INFLUENCE OF PERCEIVED VALUE ON CUSTOMER RETENTION AMONG MOBILE PHONE USERS IN THE PUBLIC UNIVERSITIES IN WESTERN REGION OF KENYA

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Abstract:
Organizations have embraced the concept customer relationship management practices since it focuses on managing relationship between its current and prospective customer base hence helping in building long lasting relationships which consequently give the organization the joy of retained customers. The specific objective of this study is to determine the effect of perceived value on customer retention. The study was guided by the social exchange theory which focused on the fundamental principle that humans in social situations choose behaviors that maximize their likelihood of meeting self-interests in those situations. Descriptive and explanatory research designs were utilized in this study and the following networks were sampled; Safaricom, Airtel, Orange and, yuMobile A questionnaire was used to collect data from sample size of 222 respondents who were sampled from the staff of public universities in the Western region which included Moi, Masinde muliro, Maseno, Jaramogi Oginga Odinga, University of Eldoret and Kisii University. Data collected was analyzed by use of descriptive and inferential statistics. Multiple regressions were used to establish the effect perceived value and customer Retention. The results revealed that Perceived value had significant effect on Customer retention. The study recommends that service providers should put more emphasis on Customer perceived value they influence customer retention. The study provides new theoretical insight into factors influencing customer retention.

JEL: L20; L22; L63

Keywords: perceived value, customer, retention, mobile phone users

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1. Introduction

In recent years, retaining customers has become increasingly more important since the business environment is dynamic and competitive. Therefore, as the competitive business environment becomes more turbulent, the most important issue the sellers face is no longer to provide quality products or services but keep loyal customers who will contribute long-term profit to organizations (Tseng, 2007). Bateson and Hoffman (2002), define customer retention as focusing a firm’s marketing effort towards the existing customer’s base.

Many firms recognize the importance of customer’s retention but relatively few understand the economics of customer retention within their own firms. It is claimed that 5% improvement in customer retention can cause an increase in profitability of between 25 and 85 percent depending on the industry (Kerin, Hartley, & Rudelius, 2009; Reichheld & Sasser, 1990). Likewise, it is easier to deliver additional product and service to an existing customer than to a first-time “buyer” (Kotler & Keller, 2006; Wills, 2009). Organizations both private and public in today’s dynamic market place are increasingly leaving anticipated marketing philosophies and strategies to the adoption of more customer-driven initiatives that seeks to understand, attract, retain and build long term relationship with profitable customers (Kotler, 2006, Gronroos, C., 1994). This paradigm shift has undauntedly led to the growing interest in CRM practices that aim at ensuring customer identification, interactions, customization and personalization that unreservedly lead to customer satisfaction, retention and profitability (Thompson, 2004, Gronroos et al., 1996; Xu et al, 2002, Store, 2000). CRM practices is defined as “activities that focuses on managing the relationship between a firm and its current and prospective customer base, as a key to success” (Gebert, 2003). It further, means developing a comprehensive picture of customer needs, expectations and behaviors and managing those factors to affect business performance. CRM practices help in building long lasting relationships and these relationships give a company joy of retained customers.

The demand for mobile phones in Kenya in the last few years has been more than most people expected and continues to expand. According to the Communications Commission of Kenya (CCK), mobile phone usage in Kenya has grown to an average of 65 percent a year for the past five years. This is twice the rate of growth in Asian countries. In Kenya, the growth rate is even higher. Statistics indicate that Kenya has more than 18 million subscribers, up from 6.5million in the year 2006 (Nokia, 2010). Penetration of mobile telephone in Kenya, like many other developing countries, is mainly driven by affordability and innovation.

