SYSTEM FAILURE AND PERCEIVED QUALITY OF SERVICES: A CASE OF EQUITY BANK

BY:

AMING'A VINCENT MAOBE

SUPERVISOR:

ONSERIO NYAMWANGE

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN OPERATIONS MANAGEMENT, UNIVERSITY OF NAIROBI.

2014

DECLARATION

This research project is my original work and has not been presented for award of a Degree in any other institution

Signature…….Date…….

AMING'A VINCENT MAOBE

D61/60790/2014

SUPERVISOR

This research project has been submitted for examination with my approval as a University Supervisor.

ONSERIO NYAMANGE

Signature……...Date……...

ACKNOWLEDGEMENT

This course has been a long journey of hard work, dedication and a lot of sacrifices. As it comes to an end, I wish to acknowledge the Lord God almighty for his love and for having given me the strength, courage and patience throughout my study. His love and mercy have been my greatest pillar.

As my course comes to an end, there are many people I wish to express my sincere gratitude to those without whom this study would not have been a success. I express my profound sense of gratitude to my supervisor Mr. Onserio Nyamange for sharing valuable insights and for being a great source of motivation and encouragement to me.

I also thank my wife Sabina, daughter Alma, my sisters, my mother and other family members who offered their financial, emotional and moral support and understood my absence from family functions and other family obligations during the period of my study.

My course could not have been successful were it not for my lecturers and classmates at the University of Nairobi, School of Business (MBA class), so I am greatly indebted to them for their contribution(s) towards my success in any way during the period of study.

My thanks also go to the participants of the study. I thank especially the Equity Bank employees and customers whom I interacted with and who provided accurate and realistic data that formed the basis of my findings and conclusions.

DEDICATION

This study is dedicated to my dear wife, Sabina, my daughter Alma and my Mother Rose, and to all those who have stood by me during the period of study.

ABSTRACT

The banking industry in Kenya in the recent past has experienced a lot of innovations and changes in service delivery that have been prompted by competition among banks, especially for more customers. This has seen banks continually seek ways to improve their services. For them to succeed, each bank has to make sure their structures co-ordinate properly to deliver the highest levels of service to their customers since there exists a lot of competition in the industry. This study sought to investigate system failure and perceived quality of services using a case study of Equity Bank. The study was guided by two objectives: (i) To determine the customer's perception of the quality of services offered by Equity Bank (ii) To determine the relationship between system failure and perceived quality of services at Equity Bank. To meet the objectives, a quantitative case study approach that targeted Equity Bank customers in a few selected Equity bank branches in the NCBD was used. In total, 352 systematically sampled respondents participated in the study. Responses from 288 respondents formed the basis of the findings of this study. Questionnaires were used as the research instruments used to collect data. Data gathered was analyzed quantitatively using correlation analysis and presented in tables, bar graphs, and means and frequencies calculated to give meaningful conclusions. The SERVQUAL model was used in the correlation analysis. The findings of the study reveal that most of the customers at Equity bank consider the quality of service delivery as good despite the bank performance not meeting customer expectations. From the gap analysis there exist a gap between customer expectation and perceived quality of service. System failure at Equity Bank was found to greatly slow the speed of processing customer queries, transactions, documents and other enquiries. The respondents noted that at times, management and staff failed to communicate uniformly and clearly across branches and departments, hence availing incomplete information to customers. Assurance and responsiveness dimensions of service quality have direct effect to the customers' perception on the quality of services. From this study, there is need for banks to ensure that they don't ignore customers' perceptions on the quality of service. At the same time, banks should employ more ways of addressing empathy dimensions as well as their responsiveness to customer needs so as to improve on customer perception on quality of service.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

ATM	Automated Teller Machine
CBK	Central Bank of Kenya
NCBD	Nairobi Central Business District
SPSS	Statistical Package for Social Science Programmers

CHAPTER ONE: INTRODUCTION

1.1 Background

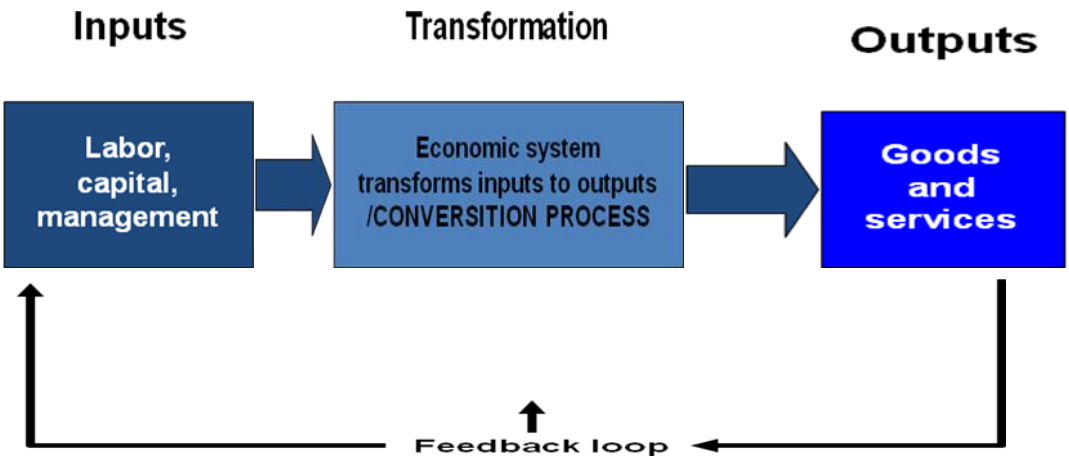
In organizations, operations managers are usually tasked with managing some, or all, of the resources that comprise the operations function and efficiently organizing them in transformative processes to produce goods and services (Slack, Chambers and Johnston, 2004).They apply ideas and technologies to increase productivity and reduce costs and losses, improve flexibility to meet rapidly changing customer needs and enhance product or service quality (Tomar, 2009). Meeting customer standards on quality is not easy since customers have diverse needs and have become more quality conscious. Due to this, service operations throughout the world have had to change (Lee, 2004 cited in Osei-Poku, 2012).

To excel in producing high quality products and services, it has been proposed that an approach in which different parts of a system work together as a whole, known as the systems approach, be used (Senge, 1990; McNamara, 2014).The systems approach in management analyzes systems, including organizations, by looking at them from a broad perspective that includes structures, patterns and events (Stichweh, 1991; Hjørland and Nicolaisen, 2005). The outcome of integration and co-operation of the various parts of a system is output (goods or services). Service organizations address requirements of customers through a service delivery system to satisfy their needs and leave certain impressions in their minds (Mahadevan, 2007).

1.1.1 Systems and System Failure

McNamara (2014) defines a system as a collection of parts (or subsystems) integrated to accomplish an overall goal. Systems have inputs, processes, outputs and outcomes, with ongoing feedback among these various parts. If one part of the system is removed, the nature of the system is changed. In operations system several activities are performed to transform a set of inputs into useful outputs in terms of goods and services through transformative processes (Mahadevan, 2007). A simple system is illustrated below:

Figure 1.1: A simple system- Economic System



Source: **Pearson Education, Inc. publishing as Prentice Hall (2014)**

In organizations, management have to manage the inputs such as capital, natural resources, equipment, and employees, monitor the throughput or processes in sub systems and to manage the outputs (the goods and services) produced. The subsystems are the business units obligated with carrying out particular tasks in their operations that use inputs to create goods or services.

Managers also have to monitor for positive and negative feedback loops and make changes necessary to alleviate any negative ones. If the feedback mechanism between inputs, transformative processes and outputs is not monitored and activities and events not controlled among various subsystems, system failure arises. Berk and Associates (2012), defines system failure as that state in which a system is not able to perform the function it was intended to, or is not able to do so at a level that equals or exceeds established minimum standards.

1.1.2 Quality

Quality as a concept applies to products and to services. Mostly it is aimed at the needs of the customer. It has been defined by many people differently. It is when a product or service is fit for use for its stated purpose and conforms to the agreed requirements. To the department in charge of quality control, quality is about detecting errors and defects in production and correcting them to meet the needs and expectations of customers consistently. To the producing entity, it includes good design and functionality, so that the product or service can be produced or delivered efficiently, reliably and at the lowest possible cost. Quality means continuously delighting customers and achieving standards of high quality. In summary, quality is the total composite product and service characteristics of marketing, engineering, manufacturing and maintenance through which the product or service in use will meet the expectations of the customer (Juran, 1988; Crosby, 1979; Macdonald and Piggott, 1990).

1.1.3 Quality Perceptions

Perceived service quality refers to the customer's perception of the overall quality or superiority of the product or service with respect to its intended purpose, relative to alternatives. The perceived quality is different from actual or objective quality, product-based quality, and manufacturing quality. It may have little or nothing to do with the actual excellence of the product but more to do with the firm's public image, past experiences with the firm's other products, and influence of opinion leaders and customers' peer (Aaker, 1991; Parasuraman, Zeithaml, and Berry, 1988).

1.1.4 Systems and Quality Perceptions

Systems in an organization sense means taking the perspective that organizations consist of a multiplicity of parts, subparts or subsystems that are made up of groups of people, processes, technologies, and materials that together perform a significant function and contribute to a specific aim, a service or product development (Potocki and Brocato, 1995). These sub parts or subsystems that make up the organization must work in tandem with each other to achieve success in meeting the set quality policies and objectives of organizations, which are usually geared towards matching service delivery with customer preferences and expectations to produce quality goods or services. These policies and objectives must be visible within the organizational structure, procedures, processes and resources needed to implement quality management in systems.

Organizations, in recognition of the fact that customers must be kept in mind during service delivery are now shifting focus from service based quality and operations management quality to the customer based quality (Garvin, 1984; Summers, 2005). To

understand the quality levels of services in organizations, there is need to relate between organization structure and systems management; in essence how the different parts of a system work together as a whole (Shirley, 2012).

1.1.5 Banking Sector Operations in Kenya

Kenya's banking industry is made up of commercial banks, non-banking financial institutions, mortgage firms, deposit taking microfinance institutions and foreign exchange bureaus. There are 43 licensed commercial banks and 1 mortgage institution regulated by the Central Bank of Kenya (CBK). Of the 43 banks, 27 are local owned while 13 are foreign owned. Three others are public financial institutions. There have been changes in the operating environment in the industry that has seen increased competition, increased capital requirement and need to expand distribution network and market share so as to benefit from best global practices among others (CBK, 2014).

