SERVICE QUALITY AND CUSTOMER SATISFACTION: THE CASE OF SAFARICOM M-PESA SERVICES

BY

ALI ISSE JAMA'A

D61/68384/2013

A RESEARCH PROJECT SUBMITTED IN PARTIAL

FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE

OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF

BUSINESS, UNIVERSITY OF NAIROBI

DECLARATION

I declare that this research project is my original wo	ork and has never been submitted
to any other university for assessment or award of a d	legree.
Signed	Date
ALI ISSE JAMA'A	
D61/68384/2013	
This research project has been submitted for exami	ination with my approval as the
University supervisor.	
Signed: Date:	
Zipporah Kiruthu.	
Lecturer, Management Science Department	

School of Business, University of Nairobi

DEDICATION

To my dear sisters Barlin Isse, Fartun Isse and Ayan Isse for the good care and support you gave to me. My sisters, your inspiration, advice, guidance, moral and financial support have made me what I am today; to you I will remain forever grateful. May God reward you. My heartfelt dedication also goes to my Mum and my late Dad, may God rest your Soul in 'Jannah'. I'm grateful to all my family members for their patience, great love, support and encouragement during this research study.

ACKNOWLEDGEMENT

My first acknowledgement goes to God Almighty for His grace to me that has been Sufficient to me throughout my degree studies and, indeed, through my entire academic journey up to this point. I express my thanks and honor to you.

Special thanks go to my project supervisor, Mrs. Zipporah Kiruthu, for her patience, dedication, and valuable knowledge that has greatly improved the quality of this work. I am grateful for her support and guidance throughout the period of writing this project.

To my moderator, Mr. Chirchir, I acknowledge his valuable input during the critical moderation stage. His valuable comments have been reflected in this final

Document and have greatly improved the quality of this work.

I thank my family and friends for their encouragement throughout the project period.

I can never thank you enough. I pray that the Almighty God will richly reward you.

ABSTRACT

The concept of quality, efficiency, productivity, growth and survival pose a great challenge for the survival and growth of all corporate bodies. There is need for service firms to improve only quality dimensions, which translate to high customer value and this can be achieved by identifying the factors which translates to higher value when improved. M-Pesa is a money transfer system operated by Safaricom, Kenya's largest cellular phone provider. M-Pesa allows users to exchange cash for "e-float" on their phones, to send e-float to other cellular phone users, and to exchange e-float back into cash. The study sought to determine the relationship between service quality and customer satisfaction among Safaricom M-Pesa services customers and to establish the challenges affecting M-pesa services. This study adopted a case study method and targeted M-Pesa outlets within the Central Business District. Three customers were randomly picked from each outlet and primary data was collected from respondents by the use of questionnaires as the main instruments of data collection. The data collected was edited to identify and remove errors made by respondents. Edited data was then coded in order to translate responses into specific categories. Descriptive statistics such as means, percentages and frequency distributions were used to describe the responses as it is a better method of presenting the findings of the study. Spearman correlation was used to establish the relationship between quality service and customer satisfaction on Safaricom M-Pesa services. The study found out that Mpesa service customers were highly satisfied. The study found that most of the M-pesa service customers found it safe to use M-pesa transfer services including receiving money, sending money and buying airtime for another user and for self, emergency transfer, paying bills as well as savings. The study concluded that the accessibility of the physical facilities and their ability to perform the required tasks efficiently makes the customers satisfaction very high since convenience of the highest level is achieved. The study recommended that Safaricom M-pesa service providers to ensure there are an increased number of personnel who endeavor to serve the customers. The study recommends the service providers to set up security measures for a comprehensive transaction in case of sending money, receiving money, buying airtime or paying bills. This would increase customers' confidence with their services and also increase the pride by the company due to their achievement of the highest levels of customer satisfaction.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURE	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Background	1
1.1.1 Service Quality	2
1.1.2 Customer Satisfaction	
1.1.3 Safaricom M-Pesa Services	
1.2 Research Problem	6
1.3 Research Objectives	8
1.4 Value of the Study	8
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	
2.2 Measurement of Service Quality	
2.2.1 Models for specific service settings	10
2.2.2 SERVQUAL Model	10
2.2.3 Gap model	
2.2.4 Performance Only Model (SERVPERF)	
2.3 Service Quality	
2.4 Determinants of Service Quality	
2.5 Challenges Affecting M-Pesa Services	
2.6 Empirical Studies on Service Quality and Customer Satisfaction	
2.7 Summary of Literature Review	
2.8 Conceptual Framework	
CHAPTER THREE: RESEARCH METHODOLOGY	
3.1 Introduction	
3.2 Research Design	
3.3 Population	
3.4 Sampling	
3.5 Data Collection	
3.6 Data Analysis	
CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION	
4.1 Introduction	
4.2 Response Rate	
4.3 Background Information of the respondents	
4.3.1 Gender of the respondents	
4.3.2 Age of the respondents	28

4.3.3 Level of education	29
4.3.4 Frequency use of M-Pesa	30
4.4 Challenges Affecting M-Pesa Services	30
4.4.3 Challenges faced by m-pesa users	32
4.4.2 Ways the respondents used M-pesa money transfer service	35
4.4.3 Safety in using m-pesa	36
4.4.4 Rating the safety of m-pesa transfer	37
4.4.5. Convenience in the use of m-pesa	38
4.5 Inferential Statistics	39
4.5.1 Regression Analysis	39
4.5.2 ANOVA	
4.5.3 Regression Coefficients	41
4.6 Discussions of the Findings	42
CHAPTER FIVE	
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	44
5.1 Introduction	44
5.2 Summary	44
5.3 Conclusions	45
5.4 Recommendations	
5.5 Limitations of the Study	46
5.6 Recommendation for Further Research	47
REFERENCES	48
APPENDICES	
APPENDIX 1: RESEACH QUESTIONAIRE	55
APPENDIX II: LIST OF M-PESA AGENTS in the CBD AS AT 31 M	MARCH,
2011	58

LIST OF TABLES

Table 2. 1 Determinants of service quality	14
Table 2. 2 Five service dimensions	15
Table 4.3 Challenges faced by m-pesa users	32
Table 4.4 Ways the respondents used M-pesa money transfer service	36
Table 4.5 Model Summary	39
Table 4.6 ANOVA (Analysis of Variance)	40
Table 4.7 Regression Coefficients	42

LIST OF FIGURE

Figure 2. 1 Conceptual framework	23
Figure 4.1 Gender of the respondents	28
Figure 4.2 Age of the respondents	28
Figure 4.3 Highest Level of education of the respondents	29
Figure 4.4 Frequency use of M-Pesa	30
Figure 4.5 Challenges faced by M-Pesa customers	31
Figure 4.6 How often they faced the challenges	31
Figure 4.7 How respondents go about the challenges they face	33
Figure 4.8 Duration it takes for the challenge to be resolved	34
Figure 4.9 Rating of m-pesa services	35
Figure 4.10 Safety in using m-pesa	37
Figure 4.11 Rating the safety of m-pesa transfer	38

CHAPTER ONE: INTRODUCTION

1.1 Background

The concept of quality, efficiency, productivity, growth and survival pose a great challenge for the survival and growth of all corporate bodies. 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. Business success depends on a firm's understanding and meeting customers' needs and demands. Customerfocused strategy has become a means of competitive advantage and survival for organizations (Taylor & Baker, 2011). In the era of global competition, many organizations have shifted the paradigm from service quality to customer perspective (Parasuraman, 2009). There has been a paradigm shift from the traditional way of measuring performance through inspection to quality assurance to strategic quality management and recently to customer satisfaction. Reid (2005) indicated that competitive strategies often led to tradeoffs between quality and cost and some strategies are willing to sacrifice quality in order to develop a low cost advantage. Improving quality relates to high cost and this reduces the value that the customers derive from the services. From a customer's perspective, the value of a product/service is strongly linked to quality. Customers feel they are getting a good value when the benefits outweigh the sacrifices (i.e. costs). Value is therefore the ultimately the reason consumers buy anything.

There is need for service firms to improve only quality dimensions, which translate to high customer value and this can be achieved by identifying the factors which translates to higher value when improved (Nikecki, 2010). The purpose of the study is to investigate the effect of service quality on customer satisfaction with a view of identifying the strategic dimensions of service quality which impact positively on

customers. This study explores the level of service quality and its relationship with customer satisfaction in the mobile money transfer service (M-Pesa) and seek to determine the extent to which the service quality dimension affects the level of customer satisfaction.

1.1.1 Service Quality

Lewis and Booms (2013) indicated that service quality involves a comparison of expectations with performance and is a measure of how well a delivered service matches the customer's expectation (Nikecki, 2010) defined service quality in terms of "meeting or exceeding customer expectations, or as the difference between customer perceptions and expectations of service. Walker, (2006) highlighted that reliability, responsiveness, assurance and empathy are the most important service quality dimension while he asserted that service quality is conceptualized as a three-dimension construct, namely: technical quality; functional quality; and image. Extant research in this area shows that properly implemented service quality dimensions have a significant impact on customer satisfaction (Walker, 2006).

In particular, consumers prefer service quality when the price and other cost elements are held constant (Turban, 2002). It has become a distinct and important aspect of the product and service offering (Caruana, 2010). The satisfaction a customer gets from quality of service offered is usually evaluated in terms of technical quality and functional quality. Usually, customers do not have much information about the technical aspects of a service; therefore, functional quality becomes the major factor from which to form perceptions of service quality (Donabedian, 1982). Service quality can be measured in terms of customer perception, customer expectation, customer satisfaction, and customer attitude (Sachdev & Verma, 2004).

Different models have been advanced concerning service quality in the service organizations with an aim of establishing the relationship between service quality and customer satisfaction. From the earlier research work Parasuraman (1985) five determinants of service quality were identified as reliability, responsiveness, assurance empathy and tangibles. Strongmen (2007) studied the factors influencing service quality in the hotel industry in Peru and established that the customers were more interested on the dimensions of reliability exterior, tangibles and assurance. The best predictor of overall service quality was identified as the dimension of reliability. The researcher however noted that a different context would give different results. This is due to different social demographic variables such as culture and religion which might impact on customer expectations. Harr (2008) on the other hand studied service dimensions that lead to higher levels of customer satisfaction in restaurants in Singapore and found out that assurance, empathy and tangibles are the most important to customers' evaluation of service quality, and thus, may have a positive influence on customer satisfaction.

Musili (2009) studied the perceived quality of passenger services provided by the rift valley railway consortium and found out that courtesy and friendliness of staff, security and driving expertise are the most important dimensions to the customers. He further noted that the general performance was poor with 37.5% of respondents registering disappointment with the service.

Krishna (2010) established that customers have the highest expectations on promptness of service, accuracy of transactions and security issues. The researcher advised managers to prioritize on attention to details and promptness in addressing customer complaints. The researcher noted that customers' expectations and

perceptions are subjective and the findings can only be generalized to a pre-defined market and economic scenarios.

1.1.2 Customer Satisfaction

Kotler (2006) found out that customer satisfaction as the level of a person's felt state resulting from comparing a product's perceived performance or outcome in violation to his/her own expectations. The study defines customer satisfaction as the degree of perceived quality that meets customers' expectation. In quality management context, customer satisfaction is often defined as result of comparison between what one customer expects about services provided by a service provider and what one customer receives actual services by a service provider (Caruana , 2010). If the services provided by an organization meet a customer's needs, this may lead to higher customer satisfaction (Walker, 2006)

Moura (2011) stated that customer satisfaction is a complex construct as it has been approached differently. As expressed by Levesque and McDougall, (1996), satisfaction is conceptualized as an overall, customer attitude towards a service provider. Also customer satisfaction has been described as an effective response, focused on product performance compared to some repurchase standard during or after consumption (Halstead, 2001). This was reechoed by Fornell (1992) when he identified satisfaction as an overall evaluation based on the total purchase and consumption experience focused on the perceived service performance compared with repurchase expectations over time.

