

**INFORMATION SYSTEM SERVICE DESIGN AND CUSTOMER SERVICE  
DELIVERY AT BARCLAYS BANK OF KENYA**

**BY**

**JUDY TIMA**

**D61/72484/2011**

**A RESEARCH PROJECT PROPOSAL SUBMITTED IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE  
DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA),  
SCHOOL OF BUSINESS,  
UNIVERSITY OF NAIROBI.**

**NOVEMBER, 2013**

## DECLARATION

This research project is my original work and has not been presented for any academic award in any other institution.

Signature.....Date.....

TIMA JUDY

D61/72484/2011

This research project has been presented for examination with my approval as the University Supervisor.

Signature.....Date.....

DR. KATE LITONDO

School of Business

University of Nairobi

## ACKNOWLEDGEMENT

I would like to thank the Almighty God for giving me sufficient grace, mercy and blessings that has seen me through this program.

I sincerely acknowledge the invaluable and tireless counsel, commitment, encouragement and commendable support of my supervisor Dr. Kate Litondo. She accorded me scholarly guidance, instructive feedback and constructive criticism in the intricacy of learning.

The same goes to my colleagues at Barclays Bank of Kenya, Esther Watakah, Florence Kamau, Seurey Lucy, Stella Lengewa and the departments I sampled for the research, for the invaluable assistance they accorded to me during my studies, and for being courteous and open with the necessary information.

To Adolfo Ferrero I am thankful for the financial support accorded to enable me realize this dream and more for his unrelenting moral support. Special gratitude to my entire family Daniel saruni, Broadricks baruni, Aldo saruni, Rachel lelekoiten, Tipatet's family, friends Clinton, Esther, Richard, Abdul, Bruno detommasi, Mariuccia detommasi, Franco Ferrero and Emma Ferrero and lastly Milele group for their moral support and encouragement during my study. Not to forget my other members of extended family for their concern and support during this period and to my MBA classmates who gave me support and encouragement throughout the entire course.

My very sincere gratitude goes to all those who contributed immensely in one way or another to the completion of this research project.

## **DEDICATION**

This Research Report is dedicated to Adolfo Ferrero for his unquantified love, undiminishing support and understanding which gave me strength throughout the program, to Detommasi family for their endless support. And lastly to my family for their moral support and encouragement.

## Table of Contents

DECLARATION.....	i
ACKNOWLEDGEMENT .....	ii
DEDICATION .....	iii
LIST OF TABLES .....	vi
LIST OF FIGURES .....	vii
ABSTRACT.....	viii
CHAPTER ONE: INTRODUCTION .....	1
1.1 Background of the Study.....	1
1.1.1 Service Design .....	3
1.1.2 Customer Service Delivery .....	4
1.1.3 Barclays Bank of Kenya .....	5
1.2 Research Problem Statement .....	6
1.3 Research Objectives.....	8
1.4 Value of the Study .....	8
CHAPTER TWO: LITERATURE REVIEW.....	9
2.1 Introduction.....	9
2.2 Service Design of Information Systems.....	9
2.2.1 Benefits of Service Design.....	10
2.2.2 Challenges of Information System Service Design. ....	13
2.3 Customer Satisfaction. ....	14
2.3.1 Employee Satisfaction and Customer satisfaction. ....	15
2.4 Electronic Services.....	15
2.5 Customer service.....	18
2.6 Service Design and Customer Service .....	22
2.7 Theoretical Framework .....	23
2.8 Summary of Literature .....	26
CHAPTER THREE: RESEARCH METHODOLOGY .....	27
3.1 Introduction.....	27
3.2 Research Design.....	27
3.3 Data Collection .....	27
3.4 Data Analysis .....	28
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION .....	29
4.1 Introduction.....	29

4.2 General Information .....	29
4.2.1 Gender.....	29
4.2.3 Department.....	31
4.2.5.Banks' E-services .....	33
4.2.5.1 Traditional Banking .....	33
4.3 Benefits of Information System Service Design.....	34
4.4 Challenges of Information System Service Design .....	35
4.5 Customer Service Delivery .....	36
CHAPTER FIVE .....	37
SUMMARYOF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS .....	37
5.1 Introduction.....	37
5.2 Summary of the Findings.....	37
5.3 Conclusions.....	38
5.4. Limitations Experienced in The Study. ....	39
5.5 Recommendation for Further Studies .....	39
5.6 Suggestions for Further Studies .....	39
REFERENCES .....	41
APPENDICES. ....	i
APPENDIX 1: LETTER OF INTRODUCTION.....	i
APPENDIX 2 :QUESTIONNAIRE.....	ii

