

**EFFECT OF FACILITY LAYOUT ENVIRONMENT ON PERCEIVED
SERVICE QUALITY: THE CASE OF NATIONAL BANK OF KENYA**

BY

ORORA GESARE CALISTER

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

NOVEMBER, 2018

DECLARATION

This research project is my original work and has not been submitted for any examination in this or any other university.

Signed.....Date.....

Orora Gesare Calister

D61/69000/2013

This research project has been submitted with my approval as the university supervisor.

Signed.....Date.....

Dr. Stephen Odock

Lecturer, Department of Management Science, University of Nairobi

DEDICATION

I would like to devote this project to my family and friends. Thank you so much for the tremendous support, patience and motivation to complete my studies.

ACKNOWLEDGEMENT

To start with, I give my gratitude to God for the gift of life and for seeing me through this project.

My supervisor Dr. Odock, am so grateful for taking me through this project. I am indebted to you for your continuous support and professional guidance from the start to the end of this project.

I acknowledge my family, to my dear parents am so grateful for your inspiration, prayers and encouragement. To my beloved husband Eric, am so grateful for your love, support and always cheering me on when the academic journey became long. To my beloved children Francis, Jayden, Cayden and Abigael, you are such a blessing.

Finally, to my friends and everyone whose presence in my life gave me encouragement and motivation to go through this academic journey, am so grateful and may God bless abundantly.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABBREVIATIONS AND ACRONYMS	viii
LIST OF TABLES.....	ix
ABSTRACT	x
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Facility Layout Environment.....	2
1.1.2 Perceived Service Quality.....	3
1.1.3 Facility Layout Environment and Perceived Service Quality	4
1.1.4 National Bank of Kenya	5
1.2 Research Problem.....	6
1.3 Research Objectives	7
1.4 Value of the Study.....	7
CHAPTER TWO: LITERATURE REVIEW.....	9
2.1 Introduction	9
2.2 Theoretical Foundation of the Study	9
2.2.1 Stimulus Organism-Response Theory	9
2.2.2 Cue Utilization Theory	9
2.2.3 Approach–Avoidance Theory	10
2.3 Elements of Facility Layout Environment	11
2.3.1 Ambient Conditions	11
2.3.2 Spatial Layout and functionality	12
2.3.3 Artefacts, Signs and Symbols	12
2.3.4 Social Elements.....	13

2.4 Empirical Review	13
2.5 Summary and Knowledge Gaps	15
2.6 Conceptual Framework	16
CHAPTER THREE: RESEARCH METHODOLOGY	17
3.1 Introduction	17
3.2 Research Design	17
3.3 Population of the Study	17
3.4 Operationalization of the Study Variables	17
3.5 Data Collection.....	21
3.6 Data Analysis	22
CHAPTER FOUR: DATA ANALYSIS AND FINDINGS	23
4.1 Introduction	23
4.2 Response Rate	23
4.3 Background Information	23
4.3.1 Number of Years of Branch Existence	23
4.3.2 Average Number of Customers	24
4.3.3 Experience of Operations Manager	24
4.3.4 Education Level of Operations Manager	25
4.4 Extent of Adoption of Facility Layout Environments.....	25
4.4.1 Ambient Conditions	26
4.4.2 Spatial Layout and Functionality	26
4.4.3 Décor, Artifacts, Signs and Symbols	27
4.4.4: Social Elements.....	28
4.4.5 Summary of Adoption of Facility Layout Environment Elements.....	28
4.5 Facility Layout Environment and Perceived Service Quality	29
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS ...	36
5.1 Introduction	36
5.2 Summary of findings	36
5.3 Conclusions	36
5.4 Recommendations	37

5.5 Limitation of the Study.....	38
5.6 Suggestions for Further Research.....	38
REFERENCES.....	39
APPENDICES	46
Appendix I: Letter of Introduction.....	46
Appendix II: List of National Bank Of Kenya Branches	47
Appendix III: Questionnaire	50

ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
GDP	Gross Domestic Product
FLE	Facility Layout Environment
KBA	Kenya Bankers Association
NBK	National Bank of Kenya
NSSF	National Social Security Fund
SERVQUAL	Service Quality
SOR	Stimulus Organism Response
SPSS	Statistical Package for Social Sciences

LIST OF TABLES

Table 3.1 Study Variables.....	18
Table 4.1: Number of years of branch existence.....	24
Table 4.2: Average Number of Customers.....	24
Table 4.3: Experience of Operations Manager.....	25
Table 4.4: Level of education of operations manager.....	25
Table 4.5: Ambient Conditions.....	26
Table 4.6 Spatial Layout and Functionality.....	27
Table 4.7: Décor, Artifacts, Signs and Symbols.....	27
Table 4.8: Social Elements.....	28
Table 4.9: Adoption of Facility Layout Environment.....	29
Table 4.10: Reliability.....	29
Table 4.11: Assurance.....	30
Table 4.12: Tangibles.....	30
Table 4.13: Empathy.....	31
Table 4.14: Responsiveness.....	31
Table 4.15: Interaction Among the Variables of Study.....	32
Table 4.16 Model Summary.....	33
Table 4.17: ANOVA Table.....	34
Table 4.18: Significance of the Coefficients	34

ABSTRACT

Facility layout environment (FLE) refers to the physical place or surrounding where services take place. It is a visual metaphor that acts as package (in the same way as product package) to convey or express an organization's image. The elements of FLE comprises of the ambient conditions, spatial layout and functionality, artifacts, signs and symbols and the social elements. Service organizations customers have become more demanding with an ever growing expectation not only in regard to quality of service but also the surrounding where these services are offered. Minimal studies have focused on facility layout environment and those that did so mainly focused on the hotel industry. This study had two objectives the first objective was to establish the extent to which elements of facility layout environment are considered by NBK branches and secondly to find out the effect of facility layout environment on perceived service quality at National Bank. The study used descriptive cross-sectional survey design and the population of the study comprised of the entire National Bank of Kenya branches. Questionnaires were the ones used to collect data.. The respondents comprised of branch operations manager and branch customers and the response rate was 53.3 %. From the study findings, the elements of FLE were adopted to a large extent. Social elements was highly ranked followed by artifacts, signs and symbols third was the ambient conditions and lastly spatial layout and functionality was the least adopted. The study also showed a positive relationship between FLE and perceived service quality however, the relationship was not significant. The study thus recommends that the management should invest more on a good facility layout environment as it affects customers' perception on organization's service quality. An appealing FLE will greatly contribute to organizational goal achievement as it enhances customer retention, attracts new customers and creates differentiation.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

For consumers who visit service organizations, facility layout environment is the first service feature that they perceive. It is at this stage that the customers form an impression of service quality that they look forward to receive from the service organization. For this reason service organizations must ensure that their facility layout environment is appealing to the customers (Lin & Liang, 2011). In the present market and economic state where product and price do not provide a distinctive competitive edge, organizations are finding out different, better and innovative ways to differentiate themselves. Some of the ways for being different and standing out include among others, implementing favourable requisites which creates appealing customer encounters through service facility layout environment. Dozie, Love and Treloar (2002) in their study of enhanced organisational performance and inventive work setting established that organisational performance can be influenced by the assets of the facility layout environment. Improvement of service quality delivery has thus become a growing concern for many service organizations today.

A number of theories can provide anchorage on the link between between facility layout environment and perceived service quality. This study was grounded on stimulus-organism-response theory, cue utilization theory and the approach-avoidance theory. Stimulus organism response theory points out that dimensions of facility layout environment will affect customers and that the customers will respond and behave differently depending on their internal reactions to the physical environment. The Approach-Avoidance theory on the other hand entails the response of people to the environment by way of emotional state (Bitner, 1992). Cue utilization theory which suggest that services and products are made up of an array cues. These cues serve as alternate pointers of anticipated quality of service (Milliman, 1986).

In many developed countries, service industry is said to be essential to increasing of Gross Domestic Product (G.D.P) with contributions reportedly surpassing 70 percent (Machuca, Gonzalez-Zamora & Aguilar-Escobar, 2007). In Kenya and other countries with developing economies where the propensity to consume is high and people have less to save, it is the banks strategic role to attract more deposits from people and deploy them as lubricants to other economy segments. National Bank of Kenya has been grappling with service quality for

some time now. The bank's services for the longest time has been characterized by low turnaround time as a result of long queues being experienced. This has put the bank under pressure to offer these features by coming up with innovative technologies and solutions for continuous and personalized relationships. A good facility layout environment will reduce avoidance behaviour of bank customers, reduce congestion and waiting time.

1.1.1 Facility Layout Environment

A facility is a unit that supports effective job performance. Heizer and Render (2008) defines layout as a grouping of workers, equipment and space in order to provide movement of information, safety and comfort. Heragu (2008) defined a facility layout as a plan that outlines all that is required for production of good or delivering a service. Slack and Johnstone (2012) defines facility layout as how transforming resources of an organisation's are positioned in relation to each other and how its various tasks are allocated among these transforming resources. A facility layout environment is physical area or surrounding where services take place. It is also where the interactions of the seller and the customer take place. Bitner (1992) defined facility layout environment as a built physical evidence/surrounding of an organization where customers and the firm intermingle, service delivered and any tangible commodities that enable service performance.

According to Bitner (1992) the facility environment elements are composed of the ambient conditions, the spatial layout and functionality, artifacts, signs and symbols and the social elements. First aspect is ambient conditions, these are features found within an environment and they affect the human senses. They include temperature, lighting, music, noise and scent. The second aspect is spatial layout and functionality. This is machinery, furnishings and equipment arrangement, their shape and size. It also entails the relationship amongst them while functionality refers to their capability to enhance performance. The third aspect is artefacts, signs and symbols. These are signals which are displayed on the interior and exterior of a facility for directional purpose, to communicate to users regarding the place, communicate rules and behaviour. Examples include name of company/department, entrances and exits, certificate and photographs/artwork on the walls. The final aspect is social elements which involve people, that is, employees in a service organization and the customer interaction.

In a fast paced and competitive service industry some customers are finding it hard to differentiate among service firms. Therefore a service organizations has to find ways of standing out from the rest. One of the opportunities of creating differential advantage in the delivery of service is through enhanced service facility environment. The tangible physical environment may directly influence the effective response of customers. The environment with all its components plays a great role in influencing people's feelings. Namasivayam (2004: 37) states that "consumers depend on tangible physical evidence accessible to them, to evaluate the intangible service components quality". Facility layout environment for improvement of the quality of service has been given much emphasis in recent years. This is mainly because of the capability of the facility layout environment to change behaviour and create an impression of service organisations.

1.1.2 Perceived Service Quality

According to Collier (1994), service concept expresses the significance and the benefits that the customers will receive. In regard to this, service concept is stated as the company's feature for attracting customers (Heskett, 1987). Requirements, anticipations and needs of customers change in regard to the quality of service they want. Service quality is regarded as a general service judgement and is universally accepted as a forerunner of customer gratification (Zeithaml, Bitner, & Parasuraman, 1996). Parasuraman, Zeithaml and Berry (1988) defined service quality as the organization's capability to attain or go beyond customer anticipation. It is the variance of customer service anticipation and the alleged customer service (Zeithaml et al. 1996). They went ahead to note that alleged service quality results from customers' evaluation of their expectations of service delivered by service organizations. Another definition of service quality is meeting customer needs and anticipations (Smith & Bolton, 1998). Customer dissatisfaction occurs when the perceived quality is less than it is deemed satisfactory, this happens when expectations are greater than performance (Parasurman et al. 1985; Lewis & Mitchell, 1990). Service quality is the clientele's judgement of organization's general superiority and the dominance of its service (Clow, Kurtz, Ozment, & Ong, 1997; Parasurman et al., 1988).