Valerie and Bitner (2013) observed that customer satisfaction is influenced by a host of issues such as product and service features, customer emotions, perception of equity and fairness and other customers, family members, friends and co-workers.

1.1.3 Safaricom M-Pesa Services

M-Pesa is a money transfer system operated by Safaricom, Kenya's largest cellular phone provider. M-Pesa allows users to exchange cash for "e-float" on their phones, to send e-float to other cellular phone users, and to exchange e-float back into cash. The story of the growth of mobile telephones in Africa is one of a tectonic and unexpected change in communications technology. From virtually unconnected in the 1990's, over 60 percent of Africans now have mobile phone coverage, and there are now over ten times as many mobile phones as landline phones in use (Aker & Mbiti, 2010). Even with the story of mobile phones' growth as a background, the growth of M-Pesa is startling. Within eight months of its inception in March 2007, over 1.1 million Kenyans had registered to use M-Pesa, and over US\$87 million had been transferred over the system (Safaricom, 2007). By September 2009, over 8.5 million Kenyans had registered to use the service and US\$3.7 billion (equivalent to 10 percent of Kenya's GDP) had been transferred over the system since inception (Safaricom, 2007). This explosive growth was also mirrored in the growth of M-Pesa agents (or service locations), which grew to over 18,000 locations by April 2010, from a base of approximately 450 in mid-2007 (Vaughan, 2007). By contrast, Kenya has only 491 bank branches, 500 post bank branches, and 352 ATMs (Mas & Ng'weno, 2009). While the mobile telephone is within sight of becoming a mature business, e-money services like M-Pesa are still in their early days and are continually evolving in response to competitive pressures and customer needs. Despite all the attention M-Pesa has received, there is little quantitative evidence on service quality and customer satisfaction.

1.2 Research Problem

The deregulation, competition and advancement in information communications technology seems to be exerting pressure on managers to demonstrate customer-focused and continuous service improvement than before, as a way to ensure customer satisfaction and brand supremacy (Walker, 2006). Service quality has been found in the literature to be a competitive tool for many companies. This is even much more pronounced in today's highly globalized, industrialized and competitive markets. The growth and survival of companies depend on their customers (Safaricom, 2007).

The prosperity and growth of M-Pesa depends to a large extent on the ability of Safaricom to provide a service that satisfies customers. Customer satisfaction is vital for ensuring high rate of adoption and continuous use of M-Pesa services among the subscribers. Apart from Safaricom expanding the coverage of their network, they need also to look on interest rate charged to customers who are sending money through the M-Pesa platform. In order for customer to be satisfied with the use of mobile money transfer services, the matter of service quality come into consideration by viewing if associated factor with mobile money services to satisfy users both sender and receiver are being put in place (Safaricom, 2007).

Customers and management of Safaricom Ltd rely on the M-pesa facility to deliver on numerous activities. The challenges of providing M-pesa on such a service are equally daunting for Safaricom. A number of critical issues and risks that have been reviewed include: liquidity management, settlement risks, the reliability of the system, the registration of users, system audit trail, anti-money laundering measures and consumer protection issues that could compromise the safety, efficiency, integrity and effectiveness of the M-Pesa system. These risks have been mitigated through a

number of measures which the Central Bank and the Communications Authority of Kenya (CAK) helps in monitoring regularly. Agent liquidity is one of the most fundamental challenges M-pesa face. In order to be effective, M-pesa agents have to have a fine-tuned understanding of their market, including an ability to predict when customers will come and what types and volumes of transactions they will want to perform. System delays on M-pesa services are a common problem affecting the effectiveness of the service. This forces consumers to wait longer to be able to operate their accounts. Lack of enough float by agents in various outlets, few agents in rural areas which can be termed as low staffing, mainly caused by low levels of economic activities in those areas, the ceiling on the maximum account balance (currently standing at Kenya shillings, 100000 and a maximum transfer per day of Kenya shillings 140000, are the major challenges facing the Mpesa service, (www.mpesa.co.ke).

Several studies have been carried out in the developed countries regarding customer satisfaction and prescriptions. Nimako (2012) studied service quality dimension in Ghana's mobile industry. The findings indicate that Technical Quality is the most important service quality dimension to the customers, followed by Empathy, Reliability, Economy, Responsiveness, Image, and Assurance. Krishna (2010) after studying service quality and its effect on customer satisfaction in retailing in India concluded that customers have the highest expectations on promptness of service, accuracy of transactions and security issues. Locally, Manyi (2011) while studying the relationship between customer satisfaction and service quality found out that all the five dimensions of service quality were significantly related to customer satisfaction. Akaka (2012) studied service quality dimensions and customer satisfaction in Kenyan telecommunications industry and established that all the five

service quality dimensions had positive impact on customer satisfaction. Maina (2010) focused on, perceived quality and value preposition but failed to study the response of consumers while utilizing the service. Gitari (2010) focused on the challenges organization face in meeting consumer expectations but there was no documented research data available to show people's response to the new facility of accessing their money through their mobile hand-sets beyond normal working hours, easily and almost everywhere.

The above study still focused on perceived service quality and value preposition but failed to focus on consumer perception on a certain product offered by mobile company i.e. M-Pesa since its introduction in March, (2007). Considering these studies critically, none of them has tried to address the effects of service quality on customer satisfaction on Safaricom M-Pesa services. Therefore, this proposal seeks to bridge this gap by answering the questions: what is the effect of service quality for Safaricom M-Pesa services on customer satisfaction? Which challenges affects M-pesa services?

1.3 Research Objectives

The objectives of the study were:-

- i. To determine the relationship between service quality and customer satisfaction among Safaricom M-Pesa services customers.
- ii. To establish the challenges affecting M-pesa services operations

1.4 Value of the Study

The finding of this study would be useful to the policy makers and the Kenya communications Authority since it would help them to know the whether M-pesa services are satisfactory to the customers and the policies to put in place to help the customers get better services from the service providers.

The finding of this study would be useful for managers of Safaricom limited M-Pesa services in developing strategies that deliver more value to customers. It would assist the manager in making focused investment decisions geared towards improving the quality of customer service without reducing the value of services since improving quality ordinarily translates into higher cost of service.

The focus on demographic characteristics would assist organizations in market segmentation and targeting in Kenya's mobile telephony industry and related sectors so that the needs of customers are fully personalized to enhance customer retention and loyalty.

The study is also expected to contribute to the body of knowledge in customer service in this region since it will embrace all the dimensions of service quality. Moreover, the study can be replicated in other service sectors in regions with the similar demographic and cultural characteristics.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter introduces the review of the contextual and theoretical literatures relating to service quality and customer satisfaction with the aim to document the critical point knowledge; it further discusses the relationship between service quality and customer satisfaction and attempt made in this line with other scholars.

2.2 Measurement of Service Quality

Measuring service quality is an important aspect in the quality improvement process because it provides feedback about the type of service provided and the extent to which it meets customers' needs (Mwangi, 2011). A number of scholars have carried out several studies with an aim of developing models of measurement that would help service organizations determine the extent to which their services are effective.

2.2.1 Models for specific service settings

Different researchers have developed alternative measures of service quality for specific service settings. Knutson (1991) developed LODGSERV model to measure service quality in the lodging industry. The model is based on the five original SERVQUAL dimensions and contains 26 items. Another model, DIVEPERF, was developed by O'Neill et al., (2010) to assess perceptions of diving services. The model consists of five SERVQUAL dimensions and 27 items. All of these models represent modifications of the SERVQUAL instrument, aiming to improve its original methodology.

2.2.2 SERVQUAL Model

The model was developed by Parasuraman, Zeithaml & Berry (1995) as a tool of identifying service quality shortfall. This model is based on the premise that

customers can evaluate a firm's service quality by comparing their perception of its service with their own expectations. The model measures customer expectations and perceptions of service quality. The quality gap (Q) is calculated by subtracting the expectation (E) from the perception (P) value i.e. P-E=Q. Summation of all the Q values provide an overall quality rating which is an indicator of relative importance of the service quality dimensions that influence customers' overall quality perceptions. SERVQUAL is a standardized instrument that has been applied across a broad spectrum of service industries.

The SERVQUAL scale (Questionnaire) has two sections: one to measure customer expectations in relation to a service quality and the other to measure perception regarding the organization whose service is being assessed. SERVQUAL comprises a 22 items (Likert-type) with five dimensions of reliability, responsiveness, assurance, empathy and tangibles. From the 5 dimensions, 22 statements are derived, each measuring both the expectations and perceptions of customers towards the quality of services of the organization being assessed. The customers are required to rate, on a 5-point Likert scale, the degree to which they feel the service provider should deliver for an excellent service. Another identical scale is provided adjacent to the first one in which the respondents rate the actual quality of service delivered to them by an organization based on their perceptions. For each statement, the difference between perception and expectation is calculated; the averages of the obtained score being the SERVQUAL score (Parasuraman, 2008).

2.2.3 Gap model

Parasuraman (1985) developed a service quality gap model, where he defined service quality as a function of the difference between the expectation and performance along quality dimensions. The various gap visualized in the model are:

Gap 1: Consumer expectation – management perception gap; the difference between customer's expectation and management perception of those expectations i.e. not knowing what consumers expect

Gap 2: Management perception – service quality specification gap; Difference between management perception of consumers' expectations and service quality specifications i.e. improver service quality standards.

Gap 3: Service quality specifications – service delivery gap; Difference between service quality specifications and service actually delivered i.e. the service performance gap

Gap 4: Service Delivery – External communication Gap; Difference between service delivery and communications to consumers about service delivery ie whether promises match delivery.

Gap 5: Expected Service – Perceived Service Gap. Difference between consumer's expectation and perceived service. This gap depends on size and direction of the four gaps associated with the delivery of the service quality on the marketer's side

2.2.4 Performance Only Model (SERVPERF)

SERVPERF was developed by Caruana (2010). in their empirical work which involved the modification of SERVQUAL with respect to conceptualization and measurement of service quality. They developed a performance based measure of service quality called "SERVPERF" illustrating that service quality is a form of consumer attitude. SERVPERF measures service quality based solely on performance. He argued that performance is the measure that best explains customers' perceptions of service quality, so expectations should not be included in the service quality measurement instrument. SERVPERF looks at the attributes of the 5

dimensions, worded the same as SERVQUAL but does not repeat the set of statements as expectation items. SERVPERF therefore comprises a 22 items (Likert-type) with five dimensions of reliability, responsiveness, assurance, empathy and tangibles. 22 statements are then derived to measure the perceptions of customers towards the quality of services of the organization being assessed.

2.3 Service Quality

The definition of quality may vary from person to person and from situation to situation. The definitions of service quality vary only in wording but typically involve determining whether perceived service delivery meets, exceeds or fails to meet customer expectations (Berry & Parasuraman, 1995). Safaricom provides two forms of agent training. The first is the initial training session when a new agent is brought on board. This session is in depth and covers all aspects of the operation of the platform and the requirements for AML and KYC compliance. The team that manages Mpesa has a dedicated department to provide current training materials and to facilitate training sessions. The second form of training happens in the field and is provided by an external agency that has been hired by Safaricom to travel around the country and provide refresher sessions for master and retail agents.

