

**IMPACT OF MOBILE PHONE NETWORK PROVIDERS'
SERVICE QUALITY ON CUSTOMER SATISFACTION
AMONG STUDENTS IN A SELECTED UNIVERSITY
IN ARUSHA, TANZANIA**

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APPROVAL SHEET

This thesis entitled **IMPACT OF MOBILE PHONE NETWORK PROVIDERS' SERVICE QUALITY ON CUSTOMER SATISFACTION AMONG STUDENTS IN A SELECTED UNIVERSITY IN ARUSHA, TANZANIA**, written and submitted by **Mhonie Banda Mellayie** in partial fulfillment of the requirements for the degree of Master of Business Administration (Marketing and Human Resource Management) is hereby accepted and approved.

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ABSTRACT

The use of mobile technology has become increasingly important in many sectors of economy. The purpose of this study was to assess the impact of mobile phone service providers' service quality on customer satisfaction among students in a selected university in Arusha, Tanzania. The study also assessed the relationship between the five dimensions of service quality and customer satisfaction. This study used a survey and data were gathered using closed ended servqual questionnaire which were administered to 222 students from a selected university in Arusha using a purposive sampling. The variable included service quality with five dimensions (tangibility, reliability, responsiveness, assurance and empathy) and customer satisfaction. Data was analyzed using descriptive and inferential statistics i.e. correlation and Principal component analysis for factor analysis. The study found that student had a positive perception and were satisfied with the services offered by mobile service providers. The study also found a significant relationship between all the five dimensions of service quality (i.e. tangibility, reliability, assurance, responsiveness and empathy) and customer satisfaction. Factor that had highest impact on students' satisfaction were customer care, connectivity of the mobile service providers' network and employee behavior. In view of the findings, the researcher recommended that Mobile service providers need to improve network coverage which was ranked the lowest on service quality aspects. Continuous training of employees to achieve continuous improvement of service quality. Continuous updating of machines and equipment to embrace continuous changing technology. Mobile service providers should benchmark their services with best mobile service providers even outside the country.

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DEDICATION

This research is dedicated to my beloved husband Sandy Banda and my lovely children Samel and Melsa without whose support, patience and understanding this work would have not been completed.

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GREAT IS THY FAITHFULNESS OH GOD MY FATHER

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CHAPTER ONE

INTRODUCTION

Background of the Study

The 21st century businesses have come to be largely characterized by two major developments: the use of modern technology particularly computer and telecommunications technology, and globalization where even small businesses have to some extent been integrated to the international business activities. This has brought about intense competition in the market for both goods and services. Competition entails a strong consideration for quality of services and products by firms in order for them to remain competitive, profitable and grow and be able to tackle the challenges of a competitive market. According to Arthur (2016), also cited by Saravana and Rao (2007) service quality has become a cornerstone of marketing strategy due to intense competition and the hostility of environmental factors.

This study focused on customer impact of mobile phone network providers' service quality on customer satisfaction mobile among university students in a selected university in Arusha, Tanzania. According to the World Bank 2003 report, mobile phone communication is considered to be one of the economic drivers. This is because it is an engine through which almost all daily transactions and activities are undertaken (Agyapong, 2011). According to Gerportt, Rams, and Shindler (2014), cell phones have evolved into something more than simple communication tool, gaining its own place in various social, economic, trade and commercial activities.

Due to advancement in technology, mobile internet connectivity through 3G and 4G networks have been so helpful and made easy the reach between individuals of different continents by enabling File sharing, video calls and many more. Just as

many business sectors, education sector has also been positively affected by mobile phone technology which has made studying easy for students. Students can access lots of books and journal in different fields of study. Cloud computing has enabled the synchronization of mobile phone and computers to share information through the use of drop box. University activities like admission, registration, tutoring, and announcements are being transformed from analog to digital. This has made university students spend more of their time on mobile phone since it impacts most of students' daily activities. The level of service quality students receive from mobile phone service provider is therefore crucial to students' academic success. Since university students accounts for the largest customer population, it is important that mobile service providers ensure students satisfaction through provision of quality service in order to attract and retain such a big market clientele.

The concept of service quality and customer satisfaction pose a great challenge for the survival and growth of all business organizations around the world. These growth and survival demands are further deepened by the need to attract and retain customers, as customers are the main focus of any successful business (Bayraktar, Tatoglu, Turkyilmaz, Delen, & Zaim, 2012).

A study conducted by Rahama (2011) in Bangladesh on service quality of mobile phone providers found that, one of the primary causes of service quality failure is the lack of understanding of the evolving needs and preferences of targeted customers. Since customer needs are dynamic, they change from time to time and are shaped by many variables including: culture, social, psychological, and individual personality, customers are therefore increasingly becoming complex (Kotler & Armstrong, 2012). This means that for an organization to meet the ever changing customer needs, it must have a heavy commitment to, and invest intensively on

service quality.

Ojo (2010) conducted an investigation on the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria. This investigation found that there is a positive relationship between service quality and customer satisfaction and also found that satisfied customers have greater propensity to be retained and resist to alternative options. Therefore customer satisfaction has been considered as a fundamental determinant of customer loyalty. Also a study conducted in Arusha, Tanzania by Foya (2015), on service quality management of mobile telecommunication industry in Arusha, Tanzania, revealed a positive relationship between customer satisfaction and loyalty and that it is more profitable to retain customers than to acquire new ones. The study claimed that a 5% improvement of customer retention can cause a profitability increase that ranges between 25 % and 85 %. Moreover, loyal customers are less likely to change provider because of price, while they also tend to recommend the business to others

In spite of the above observations which highlights the critical importance of service quality and customer satisfaction in service industry, mobile service providers in Arusha have not paid much interest on how the quality of service offered to university students (which is the biggest market), can affect students satisfaction which in return affect the business performance (Gabriel, 2012; Temba, 2013; Anatory & Manase, 2014; and Mbise, 2015). Hence the need for research to address the impact of service quality on customer satisfaction among university students in Arusha, Tanzania.

Statement of the Problem

Service quality is now considered a leading marketing strategy in service organizations. This is so because the quality of service provided affects the customer satisfaction and the competitiveness and growth of the firm. Though a lot of studies have been done on the quality of service provided by various organizations in different contexts including mobile phone industry, there is need for continuous research due to the advancement of mobile technology and the amount of time university students spend on their mobile phone. According to Tanzania Communication Regulatory Authority (TCRA) report 2015, about 23% of total population of mobile users are students. This is a significant customer base for mobile phone service providers which cannot be ignored because they interact more with mobile phones than any other generation. University students use mobile phone to carry out various research on different academic subjects, university application, online registration, e-learning, payment of bills, leisure games and even communicate with friends and parents.

The level of satisfaction university students obtain from mobile network providers is very critical to their success. It is important therefore, that the mobile network providers in Arusha seek to satisfy customers with their service quality in such a way that turns them into being loyal customers. This study intended to assess the impact of mobile phone network providers' service quality on customer satisfaction among students in a selected university in Arusha, Tanzania.

Research Questions

The general objective of this study was to evaluate how students in a selected university in Arusha, Tanzania perceive the quality of mobile phone services provided by the mobile phone companies in the area and how these perceptions affect their level

of satisfaction. In order to achieve the objective therefore, the study was guided by addressing the following questions:

- (1) How do students in a selected university perceive service quality of mobile phone service providers in Arusha, Tanzania?
- (2) What is the relationship between service quality dimensions and customer satisfaction among students in a selected university in Arusha, Tanzania?
 - a). Tangibility and customer satisfaction
 - b). Reliability and customer satisfaction
 - c). Assurance and customer satisfaction
 - d). Responsiveness and customer satisfaction
 - e). Empathy and customer satisfaction
- (3) Which of the service quality dimensions has the greatest impact on customer satisfaction among students in a selected university in Arusha, Tanzania?

Hypothesis

The following null hypothesis was developed from the above research questions:

- H₀₁: There is no significant relationship between:
- a). Tangibility and customer satisfaction among students in a selected university in Arusha, Tanzania.
 - b). Reliability and customer satisfaction among students in a selected university in Arusha, Tanzania.
 - c). Assurance and customer satisfaction among students in a selected university in Arusha, Tanzania.
 - d). Responsiveness and customer satisfaction among students in a selected university in Arusha, Tanzania.

- e). Empathy and customer satisfaction among students in a selected university in Arusha, Tanzania.

Significance of the Study

The findings of the study are relevant in several ways. First, the findings of the study may contribute to the body of knowledge in the Tanzanian mobile industry and in the field of marketing on how to integrate the various theoretical models of service quality in mobile industry. The study may give more insight on the relationships between service quality, customer satisfaction and customer loyalty and how these relationships impact overall performance of the service based industries especially mobile service sector. Also, this study may add on the number of studies done in telecommunications industry in Tanzania.

Mobile companies may also benefit from the study since the findings will provide insights on how customer relates to service quality which is a key success factor for companies in a competitive environment. Hence, companies can confidently acquire better service quality strategies to enhance profitable satisfaction and loyalty among customers. The study may offer recommendations for service based companies to consider in the formulation of policies that will allow integration of service quality as a marketing strategy with other business activities and formulation of strategies that will enable companies to adapt to the external dynamic environment. The findings are expected to inform mobile phone service providers about their customers' response to the variety of marketing strategies being deployed as it is helpful for marketers to understand the effectiveness of marketing tactics from consumer's perspective. Marketers may take clues from this and improve their customer retention strategies.

Future researchers may benefit because the findings of this study will have

pointed at appropriate research themes in marketing. Also, the findings of the study may be used by Scholars and students in marketing for generalizations necessary in the review of literature as a requirement for advanced studies in the areas of their specialization.

Justification of the Study

The study has been necessitated by the fact that practical aspect of service quality is considered to be one of the base stone for success of many businesses including mobile phone network providers. Service quality is the most powerful and well-organized strategy towards upholding and building relationship with the customers (Mbewe, 2016). According to Tanzania Communication Regulatory Authority (TCRA), University students are the biggest market for mobile service providers. The level of service quality students receive from mobile phone service provider is therefore crucial to students' academic success. Since university students accounts for the largest customer population, it is important that mobile service providers ensure their satisfaction through provision of quality service in order to attract and retain such a big market clientele.

Service quality is also very important in case of services as they are intangible and human based. According to Mbise (2015), Quality is the first thing on the basis of which customer judge the service and this relationship is built through quality services offered by an organization. Marketers should know the importance of service quality and its role in creating satisfaction and therefore, increased demand for the service.

Conceptual Framework

A conceptual framework consists of concepts, variables, definitions, and existing theories that are used by researcher for particular study. According to Tarimo (2015), the selection of variables in a study must have the characteristics that can be

measured and it is important especially when creating and designing a questionnaire. Conceptual framework must demonstrate an understanding of theories and concepts that are relevant to the topic of research paper. Selection of a theory should depend on its appropriateness, ease of application, and the explanation itself.

From the conceptual model, the independent variables include customer expectation and service quality. The main dependent variable is customer satisfaction.

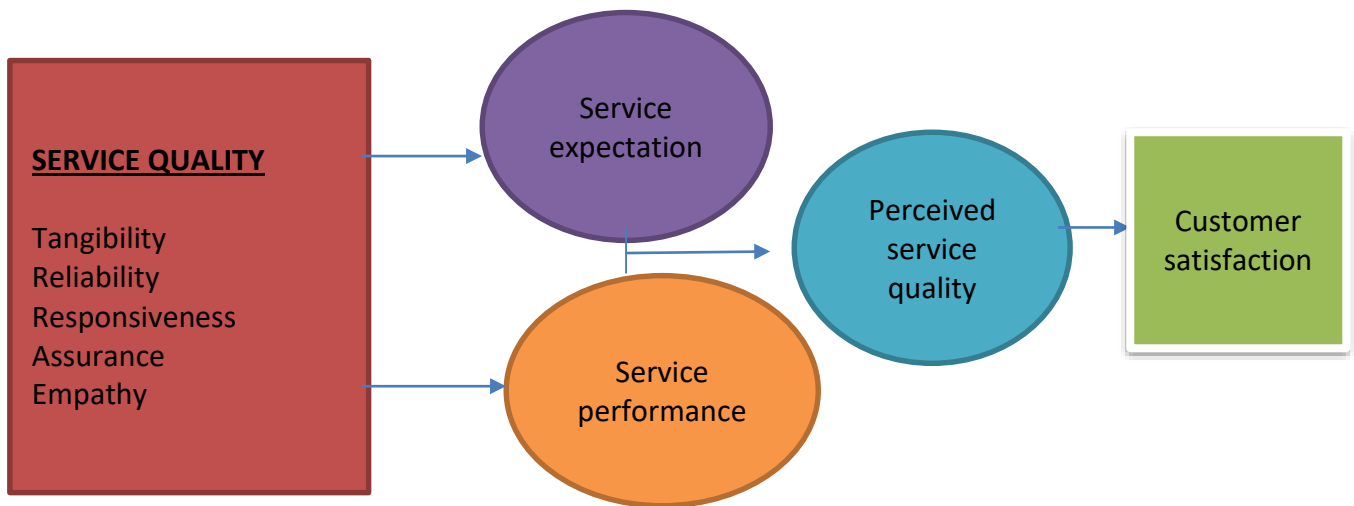


Figure 1. Conceptual framework of service quality and customer satisfaction.

