INNOVATION AND PERCEIVED CUSTOMER VALUE IN MOBILE TELECOMMUNICATIONS FIRMS IN KENYA

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A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE AWARD OF THE DEGREE OF MASTER OF BUSINESS IN ADMINISTRATION OF THE SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

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DEDICATION

This study is dedicated my mother Ms. Elizabeth Mandere who taught us during our childhood days that in any situation, you have the ability to be different and be able to set the pace amongst your peers.
ACKNOWLEDGEMENT

This study is dedicated to all those in one way or the other contributed to the success of this research project. Above all, I wish to thank the almighty God for enabling me to carry out this master’s degree research project successfully. Special recognition goes to my project supervisor, Dr. Owino Okwiri without whose guidance and coaching during the entire project time, this study would not have been possible. I too wish to recognize my friend and mentor for the MBA studies, Mr. Charles Omondi who on one day decided that we needed to undertake postgraduate studies in Masters in Business Administration and insisted on the same till I registered for the course. Last but not least, special thanks to my dear wife Edith, daughters Faith and Mercy-Pauline for encouragement and understanding during the period I undertook the MBA course.
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ABSTRACT

The aim of the study was to determine the relationship between innovation dimension emphasized and perceived customer value in service firm operations. Most of the studies in literature support that innovation in services is an important factor that affects service quality, an antecedent of perceived customer value. However, there are relatively few studies in literature, especially in the Kenyan context that have been carried out to determine the relationship between innovation dimension and perceived customer value.

The study was carried out in the mobile telecommunications firms in Kenya. The framework developed for the study comprised of three constructs; innovations dimension; the independent variable perceived service quality and perceived customer value, the dependent variable while perceived service quality was assumed to mediate the relationship between variables. The construct of innovation dimension was conceptualized as a bi-dimensional construct while perceived service quality and perceived customer value were conceptualized as multi-dimension constructs that consisted of six and four determinants respectively.

The study used regression analysis to develop and test the model for the relationship between innovation dimension and perceived customer value. The hypothesis of the study was that there is a significant relationship between innovation dimension and perceived customer value. Statistical tests were carried out at 95% confidence level to determine the direction and significance of the relationship with findings at p-value of less than 0.05, indicating that there is a strong relationship between innovation dimensions
emphasized and perceived customer value in the mobile telecommunications firms in Kenya.
CHAPTER ONE

INTRODUCTION

1.1 Background

Operations are transformation processes that use inputs in terms of materials, labor, time, unprocessed data, management and capital to create outputs. According to Taylor and Russell (2011) operations are the core function of the organization and continuously manage the flow of resources through it. Both manufacturing and service operations have five core performance objectives; quality, speed, dependability, flexibility and cost management and as noted by Letungule and Letting (2012), these objectives are very challenging to achieve more so in service firm operations in the creation of customer value.

Due to the service characteristics of heterogeneity and co-creation, according to DeTienne and Koberg (2009), service operations environment is very unpredictable and results in high variability with sudden and unexpected changes which has been explained by Browning (2010) as the key challenge in customer value creation. Continuous updating of product attributes and adjustments in service delivery, argues Waters (2009) is a requirement to maintain greater customer value. Continuous and differentiated product updating is a competitive requirement as held by Dimyati (2011) which can be used to attain new customer value; an argument supported by Mutunga, Minja and Gachanja (2014) who qualify this as being the basis of managing the frequent changes in customer tastes and preferences.
According to Tritos (2013), besides the competitive priorities of quality, cost control, speed and flexibility, innovation is the primary source of competitive advantage. To achieve competitive advantage by offering value to the customer, Murat, Burca and Omer (2013) argue that it requires a firm to be different and superior in many and new elements such as service offerings, processes, systems, quality and speed than the competition. The attainment of this competitiveness depends on adoption of innovativeness in services, processes and products in the acceleration of customer value creation as found out by Ngugi, MCogere and Muiru (2013). Christensen (2013) postulates this can be achieved through innovation which has been recognized as a critical asset that is necessary in the attainment of superior customer value.

1.1.1 Innovation
Innovation in services, according to Langdon (2011) can be approached from six distinct views which typically need to be integrated into one clear perspective to come up with the best possible result in the creation of superior customer value. These perspectives when analyzed lead to two main dimensions of innovation; conservative and disruptive innovations. Abernathy and Clarkson (1978) explained the concept of conservative versus radical innovation which was consistent with Tushman and Anderson (1986) concept of incremental versus breakthrough innovation and Porter (1986) argument that promoted continuous and discontinuous technological changes. Conservative innovation leans towards small incremental changes in product offerings based on the tenets of Total Quality Management (TQM). On the other hand, Christensen (2013) describes disruptive
innovation dimension as that type which advocates for radical processes, new practices and new product attributes for creation of new customer value.

Radical innovation based on the disruptive innovations theory, argues Browning (2010) is a foundational concept to understand for anyone hoping to do well against the competition. The disruptive innovations theory (1997) explains radical innovations as the phenomenon through which an innovation transforms an existing market by introducing product simplicity, convenience, accessibility and affordability. Disruptive innovation, as per the view taken by Paul (2011) is that it is best viewed as the process of leveraging creativity to achieve new value through new business models, processes, products and new service quality. Innovation is really about responding to change in a creative way; while Burke (2009) takes the position that disruptive innovation is about generating new ideas, improving processes and revamping products and services to create customer value. However the key feature of radical innovation according to Christensen (2013) is venturing away from familiar ground to uncharted territory, doing something new and original, rather than continuing with the existing practices or copying the activities of the competition in customer value creation.

However the process of firm innovativeness is impacted by a number of factors. The organization’s vision, structure, culture and other support mechanisms according to Tuan and Venkatesh (2010), to a greater extent influence firm innovativeness. Service operations at firm level notes Okibo and Shikanda (2011) is that usually develops a certain momentum and it often becomes easier to continue on the present course than embrace innovativeness and change to new approaches in customer value creation. Most organizations, even the most innovative argues Waters (2009) really move forward by
continuing with a series of relatively small changes which do not add new value in service offerings. Christensen (2013) discredits this approach on the basis that it tinkers and contradicts with the current products, is too conservative, satisfied with the current performance and does not get to the root cause of the problem in addressing the challenges in the creation of superior and differentiated customer value.

