MODERATING EFFECT OF INFORMATION TECHNOLOGY UTILIZATION ON THE RELATIONSHIP BETWEEN COMMUNICATION AND CUSTOMER SATISFACTION

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ABSTRACT: *Relationship marketing has been identified as an effective strategy to attract, maintain and enhance customer relationships. Hospitality industry by extension supports and enhances tourism sector and has grown, evolved and developed over the years globally, regionally and in Kenya thus making meaningful contribution to economy in terms of employment, revenue and profit. Classified star hotels provide services such as reservation, telecommunication, front office, restaurant and accommodation for customers or guests. Communication as relationship marketing practice is therefore important in service industry. Despite the importance of communication in the hospitality industry, there are few empirical studies that have tested the underlying assumptions on classified star hotels which much of the relationship marketing research is based on. The aim of this study was to determine the moderating effect of information technology communication (ICT) utilization on the relationship between communication and customer satisfaction by classified hotels. Descriptive research design was adopted for this study. The target population was 6067 customers at classified star hotels in Nairobi Kenya and a sample size of 375 was obtained using proportionate sampling from five categorized star hotels. Data was collected using a 5 Likert-scale questionnaire. Data was analyzed using multiple regression analysis. The study revealed that communication (β= .011, p-value = 0.908) as a relationship marketing practice did not have a statistically significant effect on customer satisfaction. Thus, the study failed to reject $H0_1$ since p-value was greater than α. The moderating effect of Information Technology Utilization explains 7.8% variance in customer satisfaction above and beyond the variance by communication scores. $H0_2$ was rejected since $\beta \neq 0$ and p-value was less than α. This study concluded that communication strategy has no significant effect on customer satisfaction. The study concluded that ICT utilization moderated the relationship between relationship marketing practices and customer satisfaction. It is therefore recommended that managers of classified star hotels should understand the implications of prioritizing elements based on their effect on customer satisfaction.*

KEYWORDS: Communication, Relationship Marketing, Customer Satisfaction, Information Technology Utilization, Classified Star Hotel

INTRODUCTION

The relationship marketing process is usually described as one of establishing, developing and maintaining successful relational exchanges (Morgan & Hunt, 1994). The essence of these

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activities is to decrease exchange uncertainty and to create customer collaboration and commitment through gradual development and ongoing adjustment of mutual norms and shared routines.

Several relationship marketing scholars agree that communication is a fundamental aspect of relationship development. According to Hutt and Speh, (1995), communication is the epitome of coordinating behaviour and marketing relationships are no exception. Communication is said to be the glue that holds together service provider, customer relationship and satisfaction (Mohr and Nevin, 1990) and it is defined as the human act of transferring a message to others and making it understood in a meaningful way. This definition focuses on the efficacy of communication in producing the desired effect rather than on the frequency or modality of information exchange buyer-seller relationships. In marketing relationships, communication plays a central role in providing an understanding of the exchange partners' intentions and capabilities, thus forming the groundwork for relationship development. Communication is a prerequisite for building trust among exchange partners (Anderson and Narus, 1990). The quality and sharing of information influence the success of relationships (Mohr and Spekman, 1994) and are a central part of the relationship atmosphere.

Relationship marketing is defined as attracting, maintaining, and enhancing customer relationships. A successful marketing strategy and appropriate management of relationships ensures that customers are retained. For that it is important to focus on the concept of personalization in marketing that will drive the commitment value to the customer (Ashley *et al.*, 2011). Relationship marketing has taken a central position in marketing strategy according to (Palmatier, 2009). Existing trends in business, such as transition to a services-based economy, development of information and communication technologies, increasing global competition among others has led to increasing the importance and attractiveness of loyalty based on the level of trust and greater flexibility in exchange relationships. Hotels therefore need to establish a long-term relationship with its customers in order to sustain in current competitive environment in hospitality industry.

Several studies demonstrated that success of any service company depends on maintaining a long relationship with customers. Morgan and Hunt (1994) and Izquierdo *et al*. (2005) indicated that relationship marketing includes all activities directed towards the establishment, development and maintenance of exchange relationships. Oliver (1999) has defined customer loyalty as strong emotional reflection to keep re-purchase behaviors and then maintain a long-term relationship. Research on customer relationship management (CRM) have suggested that service sector firms implement CRM strategies to strengthen their ability to communicate with customers, provide them with feedback in a timely manner, analyze customer information and customize offerings. The implementation of CRM strategies takes place to enhance the smooth dissemination of customer information throughout the hospitality industry the purpose being to enhance the quality of decision-making (Krasnikov *et al*., 2009). CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate

relationships with key customers and customer segments and unites the potential of relationship marketing strategies and technology to create profitable, long-term relationships with customers and other key stakeholders.