1.1. Statement of the Problem

Today, when a new product hits the market every day, businesses in all industries face greater cut-throat competition than ever before. To counter competition firms are increasingly adopting more customer-driven initiatives that seeks to understand, attract, retain and build long term relationship with profitable customers (Kotler, 2006; Gronroos,
In the telecommunication sector in Kenya firms have implemented Customer relationship management strategies to enhance customer satisfaction and retention. Some of the practices include improving Network quality, creating more superior customer value, enhancing Customer relational experience and the introduction of loyalty programs. CRM practices help the organization to work smarter by optimizing services to the customers and maximizing revenue. The key to stability in today’s dynamic marketplace is in forging long-term customer relationships through Customer relationship management practices and to succeed, a company must differentiate themselves through superior service & offer a consistent, convenient customer experience to gain an edge. They must abandon the view that customers represent immediate sales transactions and a quick buck. Customer Relationship Management practices is the strongest and the most efficient approach in maintaining and creating relationships with customers, not only pure business but also ideate strong personal bonding within people. Once this personal and emotional linkage is built, it is very easy for an organization to identify the actual needs of customer and help them to serve them in a better way. Customer relationship management practices can help make sure there is a thorough understanding throughout the organization of what customers really want, and then use that information to follow up with actions, solutions, and resolutions.

2. The Concept of Customer Retention

Customer retention is increasingly being seen as an important managerial issue, especially in the context of saturated market or lower growth of the number of new customers. It has been also acknowledged as a key objective of relationship marketing, primarily because of its potential in delivering superior relationship economics, i.e. it cost less to retain than to acquire new customers. (Ghavami, 2006). Bateson and Hoffman (2002), define customer retention as focusing a firm’s marketing effort towards the existing customer's base. This explain the view that instead of trying to acquire a new customers, firms engulfed in customers’ retention efforts must make sure that the existing customer are satisfied as so to create and maintain long term relationship. (Payne 2005). Many companies recognize the importance of customer’s retention but relatively few understand the economics of customer retention within their own firms. Since the start of 1990s research has identified the financial benefits of customer’s acquisition versus customer retention. Fred Reichared and Earl Sasser, published revealing research which demonstrated the financial impact of customer retention. They found even a small increase in customer retention produced a dramatic and positive effect on profitability: a five percentage points increase in customer retention yielded a very high improvement in profitability in present value terms. These results have had a significant impact in drawing attention to the critical role customer retention has to play within CRM strategy (Payne, 2005). Lovelock et al (1999), said in business context, loyalty is used to describe the willingness of a customer to continue patronizing a firms’ goods and services over a
long period of time and on a repeated and preferably exclusive basis, and voluntarily recommending the firm’s products to friends and associates.

2.2. Social Exchange Theory
The theory attempts to explain the nature of the relationships between Customer relationship management practices, Customer satisfaction and Customer Retention. The theoretical model adopted for this study was derived from the social exchange theory (Homans, 1958), which posits that all human relationships are formed by the use of cost-benefit analysis and comparisons of alternatives. Homans suggested that when an individual perceives the cost of a relationship outweighs the perceived benefits, then the person will choose to leave the relationship. The theory further states that persons that give much to others try to get much from them, and persons that get much from others are under pressure to give much to them. The social exchange relationships between two parties develop through a series of mutual exchanges that yield a pattern of reciprocal obligations to each party. Social exchange theory indicates that individuals are willing to maintain relationships because of the expectation that to do so will be rewarding. Individuals voluntarily sacrifice their self-benefits and contribute these benefits to other individuals with the expectation for more future gains. Thibaut and Kelly (1959) propose that whether an individual retains a relationship with another one depends on the comparison of current relationship, past experience and potential alternatives. The constant comparison of social and economic outcomes between a series of interactions with current partners and available alternatives determines the degree of an individual’s commitment to the current relationship.