Master agency head office and retail agents are provided with different training material that are specific to the role they are required to fill. Head office staff is required to attend a one day training program at the Safaricom offices. The training emphasizes the need for a high quality of service that meets customer requirements. The client is trained on the need to provide the service with high quality and understanding and to meet a certain minimum set of staffing requirements in order to ensure a uniform level of service across the board (Krogh, 1999). The distribution network consists of authorized agents who will perform client-facing functions such

as handling of cash and management of documents. The most successful providers of money transfer services are those with relatively large national and regional networks of branches or outlets which are already in place for their core businesses. The money transfer service is an add-on product which benefits from this network at marginal additional cost and is an expensive venture for organizations in trying to network further to reach customers (Porter, 1980).

2.4 Determinants of Service Quality

When purchasing goods, the customer employs many tangible aspects to judge quality; style, hardness, color, label, feel and package. However, when purchasing services fewer tangible aspects exist. In the absence of tangible evidence on which to evaluate quality, customers must depend on other aspects. Service quality dimensions are the aspects/characteristics which customers use to evaluate service quality. A research by (Parasuraman, 2009) identified ten determinants that influence customers' perceptions of service quality as reliability, responsiveness, tangibility, communication, credibility, security, competence, courtesy, understanding and access. The description of the ten determinants of service quality is given in Table 2.1.

Table 2. 1 Determinants of service quality

Dimension	Description	
Tangibility	Physical evidence of service (facilities, tools, equipment's	
Responsiveness	Willingness or readiness to provide service, timeliness	
Reliability	Getting it right first time, honoring promises, dependability.	
Communication	Keeping customers informed in a language that they can understand	
Credibility	Honest, trustworthiness, having customer's best interest at heart	
Security	Physical and financial; confidentiality	
Competence	Possession of the skills and knowledge required to perform the service	
Courtesy	Politeness, respect, friendliness, clean and neat appearance.	
Understanding	Knowing the customer, his needs and requirements.	
Access	Ease of approach and contact	

Source: Adapted from Parasuraman, Zeithml and Berry (2002)

Berry (2002) found a high degree of correlation between, on the one hand, communication, competence, courtesy, credibility and security, and, on the other, between access and understanding; and so they created the two broad dimensions of assurance and empathy, that is, five consolidated dimensions:-reliability, responsiveness, tangibles, assurance and empathy (Parasuraman, 2009). These dimensions were then used as a basis for the development of a service quality measurement instrument; SERVQUAL model (Zeithamlet, 2011).

Table 2.2 demonstrates the five service dimensions customers care about.

Table 2. 2 Five service dimensions

Dimension	Description
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	Knowledge and courtesy of employees and their ability to inspire trust and confidence
Empathy	Caring, individualized attention the firm provides its customers.

Source: Adapted from Parasuraman, Zeithml and Berry (2010)

Johnston & Parasuraman (2008) found out that service quality determinants using management perceptions of service and suggested a refined list of 12 determinants of service quality as access, appearance/aesthetics, availability, cleanliness/tidiness, comfort, communication, competence, courtesy, friendliness, reliability, responsiveness and security. The limitation of their work lay in the fact that the empirical investigation drew only on management perception of service quality unlike who used customer data in order to identify the determinants of service quality. Included the customer's perspective to the 12 service quality dimensions and

identified five additional dimensions to create 17 dimensions as access, appearance/aesthetics, availability, cleanliness/tidiness, comfort, communication, competence, courtesy, friendliness, reliability, responsiveness, security care, commitment, attentiveness/helpfulness, functionality and integrity (Johnston, 2012).

Gronroos (2013) identified three dimensions of service quality as technical quality of the service ("what" service is provided), which can be assessed by the customer like the technical dimensions of a product, functional quality which represent how the service is provided and the image of the service provider which moderates both technical and functional quality to arrive at a perceived level of service. He argued that functional quality is an important dimension of perceived service than technical quality because service quality lies in improving the functional quality of a firm's service process by managing the staff-customer interaction and transactional relationships. He observed that a favorable image is an asset for any firm because it has an impact on customer perception of the operation of the firm.

These authors and many others who have postulated service quality dimensions appear to have based their work. For the purpose of this study, therefore, the researcher dimensions of service quality i.e. Reliability, Responsiveness, Access, Empathy and Tangibles. The five dimensions of service quality developed are the most acknowledged and applied in diversity of service industries (Nathan. and Saghier, 2013).

2.5 Challenges Affecting M-Pesa Services

Liquidity management is a significant concern in the mobile money model. When customers are unable to make transactions due to agents' lack of liquidity, the service is less useful and this can lead to a deterioration of trust and reliability in the entire

system (Creswell, 2003). One reason cited for the use of buses and courier companies to transport money even when they did not operate as money transfer companies was a lack of capacity on the other modes of transfer to manage cash. Together with payin and pay-out points as necessary infrastructure to effective money transfer, timing for money transfers are must be balanced for a particular service location, and sufficient floats and cash at hand are essential to provide an efficient and reliable service. In order to ensure sufficient cash availability at agent end points, cash will need to be transferred to these locations. If an MNO decides to partner with a bank and use full-service model then the bank will provide also cash transfers at wholesale level (Valdecantos, 2009). The platform that manages the client accounts, transaction logging and settlement may or may not be part of the existing IN platform of the operator.

Financial operations in many countries are subject to regulation by the government and the central bank. A regulatory audit must be performed in order to establish the suitability in Kenya with regard to M-pesa holding deposits and exchanging monies. The outcome of this audit will affect the business model and profitability of the service. Efficient and reliable communications and computer systems, including MIS, are essential in operating M-pesa service. This in part because speed and reliability are key product features for entering the market. Information technology can provide a competitive advantage particularly in the area of operations management. Specific IT applications have been seen in forecasting, procurement, supply chain management, and distribution, as well as in managing the complex transactions upon which the M-pesa platform operates. However, technology also has its limitations. Beckman & Rosenfield (2008) have identified the challenges of implementing large-scale system changes, and the rigidity that IT can create for business processes.

2.6 Empirical Studies on Service Quality and Customer Satisfaction

Different models have been advanced concerning service quality in the service organizations with an aim of establishing the relationship between service quality and customer satisfaction. From the earlier research work (Parasuraman, 1995). Five determinants of service quality were identified as reliability, responsiveness, assurance empathy and tangibles. Ten studies carried out using the Servqual questionnaire revealed that Reliability is the most critical dimension when measuring the relative importance of the five dimensions followed by Responsiveness, Assurance, Empathy and finally Tangibles.

Stromgren (2007) studied the factors influencing service quality in the hotel industry in Peru and established that the customers were more interested on the dimensions of reliability exterior, tangibles and assurance. The best predictor of overall service quality was identified as the dimension of reliability. The researcher however noted that a different context would give different results. This is due to different social demographic variables such as culture and religion which might impact on customer expectations. Harr (2008) on the other hand studied service dimensions that leads to higher levels of customer satisfaction in restaurants in Singapore and found out that assurance, empathy and tangibles are the most important to customers' evaluation of service quality, and thus, may have a positive influence on customer satisfaction.

Musili (2009) studied the perceived quality of passenger services provided by the rift valley railway consortium and found out that courtesy and friendliness of staff, security and driving expertise are the most important dimensions to the customers. He further noted that the general performance was poor with 37.5% of respondents registering disappointment with the service.

A study by Krishna (2010) established that customers have the highest expectations on promptness of service, accuracy of transactions and security issues. The researcher advised managers to prioritize on attention to details and promptness in addressing customer complaints. The researcher noted that customers' expectations and perceptions are subjective and the findings can only be generalized to a pre-defined market and economic scenarios.

Kiange (2011) investigated managers' perception of customer expectations in hotel industry in Kenya. The results showed that assurance, empathy and tangibles were regarded as the most important factors affecting service quality. This research was however limited to managers' perception of customer expectations and failed to take into account customer's expectations. The result of the study therefore, does not represent the voice of the customer. More study therefore needs to be carried out to establish whether the manager's perception of customer expectations matches customers' expectations.

Kangogo (2013) studied effect of customer satisfaction on performance of the hotel industry in the western tourism circuit of Kenya. The customers reported to be satisfied with reservation, reception, food quality and beverage quality. Costs, security and hotel amenities on the other hand registered fair ratings while provision of personalized services registered dissatisfaction. The researcher also noted that customer satisfaction has positive impacts on market share, service quality, hotel image, sales turnover, and that lack of customer satisfaction results in customer and employee turnover.

Turban (2002) defined customer satisfaction as "the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual

performance of the product or service as perceived after its consumption". Woodruff & Gardial, (1999) defined customer satisfaction as "the evaluative reaction to how particular product performed when compared to how he or she anticipated that it would perform". Kotler (2006) on the other hand defined Customer satisfaction as the extent to which a product's perceived performance matches a buyer's expectations. Failure to meet these expectations leads to dissatisfaction. These definitions consider satisfaction as an overall post-purchase evaluation by the customer.

The customer service a brand offers and the fairness of the price it charges determines the level of satisfaction among its customers than any other measures. Parasuraman, (2009) identified 22 factors that influences customer satisfaction as physical facilities, equipment, appearance of hotel employees, communication materials, timeliness of service, problem solving interest, efficient service, consistency of service, accuracy of records, problem resolution time, prompt attention to guest's requests, willingness to help, flexibility of employees, behavior of employees, safety and security, courtesy of employees, competence of employees, individualized attention, convenient operating hours, personal attention from employees, concern towards guest interest and understanding guest specific needs.

Lawrence (2006) studied customer satisfaction among four star hotels in Spain, Germany and England. The results revealed that many customers were satisfied with the ability of staff to speak a foreign language, friendliness of staff, and condition of premise, room comfort and the ease of obtaining information. Areas of dissatisfaction included respect shown by staff, ease of contacting a staff member, extra personal attention, multilingual magazines, international newspaper and TV programs in own language. On overall, customer satisfaction was high in all the hotels.

Christine (2009) conducted a customer satisfaction survey in hotels in Cape Town. The research identified areas of satisfaction as, wellness/spa experience, guest entertainment, maintenance of grounds and swimming pool experience. Areas of dissatisfaction were identified as delivery of luggage, switch board and message service, attention to special requests and dinner experience.

Similarly, Mburu (2013) studied the determinants of customer satisfaction in the Kenyan banking industry. The customers reported to be satisfied with the accuracy and timeliness of bank statements and staff understanding of customer needs. Entertainment & refreshment to customers, adequacy of bank's networks and readiness of bank staff to respond to customer requests registered elements of dissatisfaction. He further noted that customer satisfaction can lead to higher rates of retention of the Kenyan bank customers.

Kangogo (2013) studied effect of customer satisfaction on performance of the hotel industry in the western tourism circuit of Kenya. The customers reported to be satisfied with reservation, reception, food quality and beverage quality. Costs, security and hotel amenities on the other hand registered fair ratings while provision of personalized services registered dissatisfaction. The researcher also noted that customer satisfaction has positive impacts on market share, service quality, hotel image, sales turnover, and that lack of customer satisfaction results in customer and employee turnover.

Some researchers argue that service quality is an antecedent of customer satisfaction (Churchill & Suprenant, 1982), while others argue that satisfaction represents an antecedent of service quality (Carman, 1990). However, the majority of recent publications believe that service quality is an antecedent to customer satisfaction

(Zeithaml, 2008). It is generally accepted that a positive relationship exists between service quality and customer satisfaction (Bei & Chiao, 2001). Rowley, (1998) argues that service quality is an attitude related to, but not the same, as satisfaction. In their study, proposed that when perceived service quality is high, then it will lead to increase in customer satisfaction (Suprenant, 1982).