Service quality is a crucial element of user satisfaction and organizational performance. It allows service providers with same output to give greater value, competitiveness and chances for growth and realize customer satisfaction. The foundation of any successful business is how good they satisfy their customer needs. (Parasuraman et al. 1988) gave out five

dimensions for measuring service quality. These dimensions as specified by SERVQUAL measuring instrument include first, reliability, this is the capability to give out the service that is promised in a correct and consistent manner. Second is assurance which refer to the level of knowledge and politeness as portrayed by the employees of an organization. It is also the degree to which the employees create trust and confidence. The third dimension is tangibles which involves the appearance of a facility and employees. The fourth dimension is empathy which is the extent to which employees care and give individual attention to customers. The final dimension is responsiveness, this is how ready the employees are to offer a speedy service (Parasuraman, Zeithaml & Berry, 1985; 1988).

1.1.3 Facility Layout Environment and Perceived Service Quality

The physical environment is very influential when it comes to communicating the purpose and the image of the service organization to its customers. Services are produced and consumed concurrently and they require direct human contact in the organization where the consumer experiences total service in the organization's facility layout environment (Parasuraman, Zeithaml and Berry, 1985). The facility layout environment cannot be hidden and it influences consumer perceptions in a big way regarding service quality. Consumers will always search for firm's clues about its capability and superiority even before purchase (Berry & Clark 1986; Shostack 1977). Clues are found in the physical environment thus the physical surrounding influences the human behaviour in which it occurs. The FLE greatly influences services, human behaviour, queuing system and customer satisfaction.

Service delivery occurs in the process of employees interacting with customers. As a result of this interactions the attitudes and behaviours of the contact employees are highly likely to influence the perceptions of the customer in reference to service quality (Schneider & Bowen, 1985). Contact employees perform the role of marketers and are also the face of the organization and as a result they directly influence customer satisfaction (Zeithaml et al. 1996). If these functions are performed well it is to the organizations' advantage and if poorly done it is to the organization's detriment. In his study, Beatson (2008) concluded that employee loyalty, commitment, satisfaction and perception had a great effect on product and service quality. In reference to Bettencourt and Gwinner (1996), facility layout environment (FLE) has the chance to mould in prompt services offered by the firm and how those services will be delivered. The front-line service personnel actions and mannerisms are profoundly

influenced by the customer's reaction and action (Solomon, Czepiel & Gutman, 1985). The organization's service level provision is mainly established by customers' impression at the FLE.

1.1.4 National Bank of Kenya

Being a major player in the banking industry, the National Bank of Kenya is one of the biggest banks in the country. It enhances economic development in all sectors as a result of financial service provision. The bank is a certified registrar, fiscal agent and market maker in the secondary market. It was formed on the 19th of June, 1968 and was officially inaugurated on the 14th of November 1968. Fully owned by the Government initially, it was formed with the purpose of helping Kenyan citizens' access credit and thus be in a position to control their economy after independence. Its shareholding was reduced by 32% equivalent to 40million shares by Government in 1994. It reduced by 40 million shares its shareholding to the public in May 1996. National Bank's current shareholding is at 48.06% NSSF, 29.44% Kenyan Public and the Government of Kenya at 22.5%. According to 2016/09/KBA-bank branch listing, NBK has Eighty (80) branches countywide. The bank also operate 1,491 National Agents in the country. The bank rebranded in May, 2013 with a tag-line "Bank on Better", as it sought to align its brand identity and livery with the overall bank transformation.

The bank has faced various challenges which include customer dissatisfaction as a result of long process time and congestion during peak seasons. The process time can be cut short through providing timely and flawless data and information. A good facility layout environment will help gain a competitive edge by enhancing smooth flow of information material and work. This, if done consistently will provide excellent problem solving and delivery of quality service. The behaviour of congestion and long queues are influenced by facility layout environment. Requiring customers to wait at for a while negatively impacts on many customers value delivery of quality service. The facility layout environment gives more congestion control exchange services like provision of different routes thus enabling customers to reduce the negative influence (Zijlstra & Mobach, 2011).

A good facility layout environment can increase employee morale, use available space effectively and efficiently and provide flexibility. Flexibility will facilitate coordination and direct communication which in return, will increase productivity. One of the behavioural consequences of service quality is customer loyalty and retention as viewed by (Zeithaml et

al. 1990). It has been argued that facility layout environment topped the list when customers were asked which attributes improves customer satisfaction and loyalty (Dube & Renaghan, 2000). A good facility layout environment in the bank will enhance differentiation, facilitate the performance of persons in the organization, services will flow efficiently, customers will have pleasant experience and employee will find their job pleasant.

1.2 Research Problem

Facility layout environment is of great importance as it affects customer satisfaction directly through service quality. The facility layout environment nonverbally acts as a way of communication and guides beliefs of consumers about the overall service quality and the service provider. This is consistent with Bitner, (1992) opinion that facility layout environment affects satisfaction of customer for the services provided. Stallworth and Kleiner (1996) talked about the importance of facility environment on service quality. The increasing competition that firms are facing requires that they differentiate themselves and maintain their competitiveness. Facility layout environment has been seen to be an effective competitive tool under such circumstances. Given such demands it is appropriate time to query the vast consumer focus on facility layouts environment. There is need to question how facility layouts environment affect the quality of service rendered.

There is a growing need in terms of facility layout environment in National Bank of Kenya. The customers' are now more informed and have an ever growing expectation. They have become more demanding and hard-hitting as far as the service they would like to receive is concerned. Uncertainties in the business conditions together with competition has led to aggressive and bitter competition in the banking industry. The bank has significantly invested on its facilities. It is not yet clear how the change of facility layout and rebranding as a whole can be attributed to perceived service quality in National bank. The bank has been experiencing long queues and crowding in the banking hall for the longest time. According to Zijlstra and Mobach (2011), many problems encountered by service organization emanate from customer dissatisfaction with the service provided while dealing with these organizations. It is on this basis that the research will investigate the effect of facility layout environment on perceived quality in National bank.

There are numerous studies that show the various aspects of facility layout for example Milliman, 1982, 1986; Areni and Kim, 1994; Holbrook and Schindler, 1989 who looked at colour, light and back ground music. Lin and Liang (2011) studied servicescape influences on customer feeling and service consequences. Hooper, Coughlan and Mullen (2013) examined service environment as a forerunner to behavioural intentions and service quality. All these studies show the behavioural effects but they all primarily focused on the retail sector. They also focused mainly on single aspects. There are few studies that focused on the overall aspects of facility layout like Wakefield and Blodgett, 1994; Donovan and Rossiter, 1982; Baker et al.,1988,1994 and Donovan et al., 1994 mainly emphasised on the direct connection between the facility layout and behavioural variables like the time and money used. Minimal consideration has however been shown on effects of facility layout on the supposed service quality in the banking industry.

Despite numerous studies on facility layout there is minimal research that has been done on effects of facility layout environment on perceived quality of service in the banking sector. Therefore, this study addressed this problem by seeking to establish the effect of facility layout environment on service quality in the bank. It sought to respond the question; What is the effect of facility layout environment on perceived service quality at National Bank of Kenya?

1.3 Research Objectives

The study objectives were;

- i. To establish the extent to which elements of facility layout environment are considered by National Bank of Kenya branches.
- ii. To establish effects of facility layout environment on perceived service quality at National Bank.

1.4 Value of the Study

A good facility environment will enable smooth flow of work, material and people. Customer waiting time and service time will be reduced. When managers implement a good facility layout environment waste and redundant customer movement will be eliminated as a result of maximum utilization of space. This will lead to service quality delivery improvement and customer satisfaction. It will also enhance the importance of aligning operational decisions

and firm strategy when seeking to improve service quality to maximize customer satisfaction. The analysis will provide quantitative estimates of the facility layout environment and its effect on service quality which will help the management gain insight into addressing them accordingly. The study will also be significant to bank management as they can identify areas that need immediate attention and make suggestions for further improvement.

The scholars in pursuit of in-depth knowledge about the facility layout environment and its effect on service quality shall gain from the study since it will give direction. The research will make additions to the prevailing knowledge on Facility layout in service sector and provide background information to research organizations. Researchers in their future studies, will get relevant information on this topic which will assist them to conduct many more studies in the same field. To the academicians, this research will help them get an understanding of the Facility layout environment and its effect on perceived quality.

The study will serve as guideline for the policies to be formulated on effects of facility layout environment on perceived service quality. The bank management can gain insight to drafting a strategy that will be well suited to improve service quality through facility layout environment. This will help the bank achieve increased customer satisfaction through quality services which will lead to increased profitability. The regulator, Central Bank of Kenya will benefit in shaping its policies on commercial banks in matters of service quality and facility layout. They will assess policies and draw conclusions on the weaknesses and strengths of their regulations and whether their rules promote or suppress business thus amend some of its policies. The findings of the study will also help policymakers by providing insights and a guide that will help in monitoring the effects of bank operations.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Outlined in this chapter, is the theoretical framework upon which this study will be grounded on. The various elements of FLE have also been explored here. The literatures from other scholars with similar studies have also been reviewed.

2.2 Theoretical Foundation of the Study

Many theories have been advanced to explain the link between FLE and service quality. This study is grounded on the below mentioned theories.

2.2.1 Stimulus Organism-Response Theory

This theory was proposed by Mehrabian and Russell in 1974. The concept behind this theory is that one of the basic frameworks that assist us to comprehend how individual behaviour is impacted or affected by the facility layout environment. It states that the environment contains stimuli which influences customers internal state which in turn affects customers overall response. A particular stimulus for example crowding, music, colour and light is believed to influence a customer's internal states. The internal states will in turn trigger a particular external response towards the facility layout environment (Kumar, Purani & Sahadev, 2013).

This theory is used mostly in hospitality industry but is also applicable in the banking industry and implies a causal relationship (Vieira, 2013). The FLE acts by arousing an activity and the customers are the organisms who react to the arousal, the behaviour customers direct to the environment is a straight answer to the arousal activity. The customer behaviour is treated as an outcome of a given reaction. For example a customer a customer may want stay longer (behaviour) in the banking hall as a result of conducive temperatures, colour, background noise or tone of voice(stimulus) in the facility layout environment (Turley & Milliman, 2000).

2.2.2 Cue Utilization Theory

Cue utilization theory was recommended in 1972 by Olson and Jacoby. They do suggest that services and products do consist of an array of cues (intrinsic and extrinsic). The intrinsic ones comprises of the external product characteristics such as the shape or size while the extrinsic are aspects relating to a product for example price or brand name (Lee & Lou, 1995). This theory states that cues are evoked by predictive and confidence values. The predictive

values represents the extent to which a customer will associate a specific cue to the service quality. The confidence value on the other hand is the degree to which customers have the assurance to accurately judge that cue.