2.3. Perceived Value and Customer Retention
Perceived value has its root in equity theory, which considers the ratio of the consumer’s outcome/input to that of the service provider’s outcome/input (Oliver and DeSarbo, 1988). The equity concept refers to customer evaluation of what is fair, right, or deserved for the perceived cost of the offering (Bolton and Lemon, 1999). Perceived costs include monetary payments and non-monetary sacrifices such as time consumption, energy consumption, and stress experienced by consumers. In turn, customer-perceived value results from an evaluation of the relative rewards and sacrifices associated with the offering. Customers are inclined to feel equitably treated if they perceive that the ratio of their outcome to inputs is comparable to the ratio of outcome to inputs experienced by the company (Oliver and DeSarbo, 1988). And customers often measure a company’s ratio of outcome to inputs by making comparisons with its competitors’ offerings. Customer value is “the fundamental basis for all marketing activity” (Holbrook, 1994, p. 22). And high value is one primary motivation for customer patronage. In this regard, Sirdeshmukh, Singh, and Sabol (2002) argue that customer value is a superordinate goal and customer loyalty is a subordinate goal, as it is a behavioral intention. According to goal and action identity theories, a superordinate goal is likely to regulate subordinate goals. Thus, customer value regulates “behavioral intentions of loyalty toward the service
Influence of Perceived Value on Customer Retention Among Mobile Phone Users in the Public Universities in Western Region of Kenya

Prior empirical research has identified perceived value as a major determinant of customer loyalty in such settings as telephone services (Bolton and Drew, 1991), airline travel and retailing services (Sirdeshmukh et al., 2002). Chang and Wildt (1994) report that customer-perceived value has been found to be a major contributor to purchase intention.

3. Research Methodology

3.1. Research Purpose

The research purpose is a broad statement of what the research hopes to achieve. According to purpose, research could be broadly divided into exploratory, descriptive and explanatory (Saunders et al., 2000, 2007; Cooper and Schindler, 2006). An explanatory research is a study that is conducted to “find out what is happening, to seek new insights, to ask questions and to assess phenomena in a new light” (Robson, 2002:59). It is mainly used when a researcher wants to have a clearer understanding of a situation or a problem, where the area of study is so new or vague, important variable may be known or defined. It therefore uses such methods as searching documented materials, asking for expert’s opinion, and conducting a focus group interviews. A descriptive research is a study that seeks to “portray an accurate profile of persons, events or situations” (Robson, 2002:59 in Saunders et al., 2007). It involves formalizing the study with definite structures in order to better describe or present facts about a phenomenon as it is perceived or as it is in reality. An explanatory research is a study that seeks to establish relationship that exists between variables. In other words, its purpose is to identify how one variable affects the other; it seeks to provide an explanation to the causes and/ or effects of one or more variables (Saunders et al., 2000, 2007; Cooper and Schindler, 2006, Malhotra and Birks, 2007). It is often termed as causal studies. They are also used when the purpose of the study is to answer “why” in a given context. This study had significant combination of both the two: Descriptive and explanatory purposes. Firstly, the study sought to describe or portray a reality regarding CRM Practices with customer retention and to better understand those CRM Practices that customers are satisfied or dissatisfied with, so it was descriptive. Secondly, the study sought to determine the effect of CRM Practices on customer retention and to examine its relationship therefore it was explanatory.

3.2. Target Population

The target population for the study was the users of Mobile Phone services. Burns and Groove (1997) argues that a target population is the entire aggregation of respondents that meets designated set of criteria. The Target population of the study consisted of staff in public universities in Western Kenya Region. The study defined Western Kenya as the region covering North Rift, former Nyanza province and former Western province. The public universities in the Western region included Moi, Masinde Muliro, Maseno, Jaramogi Oginga Odinga, University of Eldoret, Kisii University as at June, 2014. The staff
in these Universities was characterized by grade, gender, working experience, level of education, and level of mobile phone exposure. The study targeted a population of 15007 which was indicated in official records in the payrolls of respective universities. The following is how the 15007 was arrived as a target population for this study:

<table>
<thead>
<tr>
<th>Strata</th>
<th>Target Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moi University</td>
<td>6,900</td>
</tr>
<tr>
<td>Maseno University</td>
<td>2,500</td>
</tr>
<tr>
<td>Masinde Muliro University of Science and Tech.</td>
<td>1,400</td>
</tr>
<tr>
<td>Jaramogi Oginga Odinga University</td>
<td>2,070</td>
</tr>
<tr>
<td>Kisii University</td>
<td>837</td>
</tr>
<tr>
<td>University of Eldoret</td>
<td>1300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15007</strong></td>
</tr>
</tbody>
</table>

**Source:** Survey Data.

3.2. **Sampling Technique**

In selecting the sample of 250 respondents, a stratified simple random sampling was used. This technique was chosen because the population consisted of mobile phone users in each stratum. Stratified random sampling ensures greater representativeness across the entire population and also results in a smaller sampling error, giving greater precision in estimation (Wegner, 2000).