Source: Adapted from Mbewe (2016)

Service quality is the extent to which a service meets customers' needs or expectations. It addresses the gap between customers' expectations of the service performance and their evaluation of the service they experienced. Parasuraman, Zeithaml and Berry (1985) divided service quality in five dimensions i.e. tangibility, reliability, assurance, responsiveness and empathy. Customers have different expectations (what customers believe a service should be) and perceptions (true or actual state of the service experience encountered by the customer). Depending on customers' expectations and perception of service, based on the five dimensions mentioned above, the customer can either satisfied or dissatisfied by the service

rendered. This means that the quality of service that is being offered by service providers has a significant impact on customer satisfaction. If customers perceive service to be of high quality then the service is satisfactory and vice versa.

The causal relationship between service quality and customer satisfaction has been verified by research in different business sectors as well as in the mobile telephone sector, where the following studies confirmed the positive effect of service quality on satisfaction. According to Kim, Park, and Jeong, (2010); Parasuraman, Berry, and Zeithaml (1985); and Saravana and Rao (2013), there is a positive relationship between service quality and customer satisfaction.

Higher levels of customer satisfaction can lead to a reduction of the perceived benefits of alternative suppliers and hence to higher repurchase intentions (Anderson & Sullivan , 2011). In order to further emphasize this point, Anderson and Srinivasan (2010) claim that “a dissatisfied customer is more likely to search for information on alternatives and more likely to yield to competitor overtures than is a satisfied customer”. Harris and Harrington (2010) pointed out that customer satisfaction can be attained by companies, which have understood their customers' needs and make every effort to provide services in an effective and efficient manner.

Researchers believe that the service quality theory is based on the literature of customer satisfaction and product quality (Brady & Cronin, 2012). There are many service quality models but scientists are not of one mind about these models and measurements. Service quality has different dimensions regarding the various service sectors (Pollack, 2009). Nevertheless, service quality measurement enables managers to recognize quality problems and enhance the efficiency and quality of services to exceed expectations and reach customer satisfaction.

In 1985, Parasuraman, Zeithaml, and Berry developed the most used and famous model named SERVQUAL. At first, suggested ten dimensions for service quality but after some initial study in 1988, the dimensions were reduced to five for service quality model. The SERVQUAL model was based on difference between perception and expectation of quality of service through five dimensions which includes tangibility. In other words, if service providers get these dimensions right, customers will hand over the keys to their loyalty. Because customers will have received service excellence according to what's important to them.

Scope of the Study

This study analyzed the relationship between two key variables namely: service quality and customer satisfaction. On service quality, five dimensions of service quality were assessed, namely, tangibility, reliability, responsiveness, assurance and empathy. Customer satisfaction dealt with customer perception of the services offered by mobile companies and how these services lead to customers satisfaction. The study covered a selected university within Arusha city and the target people were student owning mobile phone and uses mobile phone network providers in Arusha, Tanzania.

Assumptions of the Study

The Researcher assumes that respondents were truthful, honest and accurate about the information they gave about themselves and the topic under study. The study assumes that the results, conclusion and recommendations to be made of this study will be used by mobile service providers to understand the impact of service quality on customer satisfactions. The researcher also assumed that tangibility, reliability, assurance, responsiveness and empathy are the best dimensions in measuring service quality.

Operational Definition of Terms

Mobile Phone Service Provider: A mobile service provider is a company that offers transmission services to users of wireless devices (smartphones and tablet PCs) through radio frequency signals rather than through end-to-end wire communication. It deals with the science and technology of communication over a significant distance through transmission, emission or reception of information as words, sounds, signs, signals or images by the means of wire, radio, visual or other electromagnetic systems.

Service Quality: Service quality was used to refer to customers' expectations with regard to how well they receive mobile telephone based services in the form of internet data, text messages and voice services from mobile phone companies. Service quality means all aspects of products or service, in this case mobile network services, that work together to make the services more satisfying to the customer, while minimizing the unplanned and unwanted repercussions. Service quality dimensions include:

Assurance: Assurance refers to knowledge and courtesy of mobile service providers' employees and their ability to convey trust and confidence.

Tangibility: Tangibility is the physical evidence of a service such as physical facilities for example offices, equipment, personnel and communication materials of mobile network providers.

Responsiveness: Responsiveness is the willingness and readiness of the mobile network service providers' staff to provide services needed by customers

Reliability: Reliability is consistency, accuracy and dependability of the mobile service provider's performance.

Empathy: Empathy is the efforts of a mobile phone service provider to understand students needs and individualized service delivery to students.

Customer Satisfaction: Is students feeling of either pleasure or disappointment resulting from the evaluation of services provided to students in relation to expectations in reference to mobile phone network service.

Customer Expectations: is limited to what the customers of mobile service believes should be in terms of the quality of services provided by mobile network providers in Arusha.

Customer Perceptions: The feelings of the people based on their experience with mobile services providers as they compare between what the service is and how it was supposed to be.

CHAPTER TWO

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presented literature on service quality and customer satisfaction with the aim of providing the framework based on which a suitable methodology for the study is developed. Besides, the review of relevant literature also served as a yardstick for comparing the findings from the study to those undertaken by other researchers under the same topic. The literature review was conducted under two main captions, theoretical and empirical literature. Under theoretical literature, the various dimensions of service quality were discussed, followed by customer satisfaction. The empirical literature provided a survey of studies on service quality and customer loyalty around the globe.

Service Quality

Service quality today has become not only the talk of every business enterprise, but also occupies important position in every discourse. During the 21st century service quality has drawn a lot of attention from researchers and practitioners due to its strong impact on business performance, customer satisfaction, customer loyalty and profitability. Santos (2003) looks at service quality is usually understood as a measure of how well the level of the delivered services matches customer's expectations. On the other hand Oakland (2010) outlines perceived service quality, as “the outcome of an evaluation process, where the consumer compares his expectations with the service he perceives he has received”. Furthermore, for Parasuraman et al. (1988), service quality is “the overall evaluation of a specific service firm that results from comparing that firm's performance with the customers' general expectations of how firms in that industry should perform”.

Different authors have different view about service quality. According to Choi, Kim, Sung, and Park (2007) who conducted a study on service quality of mobile phone industry in China, found that Service quality helps in cementing the relationship between customers and the organization and it is a two-way flow of value. This means that customer derives real value from the relationship which translate into value for the organization in the form of enhanced profitability and sustainability over a long period of time. Also Sauntouridis and Panagiotis (2011) who investigated impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece supports the fact that service quality is a base of success for every business in service industry.

Measuring instruments like serviqual, integrated, combine models have been developed aiming to capture and explain the service quality dimensions. According to Kerin (2011), there is little doubt that among these, SERVQUAL is the most popular. SERVQUAL has been developed in a series of stages leading to consecutive more refined versions. In the most commonly used version (Parasuraman et al., 1988), service quality is calculated as the gap between customer expectations and perceptions, and is characterized by five dimensions namely reliability, responsiveness, assurance, empathy, and tangibles.

The servqual model has been recognized as the most eminent instrument in attempting to systematize the concept of service quality. This model is also known as the gap model of service. The model was developed initially to measure customer perception of service quality for the financial service sectors but later extended to sectors such as hospitality and telecommunications (Parasuraman et al., 1985). This model explains the five dimensions of service quality and the five gaps that organizations should measure, manage and minimize to ensure maximum satisfaction

of customers. Each of the five Service Quality Dimensions makes an extra addition to the level and quality of service which the company offers to their customers. It also makes the service far more unique and satisfying. The five dimensions are tangibility, responsiveness, reliability, assurance and empathy.

Tangibility. Tangibility refers to the physical evidence of a service such as physical facilities for example offices, equipment, personnel and communication materials (Parasuraman, 1985). Even though this is the least important dimension, appearance matters. Just not as much as the other dimensions. Service providers will still want to make certain their employees appearance, uniforms, equipment, and work areas on-site (closets, service offices, etc.) look good. The danger is for providers to make everything look sharp, and then fall short on reliability or responsiveness.

Responsiveness. Responsiveness is the willingness and readiness of the organization staff to provide services needed by customers. Respond quickly, promptly, rapidly, immediately, instantly. Waiting a day to return a call or email doesn't make it. Even if customers are chronically slow in getting back to providers, responsiveness is more than 1/5th of their service quality assessment.

Service providers benefit by establishing internal Service Level Agreement for things like returning phone calls, emails and responding on-site. Whether it's 30 minutes, 4 hours, or 24 hours, it's important customers feel providers are responsive to their requests. Not just emergencies, but everyday responses too. Call centers typically track caller wait times. Service providers can track response times. And their attainment of Service Level Agreement or other Key Performance Indicators of responsiveness. This is great performance data to present to customers in Departmental Performance Reviews.

Reliability. According to Oakland (2010) reliability refers to consistency, accuracy and dependability of the service provider's performance where as assurance is the ability of conveying confidence and trust to the customers by the service provider. Do what you say you're going to do when you said you were going to do it. Customers want to count on their providers. They value that reliability. Don't providers yearn to find out what customers value? This is it. It's three times more important to be reliable than have shiny new equipment or flashy uniforms. Doesn't mean you can have ragged uniforms and only be reliable. Service providers have to do both. Providers' first and best efforts are better spent making service reliable.

Assurance. According to Business Dictionary assurance refers to knowledge and courtesy of employees and their ability to convey trust and confidence (Business Dictionary). Service providers are expected to be the experts of the service they're delivering. SERVQUAL research by Parasuram (1985) showed it's important to communicate that expertise to customers. If a service provider is highly skilled, but customers don't see that, their confidence in that provider will be lower. And their assessment of that provider's service quality will be lower. Service providers must communicate their expertise and competencies – before they do the work. This can be done in many ways that are repeatedly seen by customers, such as:

- Display industry certifications on patches, badges or buttons worn by employees
- Include certification logos on emails, letters and reports
- Put certifications into posters, newsletters and handouts

By communicating competencies, providers can help manage customer expectations and influence their service quality assessment in advance.

Empathy. Empathy involves the efforts of a service provider to understand customers' needs and individualized service delivery (Shanka, Mesay, & Sata, 2012). Services can be performed completely to specifications. Yet customers may not feel provider employees care about them during delivery. And this hurts customers' assessments of providers' service quality. For example, a day porter efficiently cleans up a spill in a lobby. However, during the clean up doesn't smile, make eye contact, or ask the customer if there is anything else they could do for them. In this hypothetical the provider's service was performed fully. But the customer didn't feel the provider employee cared. And it's not necessarily the employees fault. They may not know how they're being judged. They may be overwhelmed, inadequately trained, or disinterested.

Providers' service delivery can be as important as how it was done. Provider employees should be trained how to interact with customers and their end-users (Oakland, 2010). Even a brief session during initial orientation helps. Anything to help them understand their impact on customers' assessment of service quality. Even though a Servqual research done to rate each of the dimensions out of 100 showed varying degrees of the relative importance of the dimensions, it has been concluded that all the dimensions are important and that service providers need to focus on all of them (Berry & Parasuraman, 1991).

SERVQUAL denotes service quality as the difference between a customer's expectations for a service offered and the customer's perceptions of the service received, demanding respondents to answer questions about both their expectations and their perceptions (Parasuraman et al, 1988). The use of perceived as opposed to actual service received makes the SERVQUAL measure an attitude measure that is related to, but not the same as, satisfaction (Parasuraman et al, 1988). The variance

between expectations and perceptions, called the gap, is the determinant of customers' perception of service quality as shown in figure 2 below.

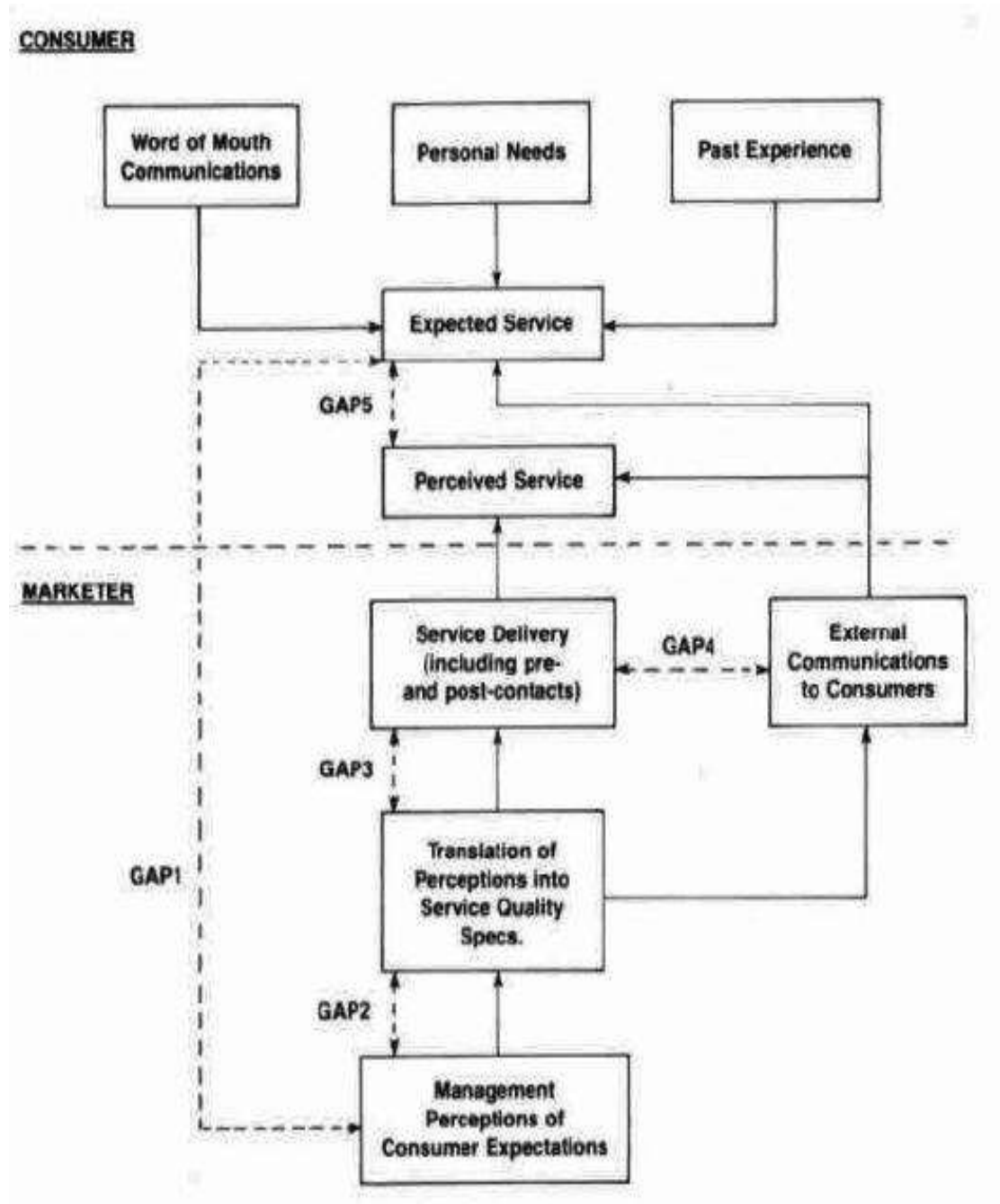


Figure 2. Gap model of service quality.