The banking sector in Kenya is regulated and hence has considerable barriers to entry into the sector including capital requirements, licensing fees, bank supervision and monitoring. The industry structure is influenced by policies and regulations set by the CBK. While offering services to their customers, commercial banks have been assaulted by the pressures of globalization, increased competition from non-banking financial institutions, and volatile market dynamics and therefore they are constantly seeking new ways to add value to their services (Soteriou and Zenios, 1999). In Kenya, banks face sustained threats, especially in the money transfer segment from innovative services that competition from non-banking service providers as well as fellow banks, with the money transfer segment under threat from non-banking institution, most notably the innovative

M-Pesa service from Safaricom, a mobile telephony company in Kenya. Given the fact that banking services have a low service differential, rival banks will try to outdo each other in the market by using service quality as a primary competitive weapon that will assist them achieve customer satisfaction and maintaining a competitive advantage (Stafford, 1996; Saravan and Rao, 2007).

Kenya's banking industry has seen remarkable financial innovation and expansion in the recent past that has effectively brought in a large segment of the population, previously cut off from the formal financial system, into the banking halls (The Global village partnerships, 2014; CBK, 2014). With the rise in customer numbers there has been increased demand for quality services. Organizational success in service delivery thus needs coordinated effort in the operational processes carried out in banks so as the organization works together as a whole to satisfy the needs of customers.

McNamara (2014) argues that for managers to realize success in delivery of service they have to look at a broader perspective in interpreting patterns and events in their organizations because they could have wonderful departments that operate well by themselves but don't integrate well together with others to deliver quality services. Subsystem communication and coordination is of great importance in meeting the overall organizational goals. This is because though the various subsystems have different business obligations, they work together to achieve operations objectives aimed at fulfilling customer needs. That is why it is necessary to study the system perspective to understand how the whole system responds to customer perceptions. This study will investigate this in the context of Equity bank.

1.2 Statement of the Problem

System failure occurs in form of disjointed decision making, or due to lack of co-operation and integration of subsystems, or when issues or events occur in different sub parts or subsystems that lead a system to deviate from its expected service to a level that is below the established minimum standards. System failure can have different effects on systems and on users, ranging from mild to very serious. Dines (2013), notes that it affects end user productivity, causes revenue loss, may result in financial penalties from regulators, or result in loss of discounts. It may also result in loss of customers, damaged reputation and confidence, or may attract high repair cost and may also result in financial penalties. In banking service delivery depends on the working of many different subsystems. Each subsystem is charged with different roles with professionals from different training backgrounds. However, they need to co-operate to achieve quality service because they are all jointly involved in service delivery.

Daft (2007), notes that organizations are made up of people in relationships with one another. Managers deliberately structure and coordinate organizational resources to achieve the organization's purpose. While the technical team (ICT) is tasked with providing system infrastructure that support service delivery by the operations contact staff, operations staff may not understand what the technical team does to deliver ATM services or run systems if they don't work closely. Support subsystems like accounting subsystems, customer relations subsystems and the managerial subsystem, all must work together. Basically, organizational coordination and control must take a systematic

approach to figure out if an organization is achieving the goals that were to be achieved (McNamara, 2014).

Much work has been done on service quality. Most studies have focused on customer satisfaction and customer loyalty and on the relationship between service quality and customer satisfaction while others have looked at looked a the service delivery systems in service organizations (Ghimire, 2012; Osei-Poku, 2012; Kimando, 2012; Rahaman, Abdullah and Rahman , 2011).

Ghimire (2012) did a study on service quality and customer satisfaction in the restaurant business an found that service quality and customer satisfaction are mutually related and due to varying desires and organizations need to place service quality at the top of their priorities in meeting customer expectations and creating positive perceptions. Osei-Poku (2012), did an assessment of service quality in commercial banks. The study however does not review the impact of failure in organizational systems on service quality. Kimando (2012), carried out a study on the quality of service in a retail bank in Kenya and equally failed to talk of the aspect of organizational system failure while noting the service quality should be addressed by all departments. However, Rahaman, Abdullah and Rahman (2011), studied service quality of Banks in Bangladesh and found that a system view of service delivery is important. None of these studies have looked at system failure and the relationship to quality of service, nor the customer perceptions on service quality as a result of failure in service delivery. This is the research gap that this research aimed to fill. The aim of this study was to find out the extent to which the system perspective is appreciated by Equity bank while providing service from the customer's

perspective and also seek to determine the relationship that exists between system failure and service quality and how it affects the perceived quality of services at Equity Bank.

1.4 Objectives of the Study

The objectives of this study were to:

1. Determine the customer's perception of the quality of services as offered by Equity Bank.
2. Determine the relationship between system failure and perceived quality of services at Equity Bank.

1.5 Value of the Study

This study sought to identify service quality dimensions associated with system failures in banking. The management of Equity Bank could therefore be able to gain significant insights on the same that could be used to improve the quality of service delivery. In turn, this could lead to the customers gaining from improved service provision by the Bank. Other institutions in Kenya's financial sector might be able to the information provided in this study to enhance their quality of service, especially during system failures. Finally, the study will serve as source of future reference to other scholars undertaking research in service quality and system failures in the banking industry or any other related fields.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter will form the literature review and will give definitions and discuss aspects in the topic of research and others including system failure, and perceived customer quality and how to measure it. Scholarly work done on the issues will also be cited and discussed.

2.2 Organization as Systems

Organizations are social-technical, man-made systems with integrative levels consisting of a set of either or all of social, technical or material partners co-operating on a common purpose (Stichweh, 1991). Social systems have structure of events rather than physical parts that is inseparable from the functioning of the system. The quality of social systems and of their events means that they can be designed for a wide range of objectives, and that they require control mechanism of various kinds to keep their component parts together and functioning in the required interdependent fashion.

Senge (1990) while talking of The Learning organization, in his book, *The Fifth Discipline*, notes that organizations that are effective in perfecting the system approach excel more than the rest. The system's overall behavior depends on its entire structure which determines the various behaviors, which in turn determine the various events. Problems hence should be solved from a holistic approach, not as bundles of small isolated problems since a system is not just the sum of its various parts. This broad view helps one to identify the real causes of issues and know how to address them (Hjørland and Nicolaisen, 2005).Operations managers need to appreciate that an organization

comprises of subsystems, with each subsystem in organizations having its own boundaries of sorts, and includes various inputs, processes, outputs and outcomes geared towards accomplishing an overall goal (Stichweh, 1991).

Attention should be given to matters of ongoing organizational co-ordination and feedback that could result in system failure and problems should be diagnosed by recognizing larger patterns of interactions. There is need to recognize the various parts of the organization, and, in particular, the interrelations of the parts, like inter-departmental relationship ,the role of the central or head office in relation to other departments, managerial to workers relationship and between the organization and their environment since is usually a dynamic interplay with the environment including with customers, competitors, suppliers, government and other agencies that results in efficient service delivery (McNamara, 2014).

2.3 Service and Service Quality

Gummesson (1994) notes that in recent times, there has been a paradigm shift from the goods-focused management to service-focused management. Organizations have recently shifted attention to the customer. In shifting to the customer, service delivery standards need consideration in realizing quality and customer satisfaction.

Johns (1999) defines service as an industry, a performance, an output or offering or a process. Bateson and Hoffman (1999) refer to services as deeds, efforts or performance. On the other hand, service quality as a concept has aroused considerable interest and debate. The concept does not have a universal definition but consensus can be reached

that it has to do with the extent to which a service meets or matches customer needs or expectations. It is about how close the service levels come to fulfilling the customer's needs. A service is said to be quality when it consistently conforms to customer expectations. Service quality is an assessment of the overall excellence of service by the customer (Wisniewski and Donnelly, 1996; Lewis and Booms, 1983; Parasuraman, Zeithaml and Berry, 1985).

There exist a myriad of definitions of service quality. Several scholars define service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Wisniewski and Donnelly, 1996). Others define it as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al ., 1988; Lewis and Mitchell, 1990).

A major reason for measuring service quality is because it allows for before and after changes, for the location of quality related problems and for the establishment of clear standards for service delivery. According to Edvardsen, Ovretveit and Tomasson (1994), the starting point in developing quality in services is analysis and measurement. The SERVQUAL approach, which is studied in this paper, is the most common method for measuring service quality.

Gronroos (2001) classifies services as either high-touch or high-tech. High-touch services are mostly dependent on people in the service process including the physical resources and technology-based systems that have to facilitate the service process in a customer-oriented fashion like instructions and personnel assistance in using services, whereas

high-tech services are predominantly based on the use of automated systems and other types of physical resources like ATM and agency banking services. Schmenner (1986 cited in Fitzsimmons and Fitzsimmons, 2001) develops a service process matrix and categorizes services along two dimensions that significantly affect the character of the service delivery process. The vertical dimension measures the degree of labour intensity, which is defined as the ratio of labour cost to capital cost while the horizontal dimension measures the degree of customer interaction and customization, which describes the ability of the customer to affect personally the nature of the service delivered. The matrix indicates four types of services namely service factory, mass service, service shop and professional service.

Bateson (1995) outlines four unique characteristics of a service as intangibility, heterogeneity, inseparability and perishability. Johns (1999) indicates that services are mostly described as intangible and their output viewed as an activity rather than a tangible object, but also admits that some service outputs have some substantial tangible components like physical facilities, equipments and personnel. Customers evaluate service quality by comparing the perceptions of service provider's actual performance with what they think would be have been expected in their service experience (Gronroos, 1982; Lehtinen and Lehtinen, 1982).

Customers compare the quality of the product after usage to that of their expectations before usage (Swan and Comb, 1976), and indicate their satisfaction/dissatisfaction with the products or services purchased. Customer expectation and perception are the two key ingredients in service quality. Oliver (1980) posits that customers judge quality as "low"

if performance (perception) does not meet their expectation and quality as “high” when performance exceeds expectations.

2.3.1 Service Quality Models

Several models have been identified in the literature for measuring service quality. Among the approaches or models are: expectancy-disconfirmation approach, performance-only approach, technical and functional dichotomy approach, and service quality versus service satisfaction approach.

Oliver (1980) came up with the expectancy-disconfirmation model that focuses on identifying customer expectation versus what they actually experienced. It compares the service performance with the expectations of the customers, which is assessed after the service encounters. Customers determine service quality after having a service experience. The technical and functional dichotomy approach was developed in 1984 by Gronroos. It distinguished between technical quality, which asks the question of whether the service meets customers’ expectations as an outcome of the service delivered based on durability, security, physical features and the functional quality, that measures how consumers perceive the production and delivery of the service (Gronroos,1984).Rust and Oliver (1994) added service environment as a new dimension to this model.

