SERVICE QUALITY AND CUSTOMER LOYALTY TO MOBILE TELEPHONE NETWORKS IN UGANDA.

[A CASE STUDY OF NAKAWA DIVISION]

BY

WILFRED OJOK

JAN16/MME/048U

SUPERVISOR: MERSIAN TULYAHEBWA

A RESEARCH PROPORSAL SUBMITTED TO THE SCHOOL OF BUSINESS AND MANAGEMENT IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER IN MONITORING AND EVALUATION OF UGANDA TECHNOLOGY AND MANAGEMENT UNIVERSITY.

MAY 2017

Contents

List of Figures

List of Tables

Acronyms/Abbreviations

FFP-   Frequent Flier Program

ITU-   International Telecommunications Union

UCC- Uganda Communications Commission

CHAPTER ONE: INTRODUCTION

1.0 Introduction

The purpose of this study is to assess the relationship between service quality and customer loyalty to a mobile telephone network in Uganda. In detail, it assesses how service quality (Reliability, responsiveness, value added services) affects customer loyalty in the mobile telecom industry in Uganda. In this study, customer satisfaction is assumed to mediate the prediction of customer loyalty by the assumed predictors. The chapter further gives information about the background to the study, the problem statement, general objectives of the study, the specific objectives, the research questions, hypotheses of the study, the conceptual framework, significance of the study, justification of the study, the scope of the study and the operational definitions.

1.1 Background to the study

Olayiwola (2012:20) argued that existing customer loyalty literature fails to reach at a consensus about determinants of customer loyalty. Knox and Walker (2001) noted the vagueness in the meaning and measurement of customer loyalty and suggested that more knowledge and comprehension about customer loyalty is required to address the prevailing ambiguity. Several practitioners and academicians in the field of customer loyalty such as (Johnson, 2006) pointed that the factors principal to loyalty formation are complex and dynamic as they change and evolve over time and varying by industry. Clottey (2008) pointed that though various determinants of customer loyalty have been identified but there remains a lack of consensus about the common ones that could be generalized across different industries (Alok & Srivastava 2013:139-163).

This section reflects on the Historical, the theoretical and the contextual issues about service quality and customer loyalty.

1.1.1 The Historical background

Bhaargay (2016) in his study pointed out that loyalty programs are one of the most effective ways to retain customers and drive down the acquisition costs. Some speculate that the concept of loyalty might have begun in the 1700's when redeemable copper tokens were given away for purchases. However, without the innovative efforts of a few companies, loyalty programs would not have shaped up into what we know them to be today. This chronological list not only takes us back in time but additionally presents the intriguing question of what's next in loyalty.

Back in the 1890's Sperry & Hutchinson Company came up with a currency for loyalty and launched the S&H Green Stamps. It is important to note that these stamps were not an equivalent of the postal stamps used for mail. The Green Stamps were actually trading stamps bought by retailers who in turn offered them to customers for their purchases. Later, the customers could redeem these stamps for products on the catalogue. Soon enough S&H stamps found their way into supermarkets, departmental stores and filling stations, becoming a popular part of American culture for nearly a century. In the 1960's it was believed that there were more S&H Green Stamps than postal stamps issued by the US Postal Service. Such was its success and it inspired other trading stamps such as the Green Shield Stamps in the UK (Sperry & Hutchinson 1980).

American Airlines Computing technology in business enterprises became mainstream in the 1980's. With capable systems in place, companies were able to maintain databases that contained large amounts of information. In 1981, American Airlines launched their Frequent Flier Program (FFP) with the help of such computerized databases. This was an instant game changer as it began rewarding fliers with miles that could be redeemed during another travel. So the more a flier travelled with a single airline, the more miles they accumulated. It also offered loyal fliers special fares and other perks. This quickly became the de facto standard (standard everywhere) of the airline industry and nobody was willing to be left behind. As of 2005, a total of 14 trillion frequent-flyer points had been accumulated by fliers worldwide,

which corresponds to a total value of USD 700 billion. Still, the most important aspect of FFP was not the financial impact but the first-time usage of technology to manage customer loyalty (Bhaargay, 2016).

Discover Cards

The Discover Card is a credit card that was launched by Sears in 1985. At a time when Visa and MasterCard dominated the credit card landscape, Discover had to stay unique to attract a large user base. Discover quickly achieved this by implementing the revolutionary concept of Cashbacks. Cardholders could earn a 2% 'Cashback Bonus' on every purchase they made with the card and this bonus would be credited back into the account at the end of the year. The bold idea of paying customer back for using a service worked wonders as consumer's preference towards using the Discover Card instead of other forms of unrewarding payments increased rapidly. Consequently, other credit cards of the time had no option but to jump on board in order to avoid losing their users. What Cashbacks brought to the table was accelerated loyalty. It turned loyal customers into frequent spenders (Sears, 1985).

Tesco

In 1995, Tesco was facing stiff competition from Walmart as the latter was trying to enter the UK market. The company was contemplating about moving away from the age old Green Shield Stamps as it did not offer any information about the transactions of the customer. Hence, the magnetic strip card was conceived as a more sophisticated solution to run its loyalty program as points could be easily awarded based on the purchases made. More importantly, it allowed Tesco to record actionable data in relation to consumer behavior such as transactional history, spending patterns etc. This was quickly adopted my many retailers and brands across the globe as loyalty cards became the norm for most brick business (Bhaargay, 2016)

Starbucks

Starbucks launched its own loyalty card in 2008 and offered perks such as free wifi, no charge for soy milk and free refills to registered users. However, with every retailer coming up with their own card, it was becoming impossible for consumers to carry all these loyalty cards in

their wallets. With the release of the iPhone in 2007 and the subsequent surge in smartphone usage, Starbucks identified mobile apps as the best way forward. Hence, they tested and launched their own mobile app in 2011. This app went beyond loyalty and enabled users to make payment through the app. By Q1 of 2016, the Starbucks app drove a staggering 21% of Starbucks's total US transactions while boasting a 11.1 million active registered users (Bhaargay, 2016).

1.1.2 The Theoretical Background

The customer loyalty theory

The customer loyalty theory based on the consideration of some variable demographics, was developed over years of research studying the habits of consumers. The theory attempts to define what drives loyalty in customers and can represent an effective tool for gaining and retaining your hard-won patrons. Business owners who witness repeat customers know on an intuitive level that customer loyalty is an invaluable commodity. Incorporating the precepts of the customer loyalty theory into daily dealings can influence the creation of more business (Michelle, 1993).