Source: Adapted from Boone & Kurtz (1998).

Gap 1, is the gap between what the customer expects and what the company's management thinks customers expect. It indicates a problem with the understanding

of the market. The following might cause this gap, insufficient marketing research, poor interpretation on the information about the audience's expectations, research not focused on demand quality and too many layers between the front line personnel and the top level management (Parasuraman, 1991).

Gap 2, is the gap that occurs when management fails to design service standards that meet customer expectations. The gap can occur due to the following reasons; insufficient planning procedures, lack of management commitment, unclear or ambiguous service design and unsystematic new service development process.

Gap 3, occurs when the company's service delivery systems (people, technology and processes) fail to deliver to the specified standard. The following are the reasons for this gap to occur; deficiencies in human resource policies such as ineffective recruitment, role ambiguity, role conflict, improper evaluation and compensation system, ineffective internal marketing, failure to match demand and supply and lack of proper customer education and training (Parasuraman *et al.*, 1988).

Gap 4, occurs when the company's communications with customers promise a level of service performance that people, technology and processes cannot deliver. This gap may occur due to over-promising in external communication campaign, failure to manage customer expectations and failure to perform according to specifications.

Gap 5, is the difference between customer's perception of the experience and the customer's expectation of the service. This gap means that what customers expected is not exactly what they experienced. Its either perception exceeded or did not meet expectation. In this study this gap was measured by evaluating how customers perceive the quality of service offered by mobile phone service providers.

The SERVQUAL model is linked with the dependent variable of the study.

The model explains the right dimensions of service quality that can be used to measure the level of service quality offered to customers. All the dimensions are important since each dimension has a role to play in mitigating the five gaps on the gap model so as to ensure maximum satisfaction of customers.

Several scholars have used serviqual model in different studies. To begin with There are numerous studies that have been carried out in trying to assess the quality of the service using the SERVQUAL test model in various sectors of society other than the electricity sector. For example Nimako (2014) conducted a research in Ghana in which he analyzed the service quality dimensions within the mobile telephone industry in Ghana. This paper sought to validate the service quality dimensions that are relevant to the mobile telephone industry in Ghana. It used confirmatory factor analysis to identify the fundamental hidden variables that meaningfully determine service quality in Ghana's mobile telephone industry. One thousand clients were sampled from four mobile telecom operators in Ghana in a cross-section survey that used a self- administered questionnaire for data gathering. Customer relations, Image, Tangibles and Real network quality emerged as the four service quality dimensions relevant to Ghana's mobile telephone industry. Cronbach alpha reliability for all the items showed a high value of 0.918. Service providers could appropriately use the resultant instrument items for measuring service quality in Ghana mobile telephone industry. The paper concludes that apart from the popular SERVQUAL, alternative service quality models, like the one conceptualized in this study, could be useful in determining the service quality dimensions relevant to mobile telephone industry.

Another study which considered the use of SERVQUAL to measure the quality of service was done by Khodaparasti and Gharebagh in Urmia Iran in 2015 in the banking sector. The title of the study was "Application of SERVQUAL Method

For Evaluating Service Quality Of Saderat Bank In Urmia, Iran". This research was conducted to evaluate the quality of services offered to customers at Saderat bank branches by using SERVQUAL model. The research target population involved all the customers of the Bank in Urmia city and 288 customers of this bank were sampled. To test the research hypotheses, software SPSS 18 and paired samples T – Test, Wilcoxon test and Friedman test were used. The research discovered that the bank had failed in all of the five dimensions of the SERVQUAL test to meet their customer's expectations. The expectations in all the dimensions were higher than the perception of the quality of service offered by the bank (Khodaparasti and Gharebagh, 2015).

The above mentioned studies shows the importance of measuring service quality in order to determine how organizations are performing quality especially with the use of serviqual model which is also used in the current study.

Customer Satisfaction

The study of satisfaction has always received large attention by researchers. It is however a subjective concept, as it can be inferred from the different definitions found in literature. According to Kotler, (2012) satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations. Therefore, satisfaction is closely related to consumers' expectations. More specifically, the narrower the gap is between the consumers' expectations and the actual performance of the product or service, the higher is the consumer's satisfaction (Pride & Ferrell, 2010).

On the other hand Vasita (2011) regards customer satisfaction as outcome resulting from the customer's pre-purchase comparison of expected performance with

perceived actual performance and incurred cost. If the perceived actual performance of service provider exceeds customers' expectations it means that customers are satisfied. However, if the perceived actual performance is less than expected, it would mean that customers are dissatisfied.

Furthermore, Boshoff and Gray (2011) came up with two general conceptualizations of satisfaction, which are, transaction specific satisfaction and cumulative satisfaction. Transaction-specific satisfaction refers to customer's evaluation of his experience and reactions to a particular service encounter and cumulative satisfaction refers to the customer's overall evaluation of the consumption experience to date.

Evidence shows that high satisfaction of customers can lead to brands building long and profitable relationships with their customers (Eshghi et al. 2014). Hafeez et al. (2010) argues that if a brand is fulfilling its promises, it would enhance customer satisfaction and create a feeling in customer that he has chosen one of the right brands. Also supported by Anderson et al., (2014) that any business is likely to lose its market share and customers if it does not satisfy customers as effectively and efficiently as its competitors. It is believed that satisfaction of customers with products and services of a company is the most important factor leading to competitiveness and success of the company.

Furthermore Foya (2015) adds that high customer satisfaction leads to repeat visitation to stores, repeat product purchases, and word of mouth promotion to friends, while dissatisfied customers make many complaints to service providers. Gloria and Agyapong (2011) urges that it is costly to keep customers satisfied and loyal. The researcher though believe in the longrun satisfied and loyal customers are profitable. Therefore, it is important for a firm to concentrate on improving service

quality and charge appropriate fair price in order to satisfy their customers who would ultimately help the firm to retain its customers (Gustafsson, Johnson & Ross, 2009).

Relationship Between Service Quality and Customer Satisfaction

Service quality and customer satisfaction have received a great deal of attention from both scholars and practitioners because of their relevancy and relationship. According to Iddrisu (2011) the main reason for focusing on these issues is improving overall performance of organizations. Various studies that focused on a link between satisfaction and quality argued for different views in terms of relationship. Some think that quality leads to satisfaction (McDougall & Levesque, 2011); while others support that satisfaction leads to quality (Cronin & Taylor, 2009). Others like Parasuraman et al., propose that quality and satisfaction are determined by the same attributes and relate customer satisfaction to service quality since what SERVQUAL model struggles to measure is attitude. They see customer satisfaction as transaction specific meaning consumers get satisfied with a specific aspect of service while perceived.

A study by Fen and Lian (2011) reviewed issues involved in service quality in universities from the customer satisfaction and attachment points of view, taking students as primary customers, especially in technology-based universities in Nigeria. The review noted that, service quality and customer satisfaction has direct relationship, because the students' expectations of a university education are skewed towards learning experiences and individual preferences, implying students' enrolment decision depends on the service encounters relating to factors like support facilities and infrastructure, image and marketing, academic issues, administrative issues, location and access. The study also found that both service quality and customer satisfaction have a positive effect on customer's re-patronage intentions

showing that both service quality and customer satisfaction have a crucial role to play in the success and survival of any business in the competitive market. This study proved a close link between service quality and customer satisfaction.

Seo, Ranganathan, and Babad (2008) carried a study to find out the link between service quality and customer satisfaction on USA mobile telecommunication market. This study focuses on understanding the factors related to customer retention behavior, both behavioral factors such as switching costs and customer satisfaction and demographic factors. Its two goals are to understand (1) how factors that affect switching costs and customer satisfaction, such as length of association, service plan complexity, handset sophistication and the quality of connectivity, drive customer retention behavior, and (2) how customer demographics such as age and gender affect their choice of service plan complexity and handset sophistication, leading to differences in customer retention behavior. The methodologies used were a binary logistic regression model and a two-level hierarchical linear model. From their study, they came up with the conclusion that, there exist a great dependency between both constructs and that an increase in one is likely to lead to an increase in another. Also, they pointed out that service quality is more abstract than customer satisfaction because, customer satisfaction reflects the customer's feelings about many encounters and experiences with service firm while service quality may be affected by perceptions of value (benefit relative to cost) or by the experiences of others that may not be as good.

Customer Loyalty

Customer loyalty is often examined from a behavioral point of view by measuring items such as number of repeat purchases, "share of wallet" and purchase frequency. A frequent assumption is that loyalty translates into an unspecified number

of repeat purchases from the same supplier over a specified period (Egan, 2010). In this line, Oliver (2013) defined loyalty as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour”.

However, the definition of loyalty based solely on repurchase behaviour doesn't provide a holistic view of this complex concept. This drove researchers like Dick and Bisau (2014) to propose alternative and more comprehensive definitions. They suggested that loyalty has both attitudinal and behavioural elements and argued that it is determined by the strength of the relationship between relative attitude and repeat patronage. Examining loyalty under the attitudinal lens, it can be derived from psychological involvement, favoritism and a sense of goodwill towards a particular product or service (Kim *et al.*, 2010).

The researcher believe that overall, despite the fact that there are plenty of different approaches aiming at the definition and conceptualization of loyalty, there is a general convergence towards the view that both behavioral and attitudinal features must be included. The behavioral view is usually based on the monitoring of the frequency of repeated purchases and brand switches, while the attitudinal approach assumes that loyalty is derived from psychological involvement and preference and focuses on issues such as brand recommendations, resistance to superior products, repurchase intention and willingness to pay a price premium.

Relationship Between Customer Satisfaction and Loyalty

Customer satisfaction has been considered as a fundamental determinant of customer loyalty. Foya (2015) found that satisfied customers have greater propensity to be retained and resist to alternative options, while Idrisu (2011) states that high

satisfaction results to customers with increased loyalty, less prone to be approached from competition. Moreover, satisfaction enhances repeat purchase and positive word of mouth by customers (Wirtz, 2011).

Similar results have been reported in the mobile telecommunications services literature, where also satisfaction has emerged as a strong predictor of loyalty. For example, Gerpott, Rams and Shindler (2014) in the context of the German mobile cellular telecommunications market, Kim *et al.* (2010) in Korea and Lee *et al.* (2012) in France had results that highlighted the causal link between customer satisfaction and loyalty.

Empirical Literature

This section presented different studies by different scholars which are related to the current study. The studies enlightened the researcher about different views, approaches and methodologies that were used by these scholars and how the studies can be applied in the current study.

To begin with Namako (2008) conducted a research in Ghana in which they analyzed the service quality dimensions within the mobile telephone industry in Ghana. This paper sought to validate the service quality dimensions that are relevant to the mobile telephone industry in Ghana. It used confirmatory factor analysis to identify the fundamental hidden variables that meaningfully determine service quality in Ghana's mobile telephone industry. 1000 clients were sampled from four mobile telecom operators in Ghana in a cross-section survey that used a self-administered questionnaire for data gathering. Customer relations, Image, Tangibles and Real network quality emerged as the four service quality dimensions relevant to Ghana's mobile telephone industry. Cronbach alpha reliability for all the items showed a high value of 0.918. Service providers could appropriately use the resultant instrument

items for measuring service quality in Ghana mobile telephone industry. The paper concludes that apart from the popular SERVQUAL, alternative service quality models, like the one conceptualized in this study, could be useful in determining the service quality dimensions relevant to mobile phone companies.

In another study Ojo (2010) investigated the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) Nigeria. A total of 230 respondents participated in the study. Regression analysis and Pearson product moment correlation coefficient were employed in analyzing the data. The study revealed a positive relationship between service quality and customer satisfaction. The researcher therefore recommended that organizations should focus more attention on service quality, because of its effects on customer satisfaction. To ensure that customer satisfaction level is high organization 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 and that the cost of attracting new customer far exceeds the cost involved in retaining existing ones.

Hafeez et al. (2010) conducted the study to investigate the determinants of customer satisfaction in telecommunications sector in Pakistan using 250 customers in Pakistan. Factor analysis was used. The results of their study show that customer services and price fairness have a positive relationship with customer satisfaction. The results further show that independent variables not only influence dependent variable but complement each other in that if customer services are of good quality, then customers will be willing to pay more for the services provided.

Maiyaki, Mokhtar and Noor (2011) applied the SERVQUAL model to examine the relationship between service quality and customer satisfaction on

customer loyalty with regards to mobile phone usage among the postgraduate students of a university in Northern Malaysia. The sample size of 341 randomly selected students were used in the study. The results reveal that both service quality and customer satisfaction significantly affect the level of customer loyalty of mobile cell phone users in Malaysia.

