade, agro-processing and small scale manufacturing. Others include Real Estate & Construction, Clearing and Forwarding, Events Management, HealthCare Services, Metal works, Tailoring, Art, Crafts and Culture, Energy & Environment, Farming & Fishing, ICT & Telecommunications, Personal Care services, Tours and Travel Services, Catering & Food Services, Entertainment, Food Processing, Leather Products, Photography and Wood works. Despite the critical role that SMEs play in developing economies, many SMEs still face numerous challenges including low levels of productivity, profitability, market competitiveness and limited access to information. Ugandan SMEs are grappling with inadequate IT penetration, lack of awareness of the potential of ICT to improved business performance, limited skills to use ICT to promote businesses, inadequate access to information and markets and costly telecommunications. Although 94% of SMEs have access to mobile phones, the majority of them do not use them on internet and email, for business purposes. Given the critical role SMEs is playing in economic development, there is need to harness the potential in ICT to bring about efficiency among the SMEs.

There is little scholarly work that has been documented on e-CRM in Uganda and yet SMEs play a pivotal role in the Ugandan economy (Street and Meister, 2004; Alam and Ahsan, (2007). The majority of the available literature is based on developed nations. The literature further focuses more on large organizations located within the United States and European Union economies (Adebanjo, 2003; Boyle, 2001; Gronroos, 2004; Hunt and Morgan, 2007). Few among these studies have focused on SMEs (Harrigan et al., 2009). Many SMEs have not adopted e-CRM even when its adoption would increase their efficiency, profitability and reduce failure rate among SMEs (Amit and Zott, 2001; Cooper et al., 2005; Zontanos & Anderson, 2004). This may explain why some SMEs efforts to effectively manage their customer relationships electronically have not achieved the intended objectives.

## III. THEORETICAL GROUNDING; THE TECHNOLOGY ACCEPTANCE MODEL

Technology Acceptance Model (TAM) was developed as an attempt to explain and apply the theory of Reasoned Action (TRA) to Information System adoption studies. TAM is hinged on two factors; perceived usefulness and perceived ease of use as determinants for an individual's intention to use a system with intention to use a system serving as a mediating factor of actual system use. The model posits that perceived usefulness is directly affected by perceived ease of use. Over the recent years, researchers on technology adoption have modified the TAM by either introducing factors from related models, additional or alternative belief factors, and by examining antecedents and moderators of perceived usefulness and perceived ease of use (Wixom and Todd, 2005).

Although TAM is a popular model for predicting and explaining information System use, there is skepticism among some researchers regarding its application and theoretical accuracy. Bagozi (2007) highlighted the poor relationship among the model constructs. He questioned intention-Actual use relationship. He further argued that behavior cannot be taken as a terminal goal but rather a means to a more fundamental goal. Bagozi (2007) also argues that intention may not be representative of actual use. The time lag between intention and actual

use is full of uncertainties and other intervening factors that may inhibit system use even when there is intention to use. Political and legal factors may outlaw the use of specific system during the intention to use or actual use. However, to-date, TAM remains the most empirically tested adoption model, hence was chosen as a good guiding theory towards understanding the influencing factors for adoption of e-CRM by SMEs in Uganda.

**IV. RESEARCH STRATEGY**

A research strategy is a plan of action that gives direction to your efforts, enabling you to conduct research systematically rather than haphazardly. It is a plan by which the activity of searching and assessing information is carried out (Shajahan, 2007). Research strategy helps the researcher to stay focused, reduce frustration, and enhance the quality of research and save time in the long run. A deductive strategy was preferred because this study was dealing with a well-known and/or structured problem of e-CRM adoption. What was missing was ascertaining the particular factors that affected e-CRM the adoption by SMEs. This was implemented through a survey research design in which data were collected using questionnaire method. Descriptive statistics were used to identify the factors affecting the adoption of e-CRM in SMEs. Data analysis for the study was done using the statistical package for social scientists software package (SPSS version 17).