Satisfaction of customers with products and services of a hotel is considered as one of the most important factor leading toward competitiveness and success in classified hotels (Hennig, *etal,* 1997). Customer satisfaction is actually how customer evaluates the ongoing performance (Gustafsson *et al.,* 2005). Customer satisfaction is an evaluation of the perceived discrepancy between prior expectations and the actual performance of the product or service which include quality of service, quality of food, good ambience, value and choice. Customer satisfaction is very important in today's business world. The ability of a service provider to create high degree of satisfaction is therefore crucial for developing strong relationship with customers in the classified star hotels. In order to enhance and improve their relationship with customers, hotels in Kenya need to embrace efficient and effective customer relationship management (CRM) techniques through information and communication technology (ICT) in order to satisfy and retain customers. Nana and Vida (2013) observed that ICT has a major role to play in CRM of classified star hotels.

Marketing has changed globally and is making marketer's shift their focus from transaction based marketing to relationship marketing in the era of information communication technology. This paradigm shift to embracing interactive relations and strengthening marketing is aimed at building and nurturing lasting close associations with customers (Abbasi *et al*., 2010). Communication appears to be one of the most important variables for entrenching the strength of a marketing relationship, and it is a useful construct for measuring the likelihood of customer loyalty as well as for predicting future purchase frequency (Morgan & Hunt, 1994). Morgan and Hunt (1994) and Ndubisi (2006) assert that Communication is information provision and antecedent of trust with shared value. It's a two way dialogue and is measured in scale of 5 items in descriptive information from the respondents to test the timely trustworthy, provision of information, fulfilment of promises and accuracy of sharing new services or of information given and ability to communicate and disseminate information. Previous studies have not looked into the ICT utilization and its effect on the relationship between communication and customer satisfaction in the hospitality industry. The study therefore sought to bridge this gap by investigating moderating effect of ICT utilization in the relationship between communication as a relationship marketing practice and customer satisfaction in classified star hotels in Nairobi Kenya.

STUDY METHODOLOGY

The study was done in classified star hotels in Nairobi Kenya. Descriptive research design was adopted for this study. The target population was 6067 customers at classified star hotels in Nairobi Kenya. A sample size of 375 was obtained using proportionate sampling from classified star hotels. The study used primary data, the questionnaire was divided into 2 sections/

categories general information and the following variables customer satisfaction, commitment strategy, communication strategy, conflict handling and service quality. Primary data was collected through semi-structured questionnaires with a 5-point Likert-style scale strongly agree to strongly disagree questionnaire. The unit of analysis was in categorized star hotels because the study was to identify the effect of moderating ICT utilization between relationship marketing practices and customer satisfaction in categorized star hotels industry in Nairobi. The research was cross-sectional in nature because the data was gathered just once over a period of months. The study used primary data, the questionnaire was divided into 2 sections/ categories general information and the following variables customer satisfaction, commitment strategy, communication strategy, conflict handling and service quality. The research took place at all sampled categorized star hotels in Nairobi. For the study population, the research used a sample of customers selected from categorised star hotels Data was analyzed using multiple regression analysis. The following regression model was used in data analysis.

$Y_1 = \alpha + \beta_1 X_{1+} \varepsilon$ (Direct Relationship)…………………………… (1)

$Y_2 = \alpha + \beta_1 X_{1+} \beta_2 (X_1 M) + \varepsilon$ (Moderated Relationship)………… (2)