Heshmati and Khayyat (2012) examined customer satisfaction of the telecommunications service in Kurdistan region of Iraq using a sample of 1458 mobile phone users. The study used a discrete choice methodology to test the three models for user satisfaction: Binomial logit model for overall satisfaction, and multinomial logit model for brand use and for handset preferred features. The findings show that variables that influence customer satisfaction include network quality, demographic variables and price of the purchased service. The results further highlighted that males and older people are likely to be more satisfied.

Kumar et al., (2013) used the SERVQUAL model in a research to determine the relative importance of critical factors in delivering service quality of banks in Malaysia. In this article they modified the SERVQUAL model and considered six dimensions; tangibility, reliability, responsiveness, assurance empathy and convenience and these consist of 26 statements. They considered convenience because it is an important determinant of satisfaction for banking customers in Malaysia and contributes very highly in the customers' appreciation of the quality of services offered by the bank. The respondents were asked questions based on the 26 statements and they seek to know about their expectations and experience. They carried this study on banking customers regardless neither of which bank you use nor how you do your transactions, could be domestically, internationally among others.

After they carried out their study they realized that there are four critical

factors; tangibility, reliability, convenience and competence. These variables had significant differences between expectations and perceptions with tangibility having the smallest gap and convenience has the largest gap. They end up with the recommendation that banks need to be more competent in delivering their services and fulfilling the assurance of customers and providing the banking services more conveniently.

In support of the above scholars, the researcher believe serviqual model is good and relevant for the current study. This model was used to access the impact of service quality on customer satisfaction among selected university students in Arusha. This means that service quality was measured from students perspective. The researcher believed that service quality and satisfaction may be measured along using the same dimensions as proposed by Parasuraman et al., (1988). The researcher therefore adopted serviqual model with five dimensions i.e. tangibility, reliability, assurance, responsiveness and empathy and customers perception was measured using 22 statements (see appendix 1).

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter dealt with the overview of research methodology that lead to answering the research questions and more understanding issues discussed in literature review. The objective of this research was to clarify the relationship between two variables of service quality and customer satisfaction and to describe the understudy conditions and phenomena, in order to better understanding of present conditions, and helping the decision making process. It mainly focuses on the research design, description of the study area, population and sampling techniques, research design, data gathering procedures (research instruments), Statistical treatment of data and ethical consideration as applied in this study.

Research Design

This research used both descriptive and correlation research designs to assess the impact of service quality on customer satisfaction. Correlation was used to establish the relationship between service quality dimensions and customer satisfaction. Correlation research design was also used to validate or reject the hypothesis. Descriptive research design was used to obtain background information from students.

Population and Sampling Technique

The researcher used simple random sampling to select a university. The names of six universities in Arusha were written on small pieces of papers, mixed in a bow, then one paper was picked. The target population comprises of students in a selected university in Arusha who were subscribers of mobile phone service providers. The study used purposive sampling technique in selection of students for

the study. Purposive sampling allows researcher to obtain information from specific targeted group or specific people who can provide required information. The selection criteria was that one should be a university student and own a mobile phone. Data was collected from selected university which is one of the well established universities in the city of Arusha. The total student population is 500 comprising both male and females students at different levels i.e. first year, second year, third year and fourth year who are either boarders or off campus students and according to schools and majors. To ensure this research assistants distributed questionnaires in different classes.

The researcher adopted Sloven's formula to determine the sample size of student to be involved in the study as indicated below:

$$n = \frac{N}{1+Ne^2}$$

where: n = total sample size

 N = total population size

 e = desired margin of error which 0.05

$$n = \frac{500}{1+500(0.05)^2}$$

$$n = 222$$

Research Instrument

Based on the literature review and the research design, a questionnaire was prepared consisting of three sections, of which the first part was on specifications of the respondent, second part on the fivefold dimensions of service quality, third part for evaluation of customer satisfaction with the firms service based on perception.

This study involved the use of SERVQUAL instrument in order to ascertain any actual or perceived gaps between customer expectations and perceptions of the service

offered. It has five generic dimensions or factors and are stated as follows (Van de wal et al., 2003): **Tangibles** - Physical facilities, equipment and appearance of personnel. **Reliability** - Ability to perform the promised service dependably and accurately. **Responsiveness** - Willingness to help customers and provide prompt service. **Assurance** - (including competence, courtesy, credibility and security) Knowledge and courtesy of employees and their ability to inspire trust and confidence. **Empathy** - (including access, communication, understanding the customer). Caring and individualized attention that the firm provides to its customers.

In its original form, SERVQUAL contains 22 pairs Likert scale statements structured around five service quality dimensions in order to measure service quality (Cronin and Taylor, 2009). Each statement appears twice. One measures customer expectations of a particular service industry. The other measures the perceived level of service provided by an individual organization in that industry. The 22 pairs of statements are designed to fit into the five dimensions of service quality.

The questionnaire for this study used a 6-point likert scale. The 6-point Likert scale require the respondent to indicate the selected option for a given statement from Agree to disagree and the interval between each scale is supposed to be equal (Cooper, & Schindler, 2011). This scale has been used because it can allow an equal number of favorable and unfavorable categories of an even number. This enables one to obtain objective data. It follows that the scale can become forced scale in that there is no “neutral” or “no opinion” or “indifference” option provided. This forced scale is advantageous in the sense because if a substantial proportion of respondents do not have options and therefore marking the neutral positions measure of central tendency and variance. The six category scale is also considered appropriate because in order to get an even number, it is recommended to add one more to the original likert scale of

5 than to reduce it to 4. According to Malhotra (2007), the size of correlation (which will be used mainly in this study) is influenced by the number of scale categories.

The correlation coefficient decreases with a reduction in the number of scale categories.

The scaling is comprised of the following scale category: 1. Strongly disagree, 2. Disagree, 3. Tend to Disagree 4. Tend to Disagree 5. Agree, 6. Strongly agree.

The researcher used the following interpretation scale on perception issues:

Table 1

Interpretation Scale

Weight Scale	Range	Interpretation
6	5.50 – 6.00	Strongly Agree (SA)
5	4.50 – 4.49	Agree (A)
4	3.50 – 3.49	Tend to Agree (TA)
3	2.50 – 2.59	Tend to Disagree (TD)
2	1.50 – 2.49	Disagree (D)
1	0.50 - 1.49	Strongly disagree (SD)

Source: Researcher’s compilation, October, 2016

Validity of the Research Instrument

Validity is the degree to which results obtained from the analysis of data actually represent the phenomenon under study. It is the extent which data collection method or methods accurately measure what they were intended to measure. It is based on the adequacy with which the items in an instrument measures the attributes of the study (Saunders et al., 2009). To ascertain the content and criterion validity of the instrument, the researcher consulted experts of research and supervisors to verify whether the questionnaire was valid to get the intended results from what was supposed to test. The process helped the researcher to reframe and eliminate irrelevant questions.

Reliability of the Research Instrument

According to Bryman and Benn (2004), reliability is the degree to which data collection method yield consistent findings, similar observations and would be made or conclusion reached by other researchers or there is transparency in how sense was made from the raw data. To ensure that the items in the research questionnaire are consistent to measure the variables being studied, a pilot study was carried out at Institute of Accountancy in Arusha with 35 participants. Cronbanch's alpha was calculated using the following Cronbach's standardized formula

$$\alpha = \left[\frac{N}{N-1} \right] \left[\frac{S^2 - \sum S_i^2}{S^2} \right]$$

Where: α is coefficient alpha,

N is equal to the number of items,

S^2 is variance of summated scale scores,

$\sum S^2$ is sum of variances of the individual items in the scale.

SPSS obtained the following Cronbach's alpha coefficient for each variable: tangibility .733, reliability .852, assurance .740, responsiveness .849, empathy .895 and customer satisfaction .762 after deleting one item on customer satisfaction. It is required that alpha coefficient ranges between 0.70 and 0.90 (Lee, Kelley, et. *al.*, 2009).

Data Gathering Procedures

After validation of research instrument, the researcher sought ethical clearance from the Ethics Committee of the University of Eastern Africa Baraton. The researcher also got a permission letter from the Graduate Studies' Director introducing the researcher to a selected university in Arusha where data was collected. The researcher was requested to submit application letter and a copy of proposal

which was analyzed in the Adboard of the selected university. Approval was granted to a researcher and was communicated through a mobile to collect data. Research assistants were used to distribute questionnaires to students within the campus of the selected university. Some questionnaires were administered in class rooms while others in the streets of a selected university. A self-administered, structured questionnaire, which contained brief description about the purpose and the significance of the study was used as a data collection tool for this study. The questionnaire consisted close-ended questions from which the respondents chose the most appropriate answers from a list of predetermined answers. The first part of the questionnaire contained questions on demographic variables while the second part contains questions related to mobile service provider service quality and the third part dealt with question on customer satisfaction. The whole process of data collection took a period of one week.

Statistical Treatment of Data

This study used Statistical Package for Social Sciences (SPSS) version 20 to capture and analyze the collected data. The researcher applied descriptive statistical techniques which included frequency distributions and percentage for data presentation. Inferential statistics was used to draw meaningful meaning from the empirical data using Pearson's product moment correlations to establish the relationship between dependent and independent variables. Factor analysis was used to determine factors with highest impact on students in relation to their satisfaction.

In factor analysis (FA) and principal components analysis (PCA) one wishes to extract from a set of p variables a reduced set of m components or factors that accounts for most of the variance in the p variables. In other words, one wish to

reduce a set of p variables to a set of m underlying superordinate dimensions. These underlying factors are inferred from the correlations among the p variables

Ethical Considerations

Ethical issues have received increasing attention in both social and natural sciences. The most of this is the need to protect the rights of the respondents and the researchers ethical behavior related to the research. To ensure this, Consent from the office of graduate studies of the University of Eastern Africa, Baraton was sought before data collection. This paper was submitted to ethics committee for approval and to ensure all ethical issues are considered. The researcher ensured that the research was carried out on the basis of mutual trust and cooperation and must satisfy well-accepted convention and expectation. The researcher also ensured that selection of respondents is done through informed consent by preparing and making available to them a brief outline of the research. Information or data gathered was treated with strict confidentiality as well as secured anonymity of respondents where necessary. The cover letter on the questionnaire informed and assured the respondents of the strict confidentiality of their responses and that the analysis of data will be reported in terms of the overall situation of all the respondents and therefore no single response can be traced to any particular participant. This study was also guarded against any misrepresentation or inadvertent distortion of collected data. Consent was sought from a selected university in Arusha where data was collected.

CHAPTER FOUR

PRESENTATIONS OF FINDINGS, ANALYSIS AND INTERPRETATIONS

This chapter presents the findings, analysis and interpretation of data gathered to assess the impact of mobile phone network providers' service quality on customer satisfaction among students in a selected university in Arusha, Tanzania. The chapter analyses the data in relation to the research questions of the study. The findings are discussed and interpreted based on the research questions too

Personal Profile of Students

In order to understand the background of the respondents, students were asked to outline their profile in terms of gender, age, year of study, residence, mobile service provider(s), preferred mobile service provider and years of use. Table 2 below summarizes the demographic information of the students as follows:

Both male and females participated in the study. Table 2 below shows that more men (129) participated in the study as compared to females (93) which accounts for 58.1% of the total population. This may be due to the fact that more males attain higher education as compared to females.

Table 2

Personal Profiles of Students

Variable	Frequency (F)	Percentage (%)
Gender		
Male	129	58.1
Female	93	41.9
Age		
15-20	32	14.4
21-25	93	41.9
26-30	69	31.1
31-35	21	9.5
36 and above	7	3.2
Year of Study		
Year 1	63	28.4
Year 2	87	39.2
Year 3	55	24.8
Year 4	17	7.7
Residence		
Boarder	71	32
Off campus	151	68
Users of Mobile service provider		
Vodacom	150	67.6
Airtel	156	70.3
Tigo	174	78.4
Zantel	26	11.7
Hallotel	96	43.2
Preferred line		
Vodacom	52	23.4
Airtel	51	23
Tigo	96	43.2
Zantel	11	5.0
Hallotel	12	5.4

Out of 222 students who participated in the study, 93 students were of age bracket 21-25. This is the highest frequency of the age bracket and accounts for 42% of the total respondents. It is expected that the normal age bracket for university students should be between 21-25 hence this is a modal age for university students

participating in this study. There are few students below 20 and even fewer above 36. The generally trend is that one must have already finished undergraduate studies at the age above 36.

Students from year 1, 2, 3 and 4 participated in the study. With reference to table 1 above, the highest frequency of students' participation was from year 2 where by 87 students participated and this accounts for 39.2% of the total population.

Table 2 above shows that both off campus and boarders participated in this study of which 151 were off campus and 87 were boarders. Due to financial challenges most students prefer off campus residence because they are considered cheaper compared to boarding.

Mobile service providers under study includes Vodacom, Airtel, Tigo, Hallotel and Zantel. With reference to table 1 above, the most used mobile service provider by students in Arusha is Tigo. The researcher further investigated as to why Tigo is mostly used by university students and one of the reasons was price. Tigo offers lower price compared to other mobile service providers.

Table 2 above indicates that Tigo is the most favorable line (43.2%) used by university students in Arusha Tanzania followed by Vodacom (23.4) and Airtel (23%). As stated above, lower prices could be the reason students preferred Tigo to other mobile service providers.

Evaluation of Service Quality of Mobile Service Providers

Section B of the questionnaire presents students evaluation of the quality of service offered by their preferred mobile service provider. The responses were reported by the likert scores discussed in chapter three. Table 3 below presents 22 statements that constituted the five dimensions of the perceived service quality of the mobile service provider.