**V. SAMPLE SIZE AND DESIGN**

The study covered 30 districts (out of 112 districts of Uganda). The 30 districts were picked using purposive sampling technique in consideration of issues such as regional balance, rural vs. urban areas and population density. A maximum of 5 SMEs were selected in each district to participate in the study. Three (3) respondents were purposively picked from each SME to fill the questionnaires. These included the proprietor and any 2 employees. A total of 450 respondents were used, 15 from each selected district. This sample was in line with Roscoe (1975) sampling rule that stipulates that a sample size of 30-500 is adequate. Table 1 shows the sample size:

**Table 1: Sample breakdown**

Region	Number of districts	Number of SMEs	Number of respondents	Sampling methods
Eastern	6	30	90	Purposive sampling
Western	6	30	90	
Central	6	30	90	
Northern	6	30	90	
Southern	6	30	90	
<b>Total</b>	<b>30</b>	<b>150</b>	<b>450</b>	

Out of the 450 sample, a total of 298 questionnaires were returned, representing 66.2% response rate. However, after a rigorous process of data cleaning, 41 questionnaires were removed due to incompleteness and inconsistencies. Hence 257 questionnaires were analyzed.

**VI. PRESENTATION OF FINDINGS**

This section presents the analysis of data and findings from the survey.

*1) Reliability and Validity Tests*

To ensure that the research instrument measured to the variables under investigation, validity tests were done. Furthermore, reliability tests were conducted on the questionnaire to ensure that it was consistent and stable. Cronbach Alpha Coefficient was used to test for reliability, while Content Validity Index was used to test for validity as had been used by Isabalija et al. (2011); Carcary (2008). Table 2 shows validity and reliability results:

**Table 2: Validity and reliability results**

Variable	N of Items	Content Validity Index	Cronbach Alpha Coefficient
CRM applicability in the organization	6	0.723	0.865
Purpose of e-CRM	5	0.671	0.802
e-CRM benefits	9	0.735	0.767
Challenges of adoption of e-CRM	14	0.761	0.736
Suggested solutions	12	0.677	0.780

According to Krishnaveni and Ranganath (2011,) the Cronbach Alpha Coefficient>0.7 and Content Validity Index>0.6 as seen in Table 2 indicate that the research instrument was valid and reliable.

2) *Description of Respondents' Attributes*

Descriptive statistics were also used to determine the age, gender and job titles of respondents as seen in Table 3, 4 and 5:

**Table 3: Age of the respondent**

Age bracket	Frequency	Percent
18-25 years old	68	26.5
26-30 years old	102	39.7
31-40 years old	60	23.3
41-50 years old	15	5.8
51 years and above	12	4.7
<b>Total</b>	<b>257</b>	<b>100.0</b>

**Table 4: Gender of the respondent**

Gender	Frequency	Percent
Female	188	73.2
Male	69	26.8
<b>Total</b>	<b>257</b>	<b>100.0</b>

**Table 5: Job title of respondents**

Job title	Frequency	Percent
IS manager	8	3.1
IT technician	35	13.6
Administrator	43	16.7
Marketing Officer	45	17.5
Customer Relationships Officer	72	28.0
Public Relations Officer	40	15.6
Accountants	13	5.1
CEO	1	0.4
<b>Total</b>	<b>257</b>	<b>100.0</b>

Results in Table 3 show that majority of the respondents were aged 26-30 years (freq=102). This was followed by those aged 18-25 years old (freq=68). Age bracket 31-40 years old had 60 respondents contributing 23.3 %, while age bracket 41-50 old had 15 respondents (5.8%). On the other hand, there were only 12 respondents aged 51 years and above (4.7%). In addition, 188 were female (73.2%), while male respondents were 69 contributing only 26.8% as seen in table 4.

The results in the above Table 5 indicate that majority of the respondents were customer relationships officers who contributed 28.0%. Marketing officers were 17.5%, closely followed by administrators who constituted 16.7%. IT technicians were 13.6%, while accountants contributed 5.1%. The least of them were IS managers and CEOs who contributed 3.1% and 0.4% respectively.

3) Knowledge of and Experience with e-CRM

An examination of respondents’ knowledge, participation on e-CRM projects and the level of experience with e-CRM systems revealed varying results as seen in Table 6, 7 and 8:

**Table 6: Knowledge of e-CRM**

Knowledge	F	%	Valid Percent	Cumulative Percent
Not knowledgeable	115	44.7	44.7	44.7
Somewhat knowledgeable	75	29.2	29.2	73.9
Neutral	32	12.5	12.5	86.4
Knowledgeable	23	8.9	8.9	95.3
Very knowledgeable	12	4.7	4.7	100.0
<b>Total</b>	<b>257</b>	<b>100.0</b>	<b>100.0</b>	