Y= Customer satisfaction

X_1= Communication strategy

M = Information communication technology utilization

α = Constant

β_1, β_2 = Coefficients for corresponding variables

ε = Error term

RESULTS

The results show that 6 items for communication are sorted and clustered into three components. The results of principal component analysis indicate that there are three factors whose Eigenvalues exceed 1.0. The Eigenvalue of a factor represents the amount of total variance explained by that factor. For communication, the first factor has Eigenvalue of 3.159 and the second factor has Eigenvalue of 1.198 and the third factor had Eigenvalue of 0.648. The three factors identified for the independent variable 'communication' explain 83.409% of the total variance. The first factor explained 52.647% of the total variance and the second factor explained 19.961% while the third factor explained 10.801% of the total variance. The percentage of variance combines for succeeding items to make up 100% variance. The results also show the extracted sum of square loading for the factors. The values are calculated on the basis of the common variance, which is smaller than the total variance incorporating 83.409% of the variance. Rotated sum of square loadings depict the distribution of the variance after varimax rotation. Varimax rotation tries to maximize the variance of each of the factors, so the total amount of variance accounted for is redistributed over the extracted factors. Principal component analysis with varimax rotation is widely adopted as a reliable method of factor analysis.

Kaiser-Meyer-Olkin (KMO) has a measure of 0.700 which is above the threshold of 0.5. The Bartlett's is significant for communication with Chi-Square = 706.613 (p-value < 0.05). This confirms the appropriateness of the factor analysis for communication.

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Rotated Component Matrix for Communication

	Component		
	1	2	3
The hotel provides timely and trustworthy information	.153	.749	.428
The hotel provides information when there is new or change of services	.850	.314	.029
The hotel makes and fulfils promises	.232	.869	.143
The information provided by the hotel is always accurate	.816	.326	.008
This hotel shares its information and moderates to its customers	.115	.383	.869
The hotel has the ability to communicate and disseminate information	.824	-.140	.448

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.700
Bartlett's Test of Sphericity	Approx. Chi-Square	706.613
	df	15
	Sig.	.000

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
   a. Rotation converged in 9 iterations.
   b.

The first component exhibited heavy loadings for three items that consisted of the hotel provides information when there is new or change of services (0.849), the information provided by the hotel is always accurate (0.814), the hotel has the ability to communicate and disseminate information (0.848). This factor can be called 'information dissemination' because the factor loadings are heavy on items related to information dissemination. The second component loads heavily on three items which consists of the hotel provides timely and trustworthy information (0.856), the hotel makes and fulfils promises (0.799), and the hotel shares its information and moderates to its customers (0.792). This factor can be called 'trustworthiness' because items that the factor heavily loads on are related to trust. The third component loads on two items which consists of this hotel shares its information and moderates to its customers (0.869) and the hotel has the ability to communicate and disseminate information (0.448). This factor cab be can be called 'information sharing' as items that heavily load on it are related to information gathering and dissemination.

Conceptual Model key Effects on Hypotheses
To determine the effect of communication on customer satisfaction and the moderating effect of Information Technology Utilization on the relationship between communication and customer satisfaction, the relevant null hypotheses were postulated as follows:

H0₁: Communication strategy has no significant effect on customer satisfaction in classified star hotels in Nairobi-Kenya

H0₂ ICT does not significantly affect the relationship between Communication and Customer Satisfaction in classified star hotels in Nairobi-Kenya

Model
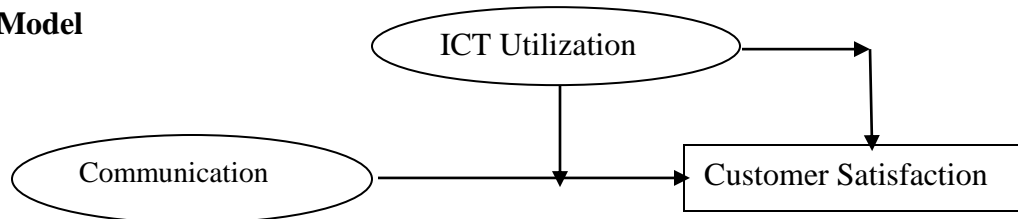
Source: Researcher 2015

Using moderated multiple regression analysis, the moderating effect of the variable Information Technology Utilization was analyzed by interpreting the R^2 change in the models obtained from the model summaries and the regression coefficients for the product term obtained from model summaries. Variance-inflation factor (VIF) and tolerance were used to test for multicollinearity among the predictor variables. Multicollinearity statistics show that the tolerance indicator for Communication, Information Technology Utilization, and Communication*Information Technology Utilization were all greater than 0.1 and their VIF values were less than 10. These results indicate that no multicollinearity problem occurred.