Parasuraman, Zeithaml and Berry (1985) suggested the SERVQUAL (service quality) model to measure the difference between perception and expectation of quality of service. It had ten dimensions that were the determinants of service quality: access, communication, competence, courtesy, credibility, reliability, responsiveness, security,

understanding and tangibles. Zeithaml, Parasuraman and Berry (1988) on further study generalized and reduced the dimensions to five broad categories, namely; tangibles, reliability, responsiveness, assurance and empathy.

Some further studies recommended that to obtain superior assessment of service quality, service performance should be more inclusive and hence came up the SERVPERF (Service Performance) model advanced by Cronin and Taylor (1992). Yet another group of researchers came up with Retail Service Quality Scale (RSQS) for use in the retail environment (Dobholkar, Thorpe and Rentz, 1996).Later conceptualisation of service quality brought about the Hierarchical and multidimensional model for service quality (Brady and Cronin, 2001).

There is no agreed number of dimensions in measuring the quality of service but in the banking industry, the SERVQUAL multidimensional model has been widely used and proved to be sufficient for measuring service quality. In this study, the ‘Gap Approach’, or 'SERVQUAL' model developed by Parasuraman, Zeithaml and Berry (1988) was used. It aimed at measuring the gap between the customers' expectations of the service level and their perceptions of the actual service performance level. The SERVQUAL dimensions as earlier mentioned are: tangibles, reliability, responsiveness, assurance and empathy and are the basis for service quality measurement (Parasuraman, Zeithaml and Berry,1985; Zeithaml, Parasuraman and Berry, 1988). Parasuraman, Zeithaml and Berry went on to distinguish each of the five dimensions.

Tangibles are about the visible aspects of that facilitate service delivery. In banks these include the physical surroundings where branches and ATMs are located, the appearance

of the staff, state of facilities like branches and ATM machines, materials, and equipment as well as communication materials.

Reliability on the other hand refers to the ability to perform the promised service both dependably and accurately with little or no error. It is the consistency of performance of the service, facilities and staff. Responsiveness is the speed of service delivery. This includes the speed of throughput ,for example transaction processing speed), ability of the bank to recover quickly when service fails and exhibit professionalism and the ability of the service to respond promptly to customer requests, with minimal queuing and waiting time.

The assurance dimension includes the competence to perform the service, the knowledge and courtesy of employees , ability to convey trust and confidence , respect for the customer, effective communication with the customer and the general attitude that the server . Empathy refers to the customer relations skills that staff, in this case in banks, display by making the customer feel welcome, feel that their needs have been understood and he/she is valued or appreciated, and that they receive personal attention.

The Gap Approach that is similar to the SERVQUAL model has five gaps according to Seth and Deshmaukh (2005) cited in Samea and Shahin (2010):

Gap 1: Customer Expectation - Management Gap

This gap addresses the difference between consumers' expectations and management's perceptions of service quality.

Gap 2 **Management Perception - Service Quality Specifications Gap.**

Addresses the difference between management's perceptions of consumer's expectations and service quality specifications, such as improper service-quality standards.

Gap 3 **Service Quality Specification - Service Delivery Gap**

Addresses the difference between service quality specifications and service actually delivered (service performance gap)

Gap 4 **Service Delivery - External Communication Gap**

Addresses the difference between service delivery and communications to consumers about service delivery (whether promises match delivery).

Gap 5 **Expected Service - Perceived Service Gap**

This gap addresses the difference between consumer's expectation and perceived service.

This study employed the fifth Gap in analyzing customers' expectation and the perceived quality of service.

2.3.2 Service Quality Perceptions

Perceived quality of a brand provides a pivotal reason-to-buy, influencing brands included and excluded from consideration, now or in the future, and the brand that is to be selected (Aaker, 1991). Brands with a bad reputation on system performance (frequent instability) and other factors will be faced with exclusion, uncertainty and low probability of choice by customers. While customers evaluate the quality of delivery, service

providers define quality by the content of the service. However, understanding of consumers attitudes will assist gauge how they perceive service quality in banking operations (Osei-poku, 2012).

The role of managers in service management is to put controls on the performance of services, monitor and evaluate service outcomes and procedures to ensure that the processes customers go through to receive service are effective in attaining customer satisfaction. Literature has proven that providing quality service delivery to customers retains them, attracts new ones, enhances corporate image, and reduces likelihood of customer defection while guarantying survival and profitability (Negi, 2009; Ladhari, 2008).

Organizations must give priority to service quality through efficient service delivery. The failure to co-ordinate the working of various departments in banks results in system failure that in turn results in poor quality output. This can contribute towards negative customer attitudes about the services delivered. Organizations must discriminate and give priority to critical system failures as they have a major impact (Pearsons, 2010).

2.4 Relationship between Service Quality and System failures

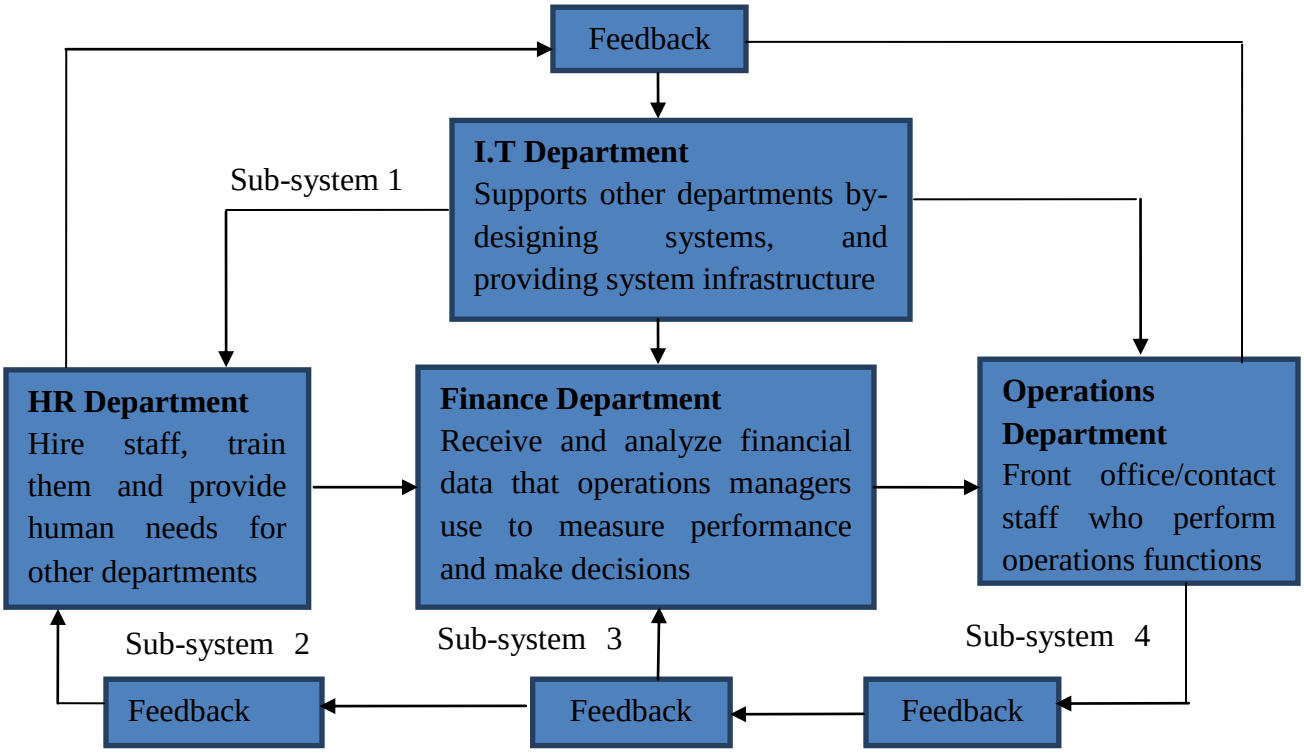
Service management literature argues that customer satisfaction is the result of customers' perception of the value received in a transaction or relationship- where value equals perceived service quality relative to prices and customer acquisition cost (Hallowell, 1996). Lewis and Spyrakopoulos (2001, cited in Taleb and Kamar, 2013) posit that from a customer's perspective, a service failure refers to a mistake or error that

occurs during the delivery of service, causing dissatisfaction. This means that the organization that fails to achieve the customer's expectations of the service could be perceived negatively.

When events occur that interrupt the feedback mechanism, causing the system to deviate from the expected service or resulting in miscommunication among various sub-systems, the system is said to have failed (Velykien , 2013). From Figure 1.2 below, it can be noted that for efficient service delivery, the Finance department must classify and organize financial data and provide relevant financial data that managers in operations can in turn use to measure performance and make decisions, the human resource department has to understand staff requirements, recruit and train adequate staff to support all functions, and the information technology department has to support all staff, especially contact staff for efficient delivery of services. Failure in managing the feedback mechanism for positive results causes system failure.

A simple illustration of how some of sub system functions support each other is shown below:

Figure 2.1: Example of Sub system interaction at Equity bank



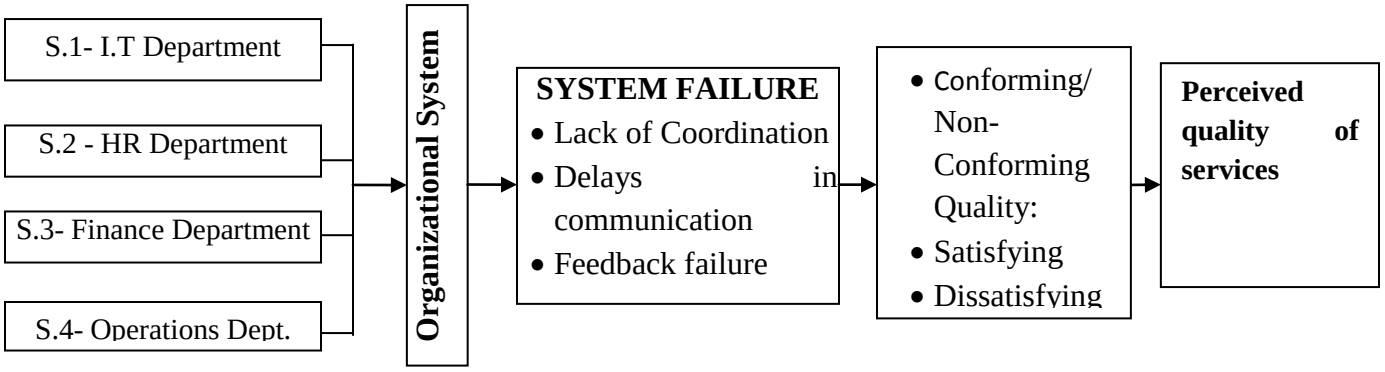
Source: Compiled by Author (2014)

2.5 The conceptual Framework

In this study the organization is considered as having several subsystems that work hand in hand so as to deliver services to customers. These subsystems include the system information department, operation and relations department, the finance/treasury and the credit departments which in the banking sector are directly involved in service delivery. They thus form the independent variables. When functioning normally the organization is able to provide the expected quality of services to its clients. Nevertheless, when the subsystems fail to have a coordinated approach to their operations and there is resultant breakdown in communication and feedback failure these translates into system failure which in this study is the intervening variable that directly influences the quality of

service and the perceptions of the customers on the quality of service; which are the independent variables for the study. Figure 1.3 captures the conceptual framework of the study.