**Table 7: Participation on e-CRM project**

Have you ever participated on an e-CRM project?					
		F	%	Valid Percent	Cumulative Percent
Valid	Yes	71	27.6	27.6	27.6
	No	186	72.4	72.4	100.0
	<b>Total</b>	<b>257</b>	<b>100.0</b>	<b>100.0</b>	

**Table 8: Experience with e-CRM**

Years	Frequency	Percent
Less than 2 years	196	76.2
2-5 years	48	18.7
5-10 years	11	4.3
10 years and above	2	0.8
<b>Total</b>	<b>257</b>	<b>100.0</b>

Results in Table 6 indicate that most respondents were not knowledgeable about e-CRM (44.7%). Only 4.7% were very knowledgeable about e-CRM. A total of 75 respondents (29.2%) were somewhat knowledgeable, while 23 respondents, representing only 8.9% were knowledgeable about e-CRM. Results also indicate that a good number of respondents were uncertain or neutral on whether they were knowledgeable about e-CRM. In addition, results in Table 7 show that majority of the respondents had never participated on an e-CRM project (Freq=186). Only 71 respondents, representing 27.6% had ever participated on an e-CRM project. Similarly, results in Table 8 show that the majority of the respondents had e-CRM experience of less than 2 years (freq=196). 48 respondents representing 18.7% had experience with e-CRM of 2-5 years, while 11 respondents representing 4.3% had experience with e-CRM of 5-10 years. Only 2 respondents representing 0.8% had experience with e-CRM of 10 years and above.

4) Users of e-CRM, Purpose of Use and the Benefits of e-CRM

To further understand the adoption problem, respondents were asked to indicate the people who used e-CRM systems in their organizations, the purpose of use and the benefits they realized from using e-CRM. Data were generated and analyzed descriptively as seen in Tables 9, 10. On the other hand, data on e-CRM benefits were analyzed using means on a 5 point scale where means close to 5 represented strong agreement, while the means close to 1 represented strong disagreement as seen in Table 11:

**Table 9: Officials who use e-CRM in the organization**

Job title	Frequency	Percent
IS manager	5	1.9
IT technician	12	4.7
Administrator	31	12.1
Marketing Officer	52	20.2
Customer Relationships Officer	70	27.2
Public Relations Officer	59	23.0
Accountants	13	5.1
CEO	15	5.8
<b>Total</b>	<b>257</b>	<b>100.0</b>

**Table 10: Purpose of e-CRM**

Purpose	N	Min	Max	Mean
For marketing our existing products	257	1	5	4.07
For promoting new products	257	1	5	4.48
For keeping our customers updated	257	1	5	3.89
For sending demand notices	257	1	5	2.89
For information sharing	257	1	5	3.76
Valid N (listwise)	257			

**Table 11: Benefits of e-CRM**

e-CRM benefit	N	Min	Max	Mean
There is increased customer loyalty	257	1	5	4.36
There is increased profitability	257	1	5	4.43
There is convenience in communication	257	1	5	4.45
There is improved customer relationship	257	1	5	4.43
It has promoted good image for the organization	257	1	5	4.31
It has promoted information sharing	257	1	5	4.21
There is better customer data management using computers	257	1	5	3.87
There is improvement in our business competitiveness	257	1	5	4.04
It has given us a long term competitive advantage	257	1	5	3.67
Valid N (listwise)	257			

Results in Table 9 indicate that the majority users of e-CRM were customer relationships officers who contributed 27.2%. These were followed by public relations officers with a contribution of 23.0% and marketing officers who constituted 20.2%. Administrators contributed 12.1% while CEOs contributed 5.8%. The least users of e-CRM in organizations were identified as ICT technicians and IS managers who contributed only 4.7% and 1.9% respectively.

In addition, results in Table 10 show that respondents strongly agreed that organizations used e-CRM for promoting new products (Mean=4.48) and also for marketing their existing products (Mean=4.07). The respondents agreed that their organizations used e-CRM for keeping their customers updated and sharing information (Mean=3.76). However, the respondents disagreed that organizations used e-CRM for sending demand notices to their customers (Mean=2.89).

About the the benefits of e-CRM, results in Table 11 indicate that the respondents strongly agreed that e-CRM was a convenient means of communication in the organizations (Mean=4.45), increased profitability (Mean=4.43), increased customer loyalty (Mean=4.36) and improved customer relationship (Mean=4.43). The respondents also strongly agreed that e-CRM promoted a good image for the organization (Mean=4.31), promoted information sharing (Mean=4.21) and that it helped in the improvement of business competitiveness (Mean=4.04).

