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Bank Customer Loyalty and Satisfaction: The Influence of Virtual e-CRM

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Abstract

Purpose – The purpose of this article is to investigate the mediating role of customer satisfaction (CS) in the electronic customer relationship management (e-CRM) and customer's loyalty (CL) relationship, using data from the customers of one of the largest retail banks in Kenya.

Design/methodology/approach – Using survey mode, the study was administered to 90 samples (of which 78 were returned and usable), with data analysed using exploratory factor analysis (EFA) to determine scale validity, and path analysis and multiple regression modelling to test hypotheses.

Findings – This study revealed that the interaction between e-CRM transaction features and CS was statistically significant and predicted CL however, the interaction did not significantly account for more variance than just e-CRM features and CS. The path analysis revealed a lack of potential significant mediation effects of CS on the relationship between e-CRM and CL.

Research limitations/implications – Although this research may have sampling limitations and also that the model fit is confined in a single bank/service industry, the estimated model was reasonable enough and has the potential of being repeated in future studies.

Originality/value – The principle contribution of the present research is it supplies unique learning to bank managers and scholars alike through conceptualising and subsequently empirically verifying the path e-CRM and e- loyalty via CS, and that CS does not mediate the relationship between the aforementioned constructs. By investigating the e-CRM practices of an existing case study, it provides insights of the issue and compare to literature, therefore supplying a thorough and detailed analysis to understand the phenomenon under investigation valuable for banking sector.

Keywords E-CRM, e-loyalty, Mediator, Contentment, Banking sector

Paper type Research paper

Introduction

The use of internet-based transactions in developing nations has become an increasingly significant phenomenon in recent years (Amin, 2016; Larsson & Viitaoja, 2017; Wu, 2011), and the service experience is seemingly different from the non-electronic service experience. By using the internet, bank customers are able to browse its website through any electronically connected device such as a computer, mobile phones, mobile tablets, etc., to search for information, conduct a transaction, ask questions, and raise queries. All of these experiences influence the customers' expected and perceived service quality (Amin, 2016; Valmohammadi & Beladpas, 2014; Wu, 2011), and this in turn impacts their satisfaction and loyalty (Thakur, 2016; Zeithaml, Bitner & Gremler, 2012). However, to achieve the aforementioned results requires proper management of the relationships with customers.

A shift from traditional customer relationship management (CRM) to electronic customer relationship management (e-CRM) occurred a few decades ago (Bahri-Ammari & Mraidi, 2016; Dhingra & Dhingra, 2013; Muro, Magutu & Getembe, 2013; Peštek & Lalović, 2012; Thuo, Kibera, K'Obonyo & Wainaina, 2011). e-CRM is described as the act of managing customer relationships electronically (Sujitha and Johnson, 2017) while enabling organisations to provide appropriate services and products that satisfy their customers thus enhancing their loyalty (Dolly & Pruthi, 2014; Dubihlela & Khosa, 2014; Harrigan, Ramsey & Ibbotson, 2012; Peshwe & Kothari, 2012). Basically, e-CRM is a strategic technology-centred relationship marketing business model, combining people activities, processes, electronic media (wireless and voice technologies) and traditional CRM with e-business applications (Abu-Shanab & Anagreh, 2015; Pourmand & Lari, 2016; Sivaraks, Kirairit & Tang, 2011). The Internet, multiple electronic technologies like fax, phone, emails and databases, facilitate the implementation of e-CRM as the attention is on a web-based interaction platform between the institution and their customers (Abdulfattah, 2012; Sivaraks et al., 2011). The relationship with the customer cannot therefore be realised on the Internet without an effective e-CRM (Lam, Cheung and Lau, 2013), commitment and a mindset in order for it to succeed, and an over-arching strategic CRM ethos (Govender, 2004).

Banks in Kenya are immensely trying to position e-CRM and improve the connections between their businesses and customers' (Muro et al., 2013; Nguyen & Mutum, 2012; Oumar, Mang'unyi, Govender & Rajkaran, 2017; Thuo et al., 2011). In addition, merging technology, processes and other business activities around the customer have facilitated CRM application (Harrigan et al., 2012; Abdulfattah, 2012), enabling organisations to recognise the best customer, increase their satisfaction and loyalty to the service offerings (Alhaiou, 2011; Lam et al., 2013). This is because e-CRM has been reported to contribute to numerous business successes and competitive advantage (Azila & Noor, 2012; Harrigan et al., 2012; Jamali Moshabaki, Aramoon & Alimohammadi, 2013; Kihara, 2015; Keshvari, 2012; Ismail & Hussin, 2016; Stojković & Đuričić, 2012).