Figure 2.2: Conceptual Framework



Compiled by Author (2014)

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter focuses on the research design, target population, sample and sampling procedures, research instruments, instruments validity and reliability, data collection and data analysis procedures.

3.1 Research Design

A case study approach was adopted to allow the researcher to do an in-depth study. Quantitative research design on the other hand was employed as it allows for explanation of a phenomenon by collecting numerical data that are analyzed using mathematically based methods, particularly statistics (Muijs, 2004). The study used the SERVQUAL model in constructing the instrument and measuring perceived service quality.

3.2 Population, Sample and Sampling

Kenya has a total of 43 banks that can form the target population of this study. However the researcher took a case study of one bank, Equity bank for an in-depth view of the impact of system failure on the perceived quality of financial services. Equity bank has a total of 161 branches (Appendix II). Of these there are 41 branches in Nairobi, with 11 of them lying within the NCBD.

This study targeted only the 11 branches within the NCBD bcause they present a wide range of demographics in terms of types of customers, type of account held, age of customers, income earned and many other such demographics that the researchers deemed representative enough. A fold select criterion was used to select four branches

from the 11 which formed the sample for the study. It is estimated that close to 750 customers visit an Equity Bank branch within the NCBD on normal working days. These customers formed the target sample and were sampled through systematic random sampling.

The sample size was calculated with recourse to the deVaus proportion approach (deVaus, 2002).

$$N = \frac{n}{1 + n(e)^2}$$

Where

N = Sample Size

n = Sample Frame

e = Confidence Level, and should lie between (0.04…..0.08). For this study 0.06 was chosen for the confidence interval level at 95% given that the researcher was to study 11 branches with a sample large enough to give a high level of certainty that the results can apply across the bank.

The above sample formula gave a sample size of 352. This sample size was equally distributed to the four branches giving 88 customer respondents per branch. The minimum sample size recommended for correlation analysis is 64 participants for one-tailed hypotheses and 82 participants for two-tailed hypotheses. The sample size of 88 per branch thus fell within the acceptable levels.

3.4 Data Collection

Both primary and secondary data was collected and analyzed. Primary data was collected through the administration of questionnaires administered to Equity bank customers as the respondents. The questionnaire was definite, concrete and preordained. The structured questionnaire was used to initiate formal enquiry to gather data from respondents, supplementing and checking previously accumulated data. The instrument was able to yield a high response rate of 81.6%.

Research instruments should be free of measurement error, bias and be complete. They must be reliable and relevant to the topic of study. Orodho (2009), states that results obtained from the analysis of the data must actually represent the phenomenon under investigation, hence be valid. Validity is concerned with "are you measuring what you think you are measuring?" The instrument should also be reliable, which Mugenda and Mugenda (1999) defines as a measure of the degree to which a research instrument yields consistent results or data after repeated tests to reduce error in the measurement process. The questionnaire was examined, discussed and reviewed by the supervisor and the researcher who used the relevance of the content on the instrument in relation to the statement problem, objectives and research questions to determine its reliability and validity.

3.5 Data Analysis

The data generated by questionnaires was checked, edited organized and coded by computer to reduce the mass of data obtained into a form suitable for analysis. The coded data was then processed using SPSS. The statistical analysis was summarized into

frequencies and percentages and presented in tables, bar charts and figures. Frequencies and percentages were adopted to present, discuss and interpret findings obtained. Inferential statistics was used with quantitative data as would be found appropriate as they are usually reliable. To address the research objectives, correlation analysis was done to establish relationships.

All data collected was checked for completeness and consistency. The researcher then looked at the outcome variables and offered explanations for these and rival explanations. The findings obtained were then discussed and formed the basis for the research findings, conclusion and recommendations.

CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter provides the empirical results of the data analysis as outlined in the research design presented in chapter three. The data was gathered through questionnaires administered to two hundred and eighty eight (288) respondents drawn from four (4) Equity Branches located within Nairobi that were selected through the fold select criterion. The presentation, analysis and interpretation of the data is in line with the research objective. Descriptive statistics and inferential statistical tools have been used to give the presentation.

4.2 Response Rate

In each of the targeted branches, 88 respondents were targeted giving a total of 352 targeted respondents. The researcher thus administered 352 questionnaires out of which 288 were considered legitimate and fit for analysis, giving an 81.6% response rate. Dillman (1999) recommends on a priori sample size determination as it enables a researcher to deploy methods that help address high non response rates in a study. Therefore, going by the advice of Dillman (1999) the researcher was able to come up with a priori sample size of 353 respondents which assisted in attaining this high response rate. This is in line with Babbie (1990) who posits that a response rate of 60% in social studies is good while that of 70% and above should be considered ‘very good’. Thus the researcher considers a response rate of 81.6% as being very good and one that is sufficient for analysis and inferential conclusions. This is presented in Table 4.1.

Table 4.1 Response Rate

Response	Frequency	Percentage (%)
Responded	288	81.6
No Response	65	18.4
Total	**353**	**100**

Source: Field Data (2014)

4.3 Demographic Data

In this section the study sought to determine the respondents' demographic information such as age, gender, marital status, educational level, duration of being customer with Equity among others.

4.3.1 Age Bracket of Respondents

Table 4.2 shows that most of the respondents (31.9%) were aged between 38-47 years while 29.2% were aged between 48 – 57 years, 27.1% between 28 – 37 years, 9% between 18 – 27 years and 2.8% were aged above 57 years.

Table 4.2 Age of Respondents

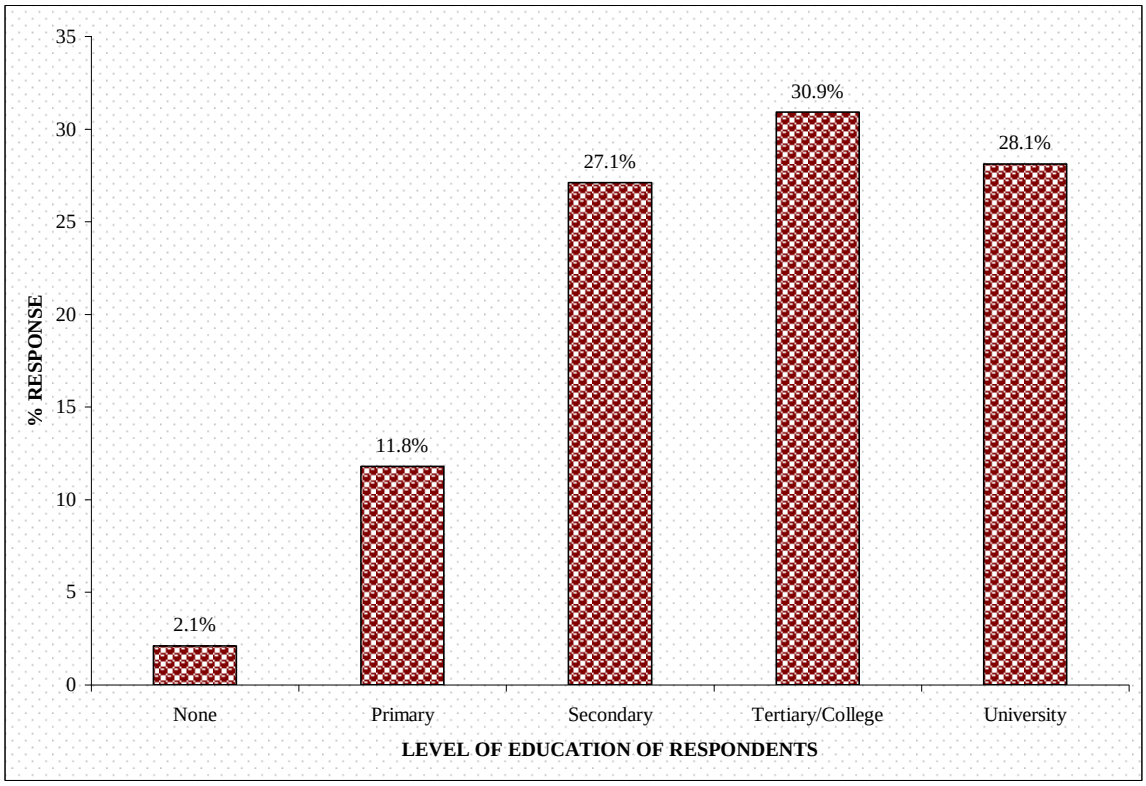
Age of Respondents	Frequency	Percentage (%)
18 - 27 yrs	26	9.0
28 - 37 yrs	78	27.1
38 - 47 yrs	92	31.9
48 - 57 yrs	84	29.2
Above 57 yrs	8	2.8
Total	**288**	**100**

Source: Field Data (2014)

4.3.2 Level of Education

The findings of the study on level of education show that most of the respondents had attained tertiary/college level of education. Figure 4.1 shows that 30.9% of the respondents fell in this group followed by 28.1% who had attained university education while 11.8% had basic education and 2.1% had no form of formal education.

Figure 4.1 Level of Education of Respondents



Source: Field Data (2014)

4.3.3 Equity Account Holders

Out of the 81.2% (n = 288) respondents, 97.2% (n = 280) had accounts with Equity Bank while 2.8% (n = 8) were not Equity Bank holders. The researcher sought to determine the type of account held by the 97.2% of respondents who indicated they had bank account with the bank. Table 4.3 gives the types of accounts held by the respondents.