## LIST OF TABLES

Table 4.2.1 Distribution of Respondent by Gender.....	30
Table 4.2.2 Distribution of Respondent By Age .....	31
Table 4.2.3 Distribution of Respondent by Department.....	32
Table 4.2.4 Work Experience of the Respondents.....	32
Table 4.2.4 Distribution of Respondent by Number of Service Years.....	33
Table 4.2.5 Distribution of Respondent by Number of E-Services Offered By the Bank.....	33
Table 4.2.5.1 Distribution of Respondent by Number of Traditional Bank.....	34
Table 4.3 Distribution of Respondents by Number of Benefits of Information System Service Design.....	35
Table 4.4 Distribution of Respondents by Number of Challenges on Information System Service Design.....	36
Table 4.5 Distribution Of Respondents By Number Of Customer Service Delivery.....	37

## LIST OF FIGURES

Figure 1. D&M IS Success Model.....	26
-------------------------------------	----

## ABSTRACT

During the 1980s, the relationship between information technology (IT) and productivity became a source of debate, the astonishing improvements in computers' underlying capabilities proved almost impossible to assess in terms of their effect on productivity. Customer centric information system emerged as a way of enabling the company to achieve customer service delivery as well as improved productivity. This would be achieved through information system service design which focuses on the system's user-ability and operation effectiveness. The purpose of the study was to establish the relation of information system service design and customer service delivery at Barclays bank of Kenya. The objectives of the study were a) to determine the benefits of information system service design to the employees when serving the customers, b) to establish the challenges experienced by the employees when using information system to serve customers and c) to determine the effect of service design on customer service. The study used case study. Questionnaires were used as a toll for data collection.

The study reveals that, the benefits of information system service design is greatly felt in the bank however certain challenges are experienced, these include majorly integration between the back end and front end of the system, these affects the system's effectiveness and increases the system downtime, additionally the changes in customer preferences also has a big impact on information system service design. With respect to customer service delivery the major issues that stood out were related to training offered by the bank on the current job and training on how to handle the information systems, system downtime which is also attributed to the user interface and lack of thorough knowledge on how to handle automated systems. The researcher also recommends that the bank should offer sufficient training to the employees on how to handle the system and refresher training should be conducted in case of system upgrades to avoid inefficiency and customer dissatisfaction. The bank should also improve further on the system's service design to maintain its competitiveness. The banking industry should consider the employees requirements in the systems they acquire because they are the internal customers and interact with the systems more, further user-friendly information system will enable the employees to work more efficiently translating to external customer satisfaction and increased revenues for the bank.

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of the Study**

Reflecting on the history of IS development, the first-generation systems have often focused on technology utilization. These systems were proprietary and targeted to meet the needs of a specific application while meeting the internal requirements of an organization. The second-generation systems were mainly focused on the process. The systems were mainly to support a set of general purpose processes through configuration and reusability. The third generation systems are customer centric information systems, the main business driver is customer value and business competitiveness therefore the focus of the system development is to configure various components of the customer driven value chain to meet the ever-changing customer requirements.

Customer centric information system is designed with customer preference and needs in mind; therefore this makes the system development a dynamic process. Organizations have realized that customers are an integral and critical component of the information system development and their involvement and satisfaction enables the system to derive its intended value. Moreover customer engagement and architectural flexibility allow the system to react promptly to discovered customer preferences. While customer needs typically drive the nature of the products/services produced, which in turn influences the process and technology architecture, the reality is that all four factors influence each other for example Service Oriented Architecture-SOA), which can enhance the bundling of products and services and provide competitive value in customer offerings (Glushko, 2008).

The purpose of service design is to have processes that consistently deliver high quality services to drive customer satisfaction and customer retention, whilst maintaining process efficiency (Johnston and Clark 2005). Thus, good design gives service businesses leverage to gain a competitive edge in the marketplace (Shostack 1984 and Verma et al. 2002). After information technology became readily available to businesses and service providers, service design concepts and methods were devised to handle technology infusion in service encounters (Bitner, et al. 2000). General purpose information technology makes service