These cues do serve as surrogate indicators of the quality of service to be expected. These cues are used for tangible products, for the intangible attributes of services, customers use extrinsic cues. Example of extrinsic cues include the physical facilities and the facility environment of the service organization. These cues are like design, colour, furniture, equipment and the staff appearance. These cues will communicate to the customer a multitude of messages which they will influence their behaviour and also use to judge the service quality level to expect (Reimer & Kueh, 2005; Bitner, 1992; Hartline & Jones, 1996).

2.2.3 Approach–Avoidance Theory

This theory was proposed by Donovan and Rossiter (1982) to describe the outcome of consumer behaviour in relation to the environment. It is founded on Stimulus Organism Response model. It states that emotions would be aroused from the environment's stimuli(s) which would subsequently influence behaviour response. The FLE do have design and characteristics that either say come in or go away. The facility layout environment may encourage or discourage interaction. It is of the opinion that people respond to FLE in two distinct ways that is approach or avoid. The approach way comprises of all the positive reactions towards a certain FLE. It comprises of the positive behaviours which are directed to a place and they include; the desire to stay, desire to communicate with others, willingness to explore the environment and the degree of enhancement. The avoidance behaviour reflect the negative behaviour and include desire to leave, avoiding any collaboration with others, tendency to remain inanimate with environment and hindrance (Donovan & Rossiter 1982).

As asserted by Donovan & Rossiter, (1982), approach behaviours were influenced by the perceptions in the facility layout environment. Individuals come to service places with a goal that may be supported or stalled by the service FLE (Darley & Gilbert 1985; Russell & Snodgrass 1987). Assume a customer walks to the banking hall confused since he/she cannot find the signage guiding him/her to the departments he/she wants. The customer becomes emotionally distressed as a result of poor ventilation, high temperatures and crowding. The customer is thus not in a position to do his/her transaction which brought him/her to the banking hall and walks away. In this situation the facility environment hinders

accomplishment of the customer's objective or aim. Service organizations want to encourage an individual's approach behaviour and reduce the avoidance behaviour (Bitner, 1992). Making FLE pleasant is essential for the success of the firm.

2.3 Elements of Facility Layout Environment

The FLE elements comprises of various factors that determine the perceived service quality. They include ambient conditions, spatial layout and functionality, social elements, artefacts, signs and symbols. These elements may positively or negatively influence the perception of service quality by an individual.

2.3.1 Ambient Conditions

These are background environmental characteristics. These characteristics affects human senses and may exhibit relatively subconscious effect in some cases. They include temperature, lighting, music, noise and colour. The ambient conditions affects the psychological state and the human behaviour in varying ways. According to Baker 1986; Baker, Berry & Parasuraman 1988, the ambient conditions have been acknowledged as a major factor affecting perception and customer response to the facility layout environment. The ambient conditions encourage pursuance of the service consumption by the customer. It also affects the customer behaviour and attitude towards the service provider (LeBlanc & Nguyen 1988; Dube, Chebat & Morin1995). Ambient elements have the power to influence either approach or avoidance consumer behaviour. It can also impact consumer arousal with the increase of pleasure level (Morrison, Dubelaar & Oppewal, 2011).

Customers may have favourable perception of an organization as a result of pleasing music, pleasant scent, comfortable temperatures and adequate light. This will thus enhance positive evaluation of their experiences. Light influences moods, emotions, cognition and spatial impression. Good lighting enhances visual performance and provides for safety and wellbeing. Music can influence service evaluation, cognitive and affective feeling. It is used to create awareness, association, remembrance and identification (Jain & Badgare, 2011). The mood of customers changes when exposed to positive sound. It can be used to produce specific attitude and behaviour among customers (Milliman, 1982). Temperatures in facility layout environment makes customers feel comfortable and relaxed. If the temperatures in the banking hall are not controlled adequately, customers will have an unpleasant experience.

2.3.2 Spatial Layout and functionality

This encompasses the equipment and counters arrangement, floor plan, furnishings and machinery. The arrangement should be in accordance to service delivery process, size, shape and their relationship. Functionality refers to their ability to enhance performance and achieve organisational goals. Efficient FLE will enhance accomplishment of functional needs and will positively affect customer comfort. Customers enjoy the main service when the service areas are spacious and accessible while on the other hand crowded conditions increase discomfort and stress levels (Wakefield & Blodgett, 1994; 1996). Ample space makes moving around easier and it prevents customers from feeling crowded. Equipment and furniture not only offer practical comfort like chairs for sitting and tables for writing but they also influence their interactions outcome and intervene in perceived quality (Bennett and Bennett, 1981).

Furnishings and equipment arrangement in a FLE should allow for a free flow movement in the entire facility. It should also enable accomplishments of customer tasks (Hooper, Coughlan and Mullen, 2013). For example the banking hall should be large enough to allow for customers move easily and comfortably without feeling restricted or crowded. A spatial layout that make people feel constricted negatively affects the customer excitement level, desire to return and customer quality perception (Wakefield & Blodgett, 1994). User friendly design layouts improves services reliability and customer search time. In the same manner design layouts that constrains movement in the FLE are likely to lead to customer frustrations (Hooper, Coughlan and Mullen, 2013).

2.3.3 Artifacts, Signs and Symbols

Signs and symbols are displays on the outside and inside of a facility for directional purpose, to give communication of a place to the users and communicate rules and behaviours. Objects in the FLE accord meaning, are informative and they do rationalize our behaviour more (Bitner, 1992). Examples include name of company/department, entrances and exits, certificate and photographs/artwork on the walls. Artefacts enhances the attractiveness of the facility layout environment (FLE) (Wakefield & Blodgett, 1994).

Consumers always do evaluate the interior designs appearance, artwork, decorations and construction material of a facility either consciously or subconsciously. Décor, artifacts, signs and symbols deliver and create an overall image of the service organisation. They also provide important cues in evaluating customer's experience in an organization. The type of

desk and its size, artwork, construction material, presence of certificates, floor coverings and photographs are used to professionally reinforce a service organization's image, Davis (1984).

2.3.4 Social Elements

Social elements involve people that is the staffs and the customers who visit service organizations. It is the link or the relationship between employees and customers as well as customer and customer. The social humanistic and physical stimuli influences the pcustomer's approach or avoidance behaviour. According to Johnstone (2014) social elements also includes the relationship with the facility environment. He is of the opinion that customers make repeated visits and become attached to service facility environment for social connections. Of importance to customers, it is not the facility environment alone but also the connection that they do have with it bearing in mind the service quality. FLE affects social interactions by duration and events progression. It also shapes customers' experience (Rosenbaum & Massiah, 2007).

Knowledgeable and friendly employees can help customers and improve their customer experience for overall service quality. The customer and employee or customer to customer interaction directly or indirectly influences behaviour of one party to another. A good interaction and communication by employees to customers will make them satisfied with service quality and will receive any information well (Schmidt & Sapsford 1995). Customers and employees when under time pressure become highly conscious of the relative easiness in which tasks can be performed in the environment. Service quality is directly related to behaviour intentions (Cronin, Brady & Hult, 2000).

2.4 Empirical Review

Reimer and Kuehn (2005) studied effect of facility environment on perceived service quality. The study was of a retail bank and a restaurant in Switzerland. They studied and analysed the problems which were found on previous studies and hypotheses described. The hypotheses were tested using SERVQUAL scale established by Pararsuraman et al. The five quality scopes were measured by multiple item scale by Wakefield & Barnes (1996). Questionnaire interview was used to collect data and random sampling was used. Structural equation modelling was used in determining the relative impact of reliability, responsiveness, empathy, assurance and tangibles on general service quality. The results established that facility layout was of great importance in evaluating the customers' expected service quality and other factors that determine perceived service quality. Its effect on perceived quality is both direct and indirect.

Kamau (2017) studied the influences of physical environment on the satisfaction of customers in restaurants in Nairobi County, Kenya. She looked at the entire mix of servicescape and not just single elements like music, colour or lighting. Systematic random sampling technique was used and a cross-section descriptive survey design implemented in the study. The variables relationship was assessed using Pearson's moment correlation while for hypotheses testing, linear regression was used to test and the moderating effect of the demographics. Semi structured questionnaires, interviews, checklists and observation were used for purposes of data collection. It was recommended that further studies be conducted to determine whether the present study findings are restricted to certain geographical area or type service organization. Further study to be carried out as the present study only focused on interior design and decoration of the classified restaurants. The study limitation was that only restaurants were studied.

In their study Hooper, Coughlan and Mullen (2013) examined servicescape as a forerunner to behavioural intentions and service quality. The study's aim was to establish if servicescape should be regarded as part of service quality conceptualization or a construct on its own preceding service quality valuations and behaviour intentions. Area of the study was service stations and retail shops which sold petrol and petrol related products in Dublin, Ireland. Three hundred and fifty five customers were interviewed and data collected from respondents using questionnaires. To analyse the data, confirmatory factor analysis and structural equation modelling were used and it was established that evaluations of service environment directly impacted behavioural intentions. The significant contributor to behavioural intentions was found to be design and that consumers perceived service quality in terms of tangible and intangible cues. The limitation of this was the fact that it did not specify the direct link between behavioural intentions and servicescape.

Maeng and Park (2015) conducted a study on the resultant of airplane physical environment on customer loyalty. The study was aimed at examining the impact of the in-flight FLE on perceived quality and its effect on customer image and satisfaction. It was conducted at Incheon International Airport and Gimpo International Airport in Korea. Survey method was used for data collection. For analysis structural equation modelling was used and the findings were that the physical environment factors have a positive impression on perceived quality. Shortcomings of the study included the fact that the study extracted factors from previous studies such as in hotels and restaurants that were suitable for inflight environment. It was

recommended that it would be imperative to include other components and diversify questions to fit the context of the study.

Lin and Liang (2011) studied service environments influences on customer feeling and service results. Their study was on fashion apparel retailers in Taiwan. The respondents were randomly selected for the research. Secondary data from environmental psychology was used. For testing the hypothesis multi-item scales from previous studies was adopted. Data was collected using survey and observation method and examined by using structural equation modelling. Findings showed positive relation amongst the environment, customer emotion and satisfaction. The limitation of the study was that it only looked at customer perception and emotions. It is recommended that future research should include, cultural variables, customer characteristics and industry variables to better understand the environment in different setting.

Alsaqre, Mohamed and Jaafar (2010) studied about the effects of physical environment, customer perception and service quality in tourism industry. Their study was on hotels in Al-Ladhiqiyah, in Syria. Survey study was done and data collected using questionnaires. Convenience data sampling design was used. The variables in the study were equipment, design and ambient conditions. Regression analysis was used to explain the connection among variables. Findings showed that décor and furniture affects customer's perception about service quality and loyalty.

2.5 Summary and Knowledge Gaps

The importance of FLE importance has been emphasised. It is evident that consumers when making their purchase respond more to cues than the core services that is being offered to them. They more often rely on the FLE to evaluate the services that they are likely to receive. FLE is an indicator of service quality which customers expect. For this reason providers of services should give more thought to the FLE. The FLE include spatial layout and functionality, the ambient conditions, artefacts, signs and symbols and the social elements.