After conducting a study to establish the relationship between customer satisfaction and service quality, Janet (2011) concluded that a significant relationship between the two existed. All the dimensions of service quality were identified as the key factors in influencing customer satisfaction. The outcome of the study suggested that to improve customer satisfaction, organizations need to improve the dimensions of service quality.

Thus, studied service quality dimensions and customer satisfaction in Kenyan telecommunications industry and established that all the five service quality dimensions had positive impact on customer satisfaction (Akaka, 2012). However, reliability dimension was considered to be having the highest impact while tangibility was considered to have the least impact. He suggested that all service quality dimensions should be improved and allocated more resources since they positively affect customer satisfaction.

In a study carried out by Musyoka (2013) to establish whether there exists any relationship between service quality and library user satisfaction among universities in Kenya, it was established that service quality accounts for 73.9% of user satisfaction. He noted further that reliability dimension contributes most towards user satisfaction while empathy dimension contributes the least.

2.7 Summary of Literature Review

A review of literature on service quality indicates that the relative importance of the dimensions of service quality is dependent on the industry in which service quality is being measured. The review also highlights the need to examine the extent to which the services provided meets customers' needs. In the service industry, a review of the existing literature has shown that customer satisfaction is highly depended on service quality (Janet, 2011).

2.8 Conceptual Framework

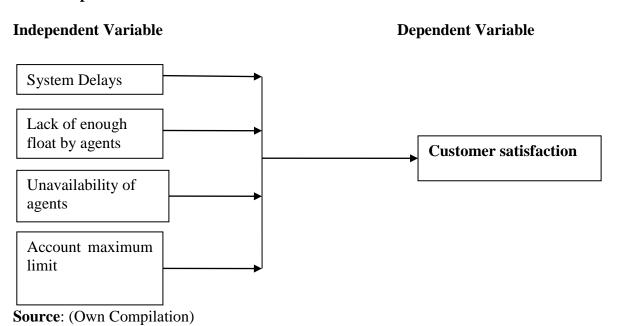


Figure 2. 1 Conceptual framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section outlined; research design target population, data collection methods and techniques and data analysis method.

3.2 Research Design

This study adopted a case study method to establish the relationship between service quality and customer satisfaction with a special focus on Safaricom M-Pesa services. Case study design is appropriate when detailed analysis of a single unit of study is required. The researcher settled on this method to enable intensive study of social units serves as a mirror for reflection and provides change data not yet available quantitatively (Kothari, 2004).

3.3 Population

The study targeted 359 M-Pesa outlets within the Central Business District (Safaricom M-Pesa Agent List, March, 2011).

3.4 Sampling

Mugenda and Mugenda (2009) posed that a good representative of sample size should be at least 10% of the target population. Basing on this fact and considering the large concentration of M-Pesa users in Nairobi Central Business District agency network some thirty six agents (10% of 359) were selected using systematic random sampling from the list of agents attached as Appendix II for inclusion in the study. Three customers were randomly picked from each outlet. This was done to avoid personal influence in the selection of the individuals to be interviewed.

3.5 Data Collection

Primary data was collected from respondents by the use of questionnaires as the main instruments of data collection. The researcher distributed a total of 108 (three customers in the sampled 36 outlets) self-administered questionnaires to the selected agents for data collection from the M-Pesa customers using "Drop and Pick Later" Method, where the self-administered questionnaires were dropped and picked later for analysis. The questionnaire designed in this study comprised of three sections. The first part was designed to determine fundamental issues including the demographic characteristics of the respondent; the second part consisted of questions on service expectation while the third part consisted of questions on service perception.

3.6 Data Analysis

The data collected was edited to identify and remove errors made by respondents. Edited data was then coded in order to translate responses into specific categories. Code numbers were assigned to each answer of survey question and from this a coding list or frame was be obtained. Coding is expected to organize and reduce research data into manageable summaries. Descriptive statistics such as means, percentages and frequency distributions were used to describe the responses as it is a better method of presenting the findings of the study. Presentation of the results was done on tables, pie charts and bar graphs. The study also employed inferential statistics to establish the relationship between quality service and customer satisfaction on Safaricom M-Pesa services. Specifically, the study used Spearman correlation to establish this relationship.

The following regression equation will be used;

$$Y = \beta_{0+} \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_2 X_4 + e$$

Where Y= Customer satisfaction

X₁=System Delays

 X_2 = Lack of enough float by agents

 X_3 = Unavailability of enough agents

 X_4 = Account minimum and maximum limit

e= Error

 βo = The constant which is the value of dependent variable when all the independent variables are 0.

 B_i = The regression coefficient or change induced by X_1 , X_2 , X_3 and X_4 on Y. It determines how much each (X_1, X_2, X_3) contributes to Y (Customer Satisfaction)

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This study was carried out to establish the service quality and customer satisfaction in case of Safaricom M-pesa services. Data was collected from the M-pesa users through duly filling the questionnaires in the M-pesa agents. The findings are presented as follows;

4.2 Response Rate

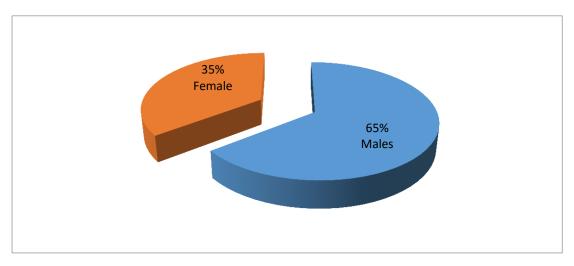
A total of 108 questionnaires were distributed to the respondents. Out of the 108 questionnaires, 96 were returned to the researcher. This represents a response rate of 88.9%. This percentage was considered sufficient for this study. Mugenda and Mugenda (2003) stipulated that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. The high response rate was achieved due to face to face administering of the questionnaires by the researcher and frequent phone calls reminding the M-Pesa agents to submit the questionnaires to the customers and enquiring on the progress.

4.3 Background Information of the respondents

4.3.1 Gender of the respondents

The study sought to establish the gender of the respondents. The findings are presented in the figure below.

Figure 4.1 Gender of the respondents

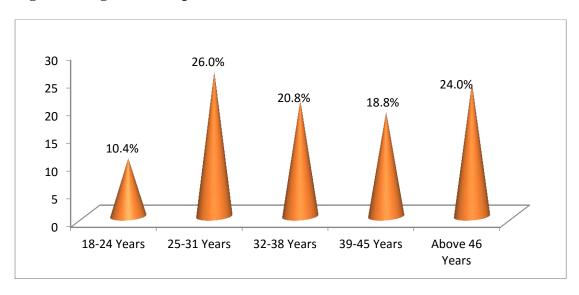


According to the study findings, majority of respondents (65%) were males while 35% were females. The study deduced that a relatively higher number of males use the M-Pesa services compared to their female counterparts.

4.3.2 Age of the respondents

The study also sought to establish the age categories of the respondents. The findings are illustrated in the below figure.

Figure 4.2 Age of the respondents



Source: Research Data (2015)

According to the study findings, majority (26.0%) of respondents were in the age bracket of 25-31 years, 24% were above 45 years of age and 20.8 % and 18.8% of the respondents were in the age brackets of 32-38 years and 39-45 years while10.4% were in the age category of 18-24 years. This implies that majority of the M-Pesa services users were in the age brackets of 25-31 years.

4.3.3 Level of education

The study sought to establish the highest levels of education of the respondents. The study findings are illustrated in the below figure.

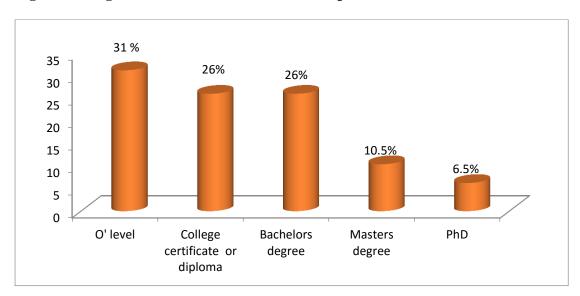


Figure 4.3 Highest Level of education of the respondents

Source: Research Data (2015)

According to the study findings, most (31%) of the respondents had '0 level.as their highest level of education, 26% had college certificates or diplomas and bachelor's degree were respectively while. 10.5% and 6.5% had Master's degree and PhD degrees as their highest level of education respectively. This implies that majority of the M-Pesa service users had 'O' level as their highest levels of education.

4.3.4 Frequency use of M-Pesa

The study sought to establish how often the respondents used the M-pesa services. The study findings were as indicated in the figure below.

67%

70
60
50
40
30
20
10
Very often

Often

Rarely

Figure 4.4 Frequency use of M-Pesa

Source: Research Data (2015)

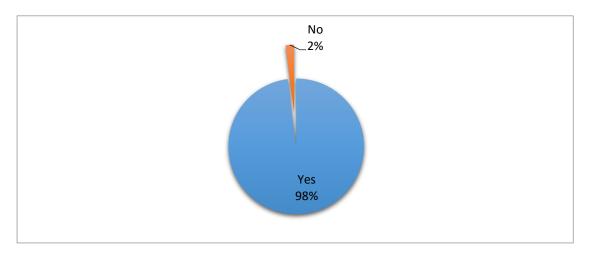
According to the study findings, majority of the respondents (67%) used the M-Pesa services very often and 31% used the service often while 2% of the respondents indicated that they rarely used the M-Pesa services. The study deduced that majority of the customers used the M-Pesa services very often.

4.4 Challenges Affecting M-Pesa Services

4.4.1 Challenges faced by M-Pesa customers

The study sought to establish whether the respondents faced any challenges when using money transfer service. The findings are presented in the figure below.

Figure 4.5 Challenges faced by M-Pesa customers

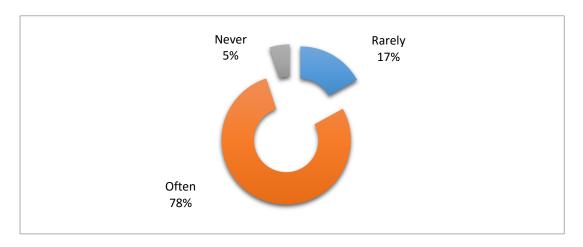


From the study findings almost all (98%) of the respondents indicated that they faced challenges when using money transfer services.

4.4.2 How often they faced the challenges

The study further sought to establish how often the M-Pesa users faced the challenges during their use of the m-pesa services. The findings are presented in the figure below.

Figure 4.6 How often they faced the challenges



Source: Research Data (2015)

From the study findings, majority (78%) of respondents indicated that they often faced the challenges during the use of M-Pesa services, 17% indicated that they rarely experienced challenges while 5% indicated that they never faced any challenge in the use of M-Pesa services. The study deduced that M-Pesa service users faced no challenges during the money transfer practices.

4.4.3 Challenges faced by m-pesa users

The study also sought to determine the extent to which the respondents faced the following challenges when using M-Pesa services. The responses were rated on a five point Likert scale where: 5= to a very great extent, 4= great extent, 3- Moderate extent, 2= to a little extent and 1 = to a very little extent. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

Table 4.1 Challenges faced by m-pesa users

challenges faced by M-Pesa Customers	Mean	Std. Dev
System Delays	3.7	0.48
Lack of float by agents	3.2	0.65
Unavailability of enough agents	4.1	0.52
Account maximum limit	3.4	1.03
Others	4.1	1.23

Source: Research Data (2015)

From the study findings in the table above, majority of the respondents agreed to a very great extent that they faced the challenge of unavailability of enough agents and other challenges as indicated by a mean score of 4.1. Most of the respondents further indicated that they faced the challenges of system delays; account minimum and

maximum limit and lack of enough float by agents to a moderate extent as indicated by the mean scores of 3.7, 3.4 and 3.2 respectively.