Table 3 below shows that students agreed to the fact that mobile service providers use modern machinery and equipment in the delivery of their core services as alluded by a mean of 4.74. This means that mobile service providers quickly adapt to the changes in technology. Use of modern machinery and equipment is important to students as it is the basis of service delivery of the mobile network providers. Table 3 below indicates that students agreed that information about mobile service provider was easily obtained as evident by the mean of 4.73. This is a positive thing because mobile service providers exist to serve customers and easy access to information can be one of the factors that lead to customer satisfaction. This is in support of Oakland (2010) approach that information about organizations or service providers must be easily accessed by customers. This will increase customer value where by customers save time on searching information about service and utilize that time on other productive activities.

Customers are satisfied when they realize service providers are willing to help customer so that maximum benefit from the service can be obtained. Students agreed to the fact that mobile service providers employees are always willing to help as indicated by a mean of 4.74 in table 3 below. This is an indication of a caring workforce are motivated to continue using services by a providers who seem to care about their wellbeing. On the other hand students seem not to be very happy with the network coverage of mobile phone service providers as allured by the mean 3.32 which is the lowest compared to other means. This is very unfortunate because provision of good network coverage should be a core activity of mobile phone companies. Since students want to communicate with parents and friends in different location, poor network coverage can be a dissatisfaction factor to them. Good network coverage can be a competitive advantage among mobile service provider.

Table 3

Service Quality Dimension

Variables	Dimensions(N)	Means	Standard Deviation
Provider uses modern machinery and equipment	222	4.74	.803
Offices and premises appear neat and modern	213	4.72	.697
Employees are well dressed and neat	213	4.63	.732
Documents used by mobile service providers are visually appealing	209	4.60	.791
Mobile service provider keeps their promises	211	4.60	.836
When a customer has a problem with the service, employee show sincere interest in solving it	215	4.70	.771
Mobile provider performs the service right	214	4.67	.749
Network coverage is good and can be easily accessed every where	219	3.32	1.608
The behavior of mobile providers' employees instills confidence in customers	213	4.60	.799
Customers feel safe in their transactions with the front line employees	213	4.71	.800
Customer care and operations employees are polite to customers	214	4.99	3.507
Customer care employees have adequate knowledge about their jobs to answer customer queries	214	4.70	.723
Information about mobile service provider is easily obtained by customers	212	4.73	.682
Mobile service provider gives prompt service to customers	214	4.65	.807
Mobile service providers employees are never too busy to respond to customers request	214	4.64	.792
Mobile service provider's employees are always willing to help customers	222	4.74	.694
Provider responds quickly to customer needs	222	4.60	.849
Provider gives customers individual attention	209	4.60	.778
Providers employees give customized service	209	4.65	.726
Provider has customers best interest at heart	208	4.70	.729
Mobile service provider offers a variety of services to customers	211	4.69	.760
Operating hours are convenient to customers	222	4.67	.848
Overall average for service quality		4.62	.931
Valid N (listwise)	195		

Evaluation of Customer Satisfaction

Table 4

Customer Satisfaction

Variables	Dimensions (N)	Means	Standard Deviation
I am likely to continue using the mobile service provider	222	4.99	.972
I would recommend this mobile service provider to a friend	222	4.81	.846
I am not likely to switch to another mobile service provider	222	3.21	1.862
Overall, I am satisfied with the services provided by my preferred mobile service	220	4.89	.811
Valid N (listwise)	195		

Table 4 above shows that students were to continue using mobile service providers as indicated by a mean of 4.99. This is a factor with the highest mean. This means that students agree to the fact that they are satisfied with the service quality offered by the mobile phone service providers in Arusha and were to continue using their current mobile service provider. Table also shows that students were to recommend mobile service provider to friend and family as indicated by a mean of 4.81. Switching to another provider of service is a sign of dissatisfaction by a customer. Companies must not leave any room for customers to switch to their competitor because once customers leave the company the chances of coming back are very slim. On the other hand a lowest mean of 3.2 was shown on students not likely to switch to other Mobile service providers. Students tend to agree that they will not switch. This is very weak though and an indication that students can switch to other mobile service providers if they are not satisfied with the services offered by the current provider. Switching is costly to service providers and this is in line with a study conducted by Arthur (2016) who found that losing a single to a

competitor means losing many more potential customers because they share information.

Overall students were satisfied with the service offered by mobile service providers. The study showed a mean of 4.89 for overall satisfaction of students. This means that mobile service providers put in more effort in assuring customer satisfaction as they deliver services to students. This is in line with the study conducted by Foya (2015) that revealed that customer satisfaction as a key to organization success. He further found that when customers are satisfied with the products and services offered by an organization, they spread a word of mouth and recommend the product or service to family and friends. This becomes a free advertisement for the organization.

Students Perception of Mobile Service Providers' Service Quality

This section responded to the first question the study addressed which was on how students in a selected university in Arusha, perceived the service quality provided by mobile phone service providers. The average likert scale score was 4.62 which is on the positive side. This means that after interacting with mobile service providers, students had positive perception of service quality and agreed to the fact that mobile service providers offers quality services.

Service quality require the consumer to have had some experience in order to evaluate level of service quality ranging from ideal quality to completely unacceptable quality. This study is similar to the findings of Nimako (2008) who studied the perception of customers on service quality of mobile service providers in Ghana and found that customers had positive perception of mobile service providers in Ghana. The study also confirmed the findings of Parasuraman (1985) that positive perception lead to customer satisfaction. Parasuraman further linked service quality to

satisfaction by pointing out that when expected service is greater than perceived service, perceived quality is less than satisfactory and will tend towards totally unacceptable quality; when expected service equals perceived service, perceived quality is satisfactory; when expected service is less than perceived service, perceived quality is more than satisfactory and will tend towards ideal quality. In this study, students perception was positive as indicated by the mean 4.62 above. This meant that mobile service providers' service quality was ideal and exceed students expectation.

Relationship between Tangibility and customer satisfaction

This section addressed question 2 (a) on the relationship between perceived service quality tangibility and customer satisfaction among university students in Arusha, Tanzania. This question sought to establish the degree of relationship between tangibility and customer satisfaction and this was addressed by testing hypothesis there is no significant relationship between tangibility and customer satisfaction. To determine the relationship Pearson product momentum correlation was performed and table 5 below presents correlations coefficients.

Table 5 revealed that there was a positive significant relationship between the use of machinery and office equipment in the tangibles dimension of service quality and customer satisfaction ($r = .367, p = .000$) in which most respondents were to continue using their current mobile service providers. A positive significant relationship between use of modern machinery and office equipment and customer satisfaction ($r = .235, p = .000$) in which students were to recommend the mobile service providers to friends.

Table 5

Correlation Coefficients between Service Quality Tangibles and Customer Satisfaction

Variables	Continuity of use	Recommend others	Not Switching	Overall satisfaction
Use of modern machinery and office equipment	.367* (.000)	.235* (.000)	-.212* (.001)	.298* (.000)
Offices and premises	.392* (.000)	.331* (.000)	-.090* (.000)	.320* (.000)
Employees well dressed	.322* (.000)	.374* (.000)	-.367 (.091)	.395* .000
Document appealing	.281* (.000)	.392* (.000)	-.195* (.005)	.404* .000

*. Correlation is significant at the 0.05 level (2-tailed). The value in parenthesis are P values.

However there is an inverse relationship between the use of modern machinery and office equipment and customer not switching to other providers ($r = -.212$, $p = .001$), this means that when machinery and equipment are modern, the rate of switching to other mobile service providers will be low. Table 5 indicated a positive relationship between use of modern machinery and overall customer satisfaction ($r = .298$, $p = .000$).

Table 5 also revealed a positive relation between neat offices and premises and customer satisfaction ($r = .392$, $p = .000$) in which most respondents were to continue using the mobile service provider, a positive relationship between neat offices and customer satisfaction ($r = .331$, $p = .000$) in which students were to recommend the mobile service provider to friends, an inverse relationship between neat offices and customer satisfaction ($r = -.090$, $p = .000$) in which students were not to switch to other mobile providers and a positive relationship between neat offices and overall satisfaction of students by the mobile service provider ($r = .320$, $p = .000$).

In relation to how well dressed employees were, Table 5 showed a positive significant relationship with customer satisfaction where by students were to continue using mobile service provider ($r = .322, p = .000$), recommend to others ($r = .374, p = .000$), insignificant relationship with students not switching to other mobile service providers ($r = -.367, p = .091$), and positive significant relationship with overall customer satisfaction ($r = .395, p = .000$).

Table 5 above also revealed a positive significant relationship between appealing documents and customer satisfaction in which students were to continue using mobile service provider ($r = .281, p = .000$), recommend to others ($r = .392, p = .000$), not switching to other mobile service providers (inverse relationship where $r = -.195, p = .005$), and positive significant relationship with overall customer satisfaction ($r = .404, p = .000$).

Overall, there is a significant relationship between tangibility and customer satisfaction. Looking at the overall correlation values between tangibility and customer satisfaction in Table 5 above, most values indicate a significant relationship. The researcher therefore, rejected the null hypothesis which states that there is no significant relationship between tangibility dimension of service quality and customer satisfaction among university students in Arusha, Tanzania. The researcher upheld the alternative hypothesis which states that there is a significant relationship between tangibility dimension of service quality and customer satisfaction among university students in Arusha, Tanzania.

This result is therefore in agreement with a study conducted by Foya (2015) on effect of technology based customer relationship on service quality of telecommunication industry in Arusha, that tangibles are very crucial to the success of

top notch service delivery. Equipment and machinery must be up-to-date to adopt the rapid change in technology and also to address the ever changing needs of customers.

Though tangibility showed a low relationship with customer satisfaction probably because unlike other services where customers need to visit the offices often to interact with a service or product, mobile phone services are consumed away from premises hence the appearance of the offices may not be of high importance to customers. This is not to say the appearance of offices and modern machinery do not add value to customers. Office and employees appearance and modern technology used by mobile service providers gives customers an idea of what to expect. As the saying goes first impression gives a right expression.

Relationship Between Reliability and Customer Satisfaction

This section gave responses question 2 (b), which dealt with the relationship between perceived mobile phone reliability and the level of satisfaction among university students in Arusha, Tanzania and test the hypothesis “is there significant relationship between reliability and customer satisfaction. The 6 below shows correlation between reliability and customer satisfaction.

Table 6 below shows a positive significant relationship between keeping promises in the reliability dimension of service quality and customer satisfaction in which students were to continue using the mobile service provider ($r = .334$, $p = .000$), recommend the service to other ($r = .367$, $p = .000$), an inverse relationship with student not switching to other providers ($r = -.199$, $p = .004$), and positive significant relationship with overall customer satisfaction ($r = .420$, $p = .000$).

Table 6

Reliability and Customer Satisfaction Correlation Coefficients

Variables	Continuity	Recommend others	Not Switching	Overall satisfaction
Promises	.334* (.000)	.367* (.000)	-.199* (.004)	.420* (.000)
Problem Solving	.225* (.001)	.262* (.000)	-.119 (.081)	.320* (.000)
Services performed right	.405* (.000)	.385* (.000)	-.083 (.229)	.145 (.033)
Network coverage	.119 (.079)	.189* (.005)	.703* (.000)	.404 (.033)

*. Correlation is significant at the 0.05 level (2-tailed). The value in parenthesis are P values.

When it comes to problem solving, table 6 above shows a positive significant relationship between employees showing sincere interest in solving customer problem and customer satisfaction where by students were to continue using the mobile service provider ($r = .225$, $p = .001$), recommend to others ($r = .262$, $p = .000$), insignificant relationship with student not switching to other providers ($r = -.199$, $p = .081$), and positive significant relationship with overall customer satisfaction ($r = .320$, $p = .000$).

Table 6 above also show a positive significant relationship between mobile service providers performing service right and customer satisfaction in which students were to continue using the provider ($r = .405$, $p = .000$), recommend the mobile service provider to others ($r = .385$, $p = .000$), insignificant relationship with student not switching to other providers ($r = -.083$, $p = .229$), and a positive significant relationship with overall customer satisfaction ($r = .145$, $p = .033$).

Network coverage is one of the factors that attract customers to choose a particular mobile service provider. The Table shows insignificant relationship between network coverage and customer satisfaction in which students were to

continue using the service provider ($r = .119$, $p = .079$), significant relationship with students recommending the service provider to others ($r = .189$, $p = .005$), significant relationship with students not switching to other providers ($r = .703$, $p = .000$), and significant relationship with overall customer satisfaction ($r = .404$, $p = .033$).

Overall, there is a significant relationship between reliability dimension of service quality and customer satisfaction as indicated by Table 6 above. The researcher rejected the null hypothesis that there's no significant relationship between reliability and customer satisfaction. The research upheld the alternative hypothesis that states that there's a significant relationship between reliability dimension of service quality and customer satisfaction. The study concurred with Parasuraman (1985); Aokland 2010 who found and strong link between reliability and customer satisfaction. Further found that organizations that are considered reliable by customers perform well in a competitive market. Customers need a provider who can be trusted and dependable. Once customers realize the service provider is reliable, they become satisfied and remain loyal to the service provider.

Relationship Between Assurance and Customer Satisfaction

This section addressed question 2 (c) on the relationship between perceived mobile phone assurance and the level of satisfaction among university students in Arusha, Tanzania and also tested the hypothesis "There is no significant relationship between assurance and customer satisfaction." The researcher carried out the following correlation as indicated in Table 7 below.