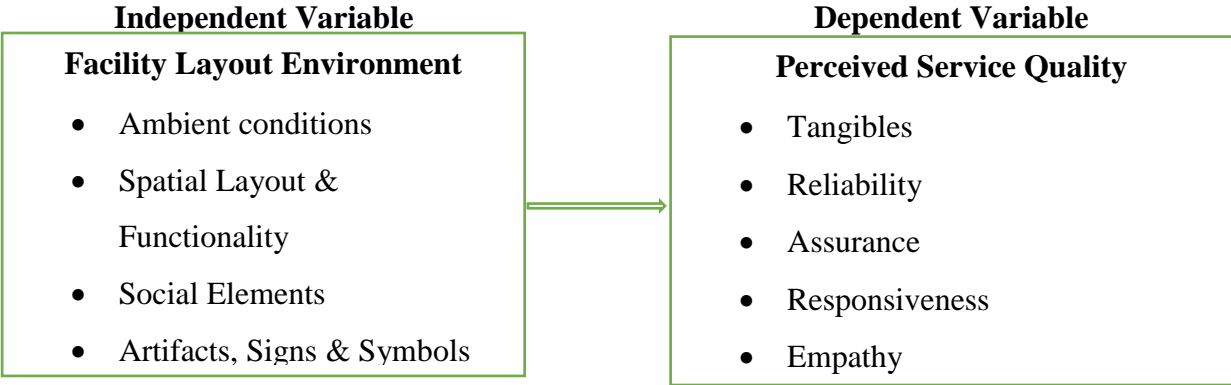
Majority of the studies on FLE have been international. For purposes of viable comparison, it is important the study be carried in Kenya. Most of the studies in Kenya only covered single elements say colour, light, background music, temperature or interior design. The few studies that have been carried out in Kenya and included the entire mix of FLE largely researched on

the hospitality industry and more specifically hotels and restaurants. This study thus tries to cover the research gap by studying a different industry.

2.6 Conceptual Framework

This is a tool that is used by the researchers to guide their inquiry. It can be a map or a set of ideas that are being used to structure a research, Kothari (2004). It helps the researcher to show the relationship among the investigated variables. The following conceptual framework was used:

Figure 2.1: Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This part of the study defines the means and procedures employed in the study. It focuses on design of the research, population of the study and its description, methods used to gather data and analysis procedures implemented. This is done for the purpose of answering the research questions which enhanced the achievement of the study objectives.

3.2 Research Design

Descriptive cross-sectional survey design was used in the study. There is flexibility in surveys in the sense that a widespread information can be collected (Mugenda & Mugenda, 2003). Descriptive research design was used to give a detailed account of the characteristics of the phenomenon (Taylor, 2005). This design entails the collection of data from a cross-section of the population at a particular time.

Research design ensures that the obtained results will help us answer initial questions unambiguously as much as possible (Saunders, Lewis & Thornhill, 2007). The design was used to gather info from respondents on the consequence of FLE on perceived service quality. It was considered ideal since it helps describe the connection between independent and dependent variables.

3.3 Population of the Study

It comprised of all National Bank of Kenya branches. National Bank of Kenya has 80 branches in Kenya in total. All the branches were studied since the population was small thus making the study a census.

3.4 Operationalization of the Study Variables

Independent variable is facility layout environment and dependent variable is the perceived service quality. These variables have been operationalized as stipulated in table 3.1

Table 3.1: Study Variables

Variable	Sub Variable	Indicators	Source(s)
Facility Layout Environment (Independent Variable)	Ambient Conditions	<ul style="list-style-type: none"> • Temperature • Noise • Music • Lighting • Colour 	Turley & Milliman (2000), Bitner (1992) Jain & Badgare (2011) Holbrook & Schindler (1989) Duncan & Capella (1994) Areni & Kim (1993) Crowley (1993) Morrison, Dubelaar & Oppewal (2011) Wakefield & Baker (1998)
	Spatial Layout & Functionality	<ul style="list-style-type: none"> • Building Architecture • Interior design • Chairs • Entrance • Layout 	Wakefield & Baker (1998) Turley & Milliman (2000) Wakefield & Blodgett (1999) Russel & Ward (1982) Bennett and Bennett (1981) Hooper, Coughlan and Mullen (2013)
	Social Elements	<ul style="list-style-type: none"> • Employees outward presentation • The available number of staff • Outward appearance of clients 	Parasuraman et al. (1991) Wakefield & Blodgett (1999) Rosenbaum & Massiah (2007) Tombs & McColl Kennedy (2003) Schmidt & Sapsford

		<ul style="list-style-type: none"> • Approachability & helpfulness of employees 	(1995) Cronin, Brady & Hult (2000) Ryu & Jang (2007)
	Artifacts, Signs & Symbols	<ul style="list-style-type: none"> • Ease of understanding communication materials • Ease of following directions • Visible & clear signage • Wall décor, painting & pictures 	Parasuraman et al. (1991) Zeithaml et al. (1990)
Perceived Service Quality (Dependent Variable)	Tangibles	<ul style="list-style-type: none"> • Staff appearance • Physical surrounding • Appealing physical facilities • Modern looking equipment • Visually appealing communication material 	Davis (1984) Parasuraman et al. (1991) Fitzsimmons & Fitzsimmons (2001)
	Reliability	<ul style="list-style-type: none"> • Sincere interest in solving customer problems 	Johnson (2012) Johnstone & Todd (2011). Tyler & Stanley (1999)

		<ul style="list-style-type: none"> • Keeping promises made to customers • Insisting on error free records • Right service the first time. 	Fitzsimmons & Fitzsimmons (1994) Ndubisi(2006)
	Assurance	<ul style="list-style-type: none"> • Polite & friendly staff • Feeling of security with bank transactions • Constant courteousness by employees • Employee behavior that instils confidence • Knowledgeable employees 	Sadek (2010) Ndubisi (2006)
	Responsiveness	<ul style="list-style-type: none"> • Prompt communication & services • Employees whom are ready to help always • Telling exactly when services will be available 	Johnstone & Todd (2011) Tyler & Stanley (1999) Hossain & Leo (2009) Kumar (2013)

		<p>by the staff.</p> <ul style="list-style-type: none"> • Never too occupied to answer customer queries 	
	Empathy	<ul style="list-style-type: none"> • Caring staff who give individual attention • Personalized attention to customers • Customers' best interest are held at heart by the bank. • Bank staff apprehends specific customer needs. • Convenient parking & operating hours 	<p>Johnstone & Todd (2011). Butcher (2001) Osayawe (2006) Ndubisi (2006) Ndubisi (2007)</p>

3.5 Data Collection

Data was gathered using questionnaires. Branch operations manager answered the first questionnaire while the second one by the bank's customers. The first questionnaire comprised of two sections. Section one consisted of the branch's background information which include the number of years of existence of the branch, the number of customers, branch operating hours and operation manager's experience and level of education. The second section comprised of the operation managers' opinion on FLE that is the ambient conditions, spatial layout, social elements, artifacts, signs and symbols. Customer questionnaire was further divided into two sections, 1 and 2. Section 1 consisted of

customers' background information that is gender, how often the customer visited the branch and whether they had accounts with other banks. The second section consisted of the customers' overall opinion on the service quality. This included questions on reliability of services, assurance, tangibles, empathy and responsiveness of NBK employees.

The reason of the study was made understandable to customers who participated and that the information they provided was confidential. Customers who were willing to participate were provided with questionnaires. The importance of the research was made clear and they were told to be as honest as possible with their answers. The study used questionnaires based on Wakefield and Blodgett (1996), Parasuraaman, Berry and Zeithaml (1991) and Bitner (1992) who had previously carried research on service environment. Likert scale ranging from 1 to 5 was used to represent, 1 strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree.

3.6 Data Analysis

After data collection, questionnaires were edited for completeness, consistency and accuracy. They were then be coded and entries made into statistical package. Coding is a methodical procedure of converting raw data into easily tabularized form, this is done by allocating symbols. This is advantageous as it condenses responses into few groups for data analysis purpose (Mongare, 2017). Data to achieve the first objective was evaluated by the use of mean and the standard deviation. Data to achieve the second objective was analyzed using multiple regression. The model that was utilized took the form; $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$

Where; Y is the perceived service quality

β_0 is the constant

β_1 to β_4 is the coefficients to be estimated

X_1 is the ambient conditions

X_2 is the spatial layout and functionality

X_3 is the artifacts, signs and symbols

X_4 is the social elements

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 Introduction

Presented in this chapter are outcomes of the study, discussions and implications. The study's first objective was to find out extent of adoption of facility layout environments in NBK branches. The second objective was to find out the facility layout environment effect on service quality as perceived by customers at National Bank of Kenya. Analyzing data was done based on the study objectives as it had been captured in the questionnaires.

4.2 Response Rate

A total of 80 questionnaires were distributed to branch operation managers to collect data on facility layout environment, 60 of them confirmed to having received them and out of which 32 responded giving a response rate of 40%. Additionally five questionnaires were administered to five randomly selected customers of each branch to gather data on perceived quality.

4.3 Background Information

This information was important as it enables the investigator to know the respondent's gender and level of education. Different people have different perceptions about things for example a male respondent may have a different view from a female respondent with regards to different aspects of facility environment and perceived service quality. Two questionnaires were used in the study. The first questionnaire was answered by the branch operations manager while the second one was answered by the bank customers.

4.3.1 Number of Years of Branch Existence

Those answering the questionnaires were asked to point out for how long the branch had existed. The findings are indicated in table 4.1.

Table 4.1: Number of Years of Branch Existence

Number of years	Frequency	Percent	Valid Percent	Cumulative Percent
Below 5 years	8	25.0	25.0	25.0
5 - 10 years	9	28.1	28.1	53.1
11 - 15 years	4	12.5	12.5	65.6
Above 15 years	11	34.4	34.4	100.0
Total	32	100	100	

Source: Research data (2018)

Its indicated in Table 4.1 that 25% of NBK branches have been existing for less than five years, 28.1% have been in existence for between 5 and 10 years, 12.5% have existed for between 11 and 15 years and 34.4% have an existence of above 15 years. This implies that a good number of the branches had been in existence for long enough to consider putting in place a good facility layout environment.

4.3.2 Average Number of Customers

Further, the operations managers were asked about the number of customers in their branches. The findings are shown in the table 4.2.

Table 4.2: Average Number of Customers

Number of customers	Frequency	Percent	Valid Percent	Cumulative Percent
Below 2500	1	3.1	3.1	3.1
2501 - 5000	14	43.8	43.8	46.9
5001 - 7500	3	9.4	9.4	56.3
Above 7500	14	43.8	43.8	100.0
Total	32	100.0	100.0	

Source: Research data (2018)

As per the Results in table 4.2, 3.1% of branches have less than 2500 customers, 9.4% have between 5001-7500 customers and 43.8% of branches had more than 7500 and between 2501 and 5000 customers. This implies that the high number of customers is a good reason for a branch to consider a good facility layout.