4.4.4. How respondents go about the challenges they face

The study sought to determine how the respondents went about the challenges they faced when using money transfer services. From the study findings majority of the respondents were found to call customer care as indicated by 62.5%, other respondents were found to wait until it resumed, report to the nearest m-pesa agent while others took no action as indicated by 14.5%, 21% and 2% respectively as illustrated in the figure below.

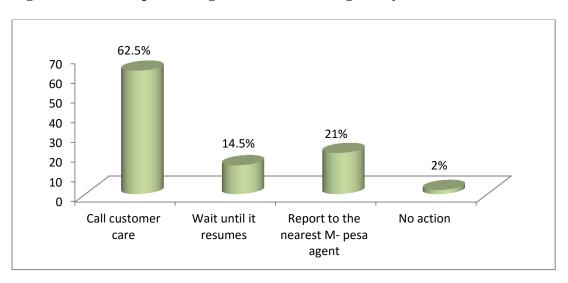


Figure 4.7 How respondents go about the challenges they face

Source: Research Data (2015)

The study deduced that customer care services are the mostly visited in the case of money transfer challenge.

4.4.5 Duration it takes for the challenge to be resolved

The study sought to determine the duration it took to resolve the challenges as faced by money transfer service user. The findings are presented in the figure below

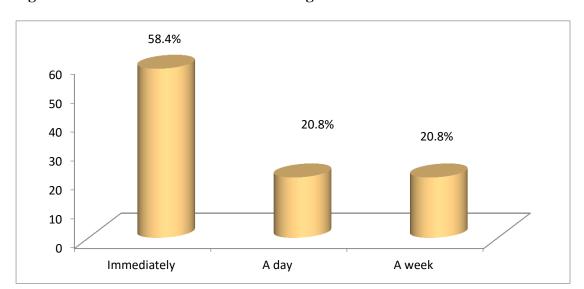


Figure 4.8 Duration it takes for the challenge to be resolved

According to the study findings, the challenges faced by majority of respondents were resolved immediately they occurred as indicated by the highest percentage (58%). The challenges faced by 21% of the respondents were resolved after a week and after a day while none of the challenges was left unresolved. The study deduced that most of the challenges faced during the mobile money transactions were solved immediately.

4.5 Customer satisfaction

4.5.1 Rating of m-pesa services

The study sought to establish how the respondents rated the M-pesa services. The findings are presented in the figure below.

47% 50 45 31% 40 35 30 25 12.5% 20 9.5% 15 10 5 Low Moderate High Very high

Figure 4.9 Rating of m-pesa services

According to the study findings, majority of the respondents rated the M-pesa services high (47%). 31.5% of the respondents rated the M-pesa services very high. On the other hand, the services were rated: moderately, low and very low as indicated by 12.5% and 9% respectively. The study deduced that most of the respondents were satisfied with the services as indicated by the majority of the respondents whose rating was high and very high.

4.4.2 Ways the respondents used M-pesa money transfer service.

The study also sought to establish the various ways the respondents used M-pesa money transfer service. The responses were rated on a four-point Likert scale where: 4= to a very often, 3= often, 2= hardly and 1 = never. The mean and standard deviations were generated from SPSS and are as illustrated in table below:

Table 4.2 Ways the respondents used M-pesa money transfer service.

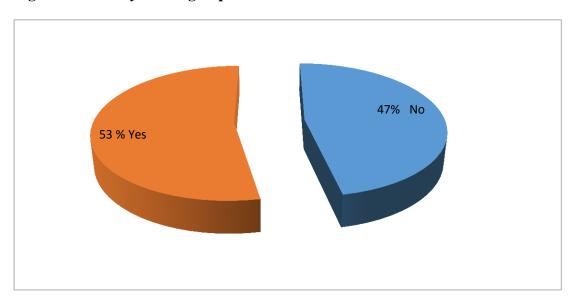
Ways of using M-pesa Service	Mean	Std. Dev
To receive money	4.4	1.29
To send money	4.3	1.16
To buy own airtime	4.2	1.23
To buy airtime for another user	4.2	1.12
To keep savings	4.1	1.22
Emergency transfers	3.6	1.11
To pay bill	4.2	1.23

According to the study findings, it was established that most of the respondents used the m-pesa services to receive money, to send money, to buy airtime, to buy airtime for another user, to pay bill and to keep savings very often as indicated by the mean scores of 4.4, 4.3, 4.2, 4.2, 4.24.2 and 4.1 respectively. On the other hand, the respondents often used the m-pesa services for emergency transfers as indicated by a mean score of 3.6.The study deduced that m-pesa- services are used in a number of ways including receiving money, sending money, buying airtime, buying airtime for another use and paying bill as well as keeping savings.

4.4.3 Safety in using m-pesa

The study also sought to establish whether it was safe to use M-pesa compared to other modes of money transfers. The study findings are illustrated in the figure below:

Figure 4.10 Safety in using m-pesa



According to the study findings, majority of the respondents (53%) indicated that it was safer to use M-pesa compared to other modes of money transfers while 47% indicated that it was not. The study deduced that it was safe to use m-pesa service transfer as opposed to other ways of money transfer.

4.4.4 Rating the safety of m-pesa transfer

The study further sought to find out the extent of safety while using M-pesa compared to other modes of money transfers. The findings were as indicated in the figure below.

47% 50 44% 45 40 35 30 25 20 15 9% 10 5 Moderate High Very high

Figure 4.11 Rating the safety of m-pesa transfer

According to the study findings, most of the respondents (47%) indicated that the safety of using M-Pesa platform was very high 44% indicated that it was high while 9% indicated that the safety of using M-Pesa platform was moderate.

4.4.5. Convenience in the use of m-pesa

The study also sought to establish whether it was more convenient to use M-Pesa compared to other modes of money transfer. From the study findings, all of the respondents indicated that it was easier to use M-Pesa as compared to other modes of money transfer. They gave the following explanations for their answers: it was easily accessible in terms of locations of the M-Pesa agents; they have low charges compared to other modes of money transfer and that M-Pesa transactions were time conscious.

4.5 Inferential Statistics

4.5.1 Regression Analysis

Further the researcher conducted a multiple regression analysis so as to analyze the service quality and customer satisfaction at Safaricom M-Pesa services. The researcher applied the statistical package for social sciences (SPSS V.21) to code, enter and compute the measurements of the multiple regressions for the study.

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (System Delays, Lack of enough float by agents, unavailability of enough agents and account minimum and maximum limit).

The four independent variables that were studied, explain that 83.4% of customer satisfaction with Safaricom M-Pesa services as represented by the adjusted R². This therefore means that other factors not studied in this research contribute 16.6% of customer satisfaction with Safaricom M-Pesa services. Therefore, further research should be conducted to investigate the other factors (16.6%) of customer satisfaction with Safaricom M-Pesa services.

 Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.913	0.834	0.751	0.4538

Source: Research Data (2015)

4.5.2 ANOVA

Table 4.4 ANOVA (Analysis of Variance)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.424	4	.208	3.23	.002ª
	Residual	5.375	103	.005		
	Total	6.799	107			

- a. Predictors: (Constant), System Delays, Lack of enough float by agents, unavailability of enough agents and account minimum and maximum limit
- b. Dependent Variable: customer satisfaction with Safaricom M-Pesa services

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. The "F" column provides a statistic for testing the hypothesis that all $\beta \neq 0$ against the null hypothesis that $\beta = 0$ (Weisberg, 2005). From the findings the significance value is .002 which is less that 0.05 thus the model is statistically significant in predicting how System Delays, Lack of enough float by agents, unavailability of enough agents and account minimum and maximum limit affect customer satisfaction with Safaricom M-Pesa services. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 2.21), this shows that the overall model was significant.

4.5.3 Regression Coefficients

Multiple regression analysis was conducted as to determine the relationship between customer satisfaction at Safaricom M-Pesa services and the four variables. As per the SPSS generated table 4.19, the equation

$$(y = \alpha + \beta 1 x 1 + \beta 2x 2 + \beta 3x 3 + \beta 4x 4 + \varepsilon)$$
 becomes:

$$Y = 1.308 + 0.558X_1 + 0.785X_2 + 0.620X_3 + 0.731X_4$$

The regression equation above has established that taking all factors into account (System Delays, Lack of enough float by agents, unavailability of enough agents and account minimum and maximum limit) constant at zero, customer satisfaction with Safaricom M-Pesa services will be 1.308. The findings presented also shows that taking all other independent variables at zero, a unit increase in System Delays will lead to a 0.558 increase in customer dissatisfaction with Safaricom M-Pesa services; a unit increase in Lack of enough float by agents will lead to a 0.731 increase in customer dissatisfaction with Safaricom M-Pesa services; a unit increase in te unavailability of enough agents will lead to a 0.785 increase in customer dissatisfaction with Safaricom M-Pesa services and a unit increase in account minimum and maximum limit will lead to a 0.620 increase in customer dissatisfaction with Safaricom M-Pesa services. This infers that System Delays contributes most to customer dissatisfaction with Safaricom M-Pesa services followed by Lack of enough float by agents then unavailability of enough agents and account minimum and maximum limit contributed the little to customer dissatisfaction with Safaricom M-Pesa services.

Table 4.5 Regression Coefficients

	Unstanda Coefficien		Standardized Coefficients		
		Std.			
Model	В	Error	Beta	t	Sig.
(Constant)	1.308	1.342		1.623	0.357
System Delays	0.558	0.310	0.172	4.342	.0276
Lack of float by agents	0.731	0.156	0.210	3.592	.0285
Unavailability of agents	0.785	0.322	0.097	3.542	.0202
Account maximum limit	0.620	0.285	0.148	3.458	.0249

At 5% level of significance and 95% confidence level lack of float by agents had a significance level of 0.0285; system delays had a significance level of 0.0276, account maximum limit had a 0.0249 significance level while unavailability of agents had a 0.0202 significant level. This implies that unavailability of agents was the most significant factor influencing customer satisfaction.

4.6 Discussions of the Findings

On the Challenges Affecting M-Pesa Services, the study established that M-pesa service customers the challenges solved immediately. This agrees with Beckman and Rosenfield (2008) who identified the challenges of implementing large-scale system changes, and the rigidity that IT can create for business processes. With regard to customer satisfaction, the study found that the M-pesa service customers were highly satisfied. Creswell (2003) also noted that when customers are unable to make transactions due to agents' lack of liquidity, the service is less useful and this can lead to a deterioration of trust and reliability in the entire system. The study found that most of the M-pesa service customers found it safe to use M-pesa transfer services including receiving money, sending money and buying airtime for another user and

for self, emergency transfer, paying bills as well as savings. Ashford and Beamish (2008) identified the nature of physical stimuli tends to influence the degree of perception for example, an ordered array of objects on display or a sudden loud noise are almost sure to attract attention. The senses are stimulated by an expected or unusual objects or events. In a fairly predictable routine of everyday life, an individual tend to seek variety and change.