1.1.2 Perceived Customer Value

Raza, Awan and Bukhari, (2012) note that perceived customer value is the trade-off between the benefits and sacrifices made with reference to performance of the product or service. Customer value, on the basis of equity, argues Auka (2012) can be analyzed as an evaluation of costs versus benefits, whereby perceived customer value increases positively if the imbalance favors benefits and negatively if the imbalance favors cost. And Mohammed (2011) brings in the perspective that customer value is influenced by customer’s perception of quality in which perceived service quality is an antecedent of the relationship. Service quality which is a function of the gap between customer expectations of a service and their perceptions of the actual service delivered, cites Dale (2006) is the key determinant of perceived customer value. However managing the gap between customer perceptions and expectations, which has been identified as gap number five in the SERVQUAL model is a major concern for many service firms in the creation of customer value. This argument according to Bosire, Auka and Matern (2013) is pegged on the fact that all the five service delivery dimensions have a positive and significant influence on perceived customer value.
Service quality and customer satisfaction alone, state Adeola and Adebiyi (2007) cannot sustain competitive advantage because customer requirements keep changing so frequently due to the service characteristics of heterogeneity and co-creation and firms have to focus on customer value delivery to effectively manage the variant customer preferences and tastes. On the basis of the service characteristics of heterogeneity and co-creation, service quality which influences perceived customer value is a key consideration in managing the frequent changes in customer requirements. Kihara and Ngugi (2014) posit that customer-centered firms emphasize on operating closer to the customer, a better understanding of customer requirements and translating them into capabilities in the creation of customer value.

1.1.3 Innovation and Perceived Customer Value

Innovation, according to Murat et. al (2013) is considered one of the most important factors that affect customer value. Gupta (2009) describes this approach as being more critical in the current products because delivering a solution that is unique to each customer is becoming more important than delivering a standard solution that is virtually perfect quality. To manage this distinguishing requirement in services, Kanten and Yaslioglu (2012) view innovation in services as the result of the energy spent by the firm in thinking like the customer and hence the innovation effort results in the formation of customer value.

However Waters (2009) notes that even the most innovative firms really move forward by continuing with a series of relatively small changes. This approach of making small and cosmetic changes in product offerings postulates Christensen (2013) seems to
experience a failure in addressing the current unique products requirements. And Khan (2013) concludes that a focus on continuous, iterative improvements and TQM is not enough: you can create better value, more value but that is not all, you must provide new value.

1.1.4 The Mobile Telecommunications Firms in Kenya

Kenya’s services sector which contributes approximately 63% of the country’s Gross Domestic Product (GDP) is dominated by tourism (Kenya National Bureau of Statistics, 2014). Other service sectors as per Communications Commission of Kenya-CCK (2014) include financial services, telecommunications, education and transport. CCK (2014) also notes that one of the fastest growing services sector in Kenya is the mobile telecommunications industry, which was approximated to have achieved a growth rate of 34.3% in the last two years. As at 2014, there were four major players in the mobile telecommunications industry in Kenya. Mutua and Ngugi (2014) identify these as Safaricom Limited, Airtel Kenya, Telkom Kenya which operates under the Orange brand name and Essar Telecom Kenya which operates under the brand name Yu Mobile. Tarus et al. (2012) note that the mobile telecommunications industry in Kenya exhibits one of the most competitive markets in the region. Due to increased demands by customers and the challenges facing the service firms in the telecommunications industry in Kenya, Njenga (2013) argues that it is imperative that the SERVQUAL model E-P gap must effectively be managed to realize customer value.

Some of the competitive strategies employed by mobile telecommunications operators to maintain market share note Ngweno and Mas (2012) include high cross-network
charges, tariff cuts, air time top-up discounts, free call bonuses, added service menus, air
time credit facility, network spread and customer support services. Lately, Tarus et. al (2012) argue technological changes have shifted competition in the mobile telecommunications industry from price and core services to value added services and therefore service providers must differentiate their services and generate customer value for money at higher service quality. Mobile service providers in Kenya may be able to retain their less satisfied customers by offering innovative services. Ooko (2014) gives an example of Safaricom whose subscribers with intentions to switch operator identify M-Pesa, an innovative service by the firm as the main reason for retaining the service provider.

Mobile telecommunications firms in Kenya, notes Ooko (2014) are facing falling prices which has led to decreasing average revenue per unit (ARPU) levels and three out of four mobile network operators (MNO’s) are receiving negative returns. And Tarus et.al (2012) argue that Kenya’s mobile telecommunications service customers do not base their choice of the service provider on basis of brand image, rather given the dynamic nature of the industry and the intensive competition it exhibits, customers place emphasis on other tangible benefits that create a differentiated service.

1.2 Statement of the Problem

The position taken in the study was that perceived customer value in service operations is affected by the type of innovation emphasized. Perceived service quality was considered as mediating the relationship. Firm innovativeness improves productivity through perceived service quality which has a positive impact on customer value.
The mobile telecommunications industry in Kenya is very competitive. This according to Kihara and Ngugi (2014) is due to the dynamic nature of the industry that is very dependent on technology which happens to be changing and growing at very high rates in its own uniqueness. This means that the firms in the mobile telecommunications industry in Kenya argues Mureithi (2012) must keep updating their operational strategies and continuously improve service quality by offering new products with many and new attributes in customer value creation. This can be achieved through the type of innovative practices employed in consideration that firms seem to be competing on the cost approach only. Competition based on cost only, posit Mbiti and Weil (2011) lead firms to copy the competition, creating a competitive trap which encourages firms to make minor product modifications which on most occasions are cosmetic changes.

A number of global and local studies have been carried out in an attempt to explain the relationship between innovations and customer value. Murat et.al (2013) study focused on the role of innovation on perceived service quality in creation of customer value. Kanten and Yaslioglu (2012) study was based on hotel establishment and focused on the relationship between innovation, perceived service quality and customer value. Browning (2010) study investigated the relationship between innovation, perceived service quality and customer value. Gunday, Ulosoy, Kilic and Alpkan (2012) study focused on the effects of innovation types on firm performance. Ocloo and Tsetse (2013) study investigated the approaches used by firms for customer retention in Ghanaian mobile telecommunications industry.
At local level, studies related to the subject of innovations, service quality and perceived customer value have also been carried out. Mutunga, Minja and Gachanja (2014) study focused on innovation adoption and operational efficiency in food beverages in Kenya. Mureithi (2012) study investigated the innovative strategies adopted by the mobile telephony sector in Kenya. Letangula and Letting (2012), Kiraka, Kobia and Katwala (2013) and Ngugi, MCogere and Muiru (2013) studies focused on role of innovation in the management of perceived service quality.