4.3.3 Experience of Operations Manager

Respondents of the first questionnaire were told to indicate duration they held managerial position in the bank and findings are presented in table 4.3.

Table 4.3: Experience of Operations Manager

Experience	Frequency	Percent	Valid Percent	Cumulative Percent
Below 5 years	10	31.3	31.3	31.3
5 - 10 years	9	28.1	28.1	59.4
10 - 15 years	6	18.8	18.8	78.1
Above 15 years	7	21.9	21.9	100.0
Total	32	100	100	

Source: Research data (2018)

As observed from table 4.3, majority of operation managers being 31.3% had less than five years of experience. They were followed by those who had 5-10 years of experience at 28.1%. Those with above 15 years of experience were 21.9% while those with 10-15 years of experience were the least with 18.8%. This implies that most respondents were more exposed and experienced operation managers.

4.3.4 Education Level of Operations Manager

Respondents were requested to indicate their level of education and results are shown in table 4.4.

Table 4.4: Level of Education of Operations Manager

Level of Education	Frequency	Percent	Valid Percent	Cumulative Percent
Diploma	9	28.1	28.1	28.1
Degree	17	53.1	53.1	81.3
Postgraduate	6	18.8	18.8	100.0
Total	32	100	100	

Source: Research data (2018)

It's indicated in Table 4.4 that most branch operations manager attained a university degree (53.1%). This is followed by those who had diploma at 28.1% and lastly postgraduate who has 18.8%. This clearly shows that majority of operations managers have attained higher education levels. This implies that they are informed and exposed as asserted by Warde and Martens (2000) that education is linked to higher levels of exposure.

4.4 Extent of Adoption of Facility Layout Environments

The study had wanted to investigate the level to which facility layout environment aspects (ambient conditions, spatial layout and functionality, artifacts, signs and symbols and the social elements) were adopted by branches of National Bank of Kenya. On a Likert scale of 1-5, respondents were told to indicate extent to which their branches had adopted the facility

layout environment. 1 represented Not at all while 5 represented to a very large extent. The results are summarized in the following subsections.

4.4.1 Ambient Conditions

Respondents were requested to tell to what level ambient conditions had been adopted in their branch. Findings are shown in table 4.5.

Table 4.5: Ambient Conditions

	Mean	Std. Deviation	Rank
The temperature inside our branch is comfortable	3.88	0.94	3
The colours of our branch building and interior is pleasant and creates a comfortable atmosphere.	4.00	0.92	2
The lighting inside the branch is adequate.	4.06	0.67	1
The background music in the branch appropriate	3.44	0.76	5
The noise level in the branch is acceptable	3.72	0.73	4
Average	3.82	0.80	

Source: Research data (2018)

It can be seen in table 4.5 that the highest ranked aspect of ambient conditions was adequate lighting inside the branch with a mean of 4.06. This is followed by “the colours of our branch building and interior being pleasant hence creating a comfortable atmosphere” with a mean of 4. The least ranked aspect of ambient condition was “the background music in the branch being appropriate” with a mean of 3.4. On average the ambient conditions had a mean of 3.82 implying that it had been adopted to a great extent.

4.4.2 Spatial Layout and Functionality

The respondents told to indicate to what extent spatial layout and functionality had been adopted. The results of the study are tabulated in table 4.6.

Table 4.6: Spatial Layout and Functionality

	Mean	Std. Deviation	Rank
The branch has enough and comfortable chairs for waiting	3.22	0.91	5
The branch entrance is convenient for disabled persons.	3.63	1.04	4
The overall bank layout in this branch makes it easier for customers to manoeuvre and find the right department.	3.94	0.76	1
The interior design in this branch is visually appealing.	3.91	0.73	2
The building's architecture in this branch is visually appealing.	3.75	0.76	3
Average	3.69	0.84	

Source: Research data (2018)

From observations of table 4.6 of the study findings, it can be said that the overall bank layout in branch made it easier to customers in moving around to find right department ranked highest with a mean of 3.94. Ranking second was the interior design in the branch which was visually appealing with a mean of 3.91. The branch had enough and comfortable chairs for waiting ranked the lowest with a mean of 3.22. On average spatial layout and functionality had a mean of 3.69 and this implies that it had been highly adopted.

4.4.3 Artifacts, Signs and Symbols

Shown in table 4.7 are the results of research as answered by the respondents. They indicated the extent of adoption of décor, artifacts, signs and symbols.

Table 4.7: Artifacts, Signs and Symbols

	Mean	Std. Deviation	Rank
Interior design in this branch is appealing and the colour scheme is attractive.	3.81	0.86	7
The signage and symbols in this branch provide the right direction.	3.97	0.47	1
Painting and pictures in this branch are visually attractive.	3.91	0.78	3
The wall décor in this branch is visually appealing.	3.88	0.75	6
The brochures and other communication materials in this branch are easy to understand.	3.91	0.39	3
The directional signs in this branch are sufficient and give guidelines on how to move around easily.	3.94	0.44	2
Directional signs in this branch are easy to follow and understand.	3.91	0.53	3
Average	3.90	0.60	

Source: Research data (2018)

It can be observed from the study findings on table 4.7 that “the signage and symbols in this branch provided the right direction” ranked the first with a mean of 3.97, followed by the directional signs in this branch being sufficient and giving guidelines on how to move around easily. The brochures and other communication materials in the branch were easy to understand and the directional signs being easy to follow and understand came third. Ranking last was the interior design in the branch was appealing with attractive colour scheme. On average, the décor, artifacts, signs and symbols had a mean of 3.90 which implies high adoption of the décor, artifacts, signs and symbols.

4.4.4: Social Elements

The respondents were requested to show to what extent the social elements had been adopted by their branch. Findings of the study are as shown in table 4.8.

Table 4.8: Social Elements

	Mean	Std. Deviation	Rank
The bank staff in this branch understand customer requirements	4.06	0.56	3
The bank staff in this branch are approachable and helpful to you.	4.22	0.66	1
The bank employees in this branch are neat in appearance.	4.16	0.68	2
Average	4.15	0.63	

Source: Research data (2018)

The study outcome as revealed in table 4.8 show that “the bank staff in this branch being approachable and helpful” was ranked the first with a mean of 4.22, the bank employees in the branch being neat in appearance came second with a mean of 4.16 and finally “the bank staff in this branch understanding customer requirements” was third with a mean of 4.06. On average the social elements had a mean of 4.15 which indicate that it was practiced to a greater extent.

4.4.5 Summary of Adoption of Facility Layout Environment Elements

The extent of adoption of the ambient conditions, spatial layout and functionality, artefacts, signs and symbols and social elements are shown in table 4.9

Facility Layout Environment Aspect	Mean	Standard deviation	Rank
Ambient Conditions	3.82	0.80	3
Spatial Layout and Functionality	3.69	0.84	4
Artifacts, Signs and Symbols	3.90	0.60	2
Social Elements	4.15	0.63	1
Average	3.89	0.72	

Table 4.9: Adoption of Facility Layout Environment

From table 4.9, it is evident that social elements with a mean of 4.15 is the highest adopted aspect, followed by artifacts, signs and symbols with a mean of 3.90, then ambient conditions with a mean of 3.82 and lastly the least adopted is spatial layout and functionality with a mean of 3.69. On average adoption of facility layout environment has a mean of 3.89 which implies that it has been largely adopted.

4.5 Facility Layout Environment and Perceived Service Quality

The study sought to establish effects of facility layout environment on service quality at NBK. Respondents were to indicate on a five point Likert scale the level which they agreed with perceived service quality dimensions. The findings were as follows:

Table 4.10: Reliability

	Mean	Std. Deviation	Rank
The bank provides timely services at promised time.	3.72	0.72	3
The bank performs services right in the first time.	3.66	0.60	4
The bank insists on error free records	3.98	0.59	1
The bank expresses sincere interest when solving customer issues.	3.95	0.58	2
Average	3.83	0.62	

Source: Research data (2018)

From the findings in table 4.10 it's shown that the most of the respondents were in agreement that reliability affects their perception of service quality. This is supported by the average mean of 3.83 and standard deviation of 0.62.

Table 4.11: Assurance

	Mean	Std. Deviation	Rank
Transactions with bank employees elicit feelings of security in you.	3.83	0.66	5
Bank employees are knowledgeable to answer your questions.	3.92	0.61	3
The bank employees are courteous with you.	3.84	0.46	4
Bank employee's behaviour inculcate confidence in you.	3.96	0.59	2
You feel safe transacting with the bank.	4.00	0.60	1
Average	3.91	0.58	

Source: Research data (2018)

Its observed from table 4.11 that majority of respondents felt safe in their transactions with the bank, bank employee's behaviour instilled confidence in them, bank employees were knowledgeable in answering their questions, employees were courteous and bank employees elicited feelings of security with respondents. This is evidenced from the mean average of 3.91 and standard deviation of 0.58.

Table 4.12: Tangibles

	Mean	Std. Deviation	Rank
The bank has visually appealing physical facilities.	3.75	0.63	4
Bank employees are neat appearing.	4.04	0.53	1
The banks equipment/furniture are modern looking.	3.77	0.59	3
Brochure's and communication materials are visually appealing.	3.91	0.52	2
Average	3.87	0.57	

Source: Research data (2018)

The observation from table 4.12 asserts that on average the tangibles had a mean of 3.87 and standard deviation of 0.57 indicating that majority of the respondents agreed that tangibles affected their perception of service quality.

Table 4.13: Empathy

	Mean	Std. Deviation	Rank
The bank has customer's best interest at heart.	3.41	0.73	3
Your specific needs are understood by employees	3.66	0.55	2
The bank's working hours are convenient to all its customers.	3.38	0.71	4
Bank employees give you individual attention	3.75	0.61	1
Average	3.55	0.65	

Source: Research data (2018)

As shown in table 4.13 bank employees give you individual attention had the highest mean of 3.75 closely followed by employees understand customers specific needs, the bank has customer's best interest at heart and lastly bank's working hours are convenient to all its customers with a mean of 3.66, 3.41 and 3.38 respectively. In general empathy had an average mean of 3.55 and standard deviation of 0.65 implying that respondents agreed that empathy highly affected their perceived service quality.

Table 4.14: Responsiveness

	Mean	Std. Deviation	Rank
Bank employees are always willing to help you.	3.84	0.57	1
Employees tell you how long and when exactly promised services will be performed.	3.51	0.53	4
Bank employees are not too busy to respond to your requests and queries.	3.72	0.57	3
Bank employee give prompt services.	3.79	0.60	2
Average	3.72	0.56	

Source: Research data (2018)

From observation of table 4.14 bank employees' willingness to help ranked highest while the bank employees telling how long exactly services will be performed ranked lowest. Generally all the aspects of responsiveness ranked approximately 4 in the Likert scale which implies that respondents agreed that responsiveness highly affects service quality.