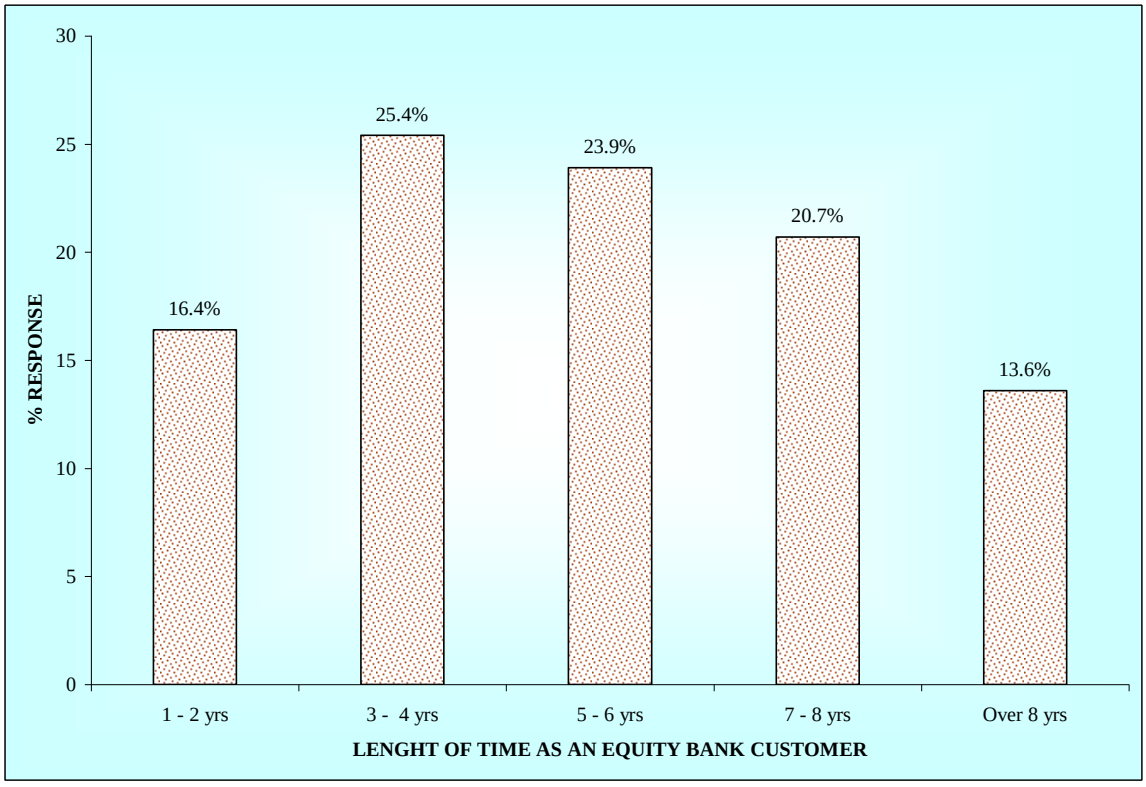
Table 4.3 Type of Account held by Respondents

Type of Account	Frequency	Percentage (%)
Retail	168	60.0
Corporate	83	29.6
Prestige	29	10.4
Total	**280**	**100**

From the table, 60% of the respondents had retail accounts, 29.6% had corporate accounts and 10.4% of the respondents had prestige accounts. This is an indication that most of the Equity Bank Customers were retail account holders followed by corporate account holders with prestige account holders being the minority account holders.

4.3.4 Duration as an Equity Bank Customer

Figure 4.2 Duration as an Equity Bank Customer



Source: Field Data (2014)

From Figure 4.2, most of the respondents had been customers with Equity Bank for

between 3 – 4 yrs while 23.9% for between 5 – 6 years, 20.7% for between 7- 8 years, 16.4% for between 1 -2 years and 13.6% for over eight years. From these findings, majority of the respondents had been Equity Bank Customers for over three years with a cumulative percentage of 85.6%. This is a very good percentage and the researcher considered this high enough and one able to address the research objectives. Essentially, a longer interaction of time as a customer is imperative in the measure of customer's perception on the quality of service.

4.3.5 Frequency of Visiting Equity Bank

Table 4.4 Frequency of Visiting Bank

Rate of Visiting Bank	Frequency	Percentage (%)
Daily	51	17.7
2 - 5 times a Week	89	30.9
Once a Week	51	17.7
Once a Fortnight	43	14.9
Once a Month	35	12.2
Rarely	19	6.6
Total	**288**	**100**

Source: Field Data (2014)

From table 4.4, most of the customers(30.9%) frequented the bank 2 – 5 times a week followed by 17.7% of customers who frequented the bank daily, with a similar number frequenting the bank once a week while those who visited the bank once a fortnight were 14.9%, once a month were 12.2% and those who rarely visited were 6.6%. From these findings, majority of the respondents (66.3%) visited the bank at least once a week which gave the researcher the confidence that majority of the study composition was of persons who visited the bank frequently. This was a great assurance that the respondents were in a position to answer questions on perception of service quality.

4.3.6 Services Sought for From Equity Bank

Table 4.5 indicates that the services that attracted customers the most to Equity Bank were savings and withdrawal services (M = 4.84; Std D = 0.045), followed by ATM services (M = 4.22; Std D = 0.426) and loans, advances and mortgages (M=4.12, Std D = 0.789).

Services that attracted customers the least to Equity Bank were foreign exchange services (M = 1.32, Std D = 0.764), online banking (M = 1.32, Std D = 0.781), insurance services (M = 1.36, Std D = 0.973) and stock trading (M=2.12, Std D = 0.961).

Table 4.5 Services Sought for at Equity Bank

Services	Mean	Std Deviation
Savings and Withdrawal	4.84	0.045
Loans, advances and mortgage	4.12	0.789
Asset financing	3.02	1.014
Stock trading	2.12	0.961
Foreign Exchange Services	1.32	0.764
Bank transfers	3.21	0.619
Insurance	1.36	0.973
Online banking	1.32	0.781
ATM services	4.22	0.426
Business support account and services	3.23	0.791

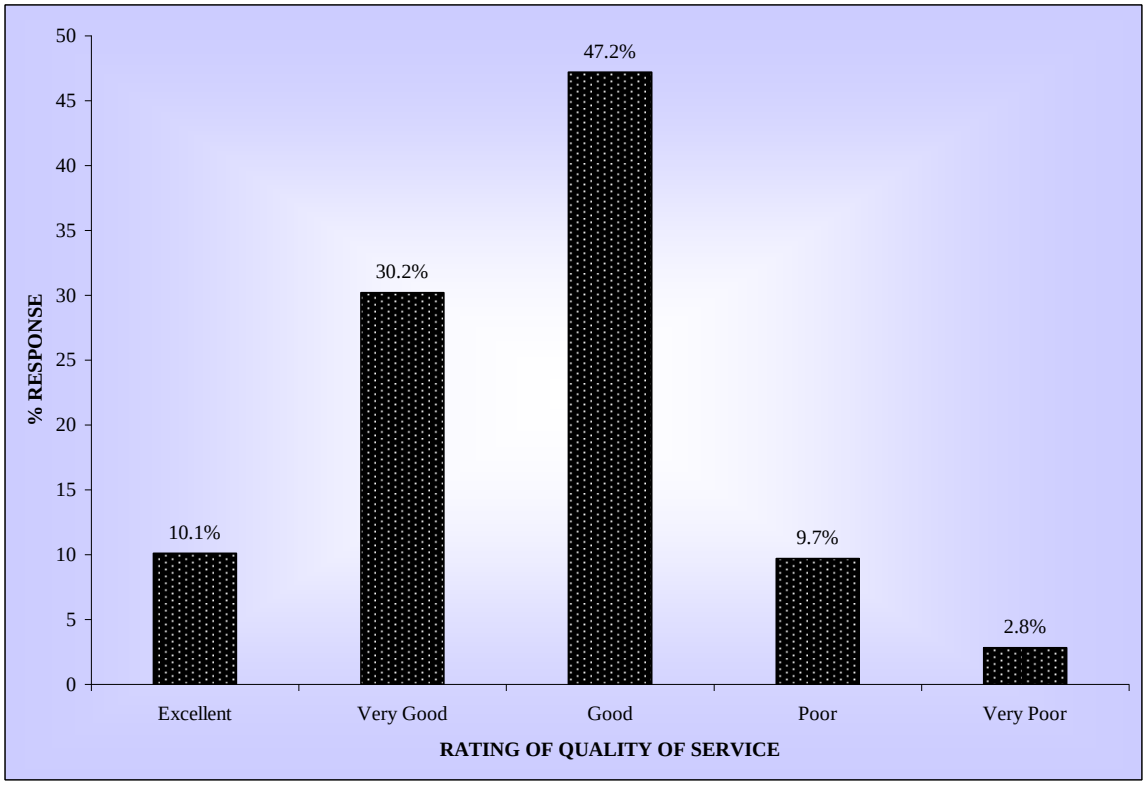
The departments that customers usually interacted with most were the customer care department and the operations department.

4.4 Rating of Service Provision at Equity Bank

The findings of the study presented in Figure 4.3 show that most of the respondents, 47.2% rated the quality of service provided at Equity Bank as ‘Good’ while 30.2% as ‘Very Good’, 10.1% as ‘Excellent’, 9.7% as ‘Poor’ and 2.8% as ‘Very Poor’.

Cumulatively the percentage of customers that can be deduced to be satisfied with the service of quality at Equity Bank is 87.5%, which is drawn from those respondents who answered Excellent, Very Good and Good.

Figure 4.3 Service Provision at Equity Bank



4.5 Customers' Expectations and Perceptions on Service Quality at Equity Bank

To understand if the bank meets customer needs on the quality of service, we need to study both the customer expectations of the services they actually expect and what they receive from the bank that forms their perceptions about service quality.

4.5.1 Gap Analysis of Service Quality

This section provides an analysis on information on the expectation and perception of customers towards the level of service quality. To undertake this, a large number of variables were assessed, with five dimensions of the variables being drawn from SERVQUAL. These were used so as to bring an understanding on the expectation and perception of the customers towards service quality of the bank in a complete and integrated approach. Customer's opinions were elicited by use of twenty two statements listed in Table 4.6.