Table 7

Correlation Coefficients Between Assurance and Customer Satisfaction

Variables	Continuity	Recommend others	Not Switching	Overall satisfaction
Instills confidence	.338* (.000)	.334* (.000)	-.121 (.077)	.411* (.000)
Customer safety	.317* (.000)	.345* (.000)	-.105 (.127)	.363* (.000)
Employee polite	.059 (.390)	.074 (.280)	-.010 (.880)	.145 (.976)
Employee have adequate knowledge	.487* (.000)	.391* (.000)	.121 (.077)	.503* (.000)

*. Correlation is significant at the 0.05 level (2-tailed). The value in parenthesis are P values.

Table 7 above shows a significant relationship between instilling confidence in customers and customer satisfaction where by students were to continue using the product ($r = .338$, $p = .000$), recommend the service to others ($r = .334$, $p = .000$), insignificant relationship with students not switching to other providers ($r = -.121$, $p = .077$), and significant relationship with overall customer satisfaction ($r = .411$, $p = .000$).

The study indicates a significant relationship between customers feeling safe in their transaction with frontline employees and customer satisfaction where students were to continue using mobile service provider ($r = .317$, $p = .000$), recommend to other ($r = .345$, $p = .000$), insignificant relationship with students not switching to other providers ($r = -.105$, $p = .127$), and significant relationship with overall customer satisfaction ($r = .363$, $p = .000$).

There is an insignificant relationship between employees being polite to customers and customer satisfaction where student were to continue using the mobile

service provider ($r = .059, p = .390$), recommend to others ($r = .074, p = .280$), students not switching to other providers ($r = -.010, p = .880$), and overall customer satisfaction ($r = .145, p = .976$).

On employee having adequate knowledge about their job, the study revealed a significant relationship between employees knowledge and customer satisfaction where students were to continue using the mobile service provider ($r = .487, p = .000$), recommending to others ($r = .391, p = .000$), insignificant relationship with student not switching to others ($r = .121, p = .077$), and significant relationship with overall customer satisfaction ($r = .503, p = .000$).

Overall there's a significant relationship between assurance and customer satisfaction as indicated by Table 7 above. This is in agreement with the study carried out by Temba (2013) that Service providers are expected to be the experts of the service they're delivering. SERVQUAL research showed it's important to communicate that expertise to customers. If a service provider is highly skilled, but customers don't see that, their confidence in that provider will be lower. And their assessment of that provider's service quality will be lower. Service providers must communicate their expertise and competencies. This study therefore also concur with Parasuraman that there's a significant relationship between assurance and customer satisfaction.

Relationship Between Responsiveness and Customer Satisfaction

To answer question 2 (d) "Is there any significant relationship between perceived mobile phone responsiveness and the level of satisfaction among university students in Arusha, Tanzania?" the research carried out the following correlation.

Table 8

Correlation Coefficients Between Responsiveness and Customer Satisfaction

Variables	Continuity of use	Recommend to others	Not Switching	Overall satisfaction
Information easily Obtained	.317* (.000)	.291* (.000)	-.061 (.380)	.320* (.000)
Prompt service to customers	.405* (.000)	.282* (.000)	-.122 (.076)	.377* (.000)
Employee not too busy	.387* (.000)	.369* (.000)	-.131 (.056)	.397* (.000)
Employees willingness to help customers	.364* (.000)	.349* (.000)	-.067 (.319)	.376* (.000)

*. Correlation is significant at the 0.05 level (2-tailed). The value in parenthesis are P values.

Table 8 above revealed that there is a significant relationship between how information is easily obtained by customer and their satisfaction in relation to continuity of use of mobile service provider ($r = .317$, $p = .000$), recommend to others ($r = .291$, $p = .000$), insignificant relationship with students not switching to other providers ($r = -.061$, $p = .380$), and significant relationship with overall customer satisfaction ($r = .320$, $p = .000$).

In relation to promptness in serving customers, Table 8 shows a significant relationship between prompt services and customer satisfaction in terms of students continuing using the mobile service provider ($r = .405$, $p = .000$), recommend to others ($r = .282$, $p = .000$), insignificant relationship with switching to other providers ($r = -.122$, $p = .076$), and significant relationship with overall customer satisfaction ($r = .377$, $p = .000$).

There is also a significant relationship between employees not being busy to respond to customers request and customer satisfaction where by customers were to

continue using the provider ($r = .387, p = .000$), recommend to others ($r = .369, p = .000$), insignificant relationship with customers not switching to other providers ($r = -.131, p = .056$), and significant relationship with overall customer satisfaction ($r = .397, p = .000$).

In terms of willingness to help, the study shows a significant relationship between employees willingness to help customers and customer satisfaction where by students were willing to continue using the mobile service provider ($r = .364, p = .000$), recommend to others ($r = .349, p = .000$), insignificant relationship with students not switching to other providers ($r = -.067, p = .319$), and a significant relationship with overall customer satisfaction ($r = .376, p = .000$).

Overall, the study revealed a significant relationship between responsiveness and customer satisfaction as allured by Table 8 above. This is in agreement with Jabber (2015), who conducted a study on role of Service Quality in Measuring Customer Satisfaction in Power Sector: Case Study of Dhaka Electric Supply Company (DESCO), that readiness to respond quickly, promptly, rapidly, immediately, and instantly to customers' request is critical to customer satisfaction in service industry. The study found that the stated factors lead to customer satisfaction. Customers are easily taken away by competitors who can provide customers' needs in seconds. Speed is a competitive advantage for service providers.

Relationship Between Empathy and Customer Satisfaction

This section responded to question 2 (e) on the relationship between perceived mobile phone empathy and the level of satisfaction among university students in Arusha, Tanzania and also tested the hypothesis "there is no significant relationship between empathy and customer satisfaction. The following correlation was performed as indicated by Table 9 below.

Table 9

Correlation Between Empathy and Customer Satisfaction

Variables	Continuity	Recommend others	Not Switching	Overall satisfaction
Quick response to customer needs	.377* (.000)	.291* (.000)	-.128 (.058)	.400* (.000)
Individual attention	.436* (.000)	.409* (.000)	-.180* (.009)	.548* (.000)
Customized Services	.382* (.000)	.398* (.000)	-.174 (.012)	.453* (.000)
Employee have customers interest at heart	.466* (.000)	.323* (.000)	-.132 (.058)	.443* (.000)
Variety of services	.336* (.000)	.355* (.000)	-.238* (.000)	.369* (.000)
Convenient operating hours	.483* (.000)	.323* (.000)	-.106 (.117)	.442* (.000)

*. Correlation is significant at the 0.05 level (2-tailed). The value in parenthesis are P values.

The study shows a significant relationship between quick response to customers' needs of empathy dimension of service quality and customer satisfaction in terms of student continuing to use mobile service provider ($r = .377$, $p = .000$), recommend to other ($r = .291$, $p = .000$), insignificant relationship with student not switching to other providers ($r = -.128$, $p = .058$), and significant relationship with overall customer satisfaction ($r = .400$, $p = .000$).

When it comes to individual attention, the study revealed a positive significant relationship between individual attention and customer relationship where by customer were to continue using the provider ($r = .436$, $p = .000$), recommend to others ($r = .409$, $p = .000$), inverse significant relationship with students not switching

to other providers ($r = -.180, p = .009$), and positive significant relationship with overall customer satisfaction ($r = .548, p = .000$)

As supported by Mbewe (2016), for organizations to be successful, they need to provide products and services that will address individual needs of a customer. Customization is one of the factors that lead to customer satisfaction. The study revealed positive significant relationship between customized services and customer satisfactions in terms of students continuing to use the mobile service provider ($r = .382, p = .000$), recommend to other ($r = .398, p = .000$), inverse significant relationship with student not switching to other providers ($r = -.174, p = .012$), and positive significant relationship with overall customer satisfaction ($r = .453, p = .000$).

Also in agreement with Kotler (2012) that, organizations exist to serve the needs of customers. Therefore, employees should have customers' best interest at heart. This study revealed a positive significant relationship between employees having customers' best interest at heart and customer satisfaction where students were not to switch to other providers ($r = .466, p = .000$), recommend to others ($r = .323, p = .000$), inverse significant relationship between students not switching to other providers ($r = -.132, p = .058$), and positive significant relationship with overall customer satisfaction ($r = .443, p = .000$).

Organizations are trying as much as possible to offer a complete package of products and services that customers are looking for (everything under one roof). In so doing, customers are restricted in term of exploring other products offered by competitors, but also help customers save time. The study shows a relationship between variety of services offered by mobile service providers and customer satisfaction in which students are likely to continue using the provider ($r = .336, p = .000$), recommend to others ($r = .355, p = .000$), inverse significant relationship with

student not switching to other providers ($r = -.238, p = .000$), positive significant relationship with overall customer satisfaction ($r = .369, p = .000$).

Customers prefer services that can be easily accessed at any of their convenient time be it at night or during day time. Mobile service providers services are 24 hours 7 days and the study showed a positive significant relationship between convenient operating hours and customer satisfaction in relation to students continuing using the mobile service provider ($r = .483, p = .000$), recommend to others ($r = .323, p = .000$), insignificant relationship with students not switching to other providers ($r = -.106, p = .117$), and significant relationship with overall customer satisfaction ($r = .442, p = .000$).

Overall the study revealed a significant relationship between empathy and customer satisfaction. This is in line with a study carried out by Wambui (2012) on customers' perception of service quality of retail stores and supermarkets in Kenya found empathy to be service quality dimension with highest impact on customer satisfaction. Since empathy involves the efforts of a service provider to understand customers' needs and individualized service delivery, services can be performed completely to specifications. Yet customers may not feel provider employees care about them during delivery. This may lead to dissatisfaction. And once customers are dissatisfied they leave the organization and look for alternatives.

In summary, there is a significant relationship between service quality and customer satisfaction. Having analyzed all the five dimensions of service quality, all the five indicated a significant relationship with customer satisfaction. The researcher supports the fact that service quality leads to customer satisfaction and this is in line with Saravana and Rao, (2013, p.436) and Lee et al., (2012, p.226) who acknowledge that customer satisfaction is based upon the level of service quality provided by the

service provider. This is a good ground for asserting whether customers are satisfied with service quality of mobile service providers or not since the average perception score is above the average of the scale. A higher perception also indicates higher satisfaction as service quality and satisfaction are positively related (Fen & Lian, 2011, p.59-60). This means that dimensions with higher perception scores depict higher satisfaction on the part of customers and lower perception scores depict lower satisfaction.

Dimension With Highest Impact on Customer Satisfaction

This section addressed research question 3 which dealt with the service quality dimensions with the greatest impact on customer satisfaction among university students in Arusha. The researcher could have picked the service quality dimension with the highest correlation value. But this is not the case with this study because the previous analysis utilized mainly correlation analysis to establish the nature of relationship between the quality dimensions and customer satisfaction. The weakness with this, however is that it is mainly bivariate, focusing on two variables at a time. To get a proper picture on the nature of the relationship a multivariate analysis was undertaken. The principle component analysis as discussed in chapter three was the chosen multivariate method to reduce the variables by identifying those that accounted for the greatest variation.

Since each dimension has different aspects or factors, only picking one dimension may not be sufficient. It is importance to also include aspect with highest values. This may give a clear picture of what students considered important factors in their satisfaction. To address this question, confirmatory factor analysis was conduct. The extraction method the principal component analysis (PCA) and rotated component matrix were carried out to explore the underlying factors associated with

22 items of service quality. To determine the minimum loading necessary to include an item in its respective constructs, Chingang (2010) suggested that variables with loading greater than 0.30 is considered significant, loading greater than 0.40 more important, and loading 0.50 or greater are very significant. Table 10 shows the factors that are more significant to students in relation to their satisfaction with the services provided by mobile phone companies.

This table contains the rotated factor loadings (factor pattern matrix), which represent both how the variables are weighted for each factor but also the correlation between the variables and the factor. Because these are correlations, possible values range from -1 to +1. On the format subcommand, the researcher used the option blank (.70), which tells SPSS not to print any of the correlations that are .7 or less. This makes the output easier to read by removing the clutter of low correlations that are probably not meaningful anyway.

From table 10, all the factors with the value above .7 are very significant and have greatest impact on students satisfaction with the services offered by mobile phone companies. All the above factors belong to different dimensions of service quality and can be grouped in different categories. The values in columns 1, 2, and 3 of table 10 above are the rotated factors that have been extracted. As you can see three factors were extracted (the three factors that we requested). These are the factors that students are most interested in and try to name. For example, the first factor in column 1 might be called "customer care" because items like "customers are given individual attention; customized service; showing sincere interest in solving customers problems and customer feeling safe with frontline employees" load highly on it.

Table 10

Rotated Component Matrix

	Component		
	1	2	3
Mobile provider uses modern machinery and equipment	.752	-.071	-.211
Offices and premises appear neat and modern	.753	.006	-.033
Employees are well dressed and neat	.752	-.104	.035
Documents used by mobile service providers are visually appealing	.790	.088	-.019
Mobile service provider keeps their promises	.802	.111	-.036
When a customer has a problem with the service, employee show sincere interest in solving it	.807	.132	.193
Mobile provider performs the service right	.741	.075	-.138
Network covered is good and can be easily accessed every where	-.005	-.036	.917
The behavior of mobile providers' employees instils confidence in customers	.731	-.020	-.049
Customers feel safe in their transactions with the front line employees	.818	.115	.160
Customer care and operations employees are polite to customers	.084	.969	-.036
Customer care employees have adequate knowledge about their jobs to answer customer queries	.770	.057	-.078
Information about mobile service provider is easily obtained by customers	.718	.086	.149
Mobile service provider gives prompt service to customers	.781	.049	.039
Mobile service providers employees are never too busy to respond to customers request	.778	.133	.111
Mobile service provider's employees are always willing to help customers	.821	.108	.104
Provider responds quickly to customer needs	.829	.128	.129
Provider gives customers individual attention	.803	-.050	-.089
Providers employees give customized service	.818	.095	.001
Provider has customers best interest at heart	.813	.007	-.072
Mobile service provider offers a variety of services to customers	.797	.121	-.017
Operating hours are convenient to customers	.756	.019	-.189

The second factor might be called "employee behavior " because items like customer care and operations employees are polite to customers" load highly on it. The third factor has to do with connectivity of the mobile service providers' network. Basically three categories (i.e. customer care, employee behavior and connectivity) have been extracted from the factors that matters most to students in Arusha Tanzania. Therefore, to respond to research question 3 the above listed principle components as alluded by table 10 above had the greatest impact on students satisfaction in Arusha.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the whole study, conclusions and recommendations based on the findings of the study.