operations more efficient and reliable. In addition, information management technology has increasingly been used to further empower the frontline employee with the information needed to provide personalized and satisfying customer experiences. Such technology ensures that the information available to all frontline employees is more accurate, complete, consistent and accessible than the separate personal memories of any of them taken individually. Nevertheless, just because some information technology has the potential to yield more consistent, reliable, and timely service, design choices must be made about whether and where to introduce it into the service system. Technology can be used solely by the frontline employee to enhance their capabilities, or by both the frontline employee and the customer to more directly enhance their interaction. Fitzsimmons and Fitzsimmons (2006) distinguish these two cases as technology assisted and technology facilitated encounters. A more fundamental change in service design than introducing technology to assist a human service provider is to use technology to transform person to person services into self-service. This eliminates the frontline employee and moves back the line of visibility between the front and back stage, giving the customer access to information that was previously visible only to the frontline employee.

In Information Technology productivity paradox the relationship between information technology and productivity became a source of debate, the astonishing improvements in computers' underlying capabilities proved almost impossible to assess in terms of their effect on productivity. A growing number of academic studies also report positive effects of information technology on various measures of economic performance. As more research is conducted, we are gradually developing a clearer picture of the relationship between IT and productivity. However, productivity measurement isn't an exact science. While one study shows a negative correlation between total factor productivity and high share of high-tech capital formation (Berndt and Morrison, 1995), another study suggests that computer capital contributes to growth more than ordinary capital during the similar period (Jorgenson and Stiroh, 1995). Brynjolfsson (1994) report positive effects of IT based on output and consumer surplus measures. Although progress in this area of research has been quite substantial, a consensus about the relationship between IT investment and economic performance still eludes. More than a decade ago, one of the earliest surveys concluded that we still had much to learn about measuring the effects of computers on organizations (Attewell and Rule, 1984). The lack of accurate quantitative measures for the output and value created by information technology has made the MIS manager's job of evaluating investments particularly difficult.

### **1.1.1 Service Design**

Service design is designing services that are useful, usable and desirable from the user's perspective, and efficient, effective and different from the provider's perspective. It is a strategic approach that helps providers to develop clear strategic positioning for their service offerings. Services are systems that involve many different influential factors, so service design takes a holistic approach in order to get an understanding of the system and the different actors within the system (Manger and Sung, 2011).

Service Design is the design of the overall experience of a service as well as the design of the process and strategy to provide that service. Service Design is a process across the four D's – Discover, Define, and Develop & Deliver. It is about understanding the client, organization and the market, develop ideas, translate them into feasible solutions and implementing them. Service Design is involved in the ongoing live-cycle of services and offers continuous evolution. Services can be constantly changing in time (Rae, 2005). Service Design is offering a competitive advantage for organizations and ensuring quality experiences for clients. For example it helps organizations to offer better services than their competitors and to raise clients' awareness of the service they consume. Consequently, service design is an activity that suggests behavioral patterns to the actors interacting in the service, leaving a higher level of freedom to the customers' behavior. Service design requires methods and tools to control new elements of the design process, such as the time and the interaction between actors.

Service design is also born out of interaction design and usability design. The term interaction design was first proposed as an adaptation of the computer science term user interface design to the industrial design profession (Verplank, 1980). Service design is important to an organization in four main ways, firstly innovation, service design helps an organization to come up with new and innovative products and service that matches with the customer's need. Secondly effectiveness and efficiency, service design enables an organization review its operations and implement processes that are fast, reliable to the customers and cost effective to the organization. Thirdly growth, with service design the organization will be constantly looking for ways to improve its products, services and operations thus achieving growth in the process. Lastly quality, the main reason of adopting the best possible service design is for the organization to achieve higher quality service provision to its customers.

Despite the new focus of technology on customer centric systems, the actualization has faced a number of challenges, some of which include; a) Dynamic customer preferences. Customers' preferences change so fast, every new technology results to advanced customers' expectations. This makes it difficult for businesses to upgrade the systems immediately to fit the change due to costs. b) Lack of clarity in the nature and intentions of the service system and c) it's also difficult to maintain analytical rigor without losing service spirit (Alter, 2012).

### **1.1.2 Customer Service Delivery**

Customer service is a set of activities formulated by a service provider with the aim of satisfying the customers' expectations (Woodruff, 1997). Customer service in every organization is very important in guiding the organization towards the achievement of its set goals and targets through increased income and revenues. The experiences that customers have when making transactions are very influential in shaping a customer's perception towards that particular organization or product, whether good or bad, that influences the loyalty of the customers. Therefore it is very crucial for organizations to establish strategies aimed at customer service improvement to enable them to continually meet the needs and expectations of their customers (Sawy and Bowles, 1997). Since competing products are often very similar to each other, customer service and support is what makes the difference (Sawy and Bowles, 1997).