In today's highly globalised, industrialised and competitive markets, e-CRM has been found in to be a powerful tool for many companies. Globally, various studies have been carried out on the influence of e-CRM on customer satisfaction and loyalty. For example, Sunny and Abolaji (2016) found that as opposed to traditional CRM, increasing use of e-CRM helps expand market share thus elevates firms revenue streams while keeping the business competitive, attracting more customers, retaining them while maintaining long-term relationships. Azila and Noor (2011; 2012) suggested that the association between e-CRM and customer loyalty leads to higher customer gratification, repurchase intentions, and spread positive word of mouth about the service provider. Satisfied customers have a tendency to perceive longer relationships, trust and commitment with the service provider (Azila & Noor, 2012; Oumar et al., 2017). Ismail and Hussin (2016) study findings suggested that e-CRM pre-purchase and post-purchase features significantly and positively affected customer satisfaction. Their study findings further revealed that customers' satisfaction with e-services received translated to loyalty thereby enhancing long-term relationship with the company. Bilgihan and Bujisic (2014) study concluded that web design features were significant for online relationship marketing since they create e-loyalty, customer commitment, sway customers trust towards firm's internet-based products and services. Alhaiou, Irani and Ali (2012) established that the use of e-CRM in building consumer relationships affects online consumer satisfaction and loyalty, while Abdulfattah (2012) who investigated the effect of various e-CRM features on customer satisfaction on banks websites, found that e-CRM influences customer relationships and enhances online customer satisfaction and service quality. Alim and Ozuem (2014) concluded that e-CRM is effective at strengthening relationship with customers and promoting the development of an attractive virtual community which further enhances satisfaction. A study by Koçoglu and Kirmaci (2012) in the financial service industry identified the e-CRM antecedents of loyalty.

Regionally, some authors have justified the impact of e-CRM on performance of organisations in relation to profitability, customer loyalty and retention (Dubihlela & Khosa, 2014; Olupot, Kituyi & Noguera, 2014; Sunny & Abolaji, 2016). Perception of technology and factors affecting e-CRM readiness and implementation have been studied within Egyptian banking industry (El Essawi and El Aziz, 2012), which results showed that perception of technology among bank employees' is a key factor which affects e-CRM implementation. In the same vein, in Kenya, some studies delved on implementation, benefits and associated challenges (Muro et al., 2013; Thuo et al., 2011) and impact of eCRM on satisfaction and loyalty (Oumar et al., 2017). These studies provide extensive evidence on importance of e-CRM, but in both contexts the studies lack strong theoretical and practical rationale for e-CRM features grouping and their influence on loyalty and satisfaction in the Kenyan banking sector. More so, the e-CRM approach has not yet been explored specifically in banking business and its influence on the bank customers' loyalty and satisfaction. By deductively employing a theory-driven e-CRM framework (Khalifa & Shen, 2009), the article proposes and tests a conceptual model comprising distinctive internet-based customer relationship management dimensions in different phases of customer relationship development specific to banks. This is done in order to contribute to a less researched area in relation to the banking industry from a customers' view point, shed new light on our understanding of the subject matter and make practical recommendations for bank managers to enhance e-CRM activities, increase loyalty and satisfaction of their customers. The empirical data used and multi-approach analyses techniques help improve the validity of the findings.

In light of the above, this paper fills a gap in this under researched area by examining the effect of customer satisfaction (CS) on the relationship between e-CRM attributes and customer loyalty (CS) from the Kenyan bank customers' perspective.

Literature review

E-CRM and banking

According to Thuo et al. (2011), Kenyan banks have highly focused on e-CRM for the last decade and this is expected to continue due to growing competition. The aforementioned authors further assert that use of e-CRM by most financial service providers, encourage by Internet penetration, are expected to increase significantly in the near future. Fundamentally, e-CRM popularity as a communication tool and relationship-building platform facilitates the realisation of new opportunities (Lam et al., 2013), enabling numerous uninterrupted service offerings to customers at their convenience. e-CRM has three major dimensions within the distinct levels of a service experience namely; pre-service sale, at service sale and after service sale (Khalifa & Shen, 2009), which jointly solidify relationships over the internet while increasing overall customer satisfaction. Pre-service e-CRM is characterised by the customer's need to search for and exchange information about a product or a service (Abdulfattah, 2012);

during-service e-CRM regards features that influence a customer's decision to complete the online transaction, while post-service e-CRM entails an online "help desk" where all customers' correspondence issues with regard to a service or product are channeled thereby creating a 'personal' interaction with the organisation (Olupot & Kituyi, 2013).