The study also established that the M-pesa service customers found it very convenient to use M-pesa money transfer as opposed to services by other companies. The main reason why the M-pesa service user preferred M-pesa transfer is its timely transactions and accessibility. Lin (2007) pointed out that goods service quality for instance will indeed satisfy the diversified demand of the customers which means if customer satisfaction in the overall assessment of product and service provider is higher than the customer service expectation; then customer will be very dissatisfied. Furthermore the study found that it was easier to use the M-pesa service as opposed to banking services whereby several rules underlie the individuals' wishes. High charges of money transfer from other companies make most of the users to prefer the M-pesa services as opposed to other transfer agencies. Wirtz and Chatterjee (2004) assert that, the customer might be uncertain about the service provider's offered price compared to the market. Consequently, information asymmetry occurs because the service providers possess information on service quality and price level that the customer does not have. To overcome this information asymmetry, service providers can send signals such as brand names and best rate- guarantee. Assail (1998) describes a service as performance rather than a thing when customers purchase a tangible product. A service performance is therefore intangible and fleeting; they are experienced rather than owned.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presented the summary of the findings, and the conclusions and recommendations of the study based on the objectives of the study. The objective of this study was to determine the relationship between service quality and customer satisfaction among Safaricom M-Pesa services customers.

5.2 Summary

The study established that majority of the respondents were males aged between 25-31 years and had 'O' level as their highest levels of education. Further, the study found out that majority of the M-Pesa users used the service very often.

On the Challenges Affecting M-Pesa Services, the study established that M-pesa service customers the challenges solved immediately. With regard to customer satisfaction, the study found that the M-pesa service customers were highly satisfied. The study found that most of the M-pesa service customers found it safe to use M-pesa transfer services including receiving money, sending money and buying airtime for another user and for self, emergency transfer, paying bills as well as savings.

The study also established that the M-pesa service customers found it very convenient to use M-pesa money transfer as opposed to services by other companies. The main reason why the M-pesa service user preferred M-pesa transfer is its timely transactions and accessibility. Furthermore the study found that it was easier to use the M-pesa service as opposed to banking services whereby several rules underlie the individuals' wishes. High charges of money transfer from other companies make most of the users to prefer the M-pesa services as opposed to other transfer agencies.

5.3 Conclusions

The study concluded that there is a great relationship between service quality and customer satisfaction among Safaricom M-Pesa services customers. Service quality typically involve determining whether perceived service delivery meets, exceeds or fails to meet customer expectations and hence satisfaction. The study also concludes that the accessibility of the physical facilities and their ability to perform the required tasks efficiently makes the customers satisfaction very high since convenience of the highest level is achieved.

On the other hand the willingness to assist the customers in case of any challenges raises their level of satisfaction as noted from this study. For instance, on the question of customer satisfaction, the study found that most of the customers contact the customer care section of the service providers. This section determines on what attitude they want the customer to develop with regards to the service provider. This is due to the fact that they can only leave the customer either satisfied or dissatisfied.

The other component is the knowledge and courtesy of service providers and their ability to inspire trust and confidence among their customers. This greatly increases the rates of the customer satisfaction due to a one-to one attention in resolving the challenges experienced during the transactions. The individualized attention in service industry increases the security expectations of the customer and this being a measure of the quality, higher levels means great extents of customer satisfaction. The study also concluded the duration it takes to resolve the customers' challenges during transaction should be minimal and the service providers should always be there to handle the cases with urgency such as those occurring during M-pesa transactions.

5.4 Recommendations

The study recommends that the concept of quality and efficiency to be adopted by the service providers including Safaricom M-pesa services. Customer satisfaction is dependent on the quality of the services provided. The Safaricom M-pesa services should therefore ensure a high degree of customer satisfaction through timely assistance. The customer care personnel have a great role in ensuring that customers are served with minimal delays. The study therefore recommends the Safaricom M-pesa service providers to ensure there are an increased number of personnel who endeavor to serve the customers.

The study would also recommend the service providers to increase the infrastructures to ensure accessibility of the Safaricom M-pesa service. The study founded that among other reasons of preferring the Safaricom M-pesa services as opposed to other service providers is the accessibility. This then calls for an increased number of agents working across the country for the efficiency in transactions. On the safety of the M-Pesa services, it calls for a lot of effort by the service providers. This is due the high number of customers who shows great levels of dissatisfaction in terms of security threats. The study recommends the service providers to set up security measures for a comprehensive transaction in case of sending money, receiving money, buying airtime or paying bills. This would increase customers' confidence with their services and also increase the pride by the company due to their achievement of the highest levels of customer satisfaction.

5.5 Limitations of the Study

The main limitations of this study were; constraints of resources access and time. The finance and material resource needed for a larger sample size for this study was inadequate. The researcher could not have access to every locality in Kenya for the

respondents to fill the questionnaires hence the restriction of the study area to Nairobi Central Business.

5.6 Recommendation for Further Research

Further research is needed in the area of mobile money affordability that should be geared towards establishing how cost effective transacting mobile money can be especially to large corporate clientele who do not frequently use the services to transact business. This research should be aimed at addressing issues like mobile money transacting cost, taxation elements and any other levying issue which may be inhibiting the utilization of this technology by larger consumers and seek to establish the bearing of the same on the consumer perception and satisfaction.

REFERENCES

- Akaka, K. (2012). Service quality dimensions and customer satisfaction in the Kenyan Akaka, K. (2012). Service quality dimensions and customer satisfaction in the Kenyan telecommunications service industry. *A case of Nokia Siemens Networks*, 2(5), 3-19.
- Aker, E & Mbiti, M.W. (2010). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12 (2), 125-43
- Bei, M., & Chiao, L. A. (2001). Critical Service Encounters: The Employee viewpoint.
- Berry K.K and Lewis M.W.(2002), "Competitive Priorities: Investigating the need for trade-offs in operations strategy", *Department of Marketing and Supply Chain management, Production and Operations Management Society Journal*, Vol. 11, No.1, USA
- Berry, L.L. Selder, K and Grewal D. (1993), "Understanding service conference: journal of marketing, vol. 66. No.3 PP. 1-17
- Boshoff and Gray, J. (2004). World-class customer satisfaction. Burr Ridge, IL: Irwin Professional.
- Boshoff, M., B., &Gray, M. (1996). The service encounter: diagnosing favorable and unfavorable incidents. *Journal of Marketing*, 54(1), 71-84.
- Brady, M., Booms, B., & Tetreault, M. (2005). The service encounter: diagnosing favorable and unfavorable incidents. *Journal of Marketing*, 54(1), 71-84.
- Carman, P.B. (1990). Quality is free. New York: McGraw Hill.

- Caruana, M. (2010). Customer satisfaction in Hotels in Cape Town. Cape Peninsula University of Technology.
- Churchil, G.A. and Supernaut, J. (1982). An investigation into the determinants of customer satisfaction, Journal of Marketing research.
- Donabedian, W.E. (1982). The New Economics for Industry, Government, Education, 2nd ed., Massachusetts Institute of Technology Center for Advanced Engineering Study, Cambridge, MA,
- Ekinci, R., (2003). The human side of introducing total quality management: two case studies from Australia, *International Journal of Manpower*, 24(5), 551-567.
- Fornell, V. A. (1992). Recent Attribution Research in Consumer Behavior: A review and New Directions, Journal of Consumer Research, 14, March, 548-565. Chapter 4 Yüksel and Yüksel
- Gitari N.J. (2010), On methods in consumer research, a perspective of mobile money~ services, the journal of consumer research Vol 13, No.3, pp 324-241
- Gronroos, C. (2013). Strategic Management and Marketing in the Service Sector.

 Swedish School of Economics and Business Administration, Helsingfors.
- Halstead, M. (2001). Process management and the future of Six Sigma.MIT SloanManagement Review, 43(2), 26-33.
- Harr, G. K. (2008). Telecom Developments and Investments in Ghana WDR Dialogue Theme, Discussion Paper, Technical University of Denmark.
- Janet, T. & McDougall, G. (2011). Determinants of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 14(7), 12-20.

- Johnston, R. and Silvestro, R., Fitzgerald, L. and Voss, C. (2012). Developing the Determinants of Service Quality, in The Proceedings of the 1st International Research Seminar in Service Management, La Londes les Maures.
- Kangogo et al,. (2013). Service dimensions of service quality impacting customer satisfaction of fine dining restaurants in Singapore. University of Nevada, Las Vegas.
- Kiange. (2011). The relationship between service quality and customer satisfaction in the telecommunication industry: Evidence from Nigeria. *Broad Research in Accounting, Negotiation, and Distribution,* 1(1), 88.
- Knutson, B., P. Stevens, C. Wullaert, and M. Patton. (1991). LODGSERV: A service quality index for the lodging industry. Hospitality Research Journal 14 (7).
- Kothari C.R. (2010). Research Methodology, methods and techniques, new age International (P) Limited publishers, New Delhi.
- Kotler, P. & Armstrong, G. (2006). Principles of Marketing. Prentice. New Jersey.
- Krishna, M., Forza, C., Filippini, R., & Anderson, J. C. (2010). A replication study of a theory of quality management underlying the Deming management method: insights from an Italian context. *Journal of Operations Management*, 17(1), 77-95.
- Lawrence C. V. (2006). The importance of customer satisfaction and cultural influences in the European hospitality industry: A case study of a 4 star hotel in Spain, Germany and England.

- Lewis and Booms J. (2013). Moving beyond normal accidents and high reliability organizations: a systems approach to safety in complex systems. *Organization Studies*, 30(2-3), 227-249.
- Maina, P.M. (2010), Perceived Quality Service: The case of mobile Telephone Services, Unpublished MBA project, University of Nairobi
- Mano, H., & Oliver, R.L. (1993). Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction. *Journal of Consumer Research*, 20, 451-66.
- Manyi.J. (2011). The relationship between customer satisfaction and service quality:

 A study of three service sectors in Umea.
- Mas, 1.and Amolo N. (2009). "Three *keys to M-PESA's success*" Branding, Channel, Management and Pricing, Unpublished, January, 2010
- Mburu, P. (2013). Determinants of Customer Satisfaction in the Kenyan Banking Industry. *European Journal of Business and Management*.
- McAlexander, J.H., Kaldenberg, D.O., & Koenig, H.F. (2011). Service quality measurement. *Journal of Healthcare Marketing*, 14(3), 34-40.
- McDougall, R. (1996). Life after ISO 9000: an analysis of the impact of ISO 9000 and total quality management on small businesses in Northern Ireland. *Total Quality Management*, 10(2), 229-241.
- Moura, J.A. (2011), "The Relationship between Customer Satisfaction and Service Quality: a study of three Service sectors in Umeå", Umea School of Business, Master's Thesis,

- Mugenda, A. & Mugenda, O. (2009). Research methods: quantitative and qualitative approaches. Nairobi: Acts Press.
- Musili, S. (2009). Management of strategic change at plan international INC-Kenya,
 Unpublished MBA project, UON
- Musyoka, K. (2013). Service quality and library user satisfaction among universities in Kenya.
- Mwangi M. R., Abdullah and Ataur R (2011), "Measuring Service Quality using SERVQUAL Model: A Study on Private Commercial Banks in Bangladesh", Journal of Business Management Dynamics Vol. 1, No. 1, July 2011, pp 01-11
- Nathan.D. & Saghier.N (2013). A time for Nairobi is a time for Africa.
- Nikecki, S., Deshmukh, S.G. and Prem, V. (2010), "Service Quality Model: a review, "International Journal of Quality and Reliability Management, Vol. 22 No. 9, pp. 913-949
- Nimako, L.L. Selder, K and Grewal D. (2012), "Understanding service conference: journal of marketing, vol. 66. No.3 **PP.** 1-17
- O'Neil, O. A., & Mbeche, I. M. (2010). The Future of ISO 9000 Quality Management System in a Global Economy.
- Odhiambo, J.O. (2013). Customer Satisfaction: The case of mobile Telephone Firms.