Customer loyalty marketing is a major segment of marketing theory and considered one of the value propositions that a marketer can offer a potential customer. Customer loyalty marketing programs can come in many forms, with common examples of loyalty programs being airline "frequent flier" miles and shoppers' reward cards. Customers that choose loyalty programs are often shopping for the cost savings and special recognition these programs provide (Terry, 1997).

Customer Relationship Marketing (CRM) Theory

CRM is the biggest paradigmatic shift in marketing theory and practice in recent decades. It has been well known that customer perceived service quality and customer loyalty have been the most important success factors of business competition for service providers (Zeithaml, 1996). In the CRM paradigm, one of the key goals is to determine different resource allocations for different tiers of customer. The first researchers who defined relationship marketing as all marketing activities directed toward establishing, developing, and maintaining successful relationship put it that CRM is becoming a necessity in order to survive. (Morgan & Hunt, 1994). The focus of relationship marketing is on building long-term arrangement in which both, the seller and the buyer participate in interest in providing a more satisfying exchange. CRM is to identify establish, maintain, enhance, and when necessary, terminate relationship with customers and other stakeholders. Relationship marketing aims to establish, maintain, and enhance relationships with customers, so that the objectives of the parties are met (Gronroos, 1994). Customer relationship marketing concerns attracting, developing and retaining customer relationship (Berry & Parasuraman, 1991). CRM goal is to provide increased value to the customer and results in a lifetime value for the service provider (Liu, 2000). Customer satisfaction is very important in today's business world as according to (Deng, 2009) the ability of a service provider to create high degree of satisfaction is crucial for product differentiation and developing strong relationship with customers. Thus, customer relationship marketing is building long term relationship with customer aim at achieving business survival and sustainability over time.

Attraction theory

Attraction theory (Aroson, 1980) postulates that one is attracted to others on the basis of: Physical appearance and personality, proximity (liking others who are physically close to us), Similarity (liking others who are like us), familiarity (liking those who have frequent

contact with us), reciprocity (liking others who like us) and barriers (liking others we cannot have). According to this theory of attraction, if a relationship gives us more reward and pleasure than cost and pain, we will like that relationship and wish it to continue. As so, customers can be attracted to a mobile network based on their convenient choices as their trust on the company, physical attractiveness of the company & service quality offered.

1.1.3 The contextual Background

It is not uncommon in Uganda to experience interrupted calls in terms of drop/incomplete calls, blocked calls and calls interference in terms of diverted phone calls. The internal network deficiencies on the radio access, backhaul and core nodes, inadequate network coverage and delays in responding to network outages as well as ineffective power back up systems are the major causes of network failures that severely impact quality of service, (UCC quality of service report, 2016).

Mugenda and Mugenda (1999) suggested that the contextual background be structured to entail the adoption of the Broader-Narrow perspective. It looks at the global, regional and national perspectives of value added services, network access, quality of service, customer satisfaction and customer loyalty in the mobile telecom services, looking at the key debates and gaps existing on the subject area to be investigated.

Service Quality and Customer Satisfaction in telecommunication Services.

Siew, Ayankunle, Taiwo, and Alan (2011) in their study on service quality and customer satisfaction in Nigeria, they found that customers from the GSM telecommunication firm experienced a difference between expectation and perception on the service received. They further observed that in accordance with previous studies, "assurance" has the biggest

difference between expectation and perception. Since assurance was conceptualized as the employees' knowledge and courtesy, and the ability to inspire trust and confidence, such finding indicated that the perception fall far below the expectations, and that the ability of the staff to communicate trust and assurance to the customers is lacking. Based on the regression results the finding confirmed a significant positive relationship between service quality and customer satisfaction except in the area of tangibility. This is understandable as the customers seemed to emphasize less on the appearance of the physical aspects provided by the GSM telecommunication firm. Prompt and reliable services are vital to attract, serve and retain the customers.

The importance of empathy in influencing satisfaction suggested that customer relationship management strategy should focus on improving in-depth understanding of consumer motivation and lifestyle factors (Francis & Stan, 2015). The gap in this study is that only one operator was considered in the study.

Service quality and customer Loyalty
Abdul (2011) in his study on the relationship between service quality and customer loyalty in the Mobile Telecommunication industry in Ghana, conducted the study at the time when Ghana has just introduced the Mobile Number Portability (MNP) system which provides dissatisfied customers the opportunity to port to other networks in search for better mobile services, applied the SERVQUAL instrument postulated by Parasuraman, Zeithaml and Berry (1985) to measure service quality. The findings from the study revealed that service quality variables such as Tangibility, Responsiveness, Reliability, Assurance and Empathy have a positive influence on customer loyalty through customer satisfaction. Besides, customer satisfaction was found to have a direct relationship with customer loyalty. The gap this study left is the technology issue, the number portability technology in the Ghana communication industry is not yet adopted here in Uganda, thus the two geographical markets quite differ.

Quality of Service Performance in Uganda

The Uganda Communications Commission (UCC) is the regulator of the communications sector in Uganda. One of the functions of UCC, under the Uganda Communications Act 2013, is to promote the interests of consumers and operators as regards the quality of communications services and equipment. In this regard, UCC carried out a Quality of Service (QoS) performance exercise on the five (5) operational Global System for Mobile communications (GSM) networks From February-June 2014 in Jinja, Kabale, Kampala, Kasese, Masaka, Mbale, Mbarara and Mukono. The five (5) operators then were Airtel Uganda Limited, MTN Uganda Limited, Uganda Telecom Limited (UTL), Orange Uganda Limited and Warid Telecom Uganda Limited. The networks were evaluated against UCC Key Performance Indicators which are: less than 2% for dropped call rate (DCR), less than 2% for blocked call rate (BCR) and greater than or equal to 98% for successful call rate (SCR). In this study, it was found out that all the five (5) operators failed the blocked call rate and the successful call rate tests safe for dropped call rate, UCC quality of service report (2014). The gap here is that this study was using machine to machine communications whereby UCC quality of service equipment would communicate directly with the signals from the operators machine and record calls data directly, however, the study did not use the SERVQUAL model.

Over view of Uganda's mobile telecommunications Industry.