E-CRM benefits

In spite of e-CRM being one of the fastest growing management approaches adopted by many organisations (Sunny and Abolaji, 2016, p. 2), the extent of its benefits will vary depending on the nature of business and likely to be significant, depending on frequency of customer interactions and purchases, perceived risks and involvement, and benefits. However, there are more benefits associated with e-CRM (Harrigan et al., 2012), superior customer service, improved profitability, sales, reduced operational costs, enlarged customer base and a broader market share (Jamali et al., 2013; Kihara, 2015; Muro, et al., 2013; Peštek & Lalović, 2012; Xiao, Guo, D'Ambra & Fu, 2016). All the aforementioned benefits have been associated with customer satisfaction. e-CRM enables organisations to gain new customers, analyse their preferences and behaviours and customise support services (Chan & Lam, 2009; Kim-Soon & Zulkifli, 2012; Mekkamol, Piewdang, & Untachai, 2013). It makes it possible to gather information on the customer, identify customers' potentials, anticipate their needs, predict behaviour, create customised alerts, develop new products and services, and identify their preferences and history (Olupot and Kituyi, 2013; Valmohammadi & Beladpas, 2014). Finally, there is increased customer loyalty, effective services, improved services and customer support, improved efficiencies and fewer costs (Rad, Ghorabi, Rafiee & Rad, 2017).

Customer electronic loyalty

Consumer loyalty is in essence, a customer's faithfulness to a particular service or brand (Amin, 2016; Gorondutse, Hilman & Nasidi, 2014) and the connection which a customer has with a brand. Customers maintain a series of loyalties to the organisations and their level of faithfulness with companies also determines their purchasing behaviour. According to Khan and Fasih (2014), encouragement for repeat purchases and referral of a product or a service to others amounts to customer loyalty. Hence, loyal customers will refer their bank to other people, enabling them to widen their customer base and market share. Despite customer loyalty having different meaning among researchers, research has shown that it is measured through buyer behaviours or consumption of a particular product or service. For example, it was considered as behaviour and an attitude (Gorondutse et al., 2014), and genuine loyalty is associated with high levels of repeated patronage.

E-CRM, customer loyalty and customer satisfaction

The advent of new technologies has led to a shift from CRM to e-CRM, and with increasing global penetration of the internet, e-CRM has become a more popular communication tool and relationship-building platform (Lam et al., 2013). Organizations therefore are keen to deploy different types of e-CRM strategies to attract, maintain, and enhance customer relationships which are beneficial for loyalty and the organization's success (Bilgihan & Bujisic, 2014; Sivaraks et al., 2011). However, relationship management is an initiative that requires commitment, strategic CRM tenets and a mindset, for it to succeed. Dawn and Guha (2010) postulates that e-CRM infrastructure provides support to valuable customers to remain loyal, since information stored in the e-CRM data base for instance, assists an organisation to look at the actual cost of attracting and retaining customers. The firm can access new international customers and seize valuable data essential for its competitiveness and market share (Harrigan, Ramsey & Ibbotson, 2008). Hence, by using this information, more time and resources are directed towards the bank's most profitable customers. Azila and Noor (2012) assert that the association between e-CRM and customer loyalty such as the aforesaid, means that the more customers are satisfied, repurchase and spread positive word of mouth about the service provider, the higher they tend to perceive longer relationships, trust and commitment with the service provider.

A study by Dhingra and Dhingra (2013) in the banking sector in India on determinants of e-CRM for customer satisfaction established that implementation of e-CRM technologies within the banking industry ensured transaction security and enhance ‘one-on-one relationship between banks and customers. Through a structural equation modelling approach, Sivaraks et al. (2011) study among 684 bank customers in Thailand established a statistically significant and positive relationship between customer-based service features and quality outcomes of customer-bank relationships. Alhaiou (2011) research of UK online shoppers on the relationship between e-CRM features and e-loyalty at different stages of the transaction cycle showed that the use of e-CRM in building consumer relationships affects online consumer satisfaction and loyalty. This is supported by Oumar et al. (2017) who have argued that perceived satisfaction is critical to loyalty and must be considered in all electronic service relationships. Their study among Kenyan bank customers revealed varying degree of loyalty at every phase of transaction cycle attributed to customers’ satisfaction with the eCRM system. A similar study by Abdulfattah (2012) who investigated the effect of various e-CRM features at the different stages of the transaction cycle on customer satisfaction with banks’ websites, revealed that e-CRM influences customer relationships and enhances online customer satisfaction and service quality. Rabbai (2013) confirmed the effect of e-CRM on customer loyalty, while Ismail and Hussin (2016) confirmed that pre-service and post-service e-CRM features had positive and significant influence on customer satisfaction with airline services. Alim and Ozuem (2014) affirmed that e-CRM is effective at strengthening relationships with customers and promoting the development of an attractive virtual community, which further enhances satisfaction. In regards to the telecommunication sector, Sunny and Abolaji (2016) proved that e-CRM sufficiently influenced market performance of internet service provider (ISP) firms. A study by Tian and Wang (2014) positively identified e-CRM features to influence e-quality, trust and satisfaction. The aforementioned authors further established a positive relationship between e-CRM and hotel’s ranking in its area. Therefore, we conclude that a well-designed e-CRM system may help organisations’ gain significant benefits in the ever more competitive online market spaces. From this perspective, this article explores how banks may use e-CRM practices to transform their marketing activities and keep customers loyal by providing insights into the e-CRM – e-loyalty relationship.