3.3. **Sample Size**

The sample size of each stratum in stratified random technique will be proportionate to the population size of the stratum when viewed against the entire population. This means that each stratum (each University) has the same sampling fraction (Castillo, 2009). The simple random sampling or probability sampling was used so that each and every one in the target population had an equal chance of inclusion. The sample size of universities in each stratum and the number of respondents was obtained using coefficient of variation. Nassiuma (2000) asserts that in most surveys or experiments, a coefficient of variation in the range of 21% to 30% and a standard error in the range 2% to 5% is usually acceptable. The Nassiuma’s formula does not assume any probability distribution and is a stable measure of variability. Therefore, a coefficient variation of 30% and a standard error of 2% were used in this study. The upper limit for coefficient of variation and standard error will be selected so as to ensure low variability in the sample and minimize the degree or error.

The formula will be;

\[ S = N \frac{(CV)^2}{(CV)^2 + (N-1) e^2} \]

Where:
S = the sample size
N = the population size
Cv = the Coefficient of Variation
e = standard error

Therefore, the sample size of universities will be as indicated in the table below:

\[ n = \frac{15007(0.3^2)}{0.3^2 + 15007 - (0.02)^2} = 222 \]

<table>
<thead>
<tr>
<th>Name of University</th>
<th>Total Population</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moi University</td>
<td>6,900</td>
<td>102</td>
</tr>
<tr>
<td>Maseno University</td>
<td>2,500</td>
<td>36</td>
</tr>
<tr>
<td>Masinde Muliro University of Science and Tech.</td>
<td>1,400</td>
<td>20</td>
</tr>
<tr>
<td>Jaramogi Oginga Odinga University</td>
<td>2,070</td>
<td>30</td>
</tr>
<tr>
<td>Kisii University</td>
<td>837</td>
<td>13</td>
</tr>
<tr>
<td>University of Eldoret</td>
<td>1300</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15007</strong></td>
<td><strong>250</strong></td>
</tr>
</tbody>
</table>

Source: Survey Data, 2014.

3.4. Data Collection, Instrument and Procedure
Primary Data was collected using a questionnaire. The percentages in table 3.2 reveal the number of questionnaires that were distributed to the respondents in the six strata at the public Universities in Western region of Kenya to respondents willing to participate in the research.

3.4.1. Data Collection Instrument
The questionnaire was used as the data collection instruments to enable achieve the stated objectives. The instrument was appropriate as it helped in collecting the primary data. The questionnaire was designed based on the five-point likert-type scales. This was so because it was to enable answer specific research questions and help achieve the objectives of the study. Closed ended questions were used as they were deemed to motivate the respondents and save time.

3.4.2 Data Collection Procedure
According to many scholars, in the use of survey strategy, the main instruments used are self-administered/interviewer administered or structured interviews and questionnaire or a combination of both (Saunders et al., 2000; cooper and Schindler, 2006; Malhotra N. K. and Birks D. F., 2007). A total of 250 copies of questionnaire were administered to the participants in the entire study. For this study, the questionnaire was administered by twelve research assistants, the research assistants were selected basing on their qualifications and availability. Those with Bachelor of Business Management were given first priority and further trained on how to effectively collect data.
3.5. Measures of Reliability and Validity

Saunders et al. (2000); Cooper and Schindler (2006); and Malhotra N. K., and Birks D. F. (2007) agree that in any research, it is expedient as a matter of reliability and validity check that the questionnaire should be pre-tested before final administration. The measurement scale in the questionnaire were deemed to have content and construct validity because they reflect the key components of CRM practices, Customer satisfaction and customer retention described in the literature.