The 8 players in this market are; MTN Uganda, Airtel Uganda, Uganda Telecom, Africell Uganda, Smile Telecom, K2 Telecom, Smart Telecom (formerly Sure telecom) and Vodafone Uganda (UCC, Annual Market and Industry Report, 2016). This growth in the number of players came about as a result of the liberalization of the telecommunication sector in Uganda in 1998 with the entry of a new private player then MTN in the industry. According to the Uganda Communications Commission Report 2016, the number of mobile SIMS subscribers as of December 2016 stands at 22,698,037 constituting 63.4% of Uganda's Population.

Players under this market structure normally struggle to win customer loyalty by offering differentiated products, bundled products, value added services and sometimes through price war.

Customer loyalty.

Beerli (2002) put it that loyalty as a concept can be interpreted as consumer behaviour towards a product or service in terms of the desire to make a repeat buy of the service or product. Loyalty is rooted in consumer behaviour theory. Loyalty can be defined as repeat purchasing of same brand. According to Oliver (1999) loyalty is a deeply held commitment to rebuy or repurchase preferred product/services consistently in the future, thereby causing repetitive same brand purchasing.

Jacoby and Kyner (1973), considered loyalty as the biased (i.e., non-random) behavioural response (i.e. purchase), expressed over time by some decision making units in the presence of more available alternatives. Thus it is necessary to differentiate between selectiveness and loyalty and a function of psychological process which involves the evaluation of different alternatives using certain latent feelings about a product.

Day (1969) in his view, loyalty is a concept that goes beyond mere purchase behaviour as it presents two perspectives-behaviour and attitude, with all leading to commitment. As such, the combination of these two components enables us to distinguish two types of customer loyalty concepts namely; (i) Loyalty based on inertia, this happens when a brand is bought out of habit merely because this takes less effort and the consumer will not hesitate to switch to another brand if there is some convenient reason to do so. What this means is that the consumer is buying the same brand not because of true brand loyalty but because it is not worth the time and trouble to search for an alternative. (ii) The true brand loyalty, this is a form of repeat purchasing

behaviour reflecting a conscious decision to continue buying the same brand in the presence of a close substitute brand.

1.3 Statement of the problem

Due to the increased competition in the telecommunication industry in Uganda today, many firms are finding it difficult to keep their existing customers loyal to them which is evidence by the acquisition of multiple SIMs cards by the consumers. With the ever growing number of players in the industry, quality of service is an indispensable parameter in customer satisfaction and loyalty. UCC carried out a Quality of Service (QoS) performance exercise on the five (5) operational Global System for Mobile communications (GSM) networks From February-June 2014 in Jinja, Kabale, Kampala, Kasese, Masaka, Mbale, Mbarara and Mukono. The five (5) operators then were Airtel Uganda Limited, MTN Uganda Limited, Uganda Telecom Limited (UTL), Orange Uganda Limited and Warid Telecom Uganda Limited. The networks were evaluated against UCC Key Performance Indicators which are: less than 2% for dropped call rate (DCR), less than 2% for blocked call rate (BCR) and greater than or equal to 98% for successful call rate (SCR). In this study, it was found out that all the five (5) operators failed the blocked call rate and the successful call rate tests safe for dropped call rate, UCC quality of service report (2014). The gap here is that this study was using machine to machine communications whereby UCC quality of service equipment would communicate directly with the signals from the operators' machine and record calls data directly, thus the study did not use the SERVQUAL model, and other parameters of quality of service (Reliability, responsiveness, value added services) were not considered. Hence this study is set to fill this gap.

This study therefore is set to establish what relationship exists between selected service quality parameters (reliability, responsiveness and value added services), customer satisfaction and customer loyalty.

1.5 General objectives of the study

The general objective of this study is to assess the relationship between the selected service quality parameters (reliability, responsiveness and value added services), customer satisfaction and customer loyalty to a mobile telephone network in Uganda.

1.5.1 Specific objectives of the study

1. To assess the relationship between reliability of a mobile telecom network and customer loyalty to the network in Uganda
2. To assess the relationship between responsiveness to customer concerns and customer loyalty to the mobile telecom network in Uganda
3. To assess the relationship between value added services and customer loyalty to the mobile telecom network in Uganda
4. To assess whether customer satisfaction mediates the relationship between the respective independent variable and the dependent variable

1.5.2 Research questions

1. Is there any relationship between reliability of a mobile telecom network and customer loyalty to the mobile telecom network in Uganda?
5. Is there any relationship between responsiveness to customer concerns and customer loyalty to the mobile telecom network in Uganda?
2. Is there any relationship between value added services and customer loyalty to the mobile telecom network in Uganda?
3. Does customer satisfaction mediate the relationship between the respective independent and the dependent variables?

1.5.3 Hypotheses of the study

1. Reliability has no significant relationship with customer loyalty
2. Responsiveness has no significant relationship with customer loyalty
3. Value added services has no significant relationship with customer loyalty.
4. Customer satisfaction does not significantly mediate the relationship between the respective independent and the dependent variable