Research objective and hypotheses

The primary objective of this article was to investigate the influence of the independent variable (e-CRM) on customer loyalty (CS) via customer satisfaction (CS) which is the independent variable, at Standard Chartered Bank in Kenya. The bank's strategy is focusing on relationship management of its customers electronically in order to realize maximum customer satisfaction and customer's mind. Although the aforementioned bank was among the first banks in Kenya to initiate digitilisation processes and services to manage customer relationships electronically, the expected efficiency and scale of benefits have not been realized fully. The bank stands at position five out of eight (i.e. 7%) in market size in the 'large peer group' category (Central Bank of Kenya Report, 2016). This has mainly been attributed to slowing revenue growth, cost to hire and retain rare skills, increasing cost to maintain complex technology platforms, compliance costs and slow if not a failure to respond to dynamic customer behaviour. Lack of understanding users' particularly the middle-to-low end clientele characteristics and perceptions or slow adoption to changing consumer behaviour could influence a customer's decision to use an electronic service consequently impacting on e-customer loyalty. In this modern era, digitilisation of services is considered vital in the banking market with increased customers' expectations of the banks to deliver internet solutions amid managing relationships on the rise (Larsson & Viitaoja, 2017). Therefore, this is an instrumental case study, where insights of an issue are explored using an existing case in the Kenyan banking sector. To test the moderating effect of customer satisfaction (CS), the hypothesis that; the customer loyalty is a function of multiple e-CRM transaction attributes (pre-service, during transaction and post-transaction) and customer satisfaction, and more specifically whether customer satisfaction moderates the relationship between e-CRM transaction attributes and customer loyalty, the following hypotheses were developed:

H1: There is a relationship between pre-service features and customer satisfaction.

H2: There is a relationship between at-service features and customer satisfaction.

H3: There is a relationship between post-service features and customer satisfaction.

H4: Customer satisfaction has a mediating effect on the relationship between e-CRM transactions features and customer e-loyalty in the banking sector.

Conceptual framework

Based on the literature, Figure1 illustrates the e-CRM stages, namely, pre-service, during service and post-service, and their relationship with the dependent variable (CL), which is mediated by CS.

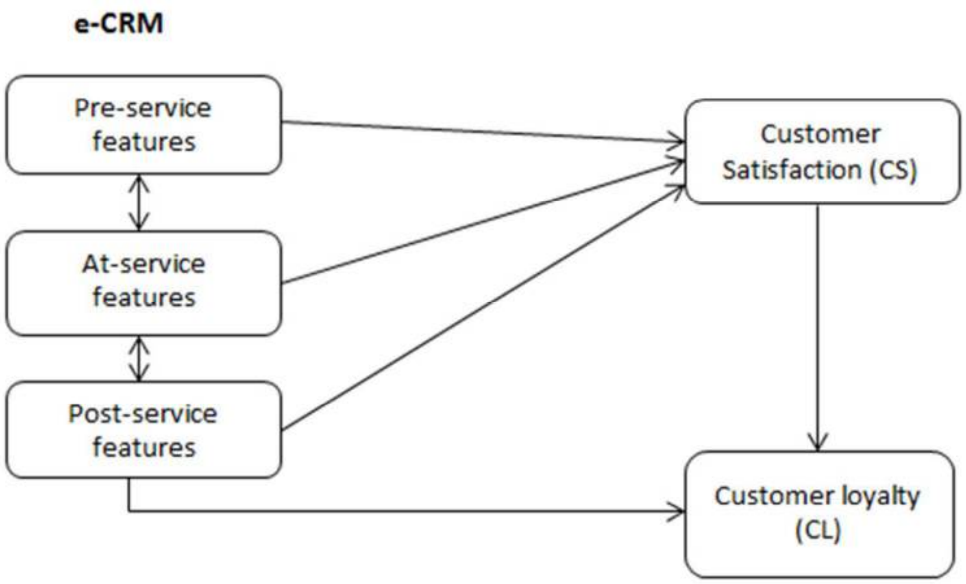

Figure 1: Conceptual research framework

Data collection

Data was collected via a survey using a structured questionnaire which consisted of three major sections; the first section contained questions on general information about the participants, including gender, age, level of education, years of dealing with the bank, duration of use of the bank's internet/electronic-based services, and frequency of use of the aforesaid services every month; the second section contained questions measuring e-loyalty at each e-CRM stage, and the last section measured customer satisfaction. The questionnaire was primarily a five-point Likert-based scale measure (Sterne, 1996) of the range of attitudes, and consisted of six items for each e-CRM cycle stages. The scale was anchored as 1= strongly disagree and 5= strongly agree. Similarly, e-loyalty was measured on a 5-point Likert scale, where 1 = not at all influential and 5= extremely influential. On the other hand, customer satisfaction was measured using six items on a 5-point Likert scale which ranged from extremely unlikely to extremely likely.