3.5.1. Reliability of Study Measures

Reliability refers to whether a measurement instrument is able to yield consistent results each time it is applied. In order to test for reliability, Cronbach alpha coefficient will be used as it is the common method used for assessing reliability for a measurement scale with multi-point items. The reliability of the study measures was assessed by Cronbach’s Alpha coefficient, which was used to assess the internal consistency or homogeneity among the research instrument items (Sekaran, 1992). The coefficient that reflects homogeneity among a set of items varies from 0 to 1. A good reliability should produce at least a coefficient value of 0.70 (Hair et al., 1995) but coefficients up to 0.62 are acceptable in social research studies (Kritsonis and Hurton, 2008). For this research the reliability coefficients met the criteria since all the reliability coefficients of the study variables were above 0.7. The concepts of validity and reliability require the researcher to ensure data is gathered and treated in a manner that will not include change to interpretation. This means there is need to record the problem of the study as closely as possible (Creswell, 2003). However, there is no absolute reliability in undertaking a research. The use of questionnaires is one source of bias because of literacy problems which may be present in the target respondents.

3.5.2. Validity

Validity refers to whether the statistical instrument measure what it is intended to measure, i.e. accuracy of measurement (Sullivan T. J., 2001; Saunders et al., 2000; 2007). Validity is concerned with whether the findings are really what they appear to be about. This study will address the four approaches to establishing validity; face validity, content validity, criterion validity and construct validity (Zikmund et al., 2010). Face validity will be established by inspecting the contents being studied for their appropriateness to logically appear to reflect what will be measured further, face validity involves assessing whether a logical relationship exist between the variables and the proposed measure.

To establish content validity this research will be validated by determining the variables which have been defined and used in literature previously. Additionally, opinions from experts were sought to provide relevant inputs adding to what had been identified from the literature. Piloting a questionnaire was crucial and had highlighted ambiguities and other potential pitfalls (Somekh and Lewin, 2005). The pilot study was carried out in Egerton University. Feedback from the pilot study enabled the researcher to make changes where necessary to the questionnaire. In addition, the respondents may
have experienced boredom because the questions may seem monotonous and towards the end of the questionnaire, the respondent may not pay keen attention to details of the question. Yet another bias that may be experienced in the course of this research is acquiescence. This issue may arise when the respondent tends to agree with an issue whenever they are not sure or undecided. To overcome this possible bias, the study will provide a short questionnaire. Reliability test will be performed on the questionnaire items using Cronbach alpha. However, the threshold that is acceptable in closely related researches is 0.7 and this is what will be the guide to this study (Eisenmerger et al., 1986).

3.6 Data Analysis and Presentation

To establish the main characteristics of the study variables, descriptive statistics, factor analysis using principal component method with varimax rotation and Pearson correlations analysis was done and relevant tests conducted. To establish the statistical significance of the respective hypotheses, ANOVA of F-tests as well as multiple linear regression analysis was conducted, appropriate at 95 percent confidence level (α=0.05). The questionnaire returned from the field was coded, edited and keyed into the computer to facilitate statistical analysis. Statistical package for social sciences (SPSS) version 17 was used to assist in analysis. Analyzed data was interpreted and presented in tables.

Data analysis was undertaken using multiple regressions to examine the way a number of independent variables relate to one dependent variable. Multiple regression was used as a technique to analyze continuous variable (Steel and Ovalle, 1984).

4. Data Analysis, Presentation and Interpretation

4.1. Response Rate

The study intended to collect data from 250 respondents, but data was successfully collected from 222 respondents. This represents a response rate of 88.8 percent of the target population, which falls within the confines of a large sample size (Anderson, Sweeney and Williams, 2003).

4.2 Profile of the Respondents

The respondents’ profiles of interest in this study were gender, age of respondent, highest level of education, mobile phone service provider, and service provider used most and lengthy of time of usage of the services.