The results in Table 11 also indicate that respondents agreed that e-CRM provided a better way of managing customers' data using computers (Mean=3.87) and that it gave organizations a long term competitive advantage (Mean=3.67).

5) *Challenges of e-CRM Adoption in SMEs*

Descriptive statistics were further used to determine the challenges of adoption of e-CRM in organizations. The data was analyzed using means on a 5 point scale where means close to 5 represented strong agreement, while the means close to 1 represented strong disagreement as seen in Table 12 below:

**Table 12: Challenges of e-CRM adoption**

<b>Challenges of e-CRM adoption</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>
There is resistance to change by members of staff	257	1	5	4.44
There is resistance to change by our customers	257	1	5	4.43
There is lack of ICT skilled staff in this organization	257	1	5	4.28
This organization does not support staff training in ICT	257	1	5	4.45
This organization lacks computers and software for implementing e-CRM	257	1	5	3.23
There is no policy and guidelines for using e-CRM in this organization.	257	1	5	2.52
This organization does not have a website	257	1	5	3.42
Our clients are not aware about the benefits of e-CRM	257	1	5	4.41
The cost of e-CRM technology is so high	257	1	5	3.23
There are no e-CRM laws in this country.	257	1	5	3.01
Clients are not free in using e-CRM because of fear of sharing their confidential information with others.	257	1	5	3.43
Our clients have no knowledge about e-CRM	257	1	5	4.34
Our clients cannot afford using e-CRM	257	1	5	3.55
This organization lacks resources for implementing e-CRM	257	1	5	3.21
Valid N (listwise)	257			

Results in Table 12 indicate that the respondents strongly agreed that the most hideous challenges to e-CRM adoption were resistance to change by members of staff (Mean=4.44), resistance to change by customers (Mean=4.43), lack of ICT skilled staff in this organization (Mean=4.28) and that their organizations did not support staff training in ICT (Mean=4.45). The respondents also strongly agreed that their clients were not aware about the benefits of e-CRM (Mean=4.41) and also that the clients did not have knowledge about e-CRM (Mean=4.34)

In addition, the respondents agreed that other challenges to e-CRM adoption in the organizations were lack of computers and software for implementing e-CRM (Mean=3.23), lack of a website (Mean=3.42) and the high cost of e-CRM technology (Mean=3.23). The respondents further agreed that their clients were not free in using e-CRM because of fear of sharing their confidential information with others (Mean=3.43). The respondents also advanced other factors hindering e-CRM adoption as clients inability to afford using e-CRM (Mean=3.55) and organizations' lacks of resources for implementing e-CRM (Mean=3.21).

On the other, the respondents disagreed that the lack of policy and guidelines for using e-CRM in their organizations (Mean=2.52) hindered e-CRM adoption.

6) *Suggested Solutions for Better e-CRM Adoption*

Descriptive statistics were also used to determine the suggested solutions for better adoption of e-CRM in organizations. The data was analyzed using means on a 5 point scale where means close to 5 represented strong agreement, while the means close to 1 represented strong disagreement as seen in Table 13 below:

**Table 13: Suggested solutions for better e-CRM adoption**

Challenges of e-CRM adoption	N	Min	Max	Mean
There is need to sensitize our staff to embrace change	257	1	5	4.46
There is need to sensitize our customers to embrace change	257	1	5	4.18
There is need for staff training to improve their ICT skills	257	1	5	4.45
This organization should acquire computers and software for implementing e-CRM	257	1	5	4.36
Management should design a policy to guide e-CRM usage in this organization.	257	1	5	4.22
This organization should develop and deploy a website	257	1	5	4.43
Our clients should be told the benefits of using e-CRM	257	1	5	4.41
The cost of e-CRM technology should be reduced	257	1	5	3.88
Government should enact e-CRM/e-business laws in this country.	257	1	5	4.18
There is need for information security to improve clients' confidence in e-CRM	257	1	5	4.31
Our clients should be trained about e-CRM	257	1	5	3.88
Top management should champion the implementation of e-CRM in this organization	257	1	5	4.47
Valid N (listwise)	257			