Sampling

A cross-sectional survey design technique was deemed as an appropriate strategy in establishing relationships between the variables, and in facilitating the collection of discrete numerical data from the population (Creswell, 2014). The target population comprised all customers of the selected bank, however, only those registered and using internet technology-based applications provided by the bank to access various services were targeted. However, since a complete list of all customers of the bank was unavailable because this is guarded data that is not disclosed by the bank, numerous visits were made to the bank to conducting the survey. In order to gain a representative sample (Gorard, 2013), questionnaires were distributed randomly, and in person, to every customer who came to the bank during business hours between August – September 2016 and those visiting the automatic teller machines (ATM) located outside the bank branch. The conceptual model comprises three predictor variables, and it is suggested (Hair, Black, Babin and Anderson, 2010) that for some analyses namely; multiple regression, factor and correlation analyses the desired level is between 15 and 20 observations for each variable. The researchers aimed at a sample size of not less than 60. All in all, a total of 90 questionnaires were distributed and collected, but only 78 were useable for analysis. Likewise to the current study, few of the key publications in the area of e-CRM (Ahmad, Rashid & Ul-Mujeeb, 2012; Agboola, 2003) have used similar and/or smaller sample sizes with cogent results.

Data analysis

Cronbach's alpha test was conducted to determine the internal consistency of the questionnaire (Hair, Black, Babin & Anderson, 2010; Leedy & Ormrod, 2013; Sekaran &

Bougie, 2010:162). Table 1 reveals that the values ranged between .607 and .919, which were acceptable (Nunnally, 1978).

Table 1: Instrument reliability and structural validity

Dimension	Number of Items	Kaiser-Meyer-Olkin (KMO)	Cronbach's α value
Pre-service features	6	0.753	.754
Pre-service loyalty	4	0.764	.834
During Service features	6	0.615	.607
During Service loyalty	4	0.729	.829
Post Service features	4	0.620	.741
Post Service loyalty	4	0.673	.840
Customer satisfaction scale	6	0.826	.919
KMO (total items)	34	0.736	
Bartlett's Test of Sphericity (x^2 = 2072.052; p<0.001)			

The KMO of the dimensions was high (i.e. >0.5), and the Bartlett's Test of Sphericity (x^2 = 2072.052; p<0.001), which confirmed sampling adequacy (Field, 2009; Hair et al., 2010). In addition, Exploratory Factor Analysis (EFA) was conducted to test the construct validity of individual measurement items, while face and content validity of the questionnaire was ensured through review by experts in business management (Blankson, Omar & Cheng, 2009). In addition to conducting descriptive analyses, analysis of variance (ANOVA) tests and structural and multiple regressions modelling were conducted to determine the moderating influence on the relationship between the e-CRM construct and customer loyalty.

Ethical considerations

Ethical guidelines as stipulated by Sekaran and Bougie (2010:15; 2016) include ensuring the confidentiality of information provided and the privacy/anonymity of the participants. The aforementioned aspects were ensured by informing the respondents not to write their names on the questionnaire, and that only codes were used to identify responses during capturing of the data for analysis using the software. The questionnaire was accompanied by a covering letter which stipulated that the research is purely for academic purposes with no commercial intent. Informed consent was sought from respondents by disclosing the procedures of the survey and requiring them to sign and/or choose between yes or no options that were provided on the consent form. Respondents were also made aware that participation in the study was voluntary and that they were free to withdraw at any time without any consequences. The data was stored on a password-protected computer while hard copies of the questionnaires were kept in a lockable safety cabinet (Creswell, 2014:92).

Results and discussion

Respondents' demographic profile

The majority, 53.3% of the respondents were male, while 46.7% female, and the dominant age group of the customer respondents was 36-40 years. A significant majority (60%) held bachelor's degree, and 45.3% had dealt with the bank for between 6-10 years. In addition, the majority (52.0%) had been using the bank's electronic services between one and three years.

Exploratory Factor Analysis (EFA)

Factor analysis was used to reduce the items from 34 to eight (8) dominant factors (Table 2) underpinning the bank's e-CRM activities with eigenvalues greater than 1, and these accounted for 75.4% total variance in the entire data set. Field (2009) argues that since eigen values measure the substantive importance of a variable, only factors with higher eigen values are retained hence, this study used variables with extracted eigen values greater or equal to 1. Principal component analysis (PCA) and varimax rotation techniques were used to run the data reduction, and the outcome is reflected in Table 3.