Summary

The purpose of this study was to assess the impact of mobile service providers' service quality on customer satisfaction among selected university students in Arusha, Tanzania. The study employed descriptive research design to analyze demographic information and Pearson product momentum correlation was used to analyze the relationship between independent and dependent variables. Factor analysis was used to find components in dimensions that are more important to students. The main research questions were to establish the possible relationship between dependent and independent variables and this was to clarify if there significant relationship between the five dimensions of service quality (tangibility, reliability, assurance, responsiveness and empathy) and customer satisfaction. Through the questionnaire that was distributed to 222 students out of the population of 500, the researcher was able to analyze data collected using descriptive statistics such as frequencies, percentages, means, standard deviation, Pearson product-momentum correlation coefficient by using the usage of SPSS version 20.

Discussion of the Major Findings

After analysis and interpretation of data, the findings of this study were based on the research questions with respect to their respective objectives. They supported what the review of related literature had revealed on the impact of service quality on

customer satisfaction. Both the positive and the negative findings were used in recommending to mobile service providers to improve service delivery to satisfy customers.

1. In regard to the first research question - How do students perceive service quality of mobile phone service providers in Arusha, Tanzania? – the findings of this study revealed that university students in a selected university had a positive perception and agreed to the fact that mobile service providers in Arusha deliver services of high quality as allured by average mean score of 4.62. the highest item of service quality, with an mean score of 4.99 shows that students had a positive perception and highly agreed to the fact that mobile service providers uses modern machinery and equipment. However, one item was ranked lower in the category of service quality. The lowest item with a mean of 3.32, is that network coverage is good and can be easily accessed everywhere.
2. Concerning question 2 (a) – Is there a significant relationship between the perceived mobile phone tangibility (equipment, machinery and premises) and the level of satisfaction among university students in Arusha, Tanzania? the study found a significant relationship between tangibility and customer satisfaction. This led to the rejection of the null hypothesis while accepting the alternative hypothesis. The study therefore shows that tangibility in the service quality dimensions has impact on customer satisfaction.
3. Question 2 (b) - Is there any relationship between perceived mobile phone reliability and the level of satisfaction among selected university students in Arusha, Tanzania? The study found a significant relationship between reliability and customer satisfaction among selected university students in

Arusha. The null hypothesis was therefore rejected while accepting the alternative hypothesis. The study therefore shows that reliability in the service quality dimensions has impact on customer satisfaction.

4. Question 2 (c) - Is there a significant relationship between perceived mobile phone assurance and the level of satisfaction among university students in Arusha, Tanzania? The study found a significant relationship between reliability and customer satisfaction among selected university students in Arusha and rejection of the null hypothesis while accepting the alternative hypothesis. The study therefore shows that assurance in the service quality dimensions has an impact on customer satisfaction.
5. Question 2 (d) – Is there a significant relationship between perceived mobile phone responsiveness and the level of satisfaction among selected university students in Arusha, Tanzania? The study found a significant relationship between reliability and customer satisfaction among selected university students in Arusha. The null hypothesis was rejected and accepting the alternative hypothesis. The study therefore shows that responsiveness in the service quality dimensions has an impact on customer satisfaction.
6. Question 2 (e) - Is there a significant relationship between perceived mobile phone empathy and the level of satisfaction among selected university students in Arusha, Tanzania? The study found a significant relationship between reliability and customer satisfaction among selected university students in Arusha. This led to rejection of the null hypothesis while accepting the alternative hypothesis. The study therefore shows that empathy in the service quality dimensions has an impact on customer satisfaction.
7. Question 3 - Which of the service quality dimensions has the greatest impact

on customer satisfaction? The study found there are several factors within five dimension that were more important to students and these factors were divided in three categories which includes: customer care, employee behavior and connectivity of the mobile service provider.

Conclusions

Based on the findings of the study, the following conclusions were drawn with respect to the research questions:

1. Students have a positive perception about the service quality offered by mobile service providers. Students are not very pleased by the network coverage of the mobile service providers
2. Tangibility has an impact on customer satisfaction.
3. Reliability has an impact on customer satisfaction.
4. Assurance has an impact on customer satisfaction
5. Responsiveness has an impact on customer satisfaction.
6. Empathy has an impact on customer satisfaction

Recommendations

Considering the findings and conclusions, this study makes the following recommendations with respect to service quality and customer satisfaction:

1. Mobile service providers need to improve network coverage which was ranked the lowest on service quality aspects
2. Since tangibility has an impact on customer satisfaction, mobile service providers must ensure continuous upgrading of equipment and machinery.
3. Mobile service providers should ensure reliable service are delivered to customers continually.
4. In dealing with customers mobile service providers must create assurance in

customer about the services offered to them.

5. Mobile service provider should improve speed in responding to customers.
6. Mobile service providers should ensure customers' interest are at the centre of their operations.

Area for Further Research

The following areas are suggested for further study:

1. Study was conducted in a selected university in Arusha, but several universities can be studied for comparison purposes.
2. A study can be carried out on mobile service employees as internal customers to see how satisfied they are with services offered by mobile service providers.
3. A comparative study between mobile service providers can also be conducted to know the best performers and strategies used.
4. A larger sample size and different methodology can be used.
5. Future researchers can use combined model to analyse service quality

Managerial Implications

Knowing how consumers perceive service quality and being able to measure service quality can benefit management of service organizations. Measuring service quality can help management provide reliable data that can be used to monitor and maintain improved service quality. Using the SERVQUAL model to assess service quality enables management to better understand the various dimensions and how they affect service quality and customer satisfaction. This will help them to identify those that have strengths and weaknesses and thereby make necessary improvements.

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APPENDICES

A: Questionnaire

Dear respondents,

The purpose of this study is to find out the impact of mobile phone network providers' service quality on customer satisfaction and loyalty among university students in Arusha, Tanzania. As one of the students who uses mobile phone, you have been selected as one who can provide the necessary information required for the study. Kindly I request you to answer the questions frankly and honestly. All information provided will be treated in strict confidence and shall be used only for this academic exercise. There are several participants responding to these questions and the results will be summarized in terms of the overall situation and no single response will be identifies to any single participant. Please complete this questionnaire at your earliest convenient time. Thank you for taking the time to complete this survey. Your assistance is greatly appreciated.

Mellayie Banda

SECTION A: DEMOGRAPHIC AND PERSONAL INFORMATION

Please tick where appropriate

Gender: Male () Female ()

Age: 15 – 20 () 21 - 25 () 26 – 30 () 31 – 35 () 36 and above ()

Year of Study: year 1 () year 2 () year 3 () year 4 ()

Residence: Boarder () Off campus ()

Mobile Service Provider:

Vodacom () Airtel () Tigo () Zantel () Hallotel ()

If you have more than one line, which one is your most favorable line?

Vodacom () Airtel () Tigo () Zantel () Hallotel ()

SECTION B: EVALUATION OF SERVICE QUALITY OF PREFERRED MOBILE PROVIDER

Instructions: Based on your experience as a user of your preferred mobile network, please evaluate the quality of service provided by this mobile network. The concern of this section is to get your feelings regarding service quality of mobile phone network providers. Tick once for each of the following statements that best matches your feelings regarding service quality.

**SD=Strongly Disagree D= Disagree TD= Tend to Disagree TA= Tend to Agree
A=Agree SA=Strongly Agree**

Dimension	Customer Statement	1 SD	2 D	3 TD	4 TA	5 A	6 SA
Tangibles	1 Mobile provider uses modern machinery and equipment						
	2 Offices and premises appear neat and modern						
	3 Employees are well dressed and neat						
	4 Documents used by mobile service providers are visually appealing						
Reliability	5 Mobile service provider keeps their promises						
	6 When a customer has a problem with a service, employees show sincere interest in solving it						
	7 Mobile provider performs the service right						
	8 Records are accurately kept						
Assurance	9 The behavior of mobile provider's employees instills confidence in customers						
	10 Customers feel safe in their transactions with the front line employees						
	11 Customer care and operations employees are polite to customers						
	12 Customer care employees have adequate knowledge about their jobs to answer customer queries						
Responsiveness	13 Information about mobile service provider is easily obtained by customers						
	14 Mobile service provider gives prompt service to customers e.g. new connections						
	15 Mobile service provider's employees are never too busy to respond to customers' request						
	16 Mobile service providers' employees are always willing to help customers						

Empathy	17	Provider responds quickly to customer needs						
	18	Provider gives customers individual attention						
	19	Provider's employees give customers customized service						
	20	Provider has their customers' best interest at heart						
	21	Mobile service provider offers a variety of services to customers						
	22	Operating hours are convenient to customers						

SECTION C: SATISFACTION WITH MOBILE SERVICE QUALITY

Instructions: The following statement relates to your level of satisfaction with the service quality offered by a selected mobile service provider. Please tick once for each of the following statements that best matches your feelings regarding service quality.

Customer Statement		1 SD	2 D	3 TD	4 TA	5 A	6 SA
1	I am likely to continue using the mobile service provider						
2	I would recommend this mobile service provider to a friend						
3	I am not likely to switch to another mobile service provider						
4	Overall, I am satisfied with the services provided by my preferred mobile service						

B: Budget

ITEM	TOTAL
Printing of the proposal	3,000.00
Administering of the questionnaire, transport and food	15,000.00
Binding of proposal	400.00
Printing and binding of the final thesis	7,000
Total	25,400.00

C: Data Analysis Output

Reliability (Tangibles)

Reliability Statistics

Cronbach's Alpha	N of Items
.733	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mobile provider uses modern machinery and equipment	13.72	8.338	.538	.665
Offices and premises appear neat and modern	13.94	7.480	.737	.537
Employees are well dressed and neat	14.00	9.484	.422	.729
Documents used by mobile service providers are visually appealing	13.56	9.931	.419	.727

Reliability (Reliability)

Reliability Statistics

Cronbach's Alpha	N of Items
.852	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mobile service provider keeps their promises	14.26	11.413	.566	.878
When a customer has a problem with the service, employee show sincere interest in solving it	13.91	10.871	.820	.758
Mobile provider performs the service right	13.79	10.956	.803	.765
Records are accurately kept	13.71	13.002	.628	.839

Reliability (Assurance)

Reliability Statistics

Cronbach's Alpha	N of Items
.740	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The behavior of mobile providers' employees instills confidence in customers	14.53	6.773	.436	.736
Customers feel safe in their transactions with the front line employees	14.19	6.028	.667	.606
Customer care and operations employees are polite to customers	13.94	7.222	.624	.660
Customer care employees have adequate knowledge about their jobs to answer customer queries	14.53	5.676	.492	.725

Reliability (Responsiveness)

Reliability Statistics

Cronbach's Alpha	N of Items
.849	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Information about mobile service provider is easily obtained by customers	13.35	11.932	.791	.761
Mobile service provider gives prompt service to customers	13.24	16.004	.442	.898
Mobile service providers employees are never too busy to respond to customers request	13.79	11.259	.833	.740
Mobile service providers employees are always willing to help customers	13.00	12.909	.706	.800

Reliability (Empathy)

Reliability Statistics

Cronbach's Alpha	N of Items
.895	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Provider responds quickly to customer needs	23.72	26.564	.753	.872
Provider gives customers individual attention	23.24	29.618	.618	.892
Providers employees give customized service	23.00	29.643	.771	.870
Provider has customers best interest at heart	23.55	27.185	.858	.854
Mobile service provider offers a variety of services to customers	22.97	33.677	.564	.899
Operating hours are convenient to customers	23.17	25.291	.800	.864

Reliability (Customer Satisfaction)

Reliability Statistics

Cronbach's Alpha	N of Items
.640	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am likely to continue using the mobile service provider	18.73	13.330	.531	.539
I would recommend this mobile service provider to a friend	19.03	10.718	.699	.425
I am not likely to switch to another mobile service provider	19.76	12.064	.314	.646
I am likely to buy other service offered by a mobile service provider	19.06	17.434	-.039	.762
Overall, I am satisfied with the services provided by my preferred mobile service	19.06	11.496	.637	.467

Service quality

Variables	Dimensions(N)	Minimum	Maximum	Means	Standard Deviation
Provider uses modern machinery and equipment	222	1	4	4.74	.803
Offices and premises appear neat and modern	213	1	4	4.72	.697
Employees are well dressed and neat	213	1	4	4.63	.732
Documents used by mobile service providers are visually appealing	209	1	4	4.60	.791
Mobile service provider keeps their promises	211	1	4	4.60	.836
When a customer has a problem with the service, employee show sincere interest in solving it	215	1	4	4.70	.771
Mobile provider performs the service right	214	1	4	4.67	.749
Network coverage is good and can be easily accessed every where	219	1	4	3.32	1.608
The behavior of mobile providers' employees instills confidence in customers	213	1	4	4.60	.799
Customers feel safe in their transactions with the front line employees	213	1	4	4.71	.800
Customer care and operations employees are polite to customers	214	1	4	4.99	3.507
Customer care employees have adequate knowledge about their jobs to answer customer queries	214	1	4	4.70	.723
Information about mobile service provider is easily obtained by customers	212	1	4	4.73	.682