The total sample for the survey consists of 222 respondents. The gender distribution of the survey respondents is 65.3 per cent males and 34.7 per cent females. The results also indicated that the samples have age predominantly of 45 years and above, which is 46.4 per cent. More than 50 per cent of the respondents use Safaricom mobile phone service provider. Majority of the respondents have college or higher education level where 10.4 per cent are professional qualification, 13.5 per cent are diploma or advanced diploma holder, 16.2 per cent have degrees and 53.2 per cent have
postgraduate level of education. Only 6.8 per cent of respondents have attained high-school level. The results are presented in Table 4.1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>145</td>
<td>65.3</td>
</tr>
<tr>
<td>Female</td>
<td>77</td>
<td>34.7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>20</td>
<td>9.0</td>
</tr>
<tr>
<td>25-34</td>
<td>18</td>
<td>8.1</td>
</tr>
<tr>
<td>35-44</td>
<td>81</td>
<td>36.5</td>
</tr>
<tr>
<td>45 and above</td>
<td>103</td>
<td>46.4</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-Level</td>
<td>15</td>
<td>6.8</td>
</tr>
<tr>
<td>Professional Qualification</td>
<td>23</td>
<td>10.4</td>
</tr>
<tr>
<td>Diploma</td>
<td>30</td>
<td>13.5</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>36</td>
<td>16.2</td>
</tr>
<tr>
<td>Post Graduate Degree</td>
<td>118</td>
<td>53.2</td>
</tr>
<tr>
<td><strong>Mobile Service Provider</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safaricom</td>
<td>111</td>
<td>50</td>
</tr>
<tr>
<td>Airtel</td>
<td>80</td>
<td>36</td>
</tr>
<tr>
<td>Orange</td>
<td>28</td>
<td>12.6</td>
</tr>
<tr>
<td>Yu-mobile</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Mobile Service Provider used often</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safaricom</td>
<td>104</td>
<td>46.8</td>
</tr>
<tr>
<td>Airtel</td>
<td>68</td>
<td>30.6</td>
</tr>
<tr>
<td>Orange</td>
<td>37</td>
<td>16.7</td>
</tr>
<tr>
<td>Yu-mobile</td>
<td>13</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>Period of Usage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>18</td>
<td>8.1</td>
</tr>
<tr>
<td>4-7 years</td>
<td>91</td>
<td>41.0</td>
</tr>
<tr>
<td>8-10 years</td>
<td>82</td>
<td>36.9</td>
</tr>
<tr>
<td>Over 11 years</td>
<td>31</td>
<td>14.0</td>
</tr>
</tbody>
</table>

Source: Research Data (2014).

4.3. Descriptive Statistics
For clear determination of the responses made to the research items, the mean, standard deviation, skewness and kurtosis of the study variables were determined as highlighted in Table 4.2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std dev</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV</td>
<td>3.0748</td>
<td>0.76270</td>
<td>-0.353</td>
<td>0.629</td>
</tr>
<tr>
<td>CS</td>
<td>3.4234</td>
<td>0.79292</td>
<td>-0.583</td>
<td>-0.248</td>
</tr>
</tbody>
</table>

PV=Perceived Value, and CR=Customer Retention

Source: Research Data (2014).

From Table 4.2 Perceived Value have a mean score of 3.0748 and a standard deviation of 0.76270, its skewness and kurtosis is -0.353 and 0.629 respectively making it skewed to the right side of the curve. The customer retention is the dependent variable which has a mean of 3.2450 and a standard deviation of 0.71781. The normal curve is skewed to the right with a skewness of -0.620 and a kurtosis of 0.715.
4.4. Scale Reliability of Study Variables
The reliability of an instrument is defined as its ability to consistently measure the phenomenon it is designed to measure. The reliability of the questionnaire was therefore tested using Cronbach alpha measurements. From the Table 4.3.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Items</th>
<th>Cronbach Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV</td>
<td>5</td>
<td>0.808</td>
</tr>
<tr>
<td>CR</td>
<td>5</td>
<td>0.716</td>
</tr>
</tbody>
</table>

PV=Perceived Value, and CR=Customer Retention

Source: Research Data (2014).