1.6 The Conceptual framework
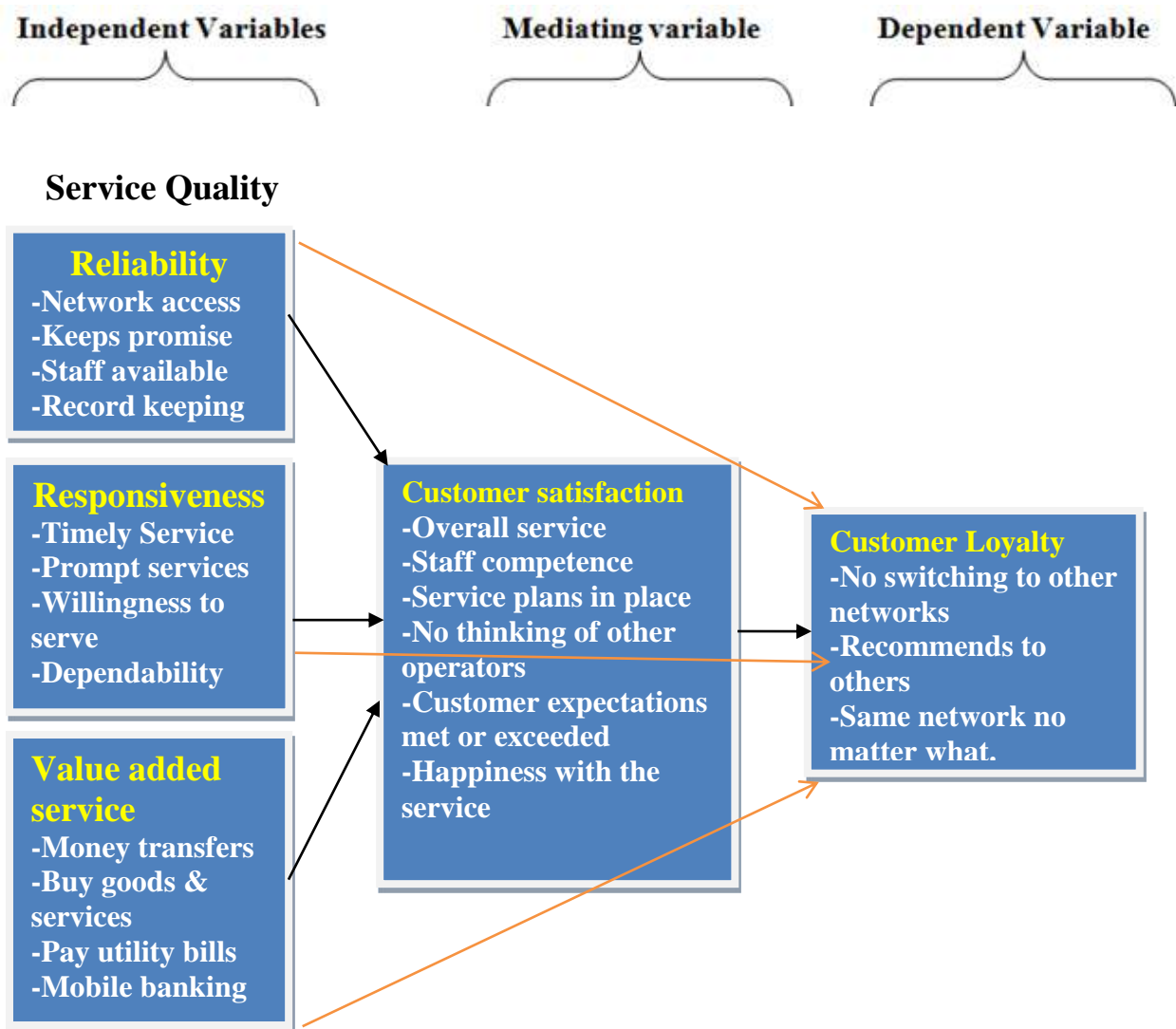
Fig 1: The conceptual framework adapted from the SERVQUAL MODEL by (Parasuraman, Zeithaml and Berry, 1985).

The quality of service parameters are expected to have a direct relationship with customer satisfaction that shall ultimately leads to customer loyalty. It is also presumed that service quality parameters relates directly with customer loyalty.

1.7 Significance of the study

This research work shall provide both the theory development for academics and practical implication for marketing managements in the mobile telecom industry. The result is expected to inform Mobile operators about their customers' response to the variety of marketing strategies

being deployed by their marketers. This shall further help marketers to understand the effectiveness of each marketing strategy from consumer's perspective.

The Successful implementation of this research shall help the researcher to fulfil the requirements for the award of his Master's degree in Monitoring and Evaluation.

1.8 Justification of the study

The study shall add to the body of knowledge factors that predict customer loyalty in the mobile telecom industry. Marketers may also take clues from this study and improve their customer loyalty strategies. The academic world may also benefit from this study as findings from this study shall provide relevant literature for further studies in a similar discipline.

1.9 Scope of the study

1.9.1 Geographical scope

Geographically, the study shall be conducted in Kampala, specifically in the division of Nakawa.

1.9.2 Time scope

This study shall be conducted in the month of May 2017, specifically, the second week of May shall be for data collection, the third and the fourth weeks of may shall be for data editing, cleaning, analysis and report writing.

1.9.3 Content scope

As illustrated in the conceptual framework, this study shall cover information regarding service quality for the selected parameters (Reliability, Responsiveness, Value added services). Analyses shall be conducted to assess how the selected parameters relate with customer satisfaction and loyalty.

1.10 Operational definitions

Tangibility- Appearance of physical facilities, equipment, personnel, printed and visual materials

Reliability- Ability to perform the promised service dependably and accurately

Responsiveness- Willingness to help customers and provide prompt service

Assurance- Knowledge and courtesy of employees and their ability to convey trust and confidence

Empathy- The provision of caring, individualized attention to customer

Network access- An access network is a user network that connects subscribers to a particular service provider and, through the carrier network, to other networks such as the Internet.

Value added services- Value-added services is the enhancement a company gives its product or service in addition to offering the standard product to customers. Value-added applies to instances where a firm takes a product that may be considered a homogeneous product, with few differences (if any) from that of a competitor, and provides potential customers with a feature or add-ons that gives it a greater sense of value.

Loyalty: In this study, the definition of loyalty is borrowed from the view of Day (1969); Jacoby and Kyner (1973) and Berne (1997), loyalty is a concept that goes beyond mere repurchase behaviour, it is a form of repeat purchasing behaviour reflecting a conscious decision to continue buying the same brand even when the time and trouble (the switching cost) to search for an alternative is cheap, and this must be accompanied by an underlying positive attitude and a high degree of commitment towards the brand.

SERVQUAL-is a multi-dimensional research model, designed to capture consumer expectations and perceptions of a service along the five dimensions (tangibles, reliability, assurance, responsiveness and empathy) that are believed to represent service quality. SERVQUAL is built on the expectancy-disconfirmation paradigm, which in simple terms means

the extent to which consumers' pre-consumption expectations of quality are confirmed or disconfirmed by their actual perceptions of the service experience, A. Parasurman, Valarie Z. and Leonard L. B. (1988).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the past relevant studies done by other researchers in the area of customer loyalty. The Chapter covers theoretical reviews, empirical studies done on customer loyalty globally, regionally and locally as suggested by (Mugenda & Mugenda, 1999). The chapter further synthesizes the reviewed literature.

2.2 Theoretical review

2.2.1 The Customer service theory

The theory of customer service is based on identifying and satisfying your customers' needs and exceeding their expectations. This theory explains that a company must be totally committed to delivering consistently high standards of service to gain and retain customer loyalty. Everyone from top management to down must be tuned into what the customer wants. Creating a customer service culture within a company can help build success. Customer satisfaction and loyalty are linked to the quality of customer service and, ultimately, to the company's profitability (Susan, 2014).