Table 4.15: Interaction Among the Variables of Study

S No.	X ₁	X ₂	X ₃	X ₄	Y
1	4.00	3.80	4.14	4.00	3.89
2	4.60	4.00	4.00	5.00	3.72
3	3.80	3.20	4.00	4.00	2.33
4	4.00	3.60	4.00	4.67	3.72
5	4.00	3.80	4.14	4.33	3.70
6	4.20	4.00	4.00	4.00	3.91
7	4.20	3.80	4.00	4.67	3.90
8	4.20	4.00	4.29	5.00	3.31
9	4.00	4.00	4.00	4.00	3.77
10	3.80	3.80	4.00	5.00	3.73
11	3.80	3.20	4.00	4.00	4.01
12	3.80	4.00	3.71	4.00	3.96
13	3.60	3.80	4.14	4.33	3.50
14	4.60	4.80	4.57	4.00	4.19
15	2.80	3.40	3.00	3.00	4.59
16	3.40	2.60	3.14	4.00	3.66
17	4.00	4.00	4.14	4.00	3.47
18	3.40	3.00	3.14	4.00	3.49
19	3.20	3.60	3.00	3.00	3.90
20	3.60	3.80	4.00	4.00	4.55
21	3.80	3.60	4.43	4.33	4.51
22	2.20	2.40	3.00	3.33	4.05
23	3.60	3.80	3.86	3.33	4.24
24	2.40	2.20	3.00	4.00	3.83
25	3.80	3.60	4.00	4.00	4.06
26	4.00	4.00	3.71	4.33	4.07
27	3.80	4.60	4.57	3.00	3.00
28	3.80	3.60	4.00	4.00	3.77
29	4.60	3.60	4.29	4.33	3.08
30	3.80	3.60	4.00	5.00	3.94
31	4.60	4.40	4.00	5.00	3.60
32	4.80	4.40	4.57	5.00	3.32

Source: Research data (2018)

Where (X₁)=Ambient conditions, (X₂) = Spatial Layout and Functionality, (X₃)= Décor, Artifacts, Signs and Symbols, (X₄) = Social Elements and Y = Perceived Service Quality. Using the data perceived service quality was regressed against the various elements of facility layout. The results are discussed in the following subsections.

Table 4.16 Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.436 ^a	.190	.070		.44228	1.992
a. Predictors: (Constant), Social Elements, Spatial Layout and Functionality, Décor, Artifacts, Signs and Symbols, Ambient conditions						
b. Dependent Variable: Perceived service quality						

Source: Research data (2018)

Observation of table 4.16 shows coefficients of correlation (R) of 0.436 suggesting a positive relationship exists between facility layout environment and perceived service quality. This coefficient of correlation was tested for significance as follows;

Step 1: Stating the hypothesis

H₀: r = 0 (relationship between facility layout environment and perceived service quality is not significant.)

H₁: r ≠ 0 (relationship between facility layout environment and perceived service quality is significant.)

Step 2: Level of significance

Level of Significance α = 0.05 and this is a two tailed test.

Step 3: Decision rule

Degrees of freedom = n – 2 = 32 – 2 = 30; Therefore t_{0.05, 30} = 2.037

The decision ruling will thus be, reject the null hypothesis if the t values do not fall within 2.037 ≤ t ≤ 2.037.

Step 4: Test statistic

$$t = r \sqrt{\frac{n - 2}{1 - r^2}} = 0.436 \sqrt{\frac{32 - 2}{1 - 0.19}} = 2.653$$

Step 5: Conclusion

The calculated t (2.653) falls in the rejection region thus, null hypothesis is rejected implying the relationship between facility layout environment and perceived service quality is significant.

Table 4.17: ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.241	4	.310	1.586	.207 ^b
	Residual	5.282	27	.196		
	Total	6.522	31			
a. Dependent Variable: Perceived service quality						
b. Predictors: (Constant), Social Elements, Spatial Layout and Functionality, Décor, Artifacts, Signs and Symbols, Ambient conditions						

Source: Research data (2018)

As per the findings of the study, the p value (.207) from table 4.17 is observed to be more than 0.05 showing that overall model is statistically insignificant in predicting perceived service quality.

Table 4.18: Significance of the Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	1	4.387	.788		5.568	.000		
	Ambient conditions	-.514	.318	-.655	-1.613	.118	.182	5.490
	Spatial Layout and Functionality	.496	.267	.614	1.859	.074	.275	3.641
	Décor, Artifacts, Signs and Symbols	-.267	.302	-.271	-.885	.384	.319	3.140
	Social Elements	.135	.193	.173	.700	.490	.491	2.035
a. Dependent Variable: Perceived service quality								

Source: Research data (2018)

According to the results in table 4.18, the regression model will be $Y = 4.387 - 0.514X_1 + 0.496X_2 - 0.267X_3 + 0.135X_4$.

From the above equation it can be observed that ambient conditions (X_1) and décor, artifacts, signs and symbols (X_3) are negatively related to perceived service quality while spatial layout and functionality (X_2) and social elements (X_4) are positively related to perceived service

quality. For a unit decrease in X_1 , Y changes by 0.514. Similarly a unit change in X_2 , Y changes by 0.496. A unit change in X_3 , Y changes by -0.267. Finally a unit change in X_4 leads to a unit change of -0.135 in Y . However, from Table 4.17 all variable's p value was more than 0.05 implying the variables are statistically insignificant.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section of the study starts by discussing summarized research findings, followed by discussion of the conclusion. Thereafter the recommendations are given based on the study findings as it has been stipulated in the objectives of this study.

5.2 Summary of Findings

The objectives of this study were to find out effect of facility layout environment on perceived service quality at National Bank of Kenya and extent to which facility layout environment elements have been adopted by the various branches of the bank. A descriptive cross sectional survey design was adopted and questionnaires were used to gather data. The study's respondents included National Bank of Kenya branch operation managers and customers.

The elements of facility layout are ambient conditions, spatial layout and functionality, artefacts, signs and symbols and lastly social elements. SERVQUAL measuring instrument (responsiveness, reliability, assurance, tangibles and empathy) was used to measure the degree service quality. From this study it can be seen that spatial layout and functionality was the highly adopted which was followed by social elements in second position, in third position was décor, artifacts, signs and symbols and finally ambient conditions. Generally the FLE elements were adopted to a high extent which had a positive impact on perceived service quality. However, from the study it was found out that FLE did not have a significant relationship with perceived service quality.

5.3 Conclusions of the Study

The study's first objective was to determine the extent of adoption of elements of facility layout environments in NBK branches, mean and standard deviation was used. The findings show that most of the respondents agreed that elements of facility layout environment have been highly adopted. The second objective was to establish effects of facility layout environment on the perceived service quality at National Bank of Kenya, regression analysis was used.

Findings indicated that facility layout environments are related in a positive way to customers' emotions which affects their perceptions of service quality. For customers who visit service organisations where the directional signs are easy to find and follow makes moving around a lot easier thus increasing their perception about service quality. Logical layouts that make moving around easier and enough and comfortable seats to wait increases customers perception about service quality, this is concurrent with Kamau (2017), Wakefield and Blodgett (1996) and Bitner (1992). Being able to move around even without asking for directions greatly reduces frustrations, this is in consistent with researchers like Zelthaml and Bitner (2007), Wakefield and Blodgett (1996; 2002) who emphasised the advantages of décor, artifacts, signs and symbols.

The results also showed that a good facility environment enhances positive perceived service quality, this is because facility environment conveys the total organization's image. This positively affects perceived service quality leading to positive experiences which will be shared among customers, this is in consistent with the findings of Lin and Liang (2011). From the research findings, it can be noted that facility layout environment is positively related with perceived service quality. However, the study established that this relationship is insignificant. The insignificance may be a result of the research methodology that was used in the study.

5.4 Recommendations

Given the complexity of services as a result of their intangible nature and the high demanding customers, there is need for managers to not only focus on the services they offer but also the environment in which these services are consumed, that is, the facility layout environment. Managers should pay more attention to facility layout environment as it enhances differentiation and elicits a positive response from customers which helps an organisation gain a competitive advantage. The findings of the current study indicate that appealing facility layout environment increases perceived service quality.

It is recommended that managers should consider spatial layout and functionality by providing enough and comfortable chairs for waiting. They should also consider the ambient conditions by playing appropriate background music. It is for this reason that the bank need to

invest more in their facility layout environment as it affects customers' perception of their service quality. There is also need for the bank to increase the quality of interactions between its employees and customers. This can be done effectively by the bank investing more on trainings for its employees.

5.5 Limitations of the Study

Like any other study, this study too had various limitations. First, the population was vast and widely distributed which made it difficult for the data to be collected within the stipulated time. Secondly, the data collection on the dependent and that of the independent variable were obtained from different sources thus making the exercise time consuming and tedious. Thirdly, the study did not consider the customer characteristics which differ widely among respondents and affects their perception of service quality. Five customers were selected from each branch to collect data on perceived service quality, this sample size was small to represent the opinion of the entire branch. Lastly only one organization was examined, this makes it hard to draw general conclusions for the service sector.

5.6 Suggestions for Further Research

Based on the findings, the following suggestions are made regarding further research. First, the price paid for the services by consumers and how that price affects their perception of service quality should be studied alongside facility layout environment to determine its effect on FLE and service quality. Secondly, the sample size of five per branch to collect data on perceived service quality should be increased in future research. Different and more variables other than those that have been captured need to be included in a similar research in the future. For example the customer characteristics likely to affect perception such as personality traits should be included in a future study, exploring these personality traits will help improve generalization and also provide a diverse context.

Thirdly, the present study depicted an insignificant effect on the facility layout environment and service quality, this provides an opportunity for further research. Regarding the methodologies used, this study employed descriptive cross-sectional survey design, thus there are numerous avenues for further research by use of other different methodologies. Finally, there is need for a further research to determine whether the present study findings are only restricted to National Bank of Kenya. It is proposed that studies in future should focus on many different banks as opposed to just one bank as it has been covered in the study, this will provide viable comparison.

REFERENCES

- Alsaqre, O. E., Mohamed, B., & Jaafar, M. (2010, December). A Study of the Effects of factors in the Physical Environment of Hotels on Customers' Perceptions of Service Quality and Loyalty. In *Proceedings of Regional Conference on Tourism Research* (p. 254).
- Areni, C. S., & Kim, D. (1993). The influence of background music on shopping behavior: classical versus top-forty music in a wine store. *ACR North American Advances*.
- Areni, C. S., & Kim, D. (1994). The Influence of in-store lighting on consumers' examination of merchandise in a wine store. *International Journal of Research in Marketing*, 11(2), 117-125.
- Baker, J., Berry, L. L., & Parasuraman, A. (1988). The marketing impact of branch facility design. *Journal of Retail Banking*, 10(2), 33-42.
- Baker, J., Grewal, D., & Parasuraman, A. (1994). The Influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science*, 22(4), 328-339.
- Baker, J. (1986). The role of the environment in marketing services: The consumer perspective. *The services challenge: Integrating for competitive advantage*, 1(1), 79-84
- Beatson, A., Lings, I., & Gudergan, S. (2008). Employee behaviour and relationship quality: impact on customers. *The Service Industries Journal*, 28(2), 211-223.
- Bennett, D. J., & Bennett, J. D. (1981). Making the scene. *The Psychology of social situations: Selected readings*, 18-25.
- Berry, L. L., & Clark, T. (1986). Four ways to make services more tangible. *Business*, 36(4), 53-54.
- Bettencourt, L. A., & Gwinner, K. (1996). Customization of the service experience: The role of the frontline employee. *International Journal of Service Industry Management*, 7(2), 3-20.
- Bitner, M.J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *The Journal of Marketing*, 56(2), 57-71.
- Butcher, K., Sparks, B., & O'Callaghan, F. (2001). Evaluative and relational influences on service loyalty. *International Journal of Service Industry Management*, 12(4), 310-327.