Table 2: Factor loadings

Var.	Initial Eigenvalues	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings

	Total	% of Varianc e	Cumula tive %	Total	% of Varianc e	Cumula tive %	Total	% of Varianc e	Cumula tive %
1	11.377	33.460	33.460	11.377	33.460	33.460	5.978	17.584	17.584
2	4.230	12.441	45.902	4.230	12.441	45.902	4.217	12.403	29.987
3	2.713	7.980	53.882	2.713	7.980	53.882	3.980	11.707	41.694
4	2.054	6.041	59.923	2.054	6.041	59.923	3.148	9.259	50.953
5	1.702	5.005	64.927	1.702	5.005	64.927	2.505	7.367	58.320
6	1.351	3.974	68.902	1.351	3.974	68.902	2.308	6.787	65.107
7	1.139	3.349	72.251	1.139	3.349	72.251	1.787	5.256	70.363
8	1.087	3.196	75.447	1.087	3.196	75.447	1.728	5.084	75.447

Note: Extraction method: principle component analysis

From Table 2 it can be observed that factor 1 accounted for considerably more variance (33.460%) than the remaining seven factors. However, after extraction it accounted for 17.584% of variance. The scree plot (Figure 2) further confirms the aforementioned.

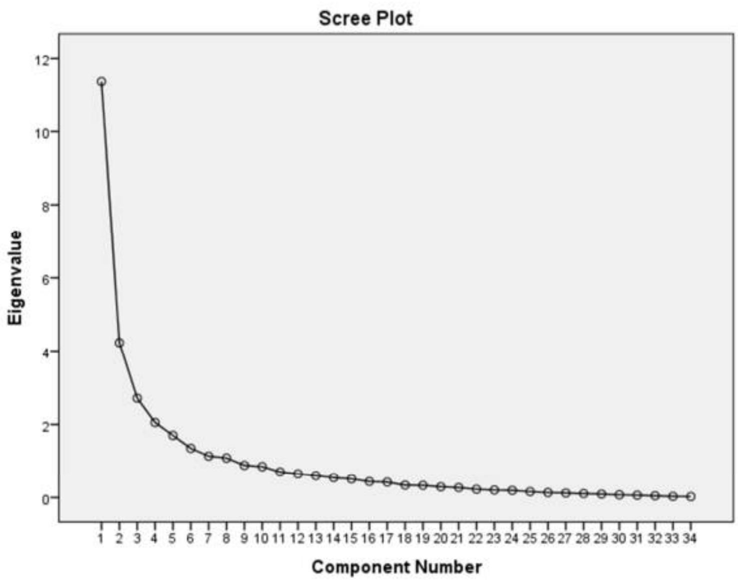

Figure 2: Scree plot

From Table 3, it was concluded that each items loadings and factor interpretations form the e-CRM banking features outlined in the research model and are consistent and or in line with previous studies (Alim and Ozuem, 2014; Azila and Noor, 2011, Koçoglu and Kirmaci, 2012; Lam et al. 2013; Olupot and Kituyi, 2013; Oumar et al., 2017; Rabbai, 2013; Zeithaml et al., 2012). Consequently, these findings suggest that future studies on e-CRM in the banking sector should incorporate privacy and security, interactivity, brand preference, problem solving, user friendliness, customised promotions and other communication platforms such as social networks (Paliouras and Siakas, 2017) as they are a precursor to e-loyalty.

Table 3: Varimax rotated component matrix

Factor	Item codes	Factor loadings	Factor interpretation
Factor 1	CS_b.	.877	Customer satisfaction
	CS_c.	.845	
	CS_a.	.818	
	CS_e.	.771	
	CS_f.	.749	
	CS_d.	.743	
	Dur_loy_b4.	.724	
	Dur_loy_b3.	.543	
Factor 2	Dur_ser_a1.	.799	Privacy and security
	Post_loy_b3.	.751	
	pre_loy4.	.681	
	pre_loy3.	.642	
	Post_loy_b4.	.641	
	pre_loy2.	.521	
Factor 3	pre_serv_a3.	.860	Interactivity
	Dur_ser_a3.	.729	
	Dur_ser_a2.	.670	
	pre_serv_a1.	.565	
	Post_serv_a1.	.544	
	pre_serv_a2.	.540	
	pre_serv_a4.	.500	
Factor 4	Dur_loy_b1.	.821	Brand preference
	Dur_loy_b2.	.772	
	pre_loyb1.	.619	
	Post_loy_b2.	.510	
Factor 5	Dur_ser_a6.	.711	Problem solving
	Post_serv_a4.	.711	
	Post_serv_a3.	.640	
Factor 6	pre_serv_a6.	.676	User friendliness
	pre_serv_a5.	.638	
Factor 7	Dur_ser_a5.	.817	Customised promotions
	Dur_ser_a4.	.755	
Factor 8	Post_loy_b1.	.654	Communication platforms
	Post_serv_a2.	.639	

Extraction method: principal component analysis.
Rotation method: Varimax with Kaiser Normalization.
a. Rotation converged in 12 iterations.