2.2.2 The consumer perception theory

Merchants aim to increase their sales by determining what drives their customers' purchase decisions. Consumer perception theory attempts to explain consumer behaviour by analysing motivations for buying or not buying particular items. Three areas of consumer perception theory are: self-perception, price perception and perception of a benefit to quality of life. Consumer perception applies the concept of sensory perception to marketing and advertising. Just as sensory perception relates to how humans perceive and process sensory stimuli through their five senses, consumer perception pertains to how individuals form opinions about companies and the merchandise they offer through the purchases they make. Merchants apply consumer perception theory to determine how their customers perceive them. They also use

consumer perception theory to develop marketing and advertising strategies intended to retain current customers and attract new ones (Wadman, 2016).

2.2.3 The customer loyalty theory

Customer loyalty marketing is a major segment of marketing theory and considered one of the value propositions that a marketer can offer a potential customer. Customer loyalty marketing programs can come in many forms, with common examples of loyalty programs like reward cards. Customers that choose loyalty programs are often shopping for the cost savings and special recognition these programs provide. Loyalty marketing programs use rewards, gifts, points, cash back or special offers to entice consumers to buy the product or service and, ideally, become repeat customers. Sometimes these systems are as simple as the punch cards given by the local sandwich shop that offer a free sub after the purchase of eight. Others can be more developed, with customer identification numbers or branded swipe cards that track purchases. In some cases, the marketer will offer deals only available to members, which encourages customers to sign up for the programs (Guilherme & John, 2014).

2.3 Conceptual review

This section of the literature reviews the concept of reliability, responsiveness, value added services, customer satisfaction in relation to customer loyalty as found by other researchers. As the current market becomes more competitive, mobile service providers are being increasingly confronted with great challenges to expand and maintain their customer base. Under such circumstances, the pursuit of customer loyalty appears to be an essential goal of the companies' sustainable competitive advantage and growth. In response to the challenges, mobile service providers are aggressively launching various innovative and attractive marketing campaigns and promotions with the aim to retain customer loyalty.

Stephanie and Mohd (2011) in their study which adopted five dimensions of SERVQUAL instrument and four additional dimensions, namely customer perceived network quality, pricing

structure, convenience, and value added services to measure service quality in the mobile telecommunication industry, found that the dimensions of service quality such as assurance, empathy, customer perceived network quality, pricing structure, and **value added services** are positively related to customer satisfaction. Furthermore, customer satisfaction was found to have significant positive effect on customer loyalty in the Malaysian mobile telecommunication industry.

Abdul-ziz, Bashiru and Ayogyam (2014) analysed customer satisfaction with the service delivery of mobile telecommunication networks in Ghana using a binary logistic regression model. Primary data was collected through questionnaire administration. Samples of 1200 respondents were selected from mobile subscribers across the country through stratified sampling. The results showed that factors such as income, call quality, **added value of services**, call charge's and network coverage of the mobile networks were statistically significant and also contributes significantly to the overall customer satisfaction of the services delivered by the mobile telecommunication networks (MTN's) in Ghana.

Karunaratna (2014) in his study of services quality effect on customer loyalty, he used the survey method of study. The sample consisted of 300 respondents. The Pierson's Correlation and Regression analysis were employed to test the impact of services quality on customer loyalty. The study findings showed that services quality dimensions of **responsiveness** and empathy have significant positive relationship with customer loyalty while tangibles, **reliability**, and assurance also indicate positive correlation with customer loyalty. Exhibiting their level of loyalty, no significant difference between male and female subscribers was reported.

Ernest (2017) in his study to examine how firms can influence customer loyalty through customer commitment by leveraging two constructs of service quality: (service assurance and

service reliability), found that **service reliability** is a direct predictor of customer loyalty while service assurance is not. Effective commitment has a direct positive effect on customer loyalty and partially mediates the relationship between service reliability and customer loyalty. In contrast, the mediating effects of affective and continuance commitment on the relationship between service assurance and customer loyalty were positive but insignificant. Finally, affective commitment mediates the effect of continuance commitment on customer loyalty.

Iddrisu (2015) in his study to investigate the relationship between service quality and customer loyalty in the Cellular industry of Ghana, their research was conducted after the introduction of the Mobile Number Portability (MNP) system. The SERVQUAL model was used to measure relationship between service quality and customer loyalty among cellular service providers with customer satisfaction mediating these variables. Survey questionnaire was used to collect 311 data from mobile users who are subscribers of 5 of the major cellular firms in Accra Metropolis of Ghana. The data was analysed using correlation and multiple regression analyses. The findings revealed that service quality variables such as Tangibles, **Responsiveness, Reliability**, Assurance and Empathy have a positive influence on customer

loyalty through customer satisfaction. The result further revealed customer satisfaction has a direct relationship with customer loyalty.

2.4 Review of related literature as per the objectives of this study.

In this study, the three core objectives of the study are how reliability, responsiveness and value added services relates with customer loyalty. Below is some related literature to the objectives under this study.

2.4.1 Reliability, Responsiveness and customer satisfaction in the cellular telecommunication services

Anantha and Abdul (2013:9) Using the SERVQUAL model, their study attempted to examine the impact of service quality dimensions (**Tangibles, Reliability, Responsiveness, Empathy, and Assurance)** on customer satisfaction. Gap Analysis was used to determine the perceived and expected satisfaction level on each of the service quality dimensions and regression analysis was conducted to test the relationship between the SERVQUAL dimensions and customer satisfaction. Results indicated that all the 5 service quality dimensions positively influenced customer satisfaction in terms of loyalty and attitudes. In addition, t-test results showed that there was a significant gap between the perceived satisfaction and expectation on all of the five service quality dimensions.

2.4.2 Customer satisfaction with cellular network performance: issues and analysis.

Bassam (2005) in his research on customer satisfaction with cellular network performance, only one dependent variable was analysed: network performance with satisfaction. The method used for multiple regressions was "enter" where all four independent variables (availability, coverage, drop calls and quality of calls) were entered into the analysis simultaneously. The regression results indicate an overall model of three predictors that significantly predict network satisfaction. The predictors are: availability, coverage and quality of calls, which loaded satisfactorily into the regression model. Dropped calls was not considered significant, with a p-value greater than 0.05. The model accounts for 37.5% of variance in network satisfaction. This means that up to 62.5% of the variations in network satisfaction could not be explained by this model, indirectly calling for more studies in this area. The beta values indicate the value of each

factor in the regression equation indicating that network availability (0.435) has the most effect on network satisfaction, followed by coverage (0.174), and call quality (0.125) in the United States of America.