Mobile service provider gives prompt service to customers	214	1	4	4.65	.807
Mobile service providers employees are never too busy to respond to customers request	214	1	4	4.64	.792
Mobile service provider's employees are always willing to help customers	222	1	4	4.74	.694
Provider responds quickly to customer needs	222	1	4	4.60	.849
Provider gives customers individual attention	209	1	4	4.60	.778
Providers employees give customized service	209	1	4	4.65	.726
Provider has customers best interest at heart	208	1	4	4.70	.729
Mobile service providers offers a variety of service to customers	211	1	4	4.69	.760
Operating hours are convenient to customers	222	1	4	4.67	.848
Overall average for service quality				4.62	.931
Valid N (listwise)	195	1	4		

Customer Satisfaction

Variables	Dimensions(N)	Minimum	Maximum	Means	Standard Deviation
I am likely to continue using the mobile service provider	222	1	6	4.99	.972
I would recommend this mobile service provider to a friend	222	1	6	4.81	.846

I am not likely to switch to another mobile service provider	222	1	6	3.21	1.862
Overall, I am satisfied with the services provided by my preferred mobile service	220	1	6	4.89	.811
Valid N (Listwise)	195				

Correlation

Tangibility and customer satisfaction

		I am likely to continue using the mobile service provider	I would recommend this mobile service provider to a friend	I am not likely to switch to another mobile service provider	Overall, I am satisfied with the services provided by my preferred mobile service
Mobile provider uses modern machinery and equipment	Pearson Correlation Sig. (2-tailed) N	.367** .000 222	.235** .000 222	-.212** .001 222	.298** .000 220
Offices and premises appear neat and modern	Pearson Correlation Sig. (2-tailed) N	.392** .000 213	.331** .000 213	-.090 .190 213	.320** .000 211
Employees are well dressed and neat	Pearson Correlation Sig. (2-tailed) N	.322** .000 213	.374** .000 213	-.116 .091 213	.395** .000 211
Documents used by mobile service providers are visually appealing	Pearson Correlation Sig. (2-tailed) N	.281** .000 209	.392** .000 209	-.195** .005 209	.404** .000 207

Reliability and customer satisfaction

		I am likely to continue using the mobile service provider	I would recommend this mobile service provider to a friend	I am not likely to switch to another mobile service provider	Overall, I am satisfied with the services provided by my preferred mobile service
Mobile service provider keeps their promises	Pearson Correlation Sig. (2-tailed) N	.334** .000 211	.367** .000 211	-.199** .004 211	.420** .000 209
When a customer has a problem with the service, employee show sincere interest in solving it	Pearson Correlation Sig. (2-tailed) N	.225** .001 215	.262** .000 215	-.119 .081 215	.320** .000 213
Mobile provider performs the service right	Pearson Correlation Sig. (2-tailed) N	.405** .000 214	.385** .000 214	-.083 .229 214	.403** .000 212
Network covered is good and can be easily accessed every where	Pearson Correlation Sig. (2-tailed) N	.119 .079 219	.189** .005 219	.703** .000 219	.145* .033 217

Assurance and customer satisfaction

		I am likely to continue using the mobile service provider	I would recommend this mobile service provider to a friend	I am not likely to switch to another mobile service provider	Overall, I am satisfied with the services provided by my preferred mobile service
The behavior of mobile providers' employees instills confidence in customers	Pearson Correlation Sig. (2-tailed) N	.338** .000 213	.334** .000 213	-.121 .077 213	.411** .000 212
Customers feel safe in their transactions with the front line employees	Pearson Correlation Sig. (2-tailed) N	.317** .000 213	.345** .000 213	-.105 .127 213	.363** .000 211
Customer care and operations employees are polite to customers	Pearson Correlation Sig. (2-tailed) N	.059 .390 214	.074 .280 214	.010 .880 214	-.002 .976 212
Customer care employees have adequate knowledge about their jobs to answer customer queries	Pearson Correlation Sig. (2-tailed) N	.487** .000 214	.391** .000 214	-.121 .077 214	.503** .000 212

Responsiveness and customer satisfaction

		I am likely to continue using the mobile service provider	I would recommend this mobile service provider to a friend	I am not likely to switch to another mobile service provider	Overall, I am satisfied with the services provided by my preferred mobile service
Information about mobile service provider is easily obtained by customers	Pearson Correlation Sig. (2-tailed) N	.317** .000 212	.291** .000 212	-.061 .380 212	.320** .000 210
Mobile service provider gives prompt service to customers	Pearson Correlation Sig. (2-tailed) N	.405** .000 214	.282** .000 214	-.122 .076 214	.377** .000 212
Mobile service providers employees are never too busy to respond to customers request	Pearson Correlation Sig. (2-tailed) N	.387** .000 214	.369** .000 214	-.131 .056 214	.397** .000 212
Mobile service provider's employees are always willing to help customers	Pearson Correlation Sig. (2-tailed) N	.364** .000 222	.349** .000 222	-.067 .319 222	.376** .000 220

Empathy and customer satisfaction

		I am likely to continue using the mobile service provider	I would recommend this mobile service provider to a friend	I am not likely to switch to another mobile service provider	Overall, I am satisfied with the services provided by my preferred mobile service
Provider responds quickly to customer needs	Pearson Correlation Sig. (2-tailed) N	.377** .000 222	.291** .000 222	-.128 .058 222	.400** .000 220
Provider gives customers individual attention	Pearson Correlation Sig. (2-tailed) N	.436** .000 209	.409** .000 209	-.180** .009 209	.548** .000 207
Providers employees give customized service	Pearson Correlation Sig. (2-tailed) N	.382** .000 209	.398** .000 209	-.174* .012 209	.453** .000 207
Provider has customers best interest at heart	Pearson Correlation Sig. (2-tailed) N	.466** .000 208	.323** .000 208	-.132 .058 208	.443** .000 206
Mobile service provider offers a variety of services to customers	Pearson Correlation Sig. (2-tailed) N	.336** .000 211	.355** .000 211	-.238** .000 211	.369** .000 209
Operating hours are convenient to customers	Pearson Correlation Sig. (2-tailed) N	.483** .000 222	.323** .000 222	-.106 .117 222	.442** .000 220

Rotated Component Matrix^a


	Component		
	1	2	3
Mobile provider uses modern machinery and equipment	.752	-.071	-.211
Offices and premises appear neat and modern	.753	.006	-.033
Employees are well dressed and neat	.752	-.104	.035
Documents used by mobile service providers are visually appealing	.790	.088	-.019
Mobile service provider keeps their promises	.802	.111	-.036
When a customer has a problem with the service, employee show sincere interest in solving it	.807	.132	.193
Mobile provider performs the service right	.741	.075	-.138
Network covered is good and can be easily accessed every where	-.005	-.036	.917
The behavior of mobile providers' employees instils confidence in customers	.731	-.020	-.049
Customers feel safe in their transactions with the front line employees	.818	.115	.160
Customer care and operations employees are polite to customers	.084	.969	-.036
Customer care employees have adequate knowledge about their jobs to answer customer queries	.770	.057	-.078
Information about mobile service provider is easily obtained by customers	.718	.086	.149
Mobile service provider gives prompt service to customers	.781	.049	.039
Mobile service providers employees are never too busy to respond to customers request	.778	.133	.111
Mobile service provider's employees are always willing to help customers	.821	.108	.104
Provider responds quickly to customer needs	.829	.128	.129
Provider gives customers individual attention	.803	-.050	-.089
Providers employees give customized service	.818	.095	.001
Provider has customers best interest at heart	.813	.007	-.072
Mobile service provider offers a variety of services to customers	.797	.121	-.017
Operating hours are convenient to customers	.756	.019	-.189

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

D: Letters of Authorization


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P. O. Box 2500, Eldoret, Kenya

04 April 2017

TO WHOM IT MAY CONCERN:


Re: PILOT STUDY OF RESEARCH INSTRUMENT

Mellayie Banda is a graduate student pursuing the degree **Master of Business Administration (Marketing)** at the University of Eastern Africa, Baraton. She is currently writing her thesis entitled *Impact of mobile phone service providers' service quality on customer satisfaction among selected university students in Arusha, Tanzania.*


To establish the reliability of her research instrument, Mellayie is conducting a pilot study. Kindly allow her to administer her questionnaire to selected students in your university.

Any assistance you will grant her will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,


Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Management
Office File


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03 May 2017

TO WHOM IT MAY CONCERN:


Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mellayie Banda is a graduate student pursuing the degree **Master of Business Administration (Marketing)** at the University of Eastern Africa, Baraton. She is currently writing her thesis entitled *Impact of mobile phone service providers' service quality on customer satisfaction among selected university students in Arusha, Tanzania.*

Kindly allow her to administer her questionnaires to selected students in your university. She will gather her research data within this month of May 2017.

Any assistance you will grant her will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,


Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Management
Office File





**OFFICE OF THE DIRECTOR OF GRADUATE STUDIES
AND RESEARCH**

UNIVERSITY OF EASTERN AFRICA, BARATON

P. O. Box 2500-30100, Eldoret, Kenya, East Africa

April 24, 2017

Mellayie Banda
University of Eastern Africa, Baraton
Department of Management

Dear Mellayie,

Re: ETHICS CLEARANCE FOR RESEARCH PROPOSAL (REC: UEAB/4/4/2017)

Your research proposal entitled "Impact of Mobile Phone Network Providers' Service Quality on Customers satisfaction among selected University Students in Arusha, Tanzania" was discussed by the Research Ethics Committee (REC) of the University and your request for ethics clearance was granted approval.

This approval is for one year effective April 24, 2017 until April 24, 2018. For any extension beyond this time period, you will need to apply to this committee one month prior to expiry date. Note that you will need a clearance from the study site before you start gathering your data.

We wish you success in your research.

Sincerely yours,

Dr. Jackie K. Obey
Chairperson, Research Ethics Committee



A SEVENTH-DAY ADVENTIST INSTITUTION OF HIGHER LEARNING
CHARTERED 1991

E: Curriculum Vitae (CV)

MELLAYIE BANDA

Contact Address:	ESAMI, P.O. Box 3030, Arusha, Tanzania	Religion:	Christian
E-Mail:	mellayieb@yahoo.com	Marital status:	Married
Nationality:	Malawian	Cell Phone:	+254710461962
Profession:	Marketer	Date of Birth:	05.11.1980

WORK EXPERIENCE

2015

MARKETING INTERN UEAB

- Analyzing and investigating fees, demand and competition
- Devising and presenting ideas and strategies
- Promotional activities
- Writing reports on promotional activities
- Organizing marketing events and exhibitions
- Monitoring marketing activities performance
- Managing campaigns on media (Baraton FM)
- Participating in adverts designing

2006-2011

FINANCE & ADMIN OFFICER, SAMEL (Travel, Malawi)

- Preparing financial accounts
- Preparing pay slips
- Budgeting

2004-2005

GENERAL DUTIES SECRETARY (Welcome Trust/LEPRA) an international population based health science research center

- Data entry for the Genera Manager's Office (excel)
 - Electronic Registration of laboratory specimen - fox pro
 - Maintaining an index register of medical journal – excel
 - Assisting the Store Keeper updating inventory reg.- access
-

2001-2003

SECRETARY TO THE GENERAL MANAGER

- Drafting and typing memos, letters and monthly reports
- Sending electronic mail through fax and e-mail
- Welcoming visitor and receiving phone calls
- Making photocopies, recording incoming & outgoing mail
- Maintaining inventory register in General Manager's office
- Supervising Office Assistants and Drivers
- Attending to various needs during Board Meetings

SKILLS

- I am a self-starter and capable of working with minimum Supervision
- Good organizational, interpersonal and communication skills
- Sound computer skills especially with MS word, Excel, Power point, Data Base and a fast learner
- High level of confidence and professional integrity
- An acquiring mind with strong analytical skills
- Generally dynamic, forward thinking and very hardworking

SPOKEN LANGUAGES

- English, Chichewa, Tumbuka, Tonga, Swahili, basic French knowledge

EDUCATION

- Currently studying MBA in Marketing & HR with UEAB
- BBA in Marketing
- Diploma in Business Administration (ABE)
- Certificate in Business Administration (ABE)
- Advanced Pitman Certificate in Secretarial Studies
- Malawi School Certificate of Education (MSCE)

HOBBIES

- Watching movies
 - Visiting places
 - Visiting the sick in hospitals
 - Taking care of flowers
 - Singing
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AWARDS AND ACADEMIC ACHIEVEMENTS

- Special award for good academic performance for consecutive trimesters
 - Academic award for getting a GPA of 3.5 above for consecutive
 - Award for presenting a research paper during interdisciplinary research conference in April, 2015
 - Magna Cumlaude Honor
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LEADERSHIP SKILLS

- Head Deaconess in BUC
 - Social Welfare Committee Member of BUC
 - A.Y. Leader (Njiro SDA Church Arusha)
 - Chair person of Malawi community in Baraton
 - Finance Manager of Bizzman Club
 - Graduate student representative on E- Library matters
 - Student representative on spiritual affairs
 - SDASA Baraton PR leader
-

REFEREES

Prof. C.T. Banaga
University of Eastern Africa, Baraton
Dean School of Business
Department of Management
Box 2500
Eldoret, Kenya

Dr. William Ondari
University of Eastern Africa, Baraton
Lecturer School of Business
Department of Management
Box 2500
Eldoret, Kenya