Results in Table 13 show that the respondents strongly agreed that the solutions for better adoption of e-CRM were that there was a need to sensitize staff and customers to embrace change (Mean=4.46 and Mean=4.18 respectively) and also that there was need for staff training to improve their ICT skills (Mean=4.45). The respondents also strongly agreed that organizations should acquire computers and software for implementing e-CRM (Mean=4.36), and also that management should design a policy to guide e-CRM usage in their organizations (Mean=4.22). The respondents further strongly agreed that for better adoption of e-CRM, organizations should develop and deploy websites (Mean=4.43), and also that their clients should be told the benefits of using e-CRM (Mean=4.41). Finally, respondents strongly agreed that the government should enact e-CRM/e-business laws in the country (Mean=4.18), that there was need for information security to improve clients' confidence in e-CRM (Mean=4.31) and also that top management should champion the implementation of e-CRM in their organizations (4.47).

In addition to the above suggested solutions, the respondents agreed that clients should be trained about e-CRM (Mean=3.88) and also agreed that the cost of e-CRM technology should be reduced (Mean=3.88).

**VII. DISCUSSION OF FINDINGS**

In order to exhaustively understand the extent to which Ugandan SMEs had adopted e-CRM, parameters such as existence of e-CRM in the organization, knowledge of e-CRM, users of e-CRM, purpose of use, benefits and challenges were examined and discussed.

**a. Existence of e-CRM in the organization**

The findings from primary data showed that 72.4% of respondents had not participated on an e-CRM project implementation or did not have e-CRM system in place. These findings are in line with Achuama and Usoro (2010); Alam and Ahsan (2007) who indicated that many SMEs in developing countries did not have e-CRM systems in place.

**b. Knowledge of e-CRM**

Although Rogers and Shoemaker (1971) had argued that for new technologies to be adopted there was a need for implementing organizations to carry out knowledge enhancement activities such as training and sensitization, the findings in this study indicated that most of the respondents were not knowledgeable about e-CRM. These findings could perhaps explain why the respondents had never used e-CRM i.e. only 27.6% of the respondents had ever used e-CRM. Further to this Davis (1989) added that perceived ease of use positively influenced adoption of new technologies. According to Davis (1989), knowledge is a key factor in increasing perceived ease of use which intern translates into actual usage. Therefore, since the respondents were not knowledgeable about e-CRM, it is not surprising that they did not use the technology.



**c. Users of e-CRM**

The findings indicated that the majority users of e-CRM were customer relationship officers, public relations officers and marketing officers. This finding re-affirms Gronroos (2004) assertion on the role that e-CRM plays in marketing hence improving communication, interaction and dialogue between their organizations and outside world. On the hand, officials whose jobs are not integral to the marketing process such as administrators did not use e-CRM systems much. According to Rogers and Shoemaker (1971), relative advantage positively influenced adoption. It is therefore understandable that PR officers and marketers were using e-CRM because it was advantageous toward their work processes, while other officials did not use e-CRM because it did not benefit them in their processes and activities.

The findings in Table 8 indicated that most (76.2%) of respondents had used e-CRM systems for a period less than two years. According the GEM report (2004), most Ugandan SMEs die during their infancy stages. This could explain why majority of e-CRM respondents used it for a period less than 2 years. Because of this, the users did not have ample time to adopt and interact with their e-CRM systems in order to increase perceived ease of use. This therefore hindered adoption (Davis et al. 1989).

**a. Purpose of use**

Findings from primary data indicated that most organizations used e-CRM for promoting new products and marketing their existing products. This is in line with Kelley at al. (2003) who argued that organizations tended to use e-CRM whenever there was a need to promote their new products.

**b. Benefits of e-CRM**

Kevork et al. (2009); Kimiloglu and Zarali (2009) had suggested that e-CRM systems offered potential benefits including better business competitiveness, increased customer loyalty and profitability. Kellen (2002) added that e-CRM was a good strategy for improving long-term competitiveness through close relationship with clients. The findings from primary data are all in agreement with these suggestions. The findings are also in line with Sophonthummapharn (2009) and Harrigan et al. (2008) who argued that e-CRM improved information management and knowledge sharing through integration.