In all these studies none has attempted to investigate and determine the nature and significance of the relationship between disruptive or radical innovations and perceived customer value. This study sought to investigate the impact of innovation dimension emphasized in service operations on perceived customer value. This was to be achieved by determining the significance of the relationship between innovation dimension emphasized and perceived customer value with perceived service quality as a mediating the relationship. This study therefore was intended to answer the question whether innovations can be used as an approach in the creation of new and superior perceived customer value.

1.3 Research Objectives

To investigate the relationship between innovation dimension emphasized and perceived customer value.

The specific objectives of the study are;
(i). To determine the impact of innovation dimension emphasized on perceived service quality in the mobile telecommunications firms in Kenya.

(ii). To determine the impact of perceived service quality on perceived customer value in mobile telecommunications firms in Kenya.

1.4 Importance of the Study

This study was expected to shed more light on the relationship between the level and type of innovation dimension emphasized in service firm operations in the creation of perceived customer value. The study findings are expected to have a significant impact on theory and practice in the area of service operations. It is expected that the findings will lead to a new approach in service operations management based on disruptive innovations rather than the current paradigm which is based on the tenets of Total Quality Management (TQM).

The study findings too, it is hoped will significantly influence service firms to adopt innovative practices to effectively manage the challenges of service quality management in the creation of perceived customer value. The study’s findings are expected to be of particular importance to operations managers and to some extent policy and decision makers in the management of perceived customer value in service firms.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
In this chapter, theoretical and conceptual literature from significant past studies, both local and international related to the subject area of innovations and perceived customer value was reviewed. First, the literature was reviewed along two themes; innovation and perceived service quality and perceived service quality and perceived customer value. Secondly, the literature as reviewed was summarized in tabular form and a conceptual framework proposed.

2.2 Innovation and Perceived Service Quality
In this theme, seven significant past studies in the subject area of innovation, perceived service quality and customer value with perceived service quality as an antecedent of perceived customer value were reviewed. The role of innovation in creating customer value: A study on employees of a call centre establishment (Murat et.al, 2013), Theoretical testing on service quality and product innovation of small–micro credit banks: A case study (Dimyati, 2011), Role of innovation in creating customer value in hotel establishments: A study on managers (Kanten & Yaslioglu, 2012), The effect of perceived service quality and trust on loyalty: Customer’s perspectives on mobile internet adoption (Roostika, 2011), Relationship between perceived service quality, innovation and customer value (Browning, 2010), Technological innovation and corporate performance (Letangula & Letting, 2011) and Factors influencing customer loyalty in the
telecommunications industry in Kenya (Kihara & Ngugi, 2014) were reviewed to gather literature on the relationship between innovation and perceived service quality.

First a case study by Murat et.al (2013) which focussed on role of innovation on customer value by means of perceived service quality was reviewed. The case study was carried out in Turkey in a call centre set-up. The study sought to examine the impact of innovations in services, processes and managerial practices. The study’s findings were that perceived service quality influences customer value and that those organizations which have implemented radical innovative processes are more likely to upgrade to superior perceived service quality through innovations. However it was noted that the study did not clearly explain to what extent and which innovation dimension is more applicable in creation of superior customer value. This study too was found out to have limitations of generalizability, context and geographical. These limitations formed the issues that were proposed to be investigated in the study using the Kenyan mobile telecommunications firms’ context.

A study carried out in the Indonesian market by Dimyati (2011) which focussed on service quality and product innovation using a case study that was based in a small-micro credit bank was also reviewed. The study by Dimyati (2011) sought to find out the impact of product innovation on customer value. The findings were that customer satisfaction and product innovation significantly influence customer value in a positive way. However it was noted that the study failed to identify the type of innovation dimension used and the study too used customer value from the firm perspective. The main weakness of the study was found out to be limitations in generalizability and context. It
was proposed that the findings were to be investigated whether they can be replicated in the Kenyan mobile telecommunications firms’ context.

Kanten and Yaslioglu (2012) a conceptual study which focused on the relationship between innovations in services, processes, managerial practices and customer value in the hospitality industry was also reviewed. The study was based on a compressive literature review and experience in the hospitality industry. The study found out that service innovation and process innovation affect customer value in a positive manner. The paper concluded that service and process innovations seem to have a positive effect on the formation of customer value. However the review found out that the paper did not differentiate the types of innovation dimensions and that the study viewed customer value from firm perspective. The issues that were raised from the study which were proposed to be investigated as identified gaps identified in the study were whether the findings can be applied in the Kenyan mobile telecommunications firms’ context and whether disruptive or conservative innovations can lead to superior customer value based on customer perspectives.

A cross sectional study by Roostika (2011) focussed on the relationship between service quality, trust and loyalty as perceived by the customer. The study conceptualized service quality as a multi-dimensional concept consisting of seven dimensions. The study was carried out in Indonesia. The findings of the study were that contextual quality is the most significant contributor of customer value and loyalty. However the study failed to differentiate between the two types of innovation dimensions. The gaps identified in the study which were proposed to be investigated were to determine whether the findings can be applied in the Kenya context.
The relationship between perceived service, innovation and their impact on customer value was investigated by Browning (2010). This study too was reviewed. The study findings were that radical innovations have superior impact on perceived customer value than conservative type of innovations. The study concluded that radical innovations in firm service operations can be used to achieve superior competitive advantage through introduction of more and new product attributes in the service offerings. However it was found out that the study did not show the level and significance of the relationship between innovations and perceived customer value. The issues that arose from the study and proposed for investigation were to determine if the findings could be applied in the Kenyan mobile telecommunications firms’ context.