2.4.3 Service Quality and Customer Satisfaction in the Telecommunication Industry

Olu-Ojo (2014) in this study the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria was investigated. The study reveals that service quality has effect on customer satisfaction and that there is a positive relationship between service quality and customer satisfaction. To ensure that customer satisfaction level is high, organisation must first of all know the expectations of the customers and how they can meet such expectations. Customer satisfaction helps in customer loyalty and retention. It has been discovered that it costs more to attract new customer than to retain existing ones

2.4.4 Influence of customer satisfaction on loyalty: a study on Mobile telecommunication industry

Motaher and Nusrat (2013) their study explores the influence of customer satisfaction on customer loyalty in the context of Bangladesh. This study focused on six factors such as communication, price structure, value-added service, convenience, sales-promotions and customer service. Both primary and secondary information were collected to test the pre-set hypotheses. Descriptive statistics and simple linear regression were employed to analyse the data. Result shows that five factors: communication, price structure, value-added services, convenience and customer service/care have positive correlations with customer loyalty.

2.5 Synthesis of the literature review

Whereas there is evidence that studies have been done to find out what factors predicts customer loyalty in the mobile telecom industry, a thorough synthesis of the above literature reveals that

the studies were done mainly in other parts of the world other than Uganda. The case studies, the conceptual frameworks, methodologies, and the sample sizes used in those studies all differs with what has been conceived in this study. Furthermore, value added services are not part of the default SERVQUAL model, yet it could be one of the driving factor for choice of a mobile telecom network today.

The technology industry which is a driving factor in the telecom growth is so dynamic to the extend that studies done three or more years ago could be obsolete in the telecom business today. Thus the given literature serves only as an "eye opener" in this market study and yet provoking more demand for studies on customer loyalty in telecommunication industry.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This study aims to assess the relationship between service quality parameters and customer loyalty to a mobile telephone network in Uganda. It assesses how the selected service quality parameters (Reliability, responsiveness, value added services) relates with customer loyalty in the mobile telecom industry in Uganda. This chapter details the steps to be taken by the researcher in undertaking this research. It contains the research design, the study population, sample size determination, the sampling techniques and procedure, data collection methods, validity and reliability testing procedure, and data analysis procedure.

3.2 Research design

A cross sectional research design with quantitative approach shall be employed in this study. Data for quantitative variables shall be collected at a particular time and analysed within the same time period basing on the set objectives of the study. Mobile phone subscribers are very volatile thus making their subscription profiles very dynamic as they can easily move from one network to another due to the lower cost of acquiring a new SIMs and ownership of multiple SIM cards. This gives the justification for the chosen research design. The questionnaire as a tool for this data collection is chosen since it is the most appropriate tool for quantitative survey whereby a large sample of data is required.

3.3 Study population

The population for this study shall be people using mobile phones and leaving in Nakawa division at the time of the research. Generally, the population of Kampala stands at 1,646,827 as projected for 2017 based on the Uganda National Housing and Population Census, 2014. Of this population, only those with/using mobile phones and aged 18 years and above shall be legible for the study. Whereas it is true that there are Ugandans below the age of 18 owning mobile phones, such under aged individuals are largely influenced on the choice of their network by their guardians/Parents.

3.4 Determination of the sample size

As projected by UBOS, Uganda's population had been growing at a rate of 3% annually. Thus the population of Kampala as of 2017 can be estimated at 1,646,827 people. Since the population of mobile phone users in Kampala is finite but not known to the researcher, a general formula for sample size determination for a finite population by Krejcie & Morgan shall be used.

3.5 Sample Size Formula for Finite Population

If the target population is finite, the following formula (Krejcie & Morgan, 1970) may be used to determine the sample size.

$$S = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2(P(1-))}$$

Where:

S   =   Required Sample size

X   =   Z value (in this case. 1.96 for 95% confidence level) /*The Z-value is a test statistic for Z-tests that measures the difference between an observed statistic and its hypothesized population parameter in units of the standard deviation*/

N   =   Population Size

P   =   Population proportion (expressed as decimal) (assumed to be 0.5 (50%))
d   =   Degree of accuracy (5%), expressed as a proportion (.05); It is the margin of error

3.6 Determining sample size for finite population

To simplify the process of determining the sample size for a finite population, Krejcie & Morgan (1970), came up with a table using sample size formula for finite population (see appendix 1). Thus the table has all the provisions one requires to arrive at the required sample size. For a population which is equal to or greater than 128,868 the required sample size is 384 as is the case for Nakawa division which has a projected adult population of mobile phone subscription of 128,868 as of 2017 UBOS. Thus a sample of 384 mobile phone users in Nakawa division shall be interviewed for this study.

3.7 Sampling techniques and procedure

Considering all the five Divisions of Kampala (Kawempe, Lubaga, Kampala central, Makindye, Nakawa), using simple random sampling, Nakawa division was selected for this study.

A repeated systematic sampling technique shall be adapted and used to pick the sampling unit. The unit of analysis in this case is the individual owning a mobile phone and residing in Nakawa division at the time of the study. **Repeated systematic sampling** is a type of systematic sampling where you take several small samples from several groups from the same population (Bruce, 2001). It's used if you aren't sure you have a completely random list of respondents and you want to avoid sample bias. In this study I do not have a completely random list of respondents (a sampling frame) since it is very costly to make the list. Thus I will adopt the repeated systematic sampling technique for this study.

3.8 The sampling strategy/plan

The estimated population of Kampala is 1,646,827 of which 988,096 qualifies as adults. Given the mobile tele-density of 62, it means up to 612,620 Kampala adults have mobile phones of which 128,868 are from Nakawa Division. Thus by Krejcie & Morgan's table, I will take 384 subscribers for my sample, however, a 5% non-response error shall be factored in thus 404 mobile phone subscribers shall be considered for this study.