The usage of IT in customer service is considered as an affordable and easy chance (Piccoli et al. 2004). The key benefit of technology, used in services is the possibility to customize and personalize (Semeijn et al. 2005). This personalization endows the customer a feeling of being special and the company the possibility to target directly. The net benefits are the ultimate impact of the system, which can affect users as well as the company (DeLone and McLean, 2004). Compared to employees, customers are generally less skillful at operating information technology involved in an e-service, and consequently demand a more user-friendly interface of the system. Where as in practice, the designs of many e-service systems have until recently been technology-driven. The lack of skills or knowledge may be of less concern when employees are the major users, since this gap usually can be filled through employee training or targeted recruiting. However when customers rather than employees, are the primary users of the facility, a company is very much limited in terms of its control or influence over its customers' skills or knowledge. This makes a user-friendly interface highly important for successful service delivery. Meanwhile, the issue is also important because

customers' judgments of service quality are heavily influenced by their experiences in the service delivery process. The design of an e-service determines the key features of a service, the ease of maintaining and improving a service, and the qualities of service experiences delivered through this channel. Yet, in practice, many e-services have been designed according to common sense or common practice (Conallen 2000), with little thought given to quality as defined by the customer (Xue, 2003).

Further Service management and design has mainly focused on the interactions between employees and customers. This perspective emphasizes on the fact that the quality of the service experience is primarily determined during this final service encounter that takes place in the front stage. This emphasis shows the important contribution of the activities in the back stage of the service value chain where information needed by the front stage are processed. However, the increase in web-driven consumer self-service applications and other automated services requires new thinking about service design and service quality. It is important to consider the entire network of services that comprise the back and front stages as vital parts of a service system (Glushko and Tabas, 2008).

### **1.1.3 Barclays Bank of Kenya**

Barclays Bank PLC is a major global financial services provider engaged in retail banking, credit cards, corporate, investment banking and wealth management with an extensive international presence in Europe, America, Africa and Asia with over 300 years of history and employs over 147,000 people. Barclays moves, lends, invests and protects money for over 48 million customers and clients worldwide (Barclays PLC Investor Seminar 2011, June 15).

Barclays Africa is the leading bank in Africa with business in ten countries in Africa namely; Botswana, Egypt, Ghana, Kenya, Nigeria, South Africa, Tanzania, Uganda, Zambia, Zimbabwe. Barclays has operated in Kenya for over 90 years. Barclays Bank (Kenya) Limited, also known as Barclays Bank of Kenya, is a commercial bank in Kenya. It is one of the forty-four (44) commercial bank licensed by the Central Bank of Kenya, the national banking regulator. The bank is a large financial institution in Kenya, with an estimated asset base in excess of US\$2.22 billion (KES: 180.9 billion), as of September 2011. At that time, Barclays Bank of Kenya was the second largest bank in Kenya, by assets, behind Kenya Commercial Bank Group with assets valued at US\$3.34 billion (KES:273.9 billion).

The institution serves the banking needs of large and small business customers as well as individuals.

Financial strength coupled with extensive local and international resources have positioned Barclays Bank of Kenya as a foremost provider of financial services. Barclays Bank of Kenya has established an extensive network of 117 outlets with over 230 ATMs spread across the country. The bank's financial performance over the years has built confidence among the bank's shareholders, with a reputation as one of the leading blue chip companies on Nairobi Stock Exchange ([www.Investorrelations.Barclays.co.ke](http://www.Investorrelations.Barclays.co.ke)).

Barclays Bank of Kenya has continued to maintain its market leadership position in a sector that has become increasingly competitive over the years. It was the first bank to introduce Islamic Banking to Kenya and first to introduce Corporate Bond by any commercial bank. Industry recognition they have received for leadership include; Best Bank in Kenya – Global Finance (2008, 2009 & 2010); Company of the Year Award for Human Resource Management Practices - Kenya Institute of Management (2008); Best Retail Bank – 2009 Banking Awards; and Company that best complies with the International Financial Reporting Standards-FiRe Awards (2009) ([www.barclays.com](http://www.barclays.com)).