Structural model results

The influence of e-CRM features on customer e-loyalty via customer satisfaction

Figure 3 shows the structural model estimates for conceptual model using standardised estimates at 5% significance level, while Table 4 shows the relationships estimates. Whereas the effect of customer satisfaction (CS) on customer loyalty (CL) at all stages of a transaction are significant, results of standardised estimates of e-CRM features (pre-service, during service and post service) on CL indicate no statistically significant effect. For example, there were positive relationships between pre-service features and customer satisfaction (1.558, CR = 0.187) and post-service features and satisfaction (0.303, CR = 0.223), while at-service features and customer satisfaction are negatively related (-2.079, CR = -.159). H1, H2 and H3 were therefore accepted. The aforementioned results are consistent with previous research (Ismail and Hussin, 2016; Mang'unyi, Khabala & Govender, 2017) which suggested that e-CRM pre-purchase and post-purchase features positively impacted customer satisfaction. On overall, the results therefore suggest that customer satisfaction does not moderate the relationship between e-CRM construct and customer loyalty. This is to say that in socialist cultures like in Kenya including the retail bank customers, tend to create and uphold long lasting relationships. Therefore, they may put up with deficiencies associated with e-CRM activities and/or systems and do not leave the institution (Ahmad et al., 2012).

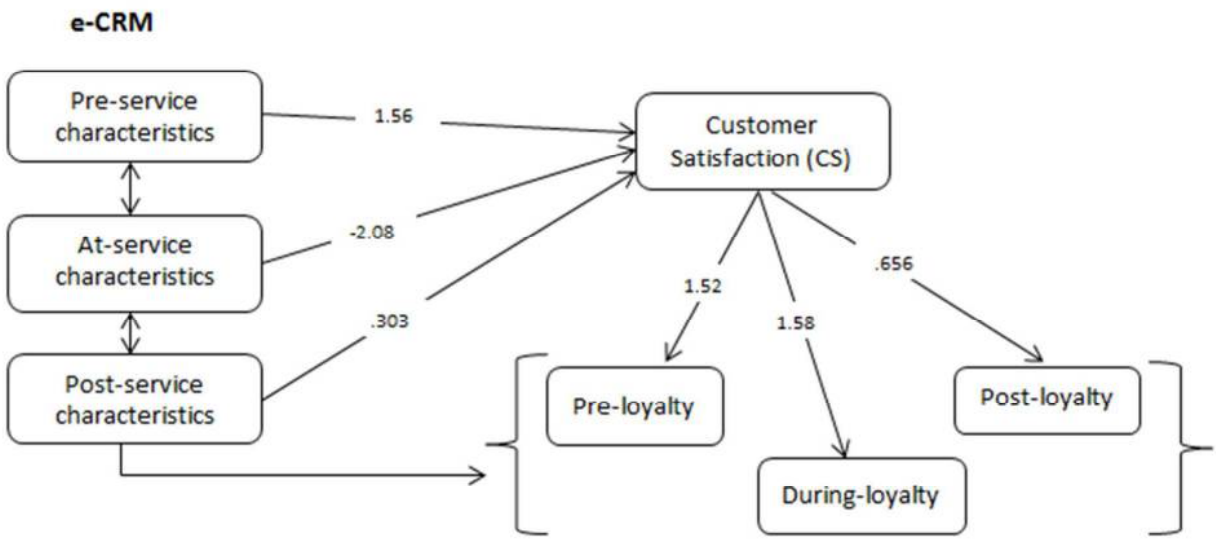

Figure 3: SEM standardised factor loadings

Table 4: Latent e-CRM factors and their relationship with CL via CS

Relationships	Estimate	Std. error	Critical Ratio	P
Satisfaction<---Pre-service	1.558	8.335	.187	.852
Satisfaction<---During-service	-2.079	13.067	-.159	.874
Satisfaction<---Post-service	.303	1.359	.223	.823
Pre-loyalty<---Satisfaction	1.526	.232	6.572	***
During-loyalty<---Satisfaction	1.577	.224	7.036	***
Post-loyalty<---Satisfaction	.656	.174	3.778	***

Notes: ***Significant ($p<0.0001$)

Multiple linear regression analysis

In order to confirm that customer satisfaction has a moderation effect on the relationship between the e-CRM transactions attributes and customer loyalty, further analysis was conducted using multiple linear regression analysis to corroborate the above-mentioned results. It was accepted that the nature of this relationship changes as the values of the moderating variable (customer satisfaction) changes. This was established by including an interaction effect in the model and checking to see if indeed such an interaction is significant, and helps to explain the variation in the customer loyalty better than before. In the first step, four variables were included: pre-service, during transaction, post-transaction and customer satisfaction (Table 5).