The reliability coefficients (a) of each variable are as follows: perceived value (0.808); and customer retention (0.716). The reliability coefficients of most of the variables are above 0.70, which concurs with the suggestion made by Nunnally (1978). The internal consistency was considered to be sufficient and adequate. As indicated in the above table Cronbach’s alpha was computed separately for the study variables to enable assess the internal consistent among the study variable. From the table, the results reveal that relating to the study variables are normally distributed.

4.5. Factor Analysis
Factor analysis was conducted to create variable composites from the original attributes and to identify a smaller set of factors that explain most of the variances between attributes. Factor analysis was done on Network Quality, Perceived Value, and Customer Relational Experiences, Loyalty Programs, Image, Customer Satisfaction and Customer Retention.

4.5.1. Factor Analysis Results of Perceived Value
The Kaiser Criterion was used to determine the number of factors to extract for analysis. Results show that the 5 items for Perceived Value are sorted and clustered into one component. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett’s Test of Sphericity were used. The KMO measure of sampling adequacy indicated a value of (KMO=0.767) indicating that the sample size was adequate for the variables entered into analysis. The Barlett’s Test of Sphericity was significant $X^2=418.074, df=10, p<0.000$, implying that the factor analysis was appropriate for the study and there was relationship among variables for the Perceived Value. From Table 4.6, the results of the principal component analysis indicate that, there is one factor whose Eigenvalues exceed 1. The Eigenvalue of a factor represents the amount of total variance explained by that factor. For Perceived Value, the first factor has Eigenvalue of 2.918 which explain 58.352% of the total variance, the percentage of variance combines for the succeeding items to make up 100% variance. Varimax rotation tries to maximize the variance of each of the factor, so the total amount of variance accounted for the redistribution over the extracted factor.
Principal component analysis with varimax rotation is widely adopted as a reliable method of factor analysis (Lee, 2010).

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Value for money</td>
<td>.839</td>
</tr>
<tr>
<td>Value ease of use</td>
<td>.811</td>
</tr>
<tr>
<td>Convenience of using service provider</td>
<td>.783</td>
</tr>
<tr>
<td>Overall ability to give up High</td>
<td>.812</td>
</tr>
<tr>
<td>Convenience of using service provider</td>
<td>.783</td>
</tr>
<tr>
<td>Overall ability to give up High</td>
<td>.812</td>
</tr>
<tr>
<td>Over ability is high</td>
<td>.531</td>
</tr>
</tbody>
</table>

**Notes:** Eigenvalues 2.918  Percentage of Variance 58.352%

KMO Measure of sampling adequacy 0.767
Approx. Chi-Square 418.074, Df 10, Sig. .000
Extraction Method: Principal component Analysis
Rotation Method: Varimax with Kaiser Normalization
Rotation converged in 3 iterations

**Source:** Research Data (2014).

### 4.5.2. Factor Analysis Results of Customer Retention

Results show that the 5 items for network quality are sorted and clustered into two components. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett’s Test of Sphericity were used. The KMO measure of sampling adequacy indicated a value of (KMO=0.578) indicating that the sample size was adequate for the variables entered into analysis. The Barlett’s Test of Sphericity was significant $X^2=341.686$, df=10, p<0.000, implying that the factor analysis was appropriate for the study and there was relationship among variables. The results show that the 5 items of Customer Retention are sorted into one component. The results of the principal component analysis indicate that, there is one factor whose Eigenvalues exceed 1. The Eigenvalue of a factor represents the amount of total variance explained by that factor. For customer retention, one factor has eigenvalue of 2.409. The factors explain 50.179% of the total variance. Varimax rotation tries to maximize the variance of each of the factor, so the total amount of variance accounted for the redistribution over the extracted factor. Principal component analysis with varimax rotation is widely adopted as a reliable method of factor analysis (Sinkkonnen et al., Malhotra and Galleta, 1999).