Kihara and Ngugi (2014), a case study in the mobile telecommunications industry in Kenya focussed on how service quality affects customer value was the first study to be reviewed from the local scene. The study conceptualised customer value as the difference between the sum total of the expectations of customers regarding the product and the total costs that they bear in order to use that service. The findings of the study were that service quality attributes are context-dependent and that brand image and value added service influence customer loyalty and value. The study concluded that service quality influences customer value in the mobile telecommunications industry in Kenya. However it was noted that the study did not show the significance and direction of the relationship. The study too was noted that it had the limitations of case study generalizability. The issues which arose from the study and which were proposed for investigation were whether the findings of the study could be replicated across the mobile telecommunications firms in Kenya.
2.3 Perceived Service Quality and Perceived Customer Value.

In this theme two significant past papers both conceptual and theoretical in nature were reviewed. Customer retention in Ghanaian mobile telecommunications industry (Ocloo & Tsetse, 2013) and Innovation adaptation and operational efficiency on sustainable competitive advantage of food and beverage firms in Kenya (Mutunga, Minja & Gachanja, 2014) were reviewed.

In their study carried out in the Ghanaian mobile industry, Ocloo and Tsetse (2013) found out that service quality had a relationship with customer satisfaction and that mobile telecommunications firms in Ghana used innovative approaches such as call completion rates, clarity of calls, prompt complaints management and targeted promotions to retain customers. The study also suggested that there was no relationship between customer retention and customer satisfaction. This was noted to be a gap in which the study did not explain what makes customers switch between the mobile telecommunications networks. Another issue that was noted and proposed for investigation was whether the findings of the study could be applicable in the Kenya context. It was noted that a similar study in the mobile telecommunication firms in Kenya would create a better understanding of the dynamics in the mobile telecommunications in the Kenyan context.

In a study carried out in Kenya and focussed on the effects of innovation and operational efficiency in a dynamic environment by Mutunga et. al (2014), it was found out that innovation adaptation is important when firms pursue differentiation strategy through improved operational efficiency which leads to unique products that customers are willing to pay a premium price. However the study did not indicate the type of innovation dimension that is likely to impact operational efficiency more and the study too did not
show the direction and significance of the operational efficiency and innovations relationship. The issues that were proposed to be investigated are direction and significance of innovation dimension and customer value relationship and whether the findings could be applied in the mobile telecommunications firms’ context.

### 2.4 Summary of Reviewed Literature and the Conceptual Framework

The literature as reviewed was summarized in tabular form as shown in Table 2.1 below.

**Table 2.1: Summary of literature reviewed**

<table>
<thead>
<tr>
<th>Study and type</th>
<th>Focus Area/Findings</th>
<th>Study gaps that were identified</th>
<th>Issue that were to be examined in the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murat et. al (2013), Cross sectional survey.</td>
<td>Influence of perceived service quality on customer value</td>
<td>Context and geographical limitations, used firm customer value perspective</td>
<td>Whether the findings could be applied in the Kenya context.</td>
</tr>
<tr>
<td>Dimyati (2011), Cross sectional study.</td>
<td>Service quality and product innovation affect customer value</td>
<td>Context and geographical, used firm customer value perspective</td>
<td>If the findings could be applied in Kenyan context.</td>
</tr>
<tr>
<td>Kanten and Yaslioglu (2012), Cross sectional study</td>
<td>Service and process innovation affect customer value</td>
<td>Geographical and context, used firm perceived customer value approach</td>
<td>If findings could be generalizable in Kenyan context.</td>
</tr>
<tr>
<td>Roostika (2011), Cross sectional study</td>
<td>Contextual quality significantly affects customer value</td>
<td>Geographical and context, used perceived service quality and customer value based on firm perspective</td>
<td>Was to examine how contextual quality could be applied in mobile firms in Kenya.</td>
</tr>
<tr>
<td>Kihara and Ngugi (2014), Case study</td>
<td>Service quality, brand image and VAS influence customer loyalty</td>
<td>Case study generalizability limitations</td>
<td>Whether the findings could be applied in the mobile telecommunications industry in Kenya.</td>
</tr>
<tr>
<td>Ocloo and Firms use innovative</td>
<td>Geographical and</td>
<td>If findings could be applied in the mobile telecommunications firms’ context</td>
<td></td>
</tr>
</tbody>
</table>

...
Tsetse (2013), Cross sectional survey | practices to retain customers | context, used firm perceived customer value perspective | applicable in Kenyan context
---|---|---|---
Mutunga et. al (2014), conceptual study | Effects of innovation on operational efficiency in creation of customer value | Study did not identify the type of innovation for more differentiated products | To investigate if the findings could be applied in the mobile telecommunications sector.

From the literature reviewed, it was revealed that service firm innovativeness directly impacts on perceived service quality which is an antecedent with a mediating effect on perceived customer value. These linkages were conceptualized as shown in Figure 2.1 below.

**Figure 2.1: Conceptual framework**

![Conceptual framework](image)

Source: (Author, 2014)

This conceptual framework was examined by testing the relationships of the linkages H₁, and H₂. The objectives were to be achieved by testing the following hypotheses;

H₁: Innovations positively impacts on perceived service quality.

H₂: Perceived service quality positively influences perceived customer value.

These hypotheses were tested on the basis of the obtained regression coefficients for each of the relationship links, H₁ and H₂ as was identified in the conceptual framework.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
The general objective of this study was to determine the impact of innovation dimension emphasized in service firm operations on perceived customer value. This chapter discussed the methodology that was used in gathering, presenting and analyzing the data collected to enable the achievement of the study objectives. The chapter examined the research design, population determination, sample design, data collection, data analysis and presentation of the data.

3.2 Research Design
The study was proposed to be a cross sectional formalized, statistical descriptive survey. The study was carried out in the telecommunications firms in Kenya. The unit of analysis was proposed to be the individual companies in the Kenyan mobile telecommunications sector. The study was descriptive in nature and used statistics to answer the “what” and “how” relationships of the proposed study variables. A descriptive study according to Cooper and Emory (1995) is used when the ‘what’ and ‘how’ of a relationship is the focus of the proposed study. It was noted that a descriptive study also has the capability of presenting data in a more meaningful format and helps better understanding of the characteristics of a selected group in a particular context.
3.3 Population

All the four mobile telecommunications firms in Kenya were included in the population. Customers of the firms formed the population. Information from the customers was collected through a questionnaire to provide the required data.

It was proposed that 120 customers from the four companies be picked randomly to form the population sample. This is because the number of customers was too large in any of the firms which had a combined total population estimated at 31.3 million as per Communications Commission of Kenya-CCK (2014). Geographical coverage was limited to Nairobi County where all the four firms had head offices and a number of customer care centers. The proposed unit of analysis was adopted as the individual mobile telecommunications firm.