- Clow, K. E., Kurtz, D. L., Ozment, J., & Soo Ong, B. (1997). The antecedents of consumer expectations of services: an empirical study across four industries. *Journal of Services Marketing*, 11(4), 230-248.
- Collier, D. A. (1994). *The service/quality solution: Using service management to gain competitive advantage*. Irwin Professional Publishing.
- Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-218.
- Crowley, A. E. (1993). The two-dimensional impact of color on shopping. *Marketing letters*, 4(1), 59-69.
- Darley, J. M., & Gilbert, D. T. (1985). Social psychological aspects of environmental psychology. *Handbook of social psychology*, 2, 949-992.
- Davis, T. R. (1984). The Influence of the Physical Environment in offices. *Academy of Management Review*, 9(2), 271-283.
- Donovan, R. J., Rossiter, J. R., Marcolyn, G. & Nesdale, A. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 283-294.
- Dozie Ilozor, B., Love, P. E., & Treloar, G. (2002). The impact of work settings on organisational performance measures in built facilities. *Facilities*, 20(1/2), 61-67.
- Dubé, L., Chebat, J. C., & Morin, S. (1995). The effects of background music on consumers' desire to affiliate in buyer- seller interactions. *Psychology & Marketing*, 12(4), 305-319.
- Dubé L., & Morin, S. (1999). Background music pleasure and store evaluation: intensity effect and psychological mechanisms. *Journal of Business Research*, 54(2), 107-113.
- Dubé, L., & Renaghan, L. M. (2000). Creating visible customer value: How customers view best-practice champions. *Cornell Hotel and Restaurant Administration Quarterly*, 41(1), 62-72.
- Duncan Herrington, J., & Capella, L. M. (1994). Practical applications of music in service settings. *Journal of Services Marketing*, 8(3), 50-65.
- Fitzsimmons, J. A., & Fitzsimmons, M. J. (1994). *Service management for competitive advantage* (pp. 31-33). New York, NY: McGraw-Hill.
- Gitahi, S. N. (2014). *Effect of workplace environment on the performance of commercial banks employees in Nakuru town* (Doctoral dissertation).

- Johnstone, M. L. (2012). The servicescape: The social dimensions of place. *Journal of Marketing Management*, 28(11-12), 1399-1418.
- Ha, J., & Jang, S. (2012). The effects of dining atmospherics on behavioral intentions through quality perception. *Journal of Services Marketing*, 26(3), 204-215.
- Hartline, M. D., & Jones, K. C. (1996). Employee performance cues in a hotel service environment: Influence on perceived service quality, value, and word-of-mouth intentions. *Journal of Business Research*, 35(3), 207-215.
- Heizer, J. H., & Render, B. (2008). *Operations management* (Vol. 1). Pearson Education India.
- Heragu, S. S. (2008). *Facilities design*. CRC Press
- Heskett, J. L. (1987). Lessons in the service sector. *Harvard Business Review*, 65(2), 118-126.
- Holbrook, M. B., & Schindler, R. M. (1989). Some exploratory findings on the development of musical tastes. *Journal of Consumer Research*, 16(1), 119-124.
- Hooper, D., Coughlan, J., & R. Mullen, M. (2013). The servicescape as an antecedent to service quality and behavioral intentions. *Journal of Services Marketing*, 27(4), 271-280.
- Hossain, M., & Leo, S. (2009). Customer perception on service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4), 338-350.
- Jain, R., & Bagdare, S. (2011). Music and consumption experience: a review. *International Journal of Retail & Distribution Management*, 39(4), 289-302.
- Johnstone, M. L. (2012). The servicescape: The social dimensions of place. *Journal of Marketing Management*, 28(11-12), 1399-1418.
- Johnstone, M. L., & Todd, S. (2011). The servicescape and the social role it plays in consumers' lives. *ACR European Advances*.
- Kamau B. N. (2017). *Influence of servicescape on customer satisfaction in restaurants within classified hotels in Nairobi County, Kenya* (Doctoral dissertation).
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Age International.
- Kumar, D. S., Purani, K., & Sahadev, S. (2013). Conceptualising visual servicescape aesthetics: An application of environmental psychology. *The Marketing Review*, 13(4), 347-376.
- LeBlanc, G., & Nguyen, N. (1988). Customers' perceptions of service quality in financial institutions. *International Journal of Bank Marketing*, 6(4), 7-18.

- Lee, M., & Lou, Y. C. (1995). Consumer reliance on intrinsic and extrinsic cues in product evaluations: A conjoint approach. *Journal of Applied Business Research*, 12(1), 21-28.
- Lewis, B. R., & Mitchell, V. W. (1990). Defining and measuring the quality of customer service. *Marketing Intelligence & Planning*, 8(6), 11-17.
- Lin, J. S. C., & Liang, H. Y. (2011). The influence of service environments on customer emotion and service outcomes. *Managing Service Quality: An International Journal*, 21(4), 350-372.
- Machuca, J. A. del Mar Gonzalez-Zamora, M., & Aguilar-Escobar, V. G. (2007). Service operations management research. *Journal of Operations Management*, 25(3), 585-603.
- Maeng, H. K., & Park, J. W. (2015). A study on the effect of the physical environment in an airplane on customer loyalty. *Journal of Airline and Airport Management*, 5(2), 81-100.
- Mehrabian, A., & Russell, J. A. (1974). *An Approach to Environmental Psychology*, Cambridge, Mass.: MIT Press.
- Milliman, R. E. (1982). Using background music to affect the behavior of supermarket shoppers. *The Journal of Marketing*, 46(3), 86-91.
- Milliman, R. E. (1986). The influence of background music on the behavior of restaurant patrons. *Journal of Consumer Research*, 13(2), 286-289.
- Mongare, C. F. (2017). *Project management practices and implementation of information technology projects among selected commercial banks in Kenya* (Unpublished master's thesis). Kenyatta University, Kenya.
- Morrison, M., Gan, S., Dubelaar, C., & Oppewal, H. (2011). In-store music and aroma influences on shopper behavior and satisfaction. *Journal of Business Research*, 64(6), 558-564.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research methods. *Quantitative and qualitative approaches*, Nairobi. Acts Press.
- Namasivayam, K. (2004). The impact of intangibles on consumers' quality ratings using the star/diamond terminology. *Foodservice Research International*, 15(1), 34-40.
- Ndubisi, N. O. (2006). A structural equation modelling of the antecedents of relationship quality in the Malaysia banking sector. *Journal of Financial Services Marketing*, 11(2), 131-141.

- Ndubisi, N.O. (2004), "Understanding the salience of cultural dimensions on relationship marketing, its underpinnings and aftermaths", *Cross Cultural Management*, Vol.11 No.3 pp. 70- 89
- Ndubisi, N. O. (2007). Relationship marketing and customer loyalty. *Marketing Intelligence*, 25 (1), 98-106.
- Olson, J. C., & Jacoby, J. (1972). Cue utilization in the quality perception process. *ACR Special Volumes*.
- Orodho, J. A. (2004). Techniques of writing research proposals and reports in education and social sciences. *Nairobi: Masola Publishers*.
- Osayawe Ehigie, B. (2006). Correlates of customer loyalty to their bank: a case study in Nigeria. *International Journal of Bank Marketing*, 24(7), 494-508.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 41-50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple item scale for measuring customer perceptions of service quality. *Journal of Retailing*, (64), 12-40.
- Parasuraman, A. Zeithaml, V. A., & Berry, L. L. (1991). SERVQUAL: A Multiple Item Scale for Measuring Customer Perceptions of Service Quality, *Journal of Retailing*, 64, 12-23.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Perceived service quality as a customer- based performance measure: An empirical examination of organizational barriers using an extended service quality model. *Human resource management*, 30(3), 335-364.
- Reimer, A. & Kuehn, R. (2005). The impact of servicescape on quality perception. *European Journal of Marketing*, 39(7/8), 785-808.
- Robert, D., & John, R. (1982). Store atmosphere: An environmental psychology approach. *Journal of retailing*, 58(1), 34-57.
- Rosenbaum, M. S., & Massiah, C. A. (2007). When customers receive support from other customers: Exploring the influence of intercustomer social support on customer voluntary performance. *Journal of Service Research*, 9(3), 257-270.
- Russell, J. A., & Snodgrass, J. (1987). Emotion and the environment. *Handbook of environmental psychology*, 1(1), 245-81.
- Russell, J. A., & Ward, L. M. (1982). Environmental psychology. *Annual review of psychology*, 33(1), 651-689.

- Ryu, K., & Jang, S. S. (2007). The effect of environmental perceptions on behavioral intentions through emotions: The case of upscale restaurants. *Journal of Hospitality & Tourism Research*, 31(1), 56-72.
- Sadek, D. M., Zainal, N. S., Taher, M. S. I. M., Yahya, A. F., Shaharudin, M. R., Noordin, N., & Jusoff, K. (2010). Service quality perceptions between cooperative and Islamic Banks of Britain. *American Journal of Economics and Business Administration*, 2(1), 1.
- Saunders, M., Lewis, P. & Thornhill, A. (2007), *Research Methods for Business Students*, Fifth Edition, Pearson Education Ltd., Essex, England.
- Schneider, B., & Bowen, D. E. (1985). Employee and customer perceptions of service in banks: Replication and extension. *Journal of applied Psychology*, 70(3), 423.
- Schmidt, R. A., & Sapsford, R. (1995). Issues of gender and servicescape: marketing UK public houses to women. *International Journal of Retail & Distribution Management*, 23(3), 34-40.
- Shostack, G. L. (1977). Breaking free from product marketing. *The Journal of Marketing*, 73-80.
- Slack, N. C. S. and Johnstone, R., 2004. *Operations Management* (4th Ed), FT Prentice Hall, London.
- Smith, A. K., & Bolton, R. N. (1998). An experimental investigation of customer reactions to service failure and recovery encounters: paradox or peril? *Journal of service research*, 1(1), 65-81.
- Solomon, M. R., Surprenant, C., Czepiel, J. A., & Gutman, E. G. (1985). A role theory perspective on dyadic interactions: the service encounter. *The Journal of Marketing*, 99-111.
- Stallworth Jr, O. E. & Kleiner, B. H. (1996). Recent developments in office design. *Facilities*, 14(1/2), 34-42.
- Taylor, G. R. (2005). Quantitative Research Methods. In G. R. Taylor (Ed.), *Integrating Quantitative and Qualitative Methods in Research*, (2nd ed.). USA: University Press of America.
- Tombs, A., & McColl-Kennedy, J. R. (2003). Social-servicescape conceptual model. *Marketing theory*, 3(4), 447-475.
- Turley, L. and Milliman, R. (2000), "Atmospheric effects on shopping behavior: a review of the experimental evidence", *Journal of Business Research*, 49(8), 193-211.