**c. Challenges faced by e-CRM users**

Findings from primary data highlighted the most hideous challenges to e-CRM adoption as resistance to change, lack of skills, clients ignorance of e-CRM and lack of knowledge about e-CRM. These challenges were expounded by Ritchie and Brindley (2005). According to them, the challenges faced by SMEs adopting e-CRM are of a strategic nature and they include culture change on the implementation and adoption of e-CRM among SMEs. The challenges are related to organization culture change

**VIII. CONCLUSION, RECOMMENDATIONS AND LIMITATIONS**

This has helped in highlighting the key factors affecting the adoption of e-CRM in Ugandan SMEs. Most of these touch on limited knowledge, infrastructure, resources and resistance to change. The identified training, sensitization and management support among others as important innervations for better adoption of e-CRM. The most important applications of e-CRM for SMEs were also identified among which include marketing, communication and information sharing.

Therefore, based on the findings, this study recommends small and medium-sized enterprises should train their staff, sensitize both staff and customers, put in place organizational e-CRM and ICT user policies and provide management support and leadership for successful adoption of e-CRM.

Since the results indicated that most respondents were not knowledgeable about e-CRM, there is general fear that some of the findings may not actually be reliable. However, given that a good number of IT staff, IS managers and project managers participated in the study; it is good enough that their views equally contributed hence the findings, to a greater extent are reliable.

IX. REFERENCES

1. Achuama M. and Usoro A. (2010). Dancing with the Stars: E-CRM and SMEs in Developing Countries: *Journal of Economic Development, Management, IT, Finance and Marketing*, 2(2), 68-80, September 2010
2. Ajzen, I. (1985) 'From intentions to actions: a theory of planned behavior' in Kuhl, J. and Beckmann, J. (eds) *Action-control: From Cognition to Behavior Heidelberg: Springer*
3. Alam, S.S., and Nilufar Ahsan, (2007), ICT Adoption in Malaysian SMEs from Services Sectors: Preliminary Findings. *Journal of Internet Banking and Commerce*, 12 (3).
4. Almotairi, M (2009). A framework for successful CRM implementation. *European and Mediterranean Conference on Information Systems 2009*. Retrieved July 30, 2010, from [www.iseing.org/emcis/.../Proceedings/Presenting%20Papers/C31/C31.pdf](http://www.iseing.org/emcis/.../Proceedings/Presenting%20Papers/C31/C31.pdf).
5. Amit R. and Zott C. (2001) Value creation in e-business. *Strategic Management Journal*, Vol. 22, No. 6/7, pp. 493-520.
6. Bagozi, R.P. (2007), "The legacy of the technology acceptance model and a proposal for a paradigm shift." *Journal of the Association for Information Systems* 8(4): 244–254
7. Boyle, A.B. (2001), "The internet in industrial channels: its use in (and effects on) exchange relationships", *Journal of Business & Industrial Marketing*, Vol. 16 No.6/7, pp.452.
8. Carcary, M. (2008). The Evaluation of ICT Investment Performance in terms of its Functional Deployment, A Study of Organizational Ability to Leverage Advantage from the Banner MIS in Institutes of Technology in Ireland, *Limerick Institute of Technology*.
9. Chen, I.J. and Popovich, K. (2003), "An empirical study on the e-CRM performance influence model for service sectors in Taiwan", *Business Process Management*, Vol. 9 No. 5, pp. 672-88.
10. Chong, A.Y.L., Ooi, K.B., Lin, B.S. and Raman, M. (2009) Factors affecting the adoption level of c-commerce: An empirical study, "Journal of Computer Information Systems", Vol. 50, No. 2, pp 13-22.
11. Cooper, M. J., Upton, N., Seaman, S., 2005. Customer Relationship Management: A comparative analysis of family and non family business practices. *Journal of Small Business Management*, 43(3), 242-256. *Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five traditions (2nd Ed). Thousand Oaks, CA: Sage*
12. Davis, F. D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly* 13(3): 319–340
13. Adebajo Dotun, (2003) "Classifying and selecting e-CRM applications: an analysis-based proposal", *Management Decision*, Vol. 41 Iss: 6, pp.570 - 577
14. Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
15. Gronroos, C. (2004). The Relationship Marketing process: communication, interaction, dialogue, value. *The Journal of Business & Industrial Marketing*, vol. 19 (2) pp. 23.
16. Harrigan, P., Ramsey, E. and Ibbotson, P (2008). Critical Factors Underpinning the e-CRM Activities of SMEs. Retrieved May 20, 2010 from <http://works.bepress.com/cgi/viewcontent.cgi?article=1005&context=paulharrigan>
17. Isabalija R. Stephen, Kituyi G. Mayoka, Agnes S. Rwashana and Victor Mbarika (2011). Factors affecting adoption, implementation and sustainability of telemedicine information systems in Uganda. *Journal of Health Informatics in Developing Countries*.
18. Kellen, V.(2002). CRM Measurement Frameworks. Retrieved May 20, 2010 from Kellen's website: [www.kellen.net/crm\\_mf.pdf](http://www.kellen.net/crm_mf.pdf)
19. Kevork, E. and Vrechopoulos, A. (2009). CRM literature: conceptual and functional insights by keyword analysis. *Marketing Intelligence & Planning*, Vol. 27 Iss: 1, pp.48 - 85
20. Kimiloglu, H. and Zarali, H. (2009). What signifies success in e-CRM?. *Marketing Intelligence & Planning*. Vol. 27 Iss: 2 pp. 246-267
21. Krishnaveni R. and Deepa Ranganath (2011). Development and Validation of an Instrument for measuring the Emotional Intelligence of Individuals in the Work Environment – In the Indian Context. *The International Journal of Educational and Psychological Assessment*
22. Kelley Lee-, L., Gilbert, D. and Mannicom, R. (2003). How e-CRM can enhance customer loyalty. *Marketing Intelligence and Planning*, vol. 21 (4/5) pp. 239. March, S. T., & *Management Decision*, Vol. 34, pp. 5-14.
23. Hunt and Morgan, J. (2007). Customer Information Management (CIM): The Key to Successful CRM in Financial Services. *Journal of Performance Management*, vol. 20 (2) pp. 47-65.
24. Nguyen T. H. 2009. 'Information technology adoption in SMEs: an integrated framework'. *International Journal of Entrepreneurial Behaviour and Research*, 15 (2): 162-186.
25. Ortega, B. H., Martínez, J. J. and De Hoyos, M. J. M. (2008), The Role of Information Technology Knowledge in B2B Development. *International Journal of E-Business Research*, vol. 4 (1) pp. 40. p. 228.