3.4 Sample Design

Sample sizes of 30 customers from each of the four firms were selected to form the respondents and were picked through simple, random sampling. This sample was determined using Cooper and Schindler Formula for sample size determination. Previous studies; Owino (2008) and Mulwa (2006) used sample sizes of 30 respondents. Cooper and Emory (1995) argue that sampling possesses the capability of better interviewing, testing, detailed investigation of missing data, detection of wrong information, better supervision and better analysis than is possible with complete coverage.
3.5 Data Collection

Data was collected using a structured questionnaire. The questionnaire were in two parts; for variables of innovation dimensions used in service firms operations, paired comparison questionnaire was used and for the multi-factor variables of perceived service quality and perceived customer value, a five point Likert scale was used. Informants were individual firm customers. The respondents were asked to complete the questionnaire to gather data on innovation dimension emphasized, perceived service quality and perceived customer value.

For each of the variables; measurement indicators for firm innovation dimension practiced were adopted from Olivera et.al (2014) while indicators for perceived service quality and customer perceived value were based on Mohajerani and Miremadi (2013) which are in consistency with Cronin, Brady and Hult (2000). A total of 120 customers picked randomly from the four mobile telecommunications firms were targeted for data collection.

3.6 Data Analysis

Data analysis for the type of innovation dimension emphasized based on paired comparison questionnaire used statistical mean, standard deviation and F-values in the analysis. Data analysis for perceived service quality based on five point Likert scale used mean, standard deviation and Chi-square statistics to analyze the data. The data was presented and analyzed using descriptive statistics. The descriptive statistics; the mean,
standard deviation and regression coefficients were presented as shown in Table 3.1 below.

**Table: 3.1: Presentation of the descriptive statistics**

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Mean -µ</th>
<th>SD-δ</th>
<th>Regression - Coeff</th>
<th>Correl-Coeff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service provider 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service provider 2</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Service provider 3</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Service provider 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regression co-efficients were used to test the null hypothesis. It was assumed that if the co-efficient of regression for the relationship between the variables is not significantly different from zero, the null hypothesis will be rejected and we accept the alternative hypothesis. The model that was proposed for the study was shown below.

\[ Y = \beta_1 X_1 + \beta_2 X_2 + E \]

\( Y \)– Perceived Customer Value

\( \beta_1 \) and \( \beta_2 \)–Beta coefficients; regression coefficients.

\( X_1 \) – Firm Innovation Dimension.

\( X_2 \) – Perceived Service Quality

\( E \)–Error Term
The interpretation of the model was based on the value of the regression co-efficient, \( \beta \). It was noted that if the regression \( \beta \) was not significantly different from zero, the null hypothesis, \( H_0 \) would be disapproved and the alternate hypothesis \( H_1 \) accepted.
CHAPTER FOUR

RESULTS AND DATA ANALYSIS

4.1 Introduction

This chapter presents results of the study as collected from the field. The data collected was converted and aggregate variables of multi-item constructs of innovation dimension, perceived service quality and perceived customer value developed. Data for the multi-item variable of innovation dimension which used the paired comparison technique was coded and data from perceived service quality and perceived customer value which used five point Likert scales was converted into nominal values to enable data analysis. Results on the respondents’ relationships with the service providers are reported first and then results on the respondents’ perceptions on management of service quality and creation of customer value presented.

4.2 Results

A total of 120 questionnaires were issued. Each of the four units of analysis was issued with 30 questionnaires. A total of 112 questionnaires were completed and returned achieving a response rate of 93.33% which was higher than the expected response rate of 75%. According to Mugenda and Mugenda (1999) a response rate of 50% is adequate for data analysis and reporting while a response rate of 60% is good and a response rate above 70% is excellent. Out of the returned questionnaires, six (6) were found be spoiled due to incompleteness and double scoring.
The four service providers used in the study were coded as Service Provider 1 (SP1), Service Provider 2 (SP2), Service Provider 3 (SP3) and Service Provider 4 (SP4) for confidentiality and ethical reasons. The results from the data collected are as presented in Table 4.1 below.

Table 4.1: Analysis of returned questionnaires

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Questionnaires Issued</th>
<th>Questionnaires Returned</th>
<th>Questionnaires Usable</th>
<th>Response Rate Based on Usable Questionnaires (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>30</td>
<td>30</td>
<td>29</td>
<td>96.67</td>
</tr>
<tr>
<td>SP2</td>
<td>30</td>
<td>29</td>
<td>27</td>
<td>90.00</td>
</tr>
<tr>
<td>SP3</td>
<td>30</td>
<td>28</td>
<td>27</td>
<td>90.00</td>
</tr>
<tr>
<td>SP4</td>
<td>30</td>
<td>25</td>
<td>23</td>
<td>76.67</td>
</tr>
<tr>
<td>Totals</td>
<td>120</td>
<td>112</td>
<td>106</td>
<td>88.33</td>
</tr>
</tbody>
</table>

(Source: Survey data)

The overall response rate based on usable questionnaires was 88.33%, which in comparison with Mugenda and Mugenda (1999) assertion was at an excellent level.

The study also requested the respondents to indicate the number of years they had been using services from the service providers. The mean number of years during which the respondents had been using services from the service providers is as shown in Table 4.2 below.
Table 4.2: Mean number of years respondents had been using services

<table>
<thead>
<tr>
<th>Service provider</th>
<th>Mean number of years respondents had been using services</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>4</td>
</tr>
<tr>
<td>SP2</td>
<td>4</td>
</tr>
<tr>
<td>SP3</td>
<td>4</td>
</tr>
<tr>
<td>SP4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>3.75</strong></td>
</tr>
</tbody>
</table>

From the results in the table above, the mean number of years the respondents had been using services from the service providers was 3.75 years. This indicates that the respondents were in a position to provide credible information about service quality issues among the service providers.

The study also sought to find out how often the respondents used the services. In terms of service usage, 68.32% of the respondents termed usage level as between very often to often whereas 26.64% of respondents termed service usage level as between very rare to rare. The results are as shown in Figure 4.1 below.
Figure 4.1: Frequency of service usage

From the results, most of the respondents sought services from the service providers frequently. This shows that the respondents were familiar with service quality issues in the four units of analysis.