 Unpublished MBA project, University of Nairobi
- Oliver, J.S. (1994), Total Quality Management: The Route to Improving Performance,

 Journal of Operations Management: 2(1);1-4

- Parasuraman A. University of Miami (1985), "Library Assessment of Benchmarking Institude", *University of Miami, Montererey CA 49*
- Parasuraman, A., Berry, L.L., and Zeithaml, V.A. (2008), "Reassessment of Expectations as a Comparison of Standard in Measuring Service Quality: Implications for Future Research", *Journal of Marketing*, Vol.58, 111-124
- Parasuraman, A., Zeithaml, V.A. & Berry L.L. (2009). A conceptual model of service quality and its implications for further research, *Journal of Marketing*. *Vol.49*
- Reid R.D, (2005), "Operations Management, 2nd Edition", Wisley Publications
- Sachdev, B., Verma, D. (2004). Entry barriers and industry rivalry: do they mediate the relationship between quality management practices and performance,

 *International Journal of Quality & Reliability Management, 27 (7):779-793.
- Safaricom, (2007), Overview of M-Pesa services: Option Magazine. Last accessed on 25th September 2009 from www.safaricom.co.ke/m-pesa
- Safaricom. (2011). M-Pesa Agency network in Kenya, 27 (7):779-793.www.safaricom.co.ke/m-pesa
- Silvestro, M. L. (2012). Setting Sights on Perfection. *Industrial Distribution*. August 1997.
- Spreng, R.A., & Mackoy, R.D. (1996). An empirical examination of a model of perceived
- Stromgren, S. B., and Verma, H. V. (2007). Relative importance of service quality. *Journal of Services Research*, 4(1), 93-116.

- Sureshchandar, M., Lewis P. & Thornhill, A. (2012) Research Methods for Business Student (6th edition), Pearson Education Limited
- Taylor, M., &Baker, D. (2011). The business value of quality management systems certification. Evidence from Australia and New Zealand. *Journal of operations management*, 15(1), 1-18.
- Turban, E. (2002). *Electronic commerce: A managerial perspective*. New York: Prentice Hall.
- Valerie, O. A., &Bitner, I. M. (2013). The Future of ISO 9000 Quality Management System in a Global Economy
- Vaughan (2007). Analyzing service quality, a study among Peruvian resort hotels.

 Lulea University of technology, Lima, Peru.
- Walker, R.H. and Craig-Lees, M. (2006), Technology-Enabled Service Delivery: An Investigation of Reason Affecting Customer Adoption and Rejection,

 International Journal of Service Industry Management, Vol. 13, pp. 91-106.
- Woodruff, A.G., &Gardial, R.T. (1999). Linking service quality, customer satisfaction and behavioral intention. *Journal of Health Care Marketing*, 19, 5-17.
- Zeithaml, V. A., Berry, L. L., and Parasuraman, A. (2011). *Delivering quality service:***Balancing customer perceptions and expectations. New York: New York Free Press.

APPENDICES

APPENDIX 1: RESEACH QUESTIONAIRE

Part A: Background Information

Kindly	indicate your	gen	der										
Male	[]					Female	;		[]]			
Kindly	indicate your ag	ge ca	atego	ory									
	18-24 years			[]		25-31	yea	rs	[]		
	32-38 years			[]		39-45	yea	rs	[]		
	Above 46 year	ırs		[]								
What i	s your highest	Lev	el o	f edı	ıca	tion?							
	'O' level			[]		Colleg	е се	ertificate/	diploi	na	[]
	Bachelor's de	egre	e	[]		Master	's I	Degree			[]
	PhD			[]								
Do you	u use the M-pe	sa s	ervi	ce?									
	Yes	[]			No		[]				
How of	ften do you use	М-р	esa?										
	Very Often	[]			Often		[]				
	Rarely	[]			Never		[]				
	3: Challenges any chal							sfei	service?)			
	Yes	[]			No		[]				

	Very Often	[]	Often			[]					
	Rarely	[]										
Kindly	rate the exten	t to	which you	face th	e f	ollov	ving	g ch	allen	iges	when	using	m-pesa
services	. Use a scale of	of 1-	-5 where1= '	To a vei	ry g	reat	ext	ent,	4= t	o a g	great	extent, 3	B= to a
moderat	e extent, 2= to	a lov	w extent and	1= to a	very	low	ext	tent					
challen	ges faced M-	pesa	a customer:	S		5			4		3	2	1
System	Delays												
Lack of	enough float	by a	agents										
Unavai	lability of eno	ugh	agents										
Accoun	nt minimum ar	ıd m	naximum lir	nit									
Others													
Han de	h	41a a	ala allan assa	41- 04-220	C.	9							
How ac	you go about	tne	cnallenges	tnat yo	u 1a	ice?							
Call cus	stomer care				[]							
Wait ur	ntil it resumes				[]							
Report	to the nearest	M-	pesa agent		[]							
No acti	on				[]							
II. 1	4 27.4		411 11	1	_ 1	16	1						
How lo	ng does it take	2 101	r the challer	ige to re	esol	ved	!						
Immedi	iately	[]		A day			[]						
A week		[]		Never			[]					
Part C	· Customer s	atic	faction										

If yes, how often do you experience the challenges?

How do you rate M-pesa service?

Very low	[]	Low	[]			
Moderate	[]	High	[]			
Very high	[]						
In how many ways o	lo y	ou us M-pe	esa money trans	sfer	servi	ce? Use a	scale wh	nere 1=
very often, 2= often,	3=	Hardly and	4= Never					
Ways of using M-pe	esa	Service			4	3	2	1
To receive money								
To send money								
To buy own airtime								
To buy airtime for an	oth	er user						
To keep savings								
Emergency transfers								
To pay bill								
Is it safer to use M-p	esa	compared to	o other modes o	of m	noney	transfers?		
Yes	[]	No	[]			
If yes, how would yo	u ra	ate the safety	y of using M-pe	esa	transa	ctions?		
Very low	[]	Low	[]			
Moderate	[]	High	[]			
Very high	[]						
Is it more convenient Yes	to	use M-pesa	compared to ot No	her [mode	s of mone	y transfe	r?
If Yes, Explain?	•••••			••••				

Thank you for your participation!!!!!!!!!!!

APPENDIX II: LIST OF M-PESA AGENTS in the CBD AS AT 31 MARCH,

Loc 7 Communications	Luthuli Avenue
Al-Amana Communication Ltd	Luthuli Avenue
Power Networks	Luthuli Avenue
Scorpio Communications	Luthuli Avenue
Sulubei Communication	Luthuli Avenue
Hallo Hallo Communication	Luthuli Avenue
Parcel Handlers	Luthuli Avenue
Smart Lines Ltd	Luthuli Avenue
Tiley Communication	Luthuli Avenue
Generations Electronics	Luthuli Avenue
Hotline ConnectionsLtd	Luthuli Avenue
Robbytech Communication Ltd	Luthuli Lane
Dailysale Ltd	Luthuli Avenue
Microvave	Luthuli Avenue
Resilient Communication Ltd	Luthuli Avenue
Comtech Communications Ltd	Luthuli Avenue
Eleka Enterprises	Duruma Road Duruma Road
Stejossam Invesment Company Mayoria Companying Ltd.	
Mawaja Communication Ltd	Price Road Off River Road
Resilient Communication Ltd	Price Road Off River Road
Winacom	Crossroads
Parcel Handlers	Crossroads
Mbakazi Enterprises	Crossroads
DailySale Ltd	Gaberone Road
Cellmart Communications Ltd	Ramogi House, Gaberone Road
Faidi Development Sacco ltd	Down Town Towers, Duruma Road
Lexcon Communication Ltd	Down Town Towers, Duruma
	Road/Nyamakima
Seph Investment Company Ltd	Duruma Road
Best Phones Ltd	Duruma Road
Robbytech Communications Ltd	River Road
Strategic Mobile	Gaberone Road
Neypart	Gaberone Road
Load Mover Yes	Gaberone Road
Keta Communication	Gaberone Road
Jubliu	River Road-Nyamakima
Isotech Interconnections Ltd	River Road
Wajuzi	River Road
2NK Sacco	River Road
Kimlink Holdings Ltd	River Road
Robbytech Communications Ltd	River Road
Vineyard Communication Ltd	River Road, Four Ways
Fast Mobile	Capital House
Vertex Communications 3 Ltd	,Ambassadeur Building

Centre Phones	Ambassadeur ,Short street
East Aberdare	Tom Mboya Street
Transpesa	Tom Mboya Street
Zenamed Pharmaceuticals	Mfangano Street
Meridian Acceptances Ltd	Mfangano street
Generations Insight Ltd	Mfangano Street, Tusker
Loska	Kirinyaga Road
Daily Sale Ltd	Kirinyaga/Park Road
Rossinet	Kirinyaga Road
Darl-Carl sam	Nyamakima
Mergut Ltd	Nyamakima
Sosmary Investment Ltd	Nyamakima,off Muimbi Road
Wisefiles Trading Company Ltd	Nyamakima
Schientch Agencies Ltd	Nyamakima
Nespet Ltd	Nyamakima
Dimples Mobile Ltd	Ambassadeur Hotel Building
Fast Mobile Ltd	Capital House, Tom Mboya
Dimples Mobile Ltd	Leon House, Tom Mboya
Cincinatti	Ronald Ngala
Fay Mobile Ltd	Gloria Hotel,Ronald Ngala
Latest Communications Ltd	Nila Pharmacy, Ronald Ngala
B-Online	Ronald Ndala
Forward Mobiles	Mfangano Street
	,Rocks Exhibition
Spiders Mobile Ltd Pharmart Chemist	,
Broadnett	,Tuskys Express Sheikh Karume Road
	Sheikh Karume Road
Kens Enterprises Ltd Timestell	
	Sheikh Karume Road
Caribean Investments Ltd	Sheikh Karume Road
Flashworld Communication Ltd	Sheikh Karume Road
Tides Mobiles Ltd	Exhibition, Sheikh karume Road
Markpoint Communications Ltd	Sheikh karume Stalls,
Robbytech Communication Ltd	Sheikh Karume Road
Romak Communication Ltd	River Road
Wimtech Communication Ltd	River Road/Duruma
Loska Communication Ltd	Ronald Ngala
Wiresoft Agencies	Ronald Ngala
Broadnett Ltd	Ronald Ngala
Generations Insight	Ronald Ngala
Anutex	Ronald Ngala
Naivas Supermarket	Ronald Ngala
Lexcon Communications Ltd	Ronald Ngala
Luzon Communictions Ltd	Duruma Road
Danpharm	Nyamakima, Mololine Stage
Sperklink	Nyamakima, Cross lane
Robbytech Communication Ltd	Nyamakima, Mololine Stage
Cosin Business Systems	Price Road Off River Road
Munje investiments	Duruma Road