Table 4.6 Statements and Dimensions of Service Quality

No.	Statement	Dimension
1	Modern facilities, equipment and well-built branches	Tangible
2	Appeal and neatness of management and staff at the bank	Tangible
3	The branches should be easy to get in and out.	Tangible
4	Branches location in clean and safe environment.	Tangible
5	Bank performs its service right the first time.	Reliability
6	Quality of services delivered is consistent and same across the bank.	Tangible
7	Management and staff at branches perform services without delay or excuse.	Reliability
8	Services offered with high accuracy and little error.	Responsiveness
9	Bank staff show a sincere interest in solving my problems.	Empathy
10	Employees respond quickly to all customer enquiries.	Responsiveness
11	Services delivery is at the exact same time the bank promises to deliver.	Assurance
12	Bank seeks solutions to all customer issues in the shortest time possible.	Responsiveness
13	The queuing system should be well managed so that customers receive prompt service.	Responsiveness
14	Staff serves customers promptly.	Responsiveness
15	Bank provides all information that is useful in for customers during service delivery.	Empathy
16	Management and the staff inspire confidence in customers	Assurance

	during service delivery.	
17	Bank provides a secure and safe environment for transactions	Assurance
18	Management and staff are approachable and polite to customers.	Empathy
19	Bank understand customers needs	Empathy
20	Employees offer customers personal attention.	Empathy
21	Service system is configured around meeting customer needs.	Empathy
22	Banking hours are convenient to all customers	Empathy

Tangibles are associated with the physical facilities, equipment and appearance of the personnel, reliability relate to the ability for the bank and its personnel to perform the desired service dependably accurately and consistently. Responsiveness refers to those statements linked with the willingness of the bank to provide prompt service and help to its customers. Assurance is related to employee's knowledge, courtesy, and ability to convey trust and confidence while empathy is concerned with the provision of caring, individualized attention to customers.

Table 4.7 Gap Analysis for Service Quality of Equity Bank

Statement	Perception Mean	Expectation Mean	Perception Minus Expectation
Modern facilities, equipment and well-built branches	4.18	4.23	-0.05
Appeal and neatness of management and staff at the bank	3.76	3.92	-0.16
Branches are easy to get in and out.	4.82	4.83	-0.01
Branches location in clean and safe environment.	3.24	3.82	-0.58
Bank performs its service right the first time.	3.26	4.12	-0.86
Quality of services delivered is consistent and same across the bank.	4.23	4.31	-0.08
Management and staff at branches perform services without delay or excuse.	3.89	4.35	-0.46
Services offered with high accuracy and little error.	3.76	4.56	-0.8
Staff show a sincere interest in solving my problems.	3.94	4.61	-0.67
Employees respond quickly to all customer enquiries.	3.68	4.58	-0.9
Services delivery is at the exact same time the bank promises to deliver.	3.91	4.42	-0.51
Bank seeks solutions to all customer issues in the shortest time possible.	3.75	4.63	-0.88
Queuing system is well managed for customers to receive prompt service.	4.25	4.72	-0.47
Staff serves customers promptly.	4.36	4.80	-0.44
Bank provides all information that is useful in for customers during service delivery.	4.18	4.63	-0.45
Management and the staff inspire confidence in customers during service delivery.	4.32	4.50	-0.18
Bank provides a secure and safe environment for transactions	4.19	4.86	-0.67
Management and staff are approachable and polite to customers.	4.38	4.68	-0.3
Bank understand customers needs	3.94	4.66	-0.72
Employees offer customers personal attention.	4.52	4.59	-0.07
Service system is configured around meeting customer needs.	4.11	4.50	-0.39
Banking hours are convenient to all customers	4.01	4.46	-0.45

Table 4.7 presents the differences between perception and expectation of service quality of the respondents interviewed. Of notable concern to the study was that all of the gap values were negative, an indication that performance of the bank was below customer expectations leading to a low service quality perception.

The highest negative score was -0.88 which was for the statement 'bank seeks solutions to all customer issues in the shortest time possible'. This was followed by a score of -0.86 for 'Bank performs its service right the first time'. This implies that the customers were not convinced that the bank was responsive enough and that the bank they were not convinced that it offered service right the first time, hence their reliability is below customer expectations.

On the other hand, the statement 'Branches are easy to get in and out' recorded the lowest negative score at -0.01 with the perception mean for the statement being 4.82 while the expectation mean was 4.83. This result from the tangible dimension shows that the expectation of customers for branches to be easy to get in and out was almost being met at Equity Bank.

The lowest customer expectation was that of bank branches to be located in safe and clean environment at 3.82. This an indication that customers were not actually concerned with the location of the bank branches as long they were easy to get in and out, staff served customers promptly and the bank provided secure and safe environment for transactions among other expectations. Customer felt assured that they were safe and the environment secure.

4.6 Relationship Between System Failure and Service Quality

To determine the impact of system failure on service quality, a Likert scale was used with 10 statements regarding service quality used to establish a relationship between system failure and service quality. The scale for ranking the statements was: 5 = strongly Agree, 4 = Agree, 3 = Not at all, 2 = Disagree to some extent, 1 = Totally Disagree.

Table 4.8 Impact of System Failure on Service Quality

No.	Statement	Mean	Std D.
1	The behavior of the banks employees determines the service offered	4.061	0.361
2	Management and staff communicate well to customers while dealing with system failures	3.502	0.909
3	Management and staff comprehend customer needs by improving the operational process when offering services.	3.242	0.671
4	Staff take time with customers to find out their needs so as to ameliorate the situation	2.964	0.153
5	The bank avails quality and complete information to the customers regarding system failure	1.630	1.002
6	Overall the speed of processing customer queries, transactions, documents and other enquiries is slow	4.581	0.644
7	The speed of identification of problems and systematically dealing with them is lackluster.	3.033	1.011
8	I don't get value for my money	2.108	0.808
9	Quality of service at the bank is poor	4.217	0.097
10	Management and the staff inspire confidence in customers during system failure.	3.021	0.729

From table 4.8, system failure at Equity Bank greatly slowed the speed of processing customer queries, transactions, documents and other enquiries (M = 4.581, Std D 0.644). System failure had a great bearing on quality of service with respondents noting that the quality of service was poor (M = 4.217, Std D = 0.097). The behavior of the banks employees determines the service offered by the bank (M = 4.061, Std = 0.361).

The table reveals that during system failure the bank doesn't avail quality and complete information to the customers regarding system failures (M = 1.630, Std D = 1.002). The bank staff also don't take enough time with customers to find out their needs so as to ameliorate the situation (M = 2.964, Std D = 0.153).

4.7 Correlation Analysis

In this study, a correlation matrix was constructed using the variables in the questionnaire to show the strength of relationship among the variables. This was in line with Kline (1998) who defines a correlation matrix as a set of correlation coefficients between several variables. To establish a correlation matrix, the variables presented in the questionnaire were grouped into the five broad SERVQUAL dimensions that are tangibles, reliability, responsiveness, empathy and assurance and the expected service quality measured. The mean and standard deviations based on the gap analysis were used to construct the correlation matrix.

Table 4.9 Summary of Means, Standard Deviations, and Correlations of Service Quality and Expected Service Quality

Variables	Mean	S.D	ESQ	Ta	Rel	Em	Ass	Res
Expected Service Quality (ESQ)	4.16	1.01						
Empathy (Em)	3.69	0.61	0.18**					
Tangible (Ta)	3.72	0.62	0.17**	0.51**				
Reliability (Rel)	3.89	0.54	0.19**	0.56**	0.48**			
Responsiveness (Res)	3.92	0.60	0.20**	0.55**	0.38**	0.49**		
Assurance (Ass)	3.74	0.53	0.21**	0.68**	0.61**	0.56**	0.60**	

There was a significant positive relationship between Assurance and Expected service quality (r =0.21). The positively moderate correlation were for Responsiveness and

expected service quality (r = 0.20), reliability (r = 0.19) and empathy (r = 0.18). The weakest correlation was for tangibles (r = 0.17). In other words, the results indicate that the most important service quality dimension on customer satisfaction was assurance, which goes to prove that Assurance was perceived as a dominant service quality.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The objective of the study was to investigate the influence of system failure on system failure and perceived quality of services. Of concern to the study was to determine the customer's perspective of the quality of services as offered by Equity Bank and the relationship between system failure and perceived quality of services. This chapter gives a summary of the study and makes conclusion and recommendations based on the results. The chapter also presents implications from the findings and areas for further research.

5.2 Summary of Findings

The findings of the study have revealed that most of the customers at Equity Bank consider the quality of service as good. This is evident from 47.2% of respondents who rated the quality of service as 'Good' and 30.2% as 'Very Good'. This is an indication of a high sense of satisfaction with service delivery at the bank. In a 22 statement Likert Scale, differences between perception and expectation of service quality of the respondents show that there is a gap between customer expectation and perceived quality of service. This reveals that the bank performance was below customer expectations leading to a low service quality perception. The highest negative score was -0.88 which was for the statement 'bank seeks solutions to all customer issues in the shortest time possible'. This was followed by a score of -0.86 for 'Bank performs its service right the first time'. This implies that the customers were not convinced that the bank seeks solutions to all its customers in the shortest time possible and that the bank performs its

services right for the first time. On the other hand, the statement 'Branches are easy to get in and out' recorded the lowest negative score at -0.01 with the perception mean for the statement being 4.82 while the expectation mean was 4.83. This result from the tangible dimension shows that the expectation of customers for branches to be easy to get in and out was almost being met at Equity Bank.

System failure at Equity Bank greatly slows the speed of processing customer queries, transactions, documents and other enquiries (M = 4.581, Std D 0.644). management and staff don't communicate clearly and uniformly across the branches on some issues, hence the bank didn't avail quality and complete information to the customers resulting in disjointed decisions, and other failures (M = 1.630, Std D = 1.002). Bank staff also don't seem to take enough time with customers to find out their needs so as to ameliorate the situation or correct any issues of concern (M = 2.964, Std D = 0.153).

5.3 Conclusion

This research offers practical help to researchers and practitioners in providing a direction for quality improvement especially for Kenyan banks. It is clear that the dimensions that have direct effect to the customers' perception are 'Assurance' and 'Responsiveness' dimensions. They have the greatest bearing on customer's perception on service quality. They are closely followed by 'Reliability' and 'Empathy' dimensions hence accuracy in service delivery, provision of accurate, timely, complete information and service is of great importance in meeting customer needs. Customers are least concerned about the 'Tangible' dimension. It least affects a customer's perception. In an aggressive and competitive financial market, service quality is an imperative indicator to a bank's

competitiveness. Therefore, there is need for banks to ensure that they don't ignore customers' perceptions on the quality of service.

5.4 Policy Recommendations

The current findings provide a guideline for banks for the allocation of efforts to maximize customer satisfaction and to improve the perceived quality of service. Based on the findings of the study, a number of recommendations are herein suggested.