26. Rajan j, & Bhatnagar J (2009). A holistic Frame work for mobile CRM from Data Mining perspective. Information management and computer security, Emerald Publishers, Vol.17, Issue.02, 2009, pp: 151-165.
27. Rao Madanmohan (2011). Mobile Africa Report 201; Regional Hubs of Excellence and Innovation. *Extensia*
28. Pereira Rex Eugene (2002) "An adopter-centered approach to understanding adoption of innovations", *European Journal of Innovation Management*, Vol. 5 Iss: 1, pp.40 - 49
29. Rogers, E.M. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
30. Shajahan. S (2007). *Research methods for management*. 6th Edition, Jaico Impression
31. Rogers, E.M. and Shoemaker, F. (1971), *Communication of Innovations: A Cross-cultural Approach*, *The Free Press, New York, NY* (Re-titled 2nd ed. of *Diffusion of Innovations*).
32. Roscoe, J.T. (1975), *Fundamental Research Statistics for the Behavioural Sciences*, 2nd ed., *Holt Rinehart & Winston, New York, NY*.
33. Sophonthummapharn, K. (2009). The adoption of techno-relationship innovations: A framework for electronic customer relationship management, *Marketing Intelligence & Planning*, Vol. 27 Iss: 3, pp.380 – 412. Retrieved January 20, 2010, from emerald Database.
34. Street, C.T. and Meister, D.B. (2004), "Small business growth and internal transparency: the role of information systems", *MIS Quarterly*, Vol. 28, pp. 473-506.
35. Thong, J.Y.L. (1999) An integrated model of information systems adoption in small businesses, "Journal of Management Information Systems", Vol. 15, No. 4, pp. 187-214.
36. Tornatzky, L. G. and M. Fleischer (1990). *The Processes of Technological Innovation*. Lexington Books.
37. Tornatzky, L. G.; Klein, R. J. (1982), "Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings", *IEEE Transactions on Engineering Management* EM-29: 28–45
38. Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. *Information Systems Research*, 16(1), 85-102
39. Yuen Yum Hui (2007). The 7th Global Forum on Reinventing Government: Building Trust in Government; Workshop on Managing Knowledge to Build Trust in Government. Overview of Knowledge Management in the Public Sector. *National University of Singapore*
40. Zontanos, G. and Anderson, A.R. (2004), "Relationships, marketing and small business: Schimmel Kurt , Darlene Motley, Stanko Racic, Gayle Marco and Mark Eschenfelder (2010). The importance of university web pages in selecting a higher education institution. *Research in Higher Education Journal*