Table 1: The sampling strategy

YEAR	Divisions	Estimate	Adult>=18 yrs	Mobile Teledensity=62
2017	Makindye	429,450	257,670	159,756
2017	Rubaga	418,750	251,250	155,775
2017	Kawempe	370,068	222,041	137,665
2017	Nakawa	346,420	207,852	128,868
2017	Kampala Central	82,138	49,283	30,555
2017	Kampala	1,646,827	988,096	612,620

3.9 Data collection methods

The use of survey as a data collection method shall be employed. The tools for the method shall be the use of a pretested questionnaire. What this means is that, after the design of the questionnaire, a pilot survey shall be done within a population with the same characteristics like those in Nakawa division to check for clarity and ambiguity in the questions contained in the questionnaire. Using simple random sampling, one of the remaining four divisions of Kampala shall be chosen for the pretesting.

3.10 Data collection instrument

The data collection instrument for this study shall be questionnaires. This is chosen because it is the most appropriate tool for collecting large sample of data. Questionnaires have advantages over some other types of data collection tools in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys do, and often have standardized answers that make it simple to compile large data (Thanos, Debas & Ara, 2010).

3.11 Data collection procedure

Upon prior recruitment and training of two research assistances on the subject matter and proper understanding of the questions in the questionnaires, the two research assistances shall be sent to the field to collect the required primary data from Nakawa division. The pretested Questionnaires shall be administered by the research assistances, however no limitations shall

be imposed on respondents who might want to respond to the questionnaires on their own given their ability to read and write.

Ethical issues

For ethical reasons, a letter introducing the researcher to the respondents and the community within which data shall be collected shall be obtained from UTAMU. The researcher shall further reach the local authority to make a self-introduction on the subject matter to get permission to roam the enumeration areas while collecting the primary data. Furthermore, a letter of notification about this study shall be shared with the Telecom companies informing them of the study.

3.12 Pre-testing (validity and reliability)
3.9.1 Validity

This means the legitimacy of the questionnaire (can it get the information you want?). The validity of the instrument shall be obtained through the development of the scales with the help of experts in the field of mobile telecommunications using Content Validity Index (CVI) to determine the degree to which elements of the questionnaire to be used are relevant and representative of the targeted variables. CVI is the average of the Content Validity Ratio (CVR) which is given by the formula

$$\text{CVR} = \frac{E - \frac{N}{2}}{\frac{N}{2}}$$

Where **E** represents the number of subject matter experts who agree that the question is relevant, **N** is the total number of subject matter experts to be considered in this study (in this case mobile telecommunications experts).

Lawshe (1975) any item performance on which is perceived to be "essential" by more than half of the panellists/experts, has some degree of content validity. Thus the more panellists (beyond 50%) who perceive the item as "essential," the greater the extent or degree of its content validity. Thus CVR shall be computed for the different construct in this study, then after, the average is

computed to get the CVI. A value of average CVI greater than 50% shall imply the contents are valid for the study, however, higher CVI shall be preferred.

3.9.2 Reliability

This means the level of dependability (can you trust it to get the data you want?). Reliability of the questionnaire shall be improved through pre-testing of pilot samples of some questionnaires; this shall help rephrase some questions which could sound or appear ambiguous in meanings. This shall be obtained using Cronbach (1951) alpha coefficient value which shall be computed to show how reliable the data is using Statistical Package for Social Scientists (SPSS). Higher alpha values (0.70 or higher) shall be preferred.

3.13 Data analysis

Preliminarily, a data reduction analysis shall first be done using factor analysis to reduce the different groups of construct about each concept to a few underlying concepts with generation of factor scores for each concept. This approach has the benefit of eliminating multicollinearity effect in each construct. Subsequently data shall be analysed at univariate, bivariate and multivariate levels. At univariate levels, frequency tables and graphs shall be generated for the different variables. At bivariate levels, relationships between paired variables shall be obtained using correlation analyses and chi-square tests. At the multivariate levels, multiple regression analysis shall be conducted to ascertain the degree of prediction of the predicted variable by the predictor variables. Also to ascertain which predictor predicts the predicted more.

3.14 Measurement of variables

The variables to be used in this study are mainly qualitative in nature and the responses shall be based on opinions of the respondents. Thus the variables shall be measured on a five- Likert scale structure namely: 5-Strongly agree; 4- Agree; 3- Not sure; 2- Disagree; 1- Strongly disagrees. (See the questionnaire designs in the appendix 2).

References

Adepoju A., Suraju A. A., (2012). The Determinants of Customer Loyalty in Nigeria's GSM Market

Alok K. R.,Srivastava M. (2013). The Antecedents of Customer Loyalty: An Empirical Investigation in Life Insurance Context. Vol. 5, Issue 2, pp. 139-163

Beerli. (2002). Analysis of the Antecedents of Customer Loyalty .

Bhaargay (2016). Customer retention techniques: 10 Customer Retention Strategies That Keep Customers Coming Back

Bruce. (2001-47). Handbook of Social work research methods

Day. (1969). Reoperationalising the loyalty framework.

Ernest E. I. (2017). Customer loyalty in telecom service sector: the role of service quality and customer commitment, The TQM Journal, Vol. 29 Iss: 1, pp.19 – 36

Guilherme P. Johnson S., (2014). Ethnic MARKETTING: Culturally sensitive theory and practice, P-20

Iddrisu A.M., Nooni I.K., Fianko, K.S., Mensah W. (2015). Assessing the impact of service quality on customer loyalty in Ghana

ITU. (2015). ICT facts and figures.

Karunaratna A. C. (2014). Services quality and customer loyalty: adequacy of SERVQUAL model

Md. Motaher H. and Nusrat J. S. (2013). Influence of customer Satisfaction on loyalty: Journal of Social Sciences 9 (2): 73-80; Published Online 9 (2) 2013 (http://www.thescipub.com/jss.toc)

Olayiwola B. (2012). Mobile telecomunication customer loyalty in Nigeria: Determining Factors.

Quaye, E. A. (2012). An Investigation of key determinants of customer loyalty.

Rajanish. (2011). An analysis of the factorscausing telecom churn: First findings.

Sperry & Hutchinson (1980). The evolution of loyalty programmes.

Stephanie H.C., Mohd F. H. (2011). Exploring Service Quality, Customer Satisfaction and customer loyalty in the Malaysian mobile telecommunication industry

UCC. (2016). Annual Market and Industry Report.

Wadman W.M. (2016). The consumer perception theory.

Appendices

Appendix 1: The sample size determination table by Krejcie & Morgan

Table for Determining Sample Size of a Known Population									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size   Source: Krejcie & Morgan, 1970

Hello, my name is (self-introduction) a student researcher from Uganda Technology and Management University (UTAMU). I am in the process of collecting data for a study in the area of Customer loyalty to a mobile telecom network in Uganda.