In view of the fact that empathy dimensions and responsiveness show large quality gap, there is need for banks to look at ways of working on areas around empathy dimensions as well as address how banks respond to customers need in order to improve on customer perceptions on quality of service offered. Management and staff need to communicate clearly and communicate in the same way and the same information across departments and across branches. In line with this, there is need for customers to be provided with an opportunity to anonymously share their opinion and complain about the quality of service provided by the staff. This can provide a good opportunity for the banks to collect information on speed of response and about the behavior and attitude of the staff. Using this information, the management can get an avenue of reprimanding staff who don't perform to customer's expectation while on the other hand rewarding those who are diligent in their work.

This feedback should also be integrated in regular service delivery and the quality of service can be effectively monitored through the customers' voice thus bringing improvements in behaviors reflected by the bank staff. The study recommends that such customer satisfaction scores can be used in performance appraisal.

5.5 Limitations of the Study

The focus of this study was on only one commercial bank, Equity Bank. Therefore it cannot be generalized for all financial institutions in Kenya. The study relied on primary data that was collected from customers in the NCBD. Although there are general guiding principles towards service delivery within Equity Bank, the study understands that the mode of service delivery in Equity Bank Branches in the rural setting might not be the same in Nairobi. This is because unlike in Nairobi where service delivery is mainly in English or Kiswahili, the homogeneity of the rural setting might mean service delivery is predominantly in the prevailing mother tongue language. Therefore the reliability and quality of this data cannot be considered to be 100% perfect. Whereas a collection of data from branches across the country could have been more appropriate, collection of such data was not possible due to time and financial constraints.

5.6 Suggestions for Further Research

This study finds the need for similar studies to be carried out targeting other financial institutions and should incorporate more financial parameters. At the same time, there is need for further research that narrows down on specific types of system failure and their contribution to perceived service quality and customer satisfaction.

REFERENCES

Aaker, D. A. (1991). Managing brand equity. New York: The Free Press.

Babbie, E. (1990). Survey research methods (rd Ed). Belmont, CA: Wadsworth.

Bateson (1995), "SERVQUAL: review, critique, research agenda", European Journal of Marketing, Vol. 30 No. 1, pp. 8-32.

Bateson, J. E. G. and Hoffman, D. K. (1999). Managing services marketing: Text and readings. New York: The Dryden Press.

Berk J.H. and Associates (2012).Systems Failure Analysis: A Fault-*Tree*-Driven, Disciplined Failure Analysis Approach.

Birger Hjørland and Jeppe Nicolaisen (2005).The *Epistemological* Lifeboat: Systems theory business.

CBK (2014). Commercial banks in Kenya. Retrieved 10.07 A.M on 01/05/2014 from https://www.centralbank.go.ke.

CBK, 2014; Banking Survey, 2014

Cronin, J.J. Jr and Taylor, S.A. (1992), "SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality", Journal of Marketing, Vol. 58 No. 1, pp. 125-31.

Crosby, P. B. (1979). Quality is free: The art of making quality certain. New York: McGraw-Hill

Daft, R. L. (2007).Understanding the Theory and Design of Organizations.

De Vaus, D., (2001). Research design in social research. Sage Publications Ltd. p 36-58.

Dines, R. (2013).Quantifying The Impact Of Downtime. Retrieved on 14th August , 2014 from from http://www.zdnet.com/quantifying-the-impact-of-downtime-7000019595/

Douglas, L. & Connor, R. (2003). Attitudes to service quality the expectation gap, Nutrition & Food Science, Vol. 33 Number 4, p.165-172.

Edvardsen, B., Tomasson, B. and Ovretveit , J. (1994). Quality of Service: Making it Really Work, McGraw-Hill, New York, NY.

Fitzsimmons, J. A. & Fitzsimmons, M. J. (2001), Service Management: operations, strategy, and information technology, McGraw Hill Inc, New York.

Garvin, D. A, (1984) Managing Quality: The Strategic and Competitive Edge.

Ghimire , A. J (2012). Service quality and customer satisfaction in the restaurant

Global village partnerships (2014). Banking landscape in Kenya. Retrieved from http://www.proudlyafrican.info/Kenya/Equity-Bank-Top-Financial-Institution.aspx

Gronroos, C. (1982), Strategic Management and Marketing in the Service Sector, Swedish School of Economics and Business Administration, *Helsinki*.

Gronroos, C. (1984), "A service quality model and its marketing implications", European Journal of Marketing, Vol. 18 No. 4, pp. 36-44.

Gronroos, C. (2001), Service Management and Marketing: a customer relationship management approach, 2nd edition, Wiley and Sons, England.

Gummesson, E., (1994). Service Management: An Evaluation and the Future, International Journal of service Industry management, Vol. 4(1), pp.77-96.

Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty and profitability: An empirical study. International Journal of Service Industry Management, Vol. 7 No. 4, pp. 27-42.

Hjørland, B., and Nicolaisen, J. (2005). Epistemologies as (normative) theories of information seeking and use. In Information Seeking and Behavior in Epistemological Light at the ASIS&T Annual Meeting in Charlotte, NC : oral presentation. Charlotte, NC.

Johns, N. (1999), What is this thing called service?, European Journal of Marketing, Vol. 33 (9/10), pp. 958-973.

Juran, J. M. (1988). Juran on planning for quality. New York: Macmillan, Inc.

Kenya Bankers Association (2014). List of Equity bank branches in Kenya 2014.

Kimando (2012). A study on factors that affect quality of customer service in the banking industry in Kenya using a case study of Postbank Head Office, Nairobi.

Ladhari, R. (2008). A review of twenty years of SERVQUAL research, International Journal of Quality and Service Sciences, Vol. 1(2).P.172-198.

Lehtinen, U., and Lehtinen, J.R. (1982).Service quality- a study of dimensions. unpublished working paper, Service Management Institute, Helsinki, 439-460.

Lewis B. and Spyrakopoulos S. (2001). Service failure and recovery in retail banking: The customers' perspective, International Journal of Bank Marketing, 19(1), *37*-47

Lewis, B. R. and Mitchell, V. W. (1990). Defining and measuring the quality of customer service. Marketing Intelligence and Planning , Vol. 8, No. 6, pp. 11-17.

Lewis, R.C. and Booms, B.H. (1983), "The marketing aspects of service quality", in Berry, L., Shostack, G. and Upah, G. (Eds), Emerging Perspectives on Services Marketing, American Marketing Association, Chicago, IL, pp. 99-107.

Macdonald, J., & Piggott, J. (1992). Global quality: The new management of culture. Garratt Lane, London: Mercury Books.

Mahadevan V. (2007). Describing and Evaluating Train Services on the Swiss Railway Network from a New Perspective, Conference paper STRC, Monte Verità / Ascona

McNamara, C (2014). Management Function of Coordinating / Controlling: Overview of Basic Methods. Adapted from the Field Guide to Leadership and Supervision. Retrieved 09/08/2014 from http://managementhelp.org/managementcontrol/

McNamara,C (2014). Thinking about Organizations as systems. Free Management Library, Retrieved16/07/2014 Retrieved 09/08/2014 from http://managementhelp.org/managementcontrol/

Rahaman, M.M, Abdullah M. and Rahman , A. (2011). Measuring service quality using SERVQUAL Model: A Study on PCBs (Private Commercial Banks) in Bangladesh, Journal of Business Management Dynamics Vol.1, No.1, July 2011, pp.01-11

Mugenda, O. M. and Mugenda, A. G. (1999). Research Methods: Quantitative and Qualitative Approaches. Nairobi: Acts Press.

Muijs, D. (2004), Doing Quantitative research in education, Sage Publications Limited, London

Negi, R. (2009), Determining customer satisfaction through perceived service quality: A study of Ethiopian mobile users, International Journal of Mobile Marketing, Vol. 4(1), pp. 31-38.

Slack, N., Chambers, S. and Johnston, R. (2004). Failure Prevention and Recovery. Operations Management Chapter 19. Retrieved 29/04/2014.

Oliver, R. L (1980; 1994). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research (JMR); Nov80, Vol. 17 Issue 4, p460

Orodho, J. (2009). Elements of Education and Social Science Research Methods. Bureau of Educational Research. Institute of Research and Development.

Osei-Poku, M. (2012). Assessing service quality in commercial banks: A case study of Merchant Bank Ghana Limited.

Parasuraman, A. Zeithaml, V.A. & Berry, L. L. (1996). The behavioral consequences of service quality. Journal of Marketing, Vol. 60, pp. 31- 46.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985).A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L. (1988). SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality", Journal of Retailing, Vol. 64, Spring, pp. 12-40.

Pearson Education, Inc. (2010) .Chapter 19: Failure prevention.

Potocki and Brocato (1995).A System of Management for Organizational Improvement, Johns Hopkins APL Technical Digest (Vol 16, No.4)

R. Saravanan, K.S.P and Rao, (2007) .The impact of total quality service age on quality and operational performance: an empirical study.

Samea, M. & Shahin, A. (2010). Developing the Models of Service Quality Gaps: A Critical Discussion. Macrothink Institute. Business Management and Strategy, Vol. 1, No. 1.

Saravanan, R. & Rao, K. S. P. (2007), Measurement of service quality from the customers perspective – An empirical study, Total Quality Management, Vol. 18(4), pp. 435-449.

Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday/Currency 6th Edition.

Seth, N. & Deshmukh, S.G. (2005). Service quality models: a review. International Journal of Quality & Reliability Management, 22(9), 913-949.

Soteriou, A. and S. A. Zenios (1999). 'Operations, quality, and profitability in the provision of banking services.' Management Science 45(9): 1221-1238.

Stafford, M. R. (1996) "Demographic discriminators of service quality in the banking industry", Journal of Services Marketing, Vol. 10

Stichweh, R. (1991). System Theory.

Summers, D. C. S. (2005). Quality Management: Creating and Sustaining Organizational Effectiveness, Pearson Prentice Hall, USA.

Swan, J.E. and Combs, L.J. (1976), "Product performance and consumer satisfaction: a new concept", Journal of Marketing, Vol. 40, April, pp. 25-33.

Taleb , A. M. & Abou Kamar M.S (2013). The Influence of Perceived Service Failure Recovery Strategies on Customer Satisfaction and loyalty in Hotels. Research Journal of Management Sciences, Vol. 2(11), 16-24, November (2013) , SSN 2319–1171.

Tomar, R. (2009). Commercial Operations Management: Process and Technology to Support Commercial Activities (Google Books).

Velykien, R. (2013). Applications of Dependable Computing Concepts to National Infrastructure Systems. School of Computing Science, Newcastle University, Newcastle upon Tyne, UK October, 2013.