The results show that for model 1, R=0.338, $R^2 = 0.114$ and F= 34.847 (p=0.000). Model 2 shows the results after the product term (Communication*Information Technology Utilization) was included in the equation. The results also show that inclusion of the product term resulted in R^2 change of 0.078, F= 26.010 (p=0.000). These results show presence of moderating effect. The moderating effect of Information Technology Utilization explains 7.8% variance in Customer Satisfaction above and beyond the variance by Communication scores. Thus it can be concluded that the study rejected H0₂ because β≠0 and p-value is less than α.

Model summary results for moderating effect communication and customer satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.338ᵃ	.114	.111	.59015	.114	34.847	1	270	.000	
2	.439ᵇ	.192	.186	.56458	.078	26.010	1	269	.000	1.721

a. Predictors: (Constant), Communication

b. Predictors: (Constant), Communication, Information Technology Utilization

c. Dependent Variable: Customer Satisfaction

Coefficients results for moderating effect communication and customer satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.567	.269		9.545	.000		
	Communication	.378	.064	.338	5.903	.000	1.000	1.000
2	(Constant)	1.836	.294		6.237	.000		
	Communication	.198	.071	.177	2.795	.006	.750	1.333
	Information Technology Utilization	.359	.070	.323	5.100	.000	.750	1.333
a. Dependent Variable: Customer Satisfaction								

DISCUSSION

The study established that Communication (β= .011, p-value = 0.908) as a relationship marketing practice did not have a statistically significant effect on Customer Satisfaction. Thus, it can be concluded that the study failed to reject *H0₂: Communication strategy has no significant effect on customer satisfaction in classified star hotels in Nairobi-Kenya* since p-value was greater than α. The results mean that a positive change in communication strategy will result into a positive change in customer satisfaction but this relationship is not statistically significant. Important factors of communication include information dissemination, information sharing and trustworthiness of information to customers.

Conclusion and the implication of the study
It was concluded that communication strategy has no significant effect on customer satisfaction in classified star hotels in Nairobi-Kenya. Communication strategy should therefore not be accorded priority over other key relationship marketing practices in decision making. However, information dissemination, information sharing and trustworthiness of information to customers are important for classified star hotels to satisfy their customers.

RECOMMENDATIONS

This recommended that managers of classified star hotels should understand the implications of prioritizing elements of relationship marketing based on their effect on customer satisfaction. Hotels management should build collaborative relationship with customers that characterised by high levels of trust, information sharing and dissemination. This will encourage repeat purchases and finally customer retention in the trading relationship.

Social
The study recommends that communication can help hotels management to build on collaborative relationship with customers that rely on quality which are characterised by high levels of trust, commitment, satisfaction, reciprocity and communication.

Managerial
The study enables managers to learn that promptness in communication formativeness, approachableness, trustworthiness and professionalism are all fundamental aspects for determining satisfaction and future interactions in a hotel and these encourage repeat purchases and finally customer retention in the trading relationship. Management will develop high levels of affective communication and calculative commitment to build the strongest relationships with customers

Policy
The study provides to hotel managers, the government of Kenya and other stakeholders in hotel industry with current and updated data in formulating appropriate policies and coming up with solutions to emerging issues in the sector on matters of communication and customer satisfaction. This study will help all stakeholders to formulate more rational strategies aimed at attracting and retaining customers, this research contributes to a better appreciation and understanding of communication and customer satisfaction related factors.

Research
This research study was initiated with the intention of making a modest contribution to the relevant body of knowledge and stimulates further research in communication, customer satisfaction and hospitality industry.

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RESEARCH QUESTIONAIRE

Communication	1	2	3	4	5
The hotel provides timely and trustworthy information					
The hotel provides information when there is new service					
The hotel makes and fulfils promises					
The information provided by the hotel is always accurate					
This hotel shares its information and moderates to its customers					
The hotel has the ability to communicate and disseminate information					

ANALYSIS RESULTS
Communication
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.159	52.647	52.647	3.159	52.647	52.647	2.157	35.948	35.948
2	1.198	19.961	72.608	1.198	19.961	72.608	1.688	28.140	64.089
3	.648	10.801	83.409	.648	10.801	83.409	1.159	19.321	83.409
4	.466	7.765	91.174						
5	.313	5.219	96.393						
6	.216	3.607	100.000						

Extraction Method: Principal Component Analysis.