I would like to request for your short moment to be part of this study if you have a mobile phone by responding to some few questions about this study. Your response shall remain anonymous, confidential and shall be used only for this study. Can you please grand me this request now?

BIO DATA (SECTION A)

Date of interview…………………………………..

Time of survey………..…………………………

Division……………..………………………..

A1 Sex of respondent   1. Male ☐   2. Female ☐

A2 Age group 1. (18-25) ☐ 2. (26-35) ☐   3. (36-45) ☐   4. (46 and above) ☐

A3 Religion of the respondent 1 Catholic ☐   2 Anglican ☐   3 Islam ☐

4 Pentecostal/Born again ☐   5 SDA ☐   6 Others (mention) ……………

A4 Employment status 1 Salary employment ☐ 2 Business ☐ 3 Unemployed ☐

4 Retired ☐   5 Student ☐   6 Others (mention)…………………..……..

A5 main source of income……………☐………………………………………..

A6 Average income range per month in UGX

    a) Less than 50,000   ☐
    b) 50,000 to 100,000   ☐
    c) 101,000 to 200,000 ☐
    d) 201,000 to 500,000 ☐
    e) 501,000 to 1,000,000 ☐
    f) Above 1,000,000 ☐

A7 Highest Education level attained

    a) None ☐
    b) Primary ☐
    c) Lower Secondary (s1-s4) ☐
    d) Upper secondary (s5-s6) ☐   e) Tertiary/institutions ☐

A8 Marital status   1 single ☐ 2 married ☐ 3 cohabiting ☐ 4 divorced ☐
5 separated ☐   6 widowed/widower ☐

Section B (Mobile Network choice)

B1 How many mobile telephone lines (SIM cards) do you have/own?...........

B2 Which of the following mobile SIM cards do you own (Tick all that is owned)

MTN   ☐ Mobile number…………………………...(Optional)

AIRTEL   ☐ Mobile number…………………………...(Optional)

SURE/SMART ☐ Mobile number…………………………...(Optional)

VODAFONE   ☐ Mobile number…………………………...(Optional)

AFRICEL   ☐ Mobile number…………………………...(Optional)

UTL   ☐ Mobile number…………………………...(Optional)

K2   ☐ Mobile number…………………………...(Optional)

SMILE   ☐ Mobile number…………………………...(Optional)

B3 which of those above is your most favourite line?................................

B4 why is it your most favourite choice? (Probe for more reasons).......................................

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

B5 If you are to quit this favourite network, what reasons/factors would compel you to do so?

(Probe for more reasons).......................................

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

B6 Supposing you are to start it all over again (may be you lost the SIM card for this favourite network), would you still re-register the lost SIM card and take the network as your most favourite network? 1 YES ☐   2 NO ☐

For the following table, please give your opinion/status of agreement with each statement below (i.e., how much do you agree with each of the below statements). We are asking the below questions in relation to your most favourite mobile network mentioned in B3 above.

Key
SA=Strongly Agree   **A**=Agree   **N**=Neutral   **DA**=Disagree   **SD**=Strongly Disagree

	Reliability	SA	A	N	DA	SD
Rel 1	When the service provider promises to do something by a certain time, services are delivered as promised.					
Rel 2	There is reliable network coverage wherever I go					
Rel 3	The service provider staff are available all time					
Rel 4	The service provider staff keeps the transaction records accurately					

	Responsiveness	SA	A	N	DA	SD
Res1	The service provider staff tells me exactly when services will be Performed.					
Res2	I receive prompt service from the service provider staff.					
Res3	Service provider staff is always willing to help customers.					
Res4	Service provider staff do not appear to be too busy in responding to my requests (dependable)					

	Value added service	SA	A	N	DA	SD
VAS1	I do money transfers like mobile money services using my preferred network					
VAS2	Buy goods and services (airtime etc) directly using my preferred network					
VAS3	Pay Utility bills (monthly bills for electricity, water bills, sewage bills, Pay TV bills) on this preferred network					
VAS4	Do mobile banking transactions using this preferred network					

	Customer Satisfaction	SA	A	N	DA	SD
CS1	I am satisfied with the overall service quality offered by this operator					
CS2	I am satisfied with the variety of service plans provided by this network that meet my needs.					
CS3	This/my operator meets my expectations and sometimes exceeds it					
CS4	I am happy enough with the service of this/my service provider					

			SA	A	N	DA	SD

	Customer Loyalty	SA	A	N	DA	SD
CL1	I am not likely to switch to another network soon					
CL2	This is the network I can recommend to my friends and/or family					
CL3	Even if I lose my SIM card for this network, I will replace it without thinking of another network					
CL4	I will continue using this network, even if other operators' prices were somewhat cheaper.					

	Tangibility	SA	A	N	DA	SD
T1	Customer service counter is well-equipped with up-to-date facilities e.g. reload/top-up machine, free WIFI.					
T2	Physical layout of equipment and furniture are comfortable for customer interacting with staff.					
T3	Staff are well-dressed and appear neat					
T4	Material and information associated with the service (e.g. promotional brochure) are visually appealing at the customer service counter					

	Assurance	SA	A	N	DA	SD
A1	I can trust the service provider staff.					
A2	I feel safe when conducting business with the service provider staff.					
A3	The customer service staff are polite.					
A4	Customer service staff seems to have received adequate supports from the service provider to do their job well.					

	Empathy	SA	A	N	DA	SD
E1	The service provider staff gives me individual attention.					
E2	The service provider staff knows what I actually want.					
E3	I have interest in the services provided by the service provider.					
E4	The service provider operates according to the business hours that are convenient to me.					

	Retention	SA	A	N	DA	SD
Ret 1	I will continue to use this network no matter what					
Ret 2	I will still choose my current provider, if I had to do it all over again.					
Ret 3	I am not ready to put forth the effort required for switching to another network.					
Ret 4	Changing my phone company will not make much difference.					

	Price/Tariffs	SA	A	N	DA	SD
Ret 1	The pricing policies of products and services from this operator are attractive					
Ret 2	The service tariffs/prices offered by this operator is reasonable (there is value for money service).					
Ret 3	This operator offers flexible prices for various services that meet my needs					
Ret 4	I will continue to stay with this operator unless the price is significantly higher for the same service					