Wikipedia (2014). A History of Equity Bank. Retrieved 9.49 A.M on 01/05/2014 from the link: History of Equity Bank, About Equity Bank

Wisniewski, M. (2001). Using SERVQUAL to assess customer satisfaction with public sector services", Managing Service Quality, Vol.11, No.6, pp. 380-388.

Wisniewski, M. and Donnelly, M. (1996).Measuring service quality in the public sector: the

Yin, R. K. (2003). Case study research: Design and methods (3rd edition.). Thousand Oaks, CA: Sage.

Zeithaml, V. A., Parasuraman, A., & Berry, L. (1990). Delivering quality service: Balancing customer perceptions and *expectations*. New York, NY: Free Press.

APPENDIX I: EQUITY BANK CUSTOMER QUESTIONNAIRE

I am Vincent Maobe Aming'a , a postgraduate student at the University of Nairobi. As part of the requirements for the degree of Master of Business Administration in Operations Management, I have to undertake a research study. This study seeks to determine the influence of system failure in an organizational perspective on the perceived quality of services through a case of Equity Bank, Kenya. All the information provided will be confidential and will be used for academic purposes only. Your contribution towards this research will be very important and much appreciated. I assure you that I have obtained the necessary authorization and consent to carry out this study.

VINCENT MAOBE AMING'A

MBA STUDENT, UNIVERSITY OF NAIROBI

Section A: Demographics

1) Branch: ……
2) Age bracket
   a) 18-27 yrs ☐
   b) 28-37 yrs ☐
   c) 38-47 yrs ☐
   d) 48-57 yrs ☐
   e) Above 57 yrs ☐
3) How long have you been banking with Equity bank? .....
4) Which departments do usually interact with most? .....
5) Type of account held
   a) Retail ☐
   b) Corporate ☐
   c) Prestige ☐
   d) Supreme ☐

6) How often do you transact at Equity Bank?

a) Daily ☐
b) Once a week ☐
c) 2-5 times a week ☐
d) Rarely ☐

7) To what extent do the following services attract you to Equity Bank?

Services	Very Great Extent	Great Extent	Not at all	Small Extent	Very Small Extent
Savings and withdrawal					
Loans, advances and mortgage					
Asset financing					
Stock trading					
Foreign exchange services					
Bank transfers (RTGS, Western Union, Moneygram and others)					
Insurance					
Online banking					
ATM services					
Pay bill services					
Mobile banking					
Agribusiness services					
Business support account and services					

8. How would you rate the quality of services you receive at Equity bank?

a) Excellent ☐
b) Very Good ☐
c) Good ☐
d) Poor ☐
e) Very Poor ☐

Section B: Customer Expectations and Perceptions on service delivery

9. Customer Expectations

The following statements relate to your expectations as a customer in terms of service quality standards when you interact with Equity bank. Use the following scale to rate the statements (tick or put number against choice).

Scale: 5 = To a very large extent, 4 = To a large extent, 3 = Not at all, 2 = To a small extent, 1 = To a very small extent

Statements	To a very large extent	To a large extent	Not at all	To a small extent	To a very small extent
1. Equity bank should have modern facilities, equipment and well-built branches					
2. Management and staff at the bank should be smartly dressed					
3. The branches should be easy to get in and out					
4. The branches should be conveniently located in a clean and safe environment					
5. The bank should perform its service right the first time					
6. The quality of services delivered at the bank should be of consistent and same across the bank					
7. Management and staff at branches and in all departments should perform services without delay or excuse					
8. Services should be offered with high accuracy and little error					
9. When I have a problem as a customer, the bank should show a sincere interest in solving it.					
10. The employees should respond quickly to all customer enquiries					
11. Service delivery should be delivered at the exact same time the bank promises to deliver					
12. The bank should seek solutions to all customer issues in the shortest time possible.					

13.The queuing system should be well managed so as customers receive prompt service.					
14.All staff should serve customers promptly.					
15.The bank should have competent, professional and knowledgeable staff that can provide all information that is useful in making customer service experience great.					
16.The management and staff must inspire confidence in customers during service delivery					
17.The bank should provide a secure and safe environment for customers to transact.					
18.The management and staff should be approachable and polite to customers.					
19.The bank should understand my needs as a customer.					
20.The employees should offer customers personal attention.					
21.The whole service system at Equity bank should be configured around meeting customer needs.					
22.Banking hours should be convenient to all customers.					

10. Customer Perceptions on service quality

The following statements relate to your feelings about the quality of services you receive at Equity bank. Please show the extent to which the bank provides quality service by scoring each of the statements (tick or put number against the choice).

Statements	**Strongly Agree**	**Agree**	**Not at all**	**Disagree to some extent**	**Totally Disagree**
1. Equity bank has modern facilities, equipment and well-built branches					
2. Management and staff at the bank are always smartly dressed					
3. The branches are easy to get in and out					

4. The branches are conveniently located in a clean and safe environment					
5. The bank performs its service right the first time					
6. The quality of services delivered at the bank is consistent and same across the bank					
7. Management and staff at branches and in all departments do perform services without delay or excuse					
8. Services are be offered with high accuracy and little error					
9. When I have a problem as a customer, the bank shows a sincere interest in solving it.					
10. The employees respond quickly to all customer enquiries					
11. Service is delivered at the exact same time the bank promises to deliver					
12. The bank always seeks solutions to all customer issues in the shortest time possible.					
13. The queuing system is well managed.					
14. Employees at the branches and in different departments serve customers promptly.					
15. The bank has competent, professional and knowledgeable staff that can provide all information that is useful in making customer service experience great.					
16. The management and staff inspire confidence in customers during service delivery.					
17. The bank provides a secure and safe environment for customers to transact.					
18. The management and staff are approachable and polite to customers.					
19. The bank understands my needs as a customer.					
20. The employees offer customers personal attention.					

21. The whole service system at Equity bank is configured around meeting customer needs.					
22. Banking hours are convenient to all customers.					

11. Section C: Relationship between System and Service Quality

The following statements relate to experiences with the management and staff at Equity Bank during system failures. To what extent do you agree with each of them? Kindly score your experience as below:

Scale: 5 = Strongly Agree, 4 = Agree, 3 = Not at all, 2 = Disagree to some extent, 1 = Totally Disagree

No.	Statement	1	2	3	4	5
1	The behavior of the banks employees determines the service offered					
2	Management and staff communicate well to customers while dealing with system failures					
3	Management and staff comprehend customer needs by improving the operational process when offering services.					
4	Staff take time with customers to find out their needs so ameliorate the situation					
5	The bank avails quality and complete information to the customers regarding the system failure.					
6	Overall the speed of processing customer queries, transactions, documents and other enquiries is slow					
7	The speed of identification of problems and systematically dealing with them is lackluster.					
8	I don't get value for my money					
9	Quality of service at the bank is poor					
10	Management and the staff inspire confidence in customers during system failure.					

Thank you for taking time to fill this Questionnaire.

APPENDIX II: EQUITY BANK BRANCHES IN KENYA

Code	Branch	Code	Branch
000	Head Office	038	Mwea
001	Corporate	039	Matuu
002	Fourways	040	Maua
003	Kangema	041	Isiolo
004	Karatina	042	Kagio
005	Kiriaini	043	Gikomba
006	Murarandia	044	Ukunda
007	Kangari	045	Malindi
008	Othaya	046	Mombasa Digo Road
009	Thika / Equity Plaza	047	Moi Avenue
010	Kerugoya	048	Bungoma
011	Nyeri	049	Kapsabet
012	Tom Mboya	050	Kakamega
013	Nakuru	051	Kisii
014	Meru	052	Nyamira
015	Mama Ngina	053	Litein
016	Nyahururu	054	Equity Centre Diaspora
017	Community	055	Westlands
018	Community Corporate	056	Industrial Area Kenpipe Plaza
019	Embu	057	Kikuyu
020	Naivasha	058	Garissa
021	Chuka	059	Mwingi
022	Muranga	060	Machakos
023	Mob	061	Ongata Rongai
024	Harambee Avenue	062	OI-kalao
025	Mombasa	063	Kawangware
026	Kimathi Street	064	Kiambu
027	Nanyuki	065	Kayole
028	Kericho	066	Gatundu
029	Kisumu	067	Wote
030	Eldoret	068	Mumias
031	Nakuru Kenyatta Avenue	069	Limuru
032	Kariobangi	070	Kitengela
033	Kitale	071	Githurai
034	Thika Kenyatta Avenue	072	Kitui
035	Knut House	073	Ngong
036	Narok	074	Loitoktok
037	037 Nkubu	075	Bondo

Code	Branch
076	Mbita
077	Gilgil
078	Busia
079	Voi
080	Enterprise Road
081	Equity Centre
082	Donhoim
083	Mukurwe-ini
084	Eastleigh
085	Namanga
086	Kajiado
087	Ruiru
088	Ow
089	Kenol
090	Tala
091	Ngara
092	Nandi Hills
093	Githunguri
094	Tea Room
095	Buru Bum
096	Mbale
097	Siaya
098	Homa Bay
099	Lodwar
100	Mandera
101	Marsabit
102	Moyale
103	Wajir
104	Meru Makutano
105	Malaba Town
106	Kilifi
107	Kapenguria
108	Mombasa Road
109	Eldoret Market
110	Maralal
111	Kimende
112	Luanda
113	KU Sub Branch
114	Kengeleni
115	Nyeri Kimathi Way
116	Migori
117	Kibera
118	Kasarani
119	Mtwapa
120	Changamwe
121	Hola
122	Bomet
123	Kilgoris
124	Keroka
125	Karen
126	Kisumu Angawa Ave
127	Mpeketoni
128	Nairobi West
129	Kenyatta Avenue
130	City Hall
131	Eldama Ravine
132	Embakasi
133	KPCU
134	Ridgeways
135	Runyenjes Sub Branch
136	Dadaad
137	Kangemi
138	Nyali Centre Corporate
139	Kabarnet
140	Westlands Corporate
141	Lavington Corporate
142	Taita Taveta
143	Awendo
144	Ruai
145	Kilimani
146	Nakuru Corporate
147	Kilimani Supreme
148	JKIA Cargo Centre
149	EPZ Athi River
150	Oyugis
151	Mayfair Supreme Centre
152	Juja
153	Iten
154	Nyali Supreme Centre
155	Thika Supreme Centre

Code	Branch
154	Nyali Supreme Centre
155	Thika Supreme Centre
156	Mombasa Supreme Centre
157	Kapsowar Sub-Branch
158	Kwale
159	Lamu
160	Kenyatta Avenue Supreme
161	KPA Sub-Branch Mombasa

Source: Kenya Bankers Association (2014)