Stejossam Invesment Company	Duruma Road
Zamusky Ltd	Ambala Road, Mungaria House
Cosin Business Systems Ltd	Tom Mboya(Almas Exhibition)
Ropem Telcom Ltd	Ronald Ngala
Generations Insight Ltd	Munyu Road
Rams Communication Ltd	Munyu Road/Luthuli Avenue
View Power Communication Ltd	Luthuli Avenue
Cheche Communications Ltd	Munyu House, Munyu Road
Lexcon Communications Ltd	Munyu Road
Meridian Acceptances Ltd	Munyu Road/Kaggio
Express Strategies Ltd	Munyu Road
Jora Logistics Ltd	Munyu Road
Lela Communication Ltd	Munyu Raod
Update Investment	Munyu Road
Beckam Enterprises	Gaberone Road
Spiders Mobile Ltd	SHEIKH KARUME
Joki Agencies Ltd	Racecourse Road
Update Investment	Gaberone Road
Jemshan	munyu road
Wimtech Communication Ltd	Duruma Road
Touchline communication	Racecourse
Blessed communication	Kirinyaga Road
Romak Communication Ltd	Sheikh karume
Cooperative Bank	River road
Mergut communication ltd	Race course rd
Centre phones	Race course rd
Mergut communication ltd	Race course rd
Winacom ltd	Race course rd
Wimtech communication ltd	Race course rd
Resilient wanachi communication	Race course rd
Dailysale	Race course rd
Muranga Thika Nairobi sacco	Race course rd
Ropem telcom ltd	Race course rd
Mergut communication ltd	Race course rd
Jumbo communication ltd	Race course rd
Zion communication ltd	Race course rd
Cheche telcom ltd	Race course rd
Jawap contractors	Gaberone Road
Update Investment	Munyu road
Minimi enterprises	Gaberone road
Robbytech communication	Nyamakima
Benrose	Nyamakima
Townlink	Mfangano
Evergreen	Nyamakima
Wimtech Communication Ltd	Duruma road
Munje investiments	Duruma Road
Taicom ltd	munyu road
Blue grass	Ambala Road, Mungaria House

MukitelLuthuli AvenueWimtech Communication LtdKirinyaga RoadRidgewaysKirinyaga RoadMarylin communicationRonald ngalaVitec communicationRonald ngalaKami holdings ltdOTCLexcon communicationRonald ngalaVitec communicationRonald ngalaResillient wananchiRonald ngalaRobbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone roadSabir networksLuthuli
Ridgeways Marylin communication Ronald ngala Vitec communication Ronald ngala Kami holdings ltd OTC Lexcon communication Ronald ngala Vitec communication Ronald ngala Vitec communication Ronald ngala Resillient wananchi Robbytech communication Robbytech communication Robbytech communication Robbytech communication River road Tri com communication River road Brentcom communication River road Genericks kenya Munyu road Vineyard Communication Ltd Gaberone road Jenath communication Gaberone road
Marylin communicationRonald ngalaVitec communicationRonald ngalaKami holdings ltdOTCLexcon communicationRonald ngalaVitec communicationRonald ngalaResillient wananchiRonald ngalaRobbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Vitec communicationRonald ngalaKami holdings ltdOTCLexcon communicationRonald ngalaVitec communicationRonald ngalaResillient wananchiRonald ngalaRobbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Kami holdings ltdOTCLexcon communicationRonald ngalaVitec communicationRonald ngalaResillient wananchiRonald ngalaRobbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Lexcon communicationRonald ngalaVitec communicationRonald ngalaResillient wananchiRonald ngalaRobbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Vitec communicationRonald ngalaResillient wananchiRonald ngalaRobbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Resillient wananchi Robbytech communication Robbytech communication Robbytech communication Ronald ngala Robbytech communication Ronald ngala River road River road River road River road Brentcom communication River road Genericks kenya Munyu road Samary traders Munyu road Vineyard Communication Ltd Gaberone road Jenath communication Gaberone road
Robbytech communicationRonald ngalaRobbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Robbytech communicationRonald ngalaBatian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Batian communicationRiver roadTri com communicationRiver roadBrentcom communicationRiver roadGenericks kenyaMunyu roadSamary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Brentcom communication River road Genericks kenya Munyu road Samary traders Munyu road Vineyard Communication Ltd Gaberone road Jenath communication Gaberone road
Brentcom communication River road Genericks kenya Munyu road Samary traders Munyu road Vineyard Communication Ltd Gaberone road Jenath communication Gaberone road
Genericks kenya Munyu road Samary traders Munyu road Vineyard Communication Ltd Gaberone road Jenath communication Gaberone road
Samary tradersMunyu roadVineyard Communication LtdGaberone roadJenath communicationGaberone road
Vineyard Communication LtdGaberone roadJenath communicationGaberone road
Jenath communication Gaberone road
Sabir networks Luthuli
Dudi neworks Lunium
Gaals agencies Luthuli
Brianah communication Luthuli
Charing cross ltd Ukwala
Centerphones Ambassadeur
Generation insight Leon House, Tom Mboya
Alca systems Sheikh karume
Charing cross ltd Race course rd
Peace communication Ambala Road, Mungaria House
Rumba investiments Nyamakima
3G telecom Crossroads
Ruinno agencies Kirinyaga road
Balozi communication Kirinyaga Road
Wimtech Communication Ltd Kirinyaga Road
Townlink mfangano street
Afro mobiles mfangano street
Charing cross ltd Ukwala Ronald ngala
Orbit communication Soko centre,Ronald ngala
Nakumatt holdings Ronald Ngala
Mountcom agencies Ronaldngala,soko centre
Kipingo ltd Racecourse Road
Umbrella holdings Ronald Ngala
Ayoon communications cbd
Jilly communications River road, sagret hotel
Global world ltd Ronald ngala,bestlady
Family Bank River road
Barclays Bank ltd River road
Barclays Bank ltd River road
Broadnet communication ltd kenbanco
Agriculture Finance corporation Tom mboya

Jobliu telcoms	Development hse
Jormac communication ltd	Gill house
Jormac communication ltd	Gill house
Jormac communication ltd	Gill house
Agriculture Finance corporation	Development hse
Pentapharm	kenbanco
Pentapharm	kenbanco
Kenumba communication ltd	Gill house
Lane one communication ltd	Gill house
Star mobile	Gill house
Star mobile	Gill house
Zetort communication ltd	Gill house
Combase communication ltd	Gill house
Wellmed pharmaceuticals	Gill house
Forward mobile	Gill house
Tricom technologies	Gill house
Pentapharm	Gill house
Pentapharm	Gill house
Mwaninge cyber	KTDA
3G telcoms	KTDA
Ropem telcom	KTDA
Ropem telcom	KTDA
Mambo comunication ltd	Dry wood
Comtrail ltd	Dry wood
viewpoint	Dry wood
Robbytech communication ltd	Tusker house
Comtrail ltd	Tusker house
Vilcostec	Tusker house
Nomads telecommunication ltd	CBD
Broadnet ltd	CBD
Broadnet ltd	CBD
Generation insight	CBD
Broadnet ltd	CBD
Dailysale	OTC
Generation insight	CBD
Cosin Business	CBD
Hifi electronics	OTC
Kinfone communication ltd	CBD
Kinfone communication ltd	CBD
Headline logistics	OTC
Dailysale	OTC
Rochan enterprises ltd	OTC
Edton technical Engineering	OTC
Pentaks company ltd	Winnie plaza
Pentaks company ltd	Winnie plaza
Resilient wanachi ltd	Winnie plaza
Salyn enterprises ltd	Winnie plaza
Charing communication ltd	Winnie plaza

Broadnet communication ltd	Winnie plaza
Vivid Focus Itd	Winnie plaza
Pentaks company ltd	Winnie plaza
Superiorfone communication ltd	Winnie plaza
Nescad communication ltd	OTC
Lupak communication ltd	OTC
Langley trading company	Temple Rd
RangeChem	Temple Rd
Harps sounds	Temple Rd
Generation insight	Temple Rd
Surfcity communication ltd	Mang hotel
Mosecat	Mang hotel
Total communication ltd	Mang hotel
Edton technical Engineering	OTC
Edton technical Engineering	OTC
Resilient wanachi ltd	OTC
Charing communication ltd	OTC
Charing communication ltd	OTC
College Hill ltd	Tom mboya
Watalamu company ltd	Ronald ngala
Samchi telecom	Ronald ngala
Samchi telecom	Ronald ngala
Samchi telecom	Ronald ngala
Eastzone distributors	Mfangano street
Fox communication ltd	weruga lane
Spiders mobile ltd	Tom mboya
Matant communication	Haiselasie
Matant communication	Haiselasie
Spiders spectrum ltd	weruga lane
Apotach communication	weruga lane
Apotach communication	weruga lane
Tamasha impex	Railways
Tamasha impex	Railways
Rasasi investment ltd	Railways
Jorene enterprises	Railways
Jorene enterprises	kenda house
Jorene enterprises	kenda house
Autikana Agencies ltd	Afya centre
Jormac communication ltd	Afya centre
Alca systems	Philadelphia
Samary traders	Philadelphia
Spiders mobile ltd	Tom mboya
Afya sacco	Afya centre
Batian network	Philadelphia
Project procurement services	Cianda market

Color zone ltd	Cianda market
Jogad communication ltd	Mfangano
Langley communication ltd	Mfangano
Sala communication ltd	Mfangano
Katimok enterprises	Mfangano
Tonycom ltd	Mfangano
Nomads telecommunication ltd	Cianda market
Generation insight	Mfangano
You and me technologies	Mfangano
Nahodha telcoms	Mfangano
Jormac communication ltd	Amber hse
Top connections	Amber hse
Generation insight	Mfangano
Superiorfone communiaction ltd	Amber hse
Samary traders	Sunbeam
Dailysale	Mfangano
Dailysale	Mfangano
Generation insight	Mfangano
Generation insight	Mfangano
Kentel	Mfangano
Wallmack enterprises ltd	Mfangano
Universal connections	Sunbeam
Dalu wireless	Mfangano
Jatel communication ltd	Mfangano
Borderless	Sunbeam
Generation insight	Hakati
Tandaza investment	Mfangano
Tandaza investment	Mfangano
Samax ltd	Bus station
Viewpoint	Bus station
Berricon Agencies ltd	Bus station
Viewpoint	Bus station
Teletext ltd	Bus station
Harps sound	Bus station
Worldwide communication ltd	Amber hse
Multi milenia purpose	Amber hse
You and me technologies ltd	Amber hse
Parcel handlers	Amber hse
Charing cross	Mfangano street
Rophat	mfangano street
Star mobile ltd	mfangano street
Star mobile ltd	mfangano street
Best phone	mfangano street
Zenamed pharmacy	mfangano street
Wellmed pharmaceuticals	mfangano street
Wellmed pharmaceuticals	mfangano street
Zion communication td	mfangano street
Zion communication td	mfangano street

Vilcostec	mfangano street
Fox communication ltd	mfangano street
Worldwide communication ltd	mfangano street
Nomads telecommunication	mfangano street
Slyde communication ltd	mfangano street
Charing cross	mfangano street
Magutu provision stores	Race course rd
Mwanzo holding ltd	Race course rd
Rhumba base investment ltd	Tusker hse
Chai sacco	KTDA
Family bank	KTDA
Family bank	KTDA
Jormac communication ltd	OTC
whiscom Agency ltd	Haileselasie
Zarmusky	Mfangano street
Oil libya kenya	Tom mboya
Azimio enterprises	Haile selasie
Generic kenya communication ltd	Tom mboya
Eazynet communication ltd	Mfangano street
Phones paradise	Tom mboya
Nakumatt holding	Development hse
Ajabu telcom	Development hse
white international	Gill house
lexcon communication ltd	River rd
Dialogue communication ltd	Race course rd
Worldwide communication ltd	Amber hse
Housing finance	Gill house
Alca System	Maendeleo House, Utalii Street