Next, the study sought to find out the type of innovation dimension emphasized in each organization to delight and satisfy customers. The results are shown below.

Table 4.3: Innovation dimensions emphasized in the service providers

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Innovation Dimension-1 Mean</th>
<th>Innovation Dimension-0 Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>5.6552</td>
<td>3.3448</td>
</tr>
<tr>
<td>SP2</td>
<td>4.9259</td>
<td>4.0741</td>
</tr>
<tr>
<td>SP3</td>
<td>4.7407</td>
<td>4.2593</td>
</tr>
<tr>
<td>SP4</td>
<td>4.0343</td>
<td>4.6957</td>
</tr>
</tbody>
</table>

(Source: Survey data)
From Table 4.3 above, service providers SP1, SP2 and SP3 practiced innovation dimension-1 (radical) while service provider SP4 emphasized innovation dimension-0 (conservative) type of innovation.

The study finally sought to find out the respondents perceptions on service quality and customer value. Table 4.4 and Table 4.5 below presents the mean scores of these multi-item constructs and type of innovation dimension emphasized in each of the four units analysis.

### Table 4.4: Innovation dimension emphasized and perceived service quality

<table>
<thead>
<tr>
<th>Organization</th>
<th>Type of Innovation Emphasized</th>
<th>Perceived service quality</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>SP 1</td>
<td>Radical</td>
<td>3.5138</td>
<td>1.5149</td>
</tr>
<tr>
<td>Sp2</td>
<td>Radical</td>
<td>3.0185</td>
<td>1.3487</td>
</tr>
<tr>
<td>SP 3</td>
<td>Radical</td>
<td>2.3556</td>
<td>1.6865</td>
</tr>
<tr>
<td>SP 4</td>
<td>Conservative</td>
<td>2.2783</td>
<td>1.4326</td>
</tr>
</tbody>
</table>

(Source: Survey data)

The type and level of innovation dimension emphasized affects the level of perceived service quality as indicated by the mean scores for the four service providers.

### Table 4.5: Innovation type emphasized and perceived customer value

<table>
<thead>
<tr>
<th>Organization</th>
<th>Type of Innovation Emphasized</th>
<th>Perceived Customer Value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>SP 1</td>
<td>Radical</td>
<td>2.6675</td>
<td>1.8828</td>
</tr>
<tr>
<td>Sp2</td>
<td>Radical</td>
<td>2.3805</td>
<td>1.5593</td>
</tr>
<tr>
<td>SP 3</td>
<td>Radical</td>
<td>2.2444</td>
<td>1.5667</td>
</tr>
<tr>
<td>SP 4</td>
<td>Conservative</td>
<td>2.0813</td>
<td>1.3609</td>
</tr>
</tbody>
</table>

(Source: Survey data)
The table above shows that the level of innovation dimension affects perceived customer value as indicated by the mean scores for each of the four service providers.

To determine the relationship between two or more variables, a correlation matrix is often used. The correlation coefficient indicates the strength of the relationship between two or more variables. The correlation matrix of the study variables for both types of innovation dimensions is as shown in Table 4.6 below.

**Table 4.6: Correlation matrix of the study variables**

<table>
<thead>
<tr>
<th></th>
<th>Innovation dimension-1</th>
<th>Innovation dimension-0</th>
<th>Service quality</th>
<th>Customer value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation dimension-1</td>
<td>1</td>
<td>0.7986</td>
<td>0.8578</td>
<td>0.6999</td>
</tr>
<tr>
<td>Innovation dimension-0</td>
<td>0.7986</td>
<td>1</td>
<td>0.3584</td>
<td>0.1548</td>
</tr>
<tr>
<td>Perceived service quality</td>
<td>0.8578</td>
<td>0.3584</td>
<td>1</td>
<td>0.8856</td>
</tr>
<tr>
<td>Perceived customer value</td>
<td>0.6999</td>
<td>0.1548</td>
<td>0.8856</td>
<td>1</td>
</tr>
</tbody>
</table>

(Source: Survey data)

From the results in the correlation matrix table above, there is a relationship between innovation dimension emphasized and the other study variables of perceived service quality and perceived customer value. The results in Table 4.6 above also show that the relationship between the independent and dependent and mediating variable (perceived service quality) is to a large extent influenced by the type of innovation dimension emphasized by the respective organizations.
5.1 Introduction

The objective of the study was to determine the relationship between firm innovation dimensions emphasized and perceived customer value with perceived service quality mediating the relationship. This chapter presents the findings, discussions and conclusions based on the study findings.

The results in Chapter Four show that there is a relationship between innovation dimensions emphasized and perceived customer value. The correlation coefficients among the four units of analysis were observed to be tending to 1, which is an indication of a perfect relationship. In this chapter, statistical tests are carried out to assess the significance of the relationship between the study variables of innovation dimension and perceived customer value.

5.2 Innovation Dimension and Perceived Service Quality

Objective number one of the study was to determine the effect of innovation dimension emphasized and perceived service quality. The relationship hypothesis $H_1$ stated that there is significant relationship between innovation dimensions emphasized and perceived service quality. The hypothesis was tested using SPSS and the findings are shown in Table 5.1 below.
Table 5.1: Relationship between firm innovation dimension and perceived service quality in the mobile telecommunications firms in Kenya

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>38.322</td>
<td>2</td>
<td>0.003</td>
</tr>
<tr>
<td>No. of Valid Cases</td>
<td>1060</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Survey data)

Table 5.1 above shows that the chi-square value is 38.322 with an associated p-value of 0.003. Since p-value is less than α which is equal to 0.05; (95% confidence interval, p< 0.05), the null hypothesis is rejected. Therefore we conclude that there is a significant relationship between firm innovation dimension emphasized and perceived service quality in the mobile telecommunications firms in Kenya.

5.3 Perceived Service Quality and Perceived Customer Value

Specific objective number two of the study was to determine the impact of perceived service quality on perceived customer value. Study hypothesis 2 was that there is a significant relationship between perceived service quality and perceived customer value in the mobile telecommunications firms in Kenya. The null hypothesis was tested using the chi-square statistic and findings are as shown in Table 5.2 below.
Table 5.2: Relationship between perceived service quality and customer value

<table>
<thead>
<tr>
<th>Chi-Square Test</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>23.883</td>
<td>2</td>
<td>0.001</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1060</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Survey data)

Table 5.2 above indicates that the chi-square value is 23.883 with an associated calculated p-value of 0.001. Since the calculated p-value is less than $\alpha = 0.05$, (95% confidence interval; $p<0.05\alpha$), the null hypothesis is rejected. We conclude that perceived service quality has a significance relationship with perceived customer value in the mobile telecommunications firms.