- Tyler, K., & Stanley, E. (1999). UK bank-corporate relationships: large corporates' expectations of service. *International Journal of Bank Marketing*, 17(4), 158-172.
- Vieira, V. A. (2013). Stimuli–organism–response framework: A meta-analytic review in the store environment. *Journal of Business Research*, 66(9), 1420-1426.
- Warde, A., & Martens, L. (2000). *Eating out: Social differentiation, consumption and pleasure*. Cambridge University Press.
- Wakefield, K. L., & Baker, J. (1998). Excitement at the mall: determinants and effects on shopping response. *Journal of Retailing*, 74(4), 515-539.
- Wakefield, K. L. & Barnes, J. H. (1996). Retailing hedonic consumption: a model of sales promotion of a leisure service. *Journal of Retailing*, 72(4), 409-427.
- Wakefield, K. L. & Blodgett, J. G. (1994). The importance of servicescapes in leisure service settings. *Journal of Services Marketing*, 8(3), 66-76.
- Wakefield, K. L. & Blodgett, J. G. (1996). The effects of the servicescape on customers' behavioral intentions in leisure service settings. *Journal of Services Marketing*, 10(6), 45-76.
- Wakefield, K. L., & Blodgett, J. G. (1999). Customer response to intangible and tangible service factors. *Psychology & Marketing*, 16(1), 51-68.
- Warwick, D. P. & Lininger, C. A. (1975). *The sample survey: Theory and practice*. McGraw-Hill.
- Zeithaml, V. A., Parasuraman, A., Berry, L. L., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon and Schuster.
- Zeithaml Valarie, A., Jo, B. M., & Gremler Dwayne, D. (1996). Services marketing. *Bk: McGraw-Hill*, 563.
- Zeithaml, V. A., Berry, L. L. & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46
- Zijlstra, E. & Mobach, M. P. (2011). The influence of facility layout on operations explored. *Journal of Facilities Management*, 9(2), 127-144.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION



UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
SCHOOL OF BUSINESS
DEPARTMENT OF MANAGEMENT SCIENCE

Telephone: 4184160/1-5 Ext. 220
Email: commerce@uonbi.ca.ke

P.O. Box 30197
Nairobi, Kenya

10th September, 2018

TO WHOM IT MAY CONCERN

RE: INTRODUCTION LETTER

This is to certify that **CALISTER GESARE ORORA (REG. NO. D61/69000/2013)** is a bona fide student of the University of Nairobi, pursuing a degree in Masters of Business Administration (MBA).

As part of the fulfillment of the requirement of the course, she undertaking a study titled **"EFFECT OF FACILITY LAYOUT ENVIRONMENT ON PERCIEVED SERVICE QUALITY: THE CASE OF NATIONAL BANK OF KENYA."**

You have been selected as one of the respondents in the study. The purpose of this letter therefore, is to kindly request you to assist and facilitate in carrying out the study in your organization by answering the questions in the attached questionnaire.

Data and information obtained through this exercise is purely for academic purpose and will be treated with utmost confidentiality. In case of any questions or clarifications, she can be reached on 0721213370 or calisgesa@yahoo.com.

Your assistance and cooperation will be highly appreciated. Thank you very much in advance.

Yours Faithfully,

A handwritten signature in black ink, appearing to read "Stephen Odock".

Dr. Stephen Odock,
Coordinator, School of Business, Mombasa Campus



APPENDIX II: LIST OF NATIONAL BANK OF KENYA BRANCHES

NATIONAL BANK OF KENYA BRANCHES	
1.	Awendo Branch
2.	Bomet Branch
3.	Bondeni Branch
4.	Bungoma Branch
5.	Busia Branch
6.	Busia KRA Agency
7.	Cargo Agency
8.	Changamwe Branch
9.	Eastleigh Branch
10.	Eldoret Airport Agency
11.	Eldoret Branch
12.	Embu Branch
13.	Garissa Branch
14.	Gigiri Branch
15.	Greenspan Mall Branch
16.	Harambee Avenue, Nairobi
17.	Hill Branch Branch
18.	Hospital Branch
19.	I.C.D Agency
20.	Isiolo Branch
21.	J.K.I.A Branch
22.	Kakamega Branch
23.	Kapsabet Branch
24.	Karatina Branch
25.	Kenyatta Avenue, Amannah

26.	Kenyatta Avenue Branch
27.	Kenyatta University Branch
28.	Kericho Branch
29.	Kiambu Branch
30.	Kianjai Branch
31.	Kilifi Branch
32.	Kilindini Agency
33.	Kisii Branch
34.	Kisumu Branch
35.	Kitale Branch
36.	Kitengela Branch
37.	Kitui Branch
38.	Limuru Branch
39.	Lungalunga Branch
40.	Machakos Branch
41.	Malindi Branch
42.	Mandera Branch
43.	Maua Branch
44.	Meru Branch
45.	Migori Branch
46.	Moi Avenue, Nairobi
47.	Moi University Branch
48.	Moi's Bridge Branch
49.	Molo Branch
50.	Mombasa Airport Agency
51.	Mountain Mall Branch
52.	Mtwapa Branch
53.	Mutomo Branch

54.	N.S.S.F Agency
55.	Nakuru Branch
56.	Nandi Hills Branch
57.	Nanyuki Branch
58.	Narok Branch
59.	Ngong Road Branch
60.	Nkrumah Road Branch
61.	Nyali Centre Branch
62.	Nyeri Branch
63.	Portway Branch
64.	Premium Centre, Kisumu
65.	Red Cross Branch
66.	Rongata Rongai Branch
67.	Ruiru Branch
68.	Sameer Park Branch
69.	SEKU Branch
70.	South C – KEBS
71.	St. Paul University
72.	Technical University of Mombasa
73.	Thika Branch
74.	Times Tower Branch
75.	Ukunda Branch
76.	Upper Hill (TSC) Branch
77.	Wajir Branch
78.	Westlands Branch
79.	Wilson Airport Branch
80.	Yaya Centre Branch

APPENDIX III: QUESTIONNAIRE
QUESTIONNAIRE ONE

Dear respondent, you are kindly requested to fill the questionnaire with utmost honesty. Information provided herein will not be used against you under any circumstances. The findings of the study will be used for academic purposes only. Please do not provide any form of identity on this questionnaire. Thank you.

Section A: Background Information

1. Number of years of branch existence.

- | | | | |
|-----------------|--------------------------|-----------------|--------------------------|
| a. Below 5years | <input type="checkbox"/> | b. 5-10 years | <input type="checkbox"/> |
| c. 11-15 years | <input type="checkbox"/> | d. 15 and above | <input type="checkbox"/> |

2. Average number of customers.

- | | | | |
|---------------|--------------------------|---------------|--------------------------|
| a. Below 2500 | <input type="checkbox"/> | b. 2501-5000 | <input type="checkbox"/> |
| c. 5001-7500 | <input type="checkbox"/> | d. Above 7500 | <input type="checkbox"/> |

3. Average number of operating hours per day_____

4. Branch operations manager years of experience.

- | | | | |
|------------------|--------------------------|-------------------|--------------------------|
| a. Below 5 years | <input type="checkbox"/> | b. 10-15 years | <input type="checkbox"/> |
| c. 5-10 years | <input type="checkbox"/> | d. Above 15 years | <input type="checkbox"/> |

5. Branch operations manager's education level.

- | | | | |
|------------|--------------------------|--------------------|--------------------------|
| a. Diploma | <input type="checkbox"/> | b. Postgraduate | <input type="checkbox"/> |
| c. Degree | <input type="checkbox"/> | d. Others(Specify) | _____ |

Bank Facility Layout Environment

To what extent, in a scale of 1-5 do you agree with the following statements? Indicate by ticking only one.

Whereby 1 represents strongly disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 strongly agree

ID	AMBIENT CONDITIONS	1	2	3	4	5
1.	Temperature inside our branch is comfortable					
2.	The colours of our branch building and interior is pleasant and creates a comfortable atmosphere.					
3.	The lighting inside the branch is adequate.					
4.	The background music in the branch appropriate.					
5.	The noise level in the branch is acceptable.					
SPATIAL LAYOUT AND FUNCTIONALITY						
1.	The branch has enough and comfortable chairs for waiting					
2.	The branch entrance is convenient for disabled persons.					
3.	The overall bank layout in this branch makes it easy for customers to move around and find right department.					
4.	The interior design in this branch is visually appealing.					
5.	The building's architecture in this branch is visually appealing.					
DÉCOR, ARTIFACTS, SIGNS AND SYMBOLS						
1.	Interior design in this branch is appealing and the colour scheme is attractive.					
2.	The signage and symbols in this branch provide the right direction.					
3.	Painting and pictures in this branch are visually attractive.					
4.	The wall décor in this branch is visually appealing.					

5.	The brochures and other communication materials in this branch are easy to understand.					
6.	The directional signs in this branch are sufficient and give guidelines on how to move around easily.					
7.	Directional signs in this branch are easy to follow and understand.					
SOCIAL ELEMENTS						
1.	The bank staff in this branch understand customer requirements.					
2.	The bank staff in this branch are approachable and helpful to you.					
3.	The bank employees in this branch are neat in appearance.					

Am much grateful for your cooperation. Thank you.

QUESTIONNAIRE TWO

Dear respondent, you are kindly requested to fill the questionnaire with utmost honesty.

Information provided herein will not be used against you under any circumstances. The findings of the study will be used for academic purposes only. Please do not provide any form of identity on this questionnaire. Thank you.

Section A: Background Information

1. Gender

a. Male

b. Female

2. Are you a customer to any other bank?

YES

NO

If yes how many? _____

3. How often do you visit the bank

- a. Daily
- b. Once a week
- c. Once a month
- d. 2-3 times a week

Section B: Overall Service Quality

To what extent in a range of 1-5, do you agree with the following statements? Indicate by ticking only one.

Whereby 1 represents strongly disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 strongly agree

ID	RELIABILITY	1	2	3	4	5
1.	The bank offers timely services within promised time.					
2.	The bank performs services correctly the first time.					
3.	The bank insists on error free records.					
4.	The bank displays sincere interest in solving customer issues.					
ASSURANCE						
1.	Transactions with bank employees elicit feelings of security in you.					
2.	Bank employees are knowledgeable to answer your questions.					
3.	The bank employees shows courtesy					
4.	Bank employee’s behaviour inculcates confidence in you.					
5.	There is a sense of security in transacting with the bank.					

TANGIBLES						
1.	The bank has visually appealing physical facilities.					
2.	Bank employees look neat.					
3.	Banks equipment/furniture are modern looking.					
4.	Brochure's and communication materials which are appealing visually.					
EMPATHY						
1.	The bank has customer's best interest at heart.					
2.	Your specific needs are understood by employees					
3.	The working hours of the bank are ideal to all.					
4.	Bank employees are not too busy to respond to your requests and queries.					
RESPONSIVENESS						
1.	Bank employees are in all times ready to provide help.					
2.	Employees inform you exactly when and how long promised services will be performed.					
3.	Bank employees are not too occupied to provide response to your requests and queries.					
4.	Bank employee give prompt services.					

Thank you very much for your cooperation.