Table 5: ANOVA Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.293	4	5.323	22.718	.000[b]
	Residual	16.402	70	.234		
	Total	37.696	74			
2	Regression	21.295	5	4.259	17.919	.000[c]
	Residual	16.400	69	.238		

Total	37.696	74

a. Dependent Variable: Overall Customer Loyalty
b. Predictors: (Constant), Customer Satisfaction, Post Service e-CRM Transactions, Pre-Service e-CRM Transactions, During Service e-CRM Transactions
c. Predictors: (Constant), Customer Satisfaction, Post Service e-CRM Transactions, Pre-Service e-CRM Transactions, During Service e-CRM Transactions, Pre*During*Post service e CRM*customer satisfaction

Table 5 shows that all the variables (customer satisfaction, post service e-CRM transactions, pre-service e-CRM transactions, during service e-CRM transactions) accounted for a fairly moderate amount of variance in customer loyalty (R^2 = .565; F = 22.718, p < .05). To avoid potentially problematic high multi-collinearity with the interaction, the variables were centered and an interaction term was created between them, as suggested by Huck (2010). As shown in Table 6, although (model 2), the interaction between the e-CRM transaction attributes and customer satisfaction was a statistically significant predicator of customer loyalty [$F(5, 69) = 17.919$, $p<.05$, R^2=.565], the interaction did not significantly account for more variance than just the e-CRM attributes and customer satisfaction (R^2 change = .000, p = .929), indicating that there is lack of a potentially significant moderation effect of customer satisfaction between e-CRM and customer loyalty. Given the aforementioned, there was no need to run the regression on the centered terms to examine the effect, hence it was concluded that there is no moderating effect of customer satisfaction on the relationship between attributes of e-CRM transactions and customer loyalty. H4 was therefore rejected.

Table 6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df2	Sig. F Change
1	.752[a]	.565	.540	.48406	.565	22.718	4	70	.000
2	.752[b]	.565	.533	.48753	.000	.008	1	69	.929

a. Predictors: (Constant), Customer Satisfaction, Post Service e-CRM Transactions, Pre-Service e-CRM Transactions, During Service e-CRM Transactions
b. Predictors: (Constant), Customer Satisfaction, Post Service e-CRM Transactions, Pre-Service e-CRM Transactions, During Service e-CRM Transactions, Pre*During*Post service e-CRM*Customer satisfaction

Conclusions, suggestions and limitations

While not much literature exists on the relationship between e-CRM and customer loyalty, the possible role of customer satisfaction as a moderating variable appears to have received lesser attention among academic researchers. Building customer loyalty remains a vital strategy for the stability and success of banks in current highly competitive and turbulent markets. Our study has found that with respect to the bank customers, customer satisfaction does not moderate the relationship of e-CRM transactions features and customer loyalty. We conclude that though customers may be loyal to the bank, it does not necessarily imply that their satisfaction with the service is high. Other factors such as knowledge may be at play since research (Wang, Wang and Chieh, 2016), has shown that increased customer knowledge level is likely to cause a switch in service brand rather than make them loyal.

This finding calls for more in-depth studies to confirm or otherwise refute the findings, which would represent a significant contribution to our understanding of interrelationships between the three constructs. It is also factual that e-CRM is an emerging concept in the marketing literature, and together with other related concepts, has increasingly played a key role in services marketing, and have a significant impact on the long-term competitiveness of firms. The results emphasize upon the significance of e-CRM as a contributor to e-loyalty providing insights to this phenomenon while corroborating with the propositions of academicians and researchers. The implication for management is the important effect of e-CRM on CS. There is need to understand different dimensions of e-CRM (at different stages of the transaction cycle) with their impact on CS and e-loyalty especially in new and/or emerging markets to build and achieve competitive advantage in an increasingly competitive banking sector faced with reduced profits. An understanding of these dimensions could assist the management advance effective marketing plans to increase loyalty. The resultant model highlights to bank managers where they can focus more by distributing any available resources efficiently while strengthening their e-CRM to attract/acquire new, retain existing customers and to an extent doing away with less profitable ones (Sujitha & Johnson, 2017). Furthermore, regular evaluation of a bank's e-CRM activities would assist managers track changes over time, design and schedule trainings for personnel involved in implementation of e-CRM. Since embracing and use of e-CRM methods and systems is a tactical strategy in managing customer relationships, however, it requires commitment throughout the banks to enhance customer orientation.

It would also be interesting to find out, using some divergent sample, other variables that can impact this relationship like gender, knowledge, brand image etc. For example, in this study gender differences in participation or uptake of electronic services were conspicuous. Therefore, knowing individual customers' preferences in relation to gender differences in e-CRM quality is crucial for creating loyalty.

Whereas the research was empirical in nature and concentrated on the clients/customers of just one commercial bank, the findings need to be confirmed by research conducted in other banks and/or service industries. Furthermore, the number of participants was small, and selected through convenience sampling which calls for vigilant treatment of generalisations. Thus, a larger sample would strengthen the results, and increasing generalisation. Although steps were taken to keep to a minimum the effects of multi-collinearity among the constructs, some effects may still exist. Future research should ensure that there is no correlation between the moderator, predictor and criterion variables, to provide a clearly interpretable interaction. Development of clearer measurements (items) of the constructs used in this study particularly, e-CRM is needed. This can result in better measures, after which the interrelationships between and among the constructs can be better understood.

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