5.4 The Study Model

The overall objective of the study was to determine the relationship between innovation dimension emphasized in service firm operations and perceived customer value. Perceived service quality was taken as the mediating variable for the relationship. The model that was developed for the study was;

$$ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + E $$

$Y =$ Perceived customer value
\( \beta_0 = \text{Constant} \)
\( \beta_1 = \text{Regression coefficient associated with variable 1} \)
\( \beta_2 = \text{Regression coefficient associated with variable 2} \)
\( X_1 = \text{Firm innovation dimension} \)
\( X_2 = \text{Mediating effect of service quality on perceived customer value} \)
\( E = \text{Error term} \)

This study model was subjected to regression analysis to determine coefficients \( \beta_0, \beta_1 \) and \( \beta_2 \) to enable development of the model. The null hypothesis was tested to determine the validity of the relationship. The results from the analysis are as shown in Table 5.3 below, with regression coefficients as obtained from Statistical Package for Social Sciences-SPSS analysis.

**Table 5.3: Regression analysis of the study model**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.871</td>
<td>0.7058</td>
<td>0.713</td>
<td>0.33531</td>
</tr>
</tbody>
</table>

(Source: Survey data)

The adopted adjusted \( R^2 \) is a coefficient of determination which indicates the variation in the dependent variable due to changes in the independent variable. From the findings above, the value of adjusted \( R^2 \) was 0.713, an indication that there was a variation of 71.3% in perceived customer value due to changes in firm innovation dimension emphasized.

The coefficient R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in Table 5.3, it is notable that there exists a
strong and positive relationship between the study variables as shown by an R of 0.8711 at 95% confidence interval.

5.4.1 Co-variance among the Study Variables
The study used three variables; innovation dimension being the independent and perceived customer value being the dependent variable. Perceived service quality was taken as mediating the relationship. The covariance among the three study variables was tested using SPSS and the results are as shown in Table 5.4 below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.474</td>
<td>2</td>
<td>.237</td>
<td>2.060</td>
<td>.002</td>
</tr>
<tr>
<td>Residual</td>
<td>11.845</td>
<td>103</td>
<td>.115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.319</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Critical value = 1.997
(Source: Survey data)

From the regression analysis in Table 5.4 above, the study established that the study model; \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \) had a significance level of 0.2%. This is an indication that the data was ideal for making conclusions on the population parameters because the significance value (p-value = 0.002) was less than 5%.
The calculated F-value = 2.069 was greater than the critical value = 1.997, an indication that firm innovation dimension and perceived service quality both have an influence on perceived customer value.

To enable development of the proposed model, the results were subjected to regression analysis to determine the beta coefficients (β₀, β₁ and β₂). The outcome from the regression analysis is as shown in Table 5.5 below.

**Table 5.5: Study model regression coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T.test</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.528</td>
<td>0.371</td>
<td>4.119</td>
<td>0.002</td>
</tr>
<tr>
<td>Firm innovation dimension</td>
<td>.414</td>
<td>0.204</td>
<td>0.398</td>
<td>2.029</td>
</tr>
<tr>
<td>Perceived service quality</td>
<td>.387</td>
<td>.156</td>
<td>.367</td>
<td>2.481</td>
</tr>
</tbody>
</table>

(Source: Survey data)

From the analysis in Table 5.5 above, the established regression equation was determined to be;

\[ Y = 1.528 + 0.414 X_1 + 0.387 X_2 \]

The interpretation of this regression model shows that holding firm innovation dimension and perceived service quality to a constant at zero, perceived customer value would be 1.528 units. A unit increase in firm innovation dimension would increase in perceived
customer value by a factor of 0.414; and a unit increase in perceived service quality would lead to an increase in perceived customer value by a factor of 0.387 units.

All the variables were significantly correlated in the model for relationship between innovation dimension emphasized and perceived customer value because their significance values (innovation dimension = 0.002, perceived service quality = 0.001 and perceived customer value = 0.001) were less than the p-value of 0.05. This indicates that innovation dimension emphasized positively and significantly impacts on perceived customer value.

5.5: Summary of Findings

From the statistical analysis and tests in Section 5.4 above, the following findings are evident as the outcome of the study. Innovation dimension emphasized in firm service operations significantly influences perceived service quality as indicated by Chi-square value of 38.322 with an associated p-value of 0.003, which is less than 0.05 at 95% confidence interval.

Secondly, perceived service quality which had a mediating effect in the relationship between innovation dimension emphasized and perceived customer value was found to have a significant relationship with perceived customer value as indicated by a Chi-square value of 23.883 with an associated p-value of 0.001 which is less than 0.05.

Finally, the study model presenting the relationship between innovation dimension and perceived customer value as developed from the conceptual framework was found to have significant relationships among all the variables as indicated by an R = 0.8711. The
significance of the relationship as tested by the regression analysis test of Chi-square, the model was found to have high significance as indicated by an $R^2 = 0.7130$ which led to rejection of the null hypothesis and acceptance of the alternate hypothesis which stated that there is a significant and positive relationship between innovation dimension emphasized and firm level of perceived customer value.

5.6 Discussions

The study established from the findings that a number of firms; three out of four firms in the mobile telecommunications sector in Kenya used radical type of innovation in their service operations to delight and satisfy their customers. These findings concur with Tritos (2013) who argue that besides the competitive priorities of quality, cost control, speed and flexibility, innovation is the primary source of competitive advantage. To achieve competitive advantage by offering value to the customer, this study established that those firms practicing radical innovations achieved higher customer value, a confirmation of Murat, Burca and Omer (2013) who note that it requires a firm to be different and superior in many and new elements such as service offerings, processes, systems, quality and speed than the competition. The study too concurs with Christensen (2013) assertion that superior and differentiated customer value can be achieved through innovation which has been recognized as a critical asset that is necessary to attain higher firm performance.