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider the company as my first choice</td>
<td>.528</td>
</tr>
<tr>
<td>Patronizing the company in few more years</td>
<td>.830</td>
</tr>
<tr>
<td>Encouraging others to patronizing the service provider</td>
<td>.874</td>
</tr>
<tr>
<td>Say Positive things about the service provider</td>
<td>.566</td>
</tr>
</tbody>
</table>

**Table 4.10: Customer Retention Rotated Component Matrix**

**Source:** Research Data (2014).
4.8. Correlation Analysis

The correlation shown in the table below presents bivariate correlations between variables. Since a single construct in the questionnaire was measured by multiple items, the average score of the multi-items for a construct was computed and used in further analysis such as correlation analysis and multiple regression analysis (Wang and Benbasat, 2007).

From the table attached, When the correlation coefficient value \( r \) range from 0.10-0.29, is considered to be weak, 0.30-0.49, medium, 0.5-1.0 is considered strong, Wong & Hiew (2005). According to Field (2005), correlation coefficient should not go beyond 0.8 to avoid Multicollinearity. In this research, the highest correlation coefficient is 0.69, thereby implying that there was no multicollinearity problem in this research, since the value is less than 0.8. The PV is positively and statistically significant \( r=0.541, p<0.00 \) (2 tailed at 1% level of significance), CR is positively and statistically significant. The PV was correlated to customer retention and were positively and statistically significant.

<p>| Table 4.11: Pearson Correlation Coefficient of Study Variable |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>NQ</th>
<th>PV</th>
<th>CRE</th>
<th>LP</th>
<th>CS</th>
<th>CR</th>
<th>Sig. (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQ</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV</td>
<td>.516</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>.501</td>
<td>.461</td>
<td>.512</td>
<td>.587</td>
<td>.646</td>
<td>1</td>
</tr>
</tbody>
</table>

PV=Perceived Value, and CR=Customer Retention

Source: Research Data (2014).

5. Summary of Findings, Conclusions and Recommendations

The study examined the mediating effect of customer satisfaction on the relationship between customer relationship management practices on customer retention among mobile phone users in public universities of Western Kenya region. The study was guided by the objective meant to determine the effect of perceived value on Customer retention. The study had proposed the null hypothesis; \( H_0: \) perceived value has no significant effect on customer retention. From the findings, it was found that beta coefficients (perceived value), \( B=-0.637, t=-2.866, p=0.005 \). The null hypothesis was therefore rejected since its \( p \)-value is <0.05 and an alternative hypothesis were accepted, meaning that there is an effect of perceived value on customer retention. This result supports prior researches that perceived value has its root in equity theory, which
considers the ratio of the consumer’s outcome/input to that of the service provider’s outcome/input (Oliver and DeSarbo, 1988). In this regard the findings of this study are supported by Sirdeshmukh, Singh, and Sabol (2002), who argued that customer value is a superordinate goal and customer loyalty is a subordinate goal, as it is a behavioral intention and this enhances retention.

**Conflict of Interest Statement**
The author declares no conflicts of interests.

**About the Author**
Dr. Kennedy Ntabo Otiso, holds a Doctor of Philosophy in Business Management (Marketing Option), a Master of Business Management (Marketing Option) all from Moi University. He has a bachelor’s degree in Business Administration (Marketing Option-Cum Laude) graduated from the University of Eastern Africa, Baraton. He has over 10 years of experience serving in different capacities in various Institutions of Higher learning in Kenya. He currently serves as a Senior lecturer and Head of department in the Department of Business Administration and Management Sciences, school of Business in Koitaleel Samoei University College (A constituent college of the University of Nairobi). He has widely published in scholarly peer reviewed academic journals and actively attended several international conferences. He has supervised and examined many postgraduate students from various Universities in Kenya. His specific area of research is marketing, strategic management, consumer behavior, insurance, customer relationship management and relational studies amongst others. He has previously served as Lecturer at University of Eldoret, Served at Kibabii University as lecturer as well as a founding chairman of the Department of Business administration and Management; he also served as an assistant Lecturer at the University of Eastern Africa, Baraton. He has also served as Chief Principal at Elgonview College. He has served as the Director of Consolidated Bank for a period of three years. He is the current Chairman, Board of Management, Ntana High School-Nyamira County. Dr. Otiso is a trained professional marketer as well as a member of the marketing society of Kenya and Kenya Institute of Management respectively.

**References**


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