The study also established that firms that used radical type of innovation dimension had higher service quality perception than those emphasizing conservative type of innovation. These findings concur with the studies by Christensen and Kuala (2013) and Mutua and
Ngugi (2014) both whose findings indicated that firms with frequent changes in products have better service quality perceptions than firms focusing on small, incremental and cosmetic changes in products.

The study also found out that firms which focused on radical innovation dimension had higher customer value perception than conservative innovation dimension focused firms. This indicates that radical innovators with continuous product updating as a competitive requirement as argued by Dimyati (2011), are better customer value creators which also agrees with other studies by Gunday, Ulosoy, Kilic and Alpkan (2012), Kanten and Yaslioglu (2012) and Letengula and Letting (2012) who found out that innovation, particularly technological innovation positively impacts on customer value which can be used to manage the frequent changes in customer preferences and hence as a means to attain new customer value (Mutunga, Minja & Gachanja, 2014) based on the frequent and unpredictable changes in customer preferences and tastes in services.

It too was revealed in the study that firms in mobile telecommunications sector in Kenya generally offered good customer value which confirms the assertion by Ngugi and MCogere (2013) that service quality in the mobile telecommunications sector in Kenya is generally satisfactory due to the adoption of innovative service offerings which also is an indication that adoption of radical innovation dimension leads to the attainment of competitiveness in the acceleration of customer value creation.

5.7 Limitations of the Study

The study limitations can be cited on two areas. Considering that the population consisted of all the four mobile telecommunications firms in Kenya which is rather narrow, makes
the study to tend to a case study. This creates a limitation of generalizability of the findings.

Secondly, there is a limitation in terms of context. The mobile telecommunications firms are mainly technological dependent and their services keep changing at very fast rates. This makes a contextual limitation for applicability and replication of the findings across other service sectors in Kenya and other parts of the world.

5.8 Conclusions

The study established that radical innovation dimension has greater impact on perceived customer value which can be used to achieve competitive advantage through introduction of more, new and superior product attributes in the service offerings. Adopters of radical innovation dimension are able to establish themselves as different from the competition with superior and differentiated product offerings. Thus the study concludes that innovation positively influences perceived customer value with radical innovation dimension being more superior in the creation of customer value in the mobile telecommunications firms in Kenya.

The study too revealed that perceived service quality has a direct relationship with perceived customer value in the mobile telecommunications firms in Kenya. This relationship is more pronounced in the firms that were found to be emphasizing radical innovation dimension in their service operations.
5.9 Recommendations

The study recommends that the mobile telecommunications firms in Kenya need to invest more in research and development, and focus on employee training and development as this will lead to adoption of more radical innovation dimension approaches in their service operations. This will help to innovate on more and new customer value creation products. Sustaining distinctive superior products in the market will lead to creation of superior customer value and thus win more customers leading to higher and positive firm performance.

The study also recommends that mobile telecommunications firms in Kenya need to keep updating their product attributes to manage the service quality characteristics of heterogeneity and co-creation which makes the service operations environment very unpredictable. Providing quality services rhymes with the value for money because service quality is a key determinant of perceived customer value. Consistent high service quality will help to increase customer satisfaction and thus higher customer loyalty leading to improved firm performance.

5.5 Recommendation for Further Studies

The study sought to determine the relationship between innovation dimensions and perceived customer value in the mobile telecommunications firms in Kenya. Considering that the population consisted of only four firms which make up the mobile telecommunications industry in Kenya, the study recommends that a similar study need to be carried out in other sectors of the Kenyan service industry to further strengthen and validate the findings of this study; which found out that innovation in services significantly affects perceived customer value.
REFERENCES


APPENDIX

QUESTIONNAIRE

This is a study on an important topic in management decision making. We believe you have experience that is useful in identifying decision points for managing service quality.

You are kindly requested to spare a few minutes to complete this questionnaire. Confidentiality is assured and the data will be used in summary form only.

You will have contributed to a better understanding of management decision making and your input is highly recognized and appreciated.

Company Reference: ............................................................

1. How long have you been using this Service Provider (please tick).

   - [ ] Over 4 Years  [ ] 3-4 Years  [ ] 2-3 Years  [ ] 1-2 Years  [ ] Below 1 Year

2. Please indicate your relationship with this Company by ticking what best describes how often you use their services.

   - [ ] Very Rare   [ ] Rarely   [ ] Can’t Remember   [ ] Quite Often   [ ] Very Often

3. The following pairs of statements in each row describe what organizations use so as to satisfy and delight customers. Please select one statement in each pair which applies more in this Company to the best of your perception. (Please choose A or B in each pair).

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent changes in services offered by the Company.</td>
<td>Use of partnerships collaborations</td>
</tr>
<tr>
<td>Frequent changes in services offered by the Company.</td>
<td>Use of brand and trademarks</td>
</tr>
<tr>
<td>No.</td>
<td>Statement</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Frequent changes in services offered by the Company.</td>
</tr>
<tr>
<td></td>
<td>Well trained and experienced employees to work better</td>
</tr>
<tr>
<td></td>
<td>Well trained and experienced employees to work better</td>
</tr>
<tr>
<td></td>
<td>Use of ICT in services</td>
</tr>
<tr>
<td></td>
<td>Use of ICT in services</td>
</tr>
<tr>
<td></td>
<td>Use of ICT in services</td>
</tr>
</tbody>
</table>

4: For each of the 10 statements below, please tick the column that represents best your perception about this Service Provider’s services.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Some How Disagree</th>
<th>Do Not Know</th>
<th>Some How Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The physical attributes of this Service Provider are very attractive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The type of interaction with this</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td><strong>Service Provider is very courteous.</strong></td>
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<td><strong>I get what I’m looking for at this Service Provider.</strong></td>
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<tr>
<td><strong>This Service Provider always fulfils my service expectations</strong></td>
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<td><strong>This Service Provider meets my personal needs</strong></td>
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<td><strong>The overall service quality from this Service Provider is satisfactory.</strong></td>
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<td><strong>I use this Service Provider because I get value for my money.</strong></td>
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<td><strong>I use this Service Provider because of its reputation</strong></td>
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<td><strong>This Service Provider’s products are fairly priced.</strong></td>
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<td><strong>This Service Provider generally offers satisfactory service.</strong></td>
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Thank you very much for taking your time to complete this Questionnaire.