One of the bank's strategies is to use information technology for competitive advantage. Therefore the bank uses information systems for all its operations. Most of these systems are used by the customer contact employees to serve the customers, additionally the customers also access the system for e-banking services through the mobile or internet. Therefore the information system service design plays a big role in providing efficiency to employees when serving customer and for customers, they achieve customer satisfaction through e-banking service experience. However when there is system down time customer satisfaction is adversely affected conversely customer service.

## **1.2 Research Problem Statement**

Barclays Bank of Kenya uses information systems for all its operations. Most of these systems are used by the customer contact employees to serve the customers. Therefore the information system service design plays a big role in providing efficiency to employees when serving customers and for customers, they achieve customer satisfaction through e-banking service experience. However when there is system down time customer satisfaction is adversely affected conversely customer service. Despite the importance of customer service derived from the information system service design more emphasize has been on the processes efficiency and not customer satisfaction. As a result researches have been carried

out on service quality of information systems however lesser has been on information system service design. Karmakar et al. (2007) suggested that more research is needed to address system service design issues in information intensive environments. Academic literatures have also approached the electronic service design problem, but typically with an eye toward being more descriptive than prescriptive. Prior research has focused on building conceptual frameworks (Hoffman et al. 1995 and Boyer et al. 2002) or an empirical taxonomy of e-service designs (Spiller and Lohse, 1998, Heim and Sinha, 2002).

Jepchirchir (2012) in her study project noted that customers had a general feeling of poor customer service, ironically the implementation of technology is driven by cost saving and not service quality even though technology is capable of doing both. Furthermore she states that the usage of technology to provide superior customer service is often no more expensive than what is done today ,it just requires focus on the quality service. Jepchirchir's research focused on customer service in Gracia resort hotel while my research will be more on the impact of information system's service design on customer service delivery in Barclays Bank of Kenya.

Banking is a service, paid for by customers holding accounts in a particular bank. It is about people interacting with people, processes and technology. Banking services is something that most people have experienced. According to Cooper (2010) the way to differentiate an organization with a good service design and one with a poor service design is on the way they deliver their services, good service design enables the organization to be logical and effective, that is, quick and efficient with both time and money ,it also balances what the customers' needs are with what the service providers need, additionally it combines the best of technology and people. On the contrary poor service design lacks effectiveness, it almost relies exclusively on technology hence resulting to poor service experiences to the customers and lastly it does not response fast to the customers' needs or preferences. Furthermore unlike material products or pure services, banking service experiences are an amalgam of products and services. As a result, it is possible to say that satisfaction with a banking experience such as a loan facility or an investment advice is a sum total satisfaction with the individual elements or attributes of all products and service to make up the experience.

With increasing competition among banks, customer loyalty to their banks has declined. Today's customers are approached by more competitors with equal or better offers. As such

many customers have become more willing to use more than one financial institution to meet their needs and to switch funds for the short-term gain. The ultimate challenge facing bankers today is not merely to produce satisfied consumers but rather loyal customers for strategic purposes which can only be achieved through customer satisfaction (Vavra, 1997).

This research will attempt to establish if service design in information system has impact on customer service delivery, by answering the following question; what effect does system service design have on customer service delivery?

### **1.3 Research Objectives**

The objective of the research is:

- a) Determine the benefits of information system service design to the employees when serving the customers.
- b) To establish the challenges experienced by the employees when using information system to serve customers.
- c) To determine the effect of service design on customer service delivery.

### **1.4 Value of the Study**

The results of this study will bring out several benefits. It will add to the current scope of knowledge and theory in service design in Information Systems. The research will benefit executives and managers as it will bring to light the need for Information Technology department to make concrete decision when it comes to investment in information system. It will further enable firms realize the need to consider customers as the main beneficiaries of any system implementation regardless of their direct or indirect interaction with the system. Moreover the research will offer academicians with more insight on e-service design hence prompting further research in the area.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter provides reviews and summary of literature on service design and customer service. The Chapter is organized as follows; Section 2.2 presents the concept of customer satisfaction and 2.2.1 on the impact of employee satisfaction on customer satisfaction; section 2.3 discusses on service design; section 2.4 on customer service and section 2.4.1 on customer life cycle care; section 2.5 presents customer service and service design.

### **2.2 Service Design of Information Systems.**

Service Design is the design of the overall experience of a service as well as the design of the process and strategy to provide that service. Service Design is a process across the four D's – Discover, Define, Develop and Deliver. It is about understanding the client, organization and the market, develop ideas, translate them into feasible solutions and implementing them. Service Design is involved in the ongoing live-cycle of services and offers continuous evolution. Services can be constantly changing in time (Rae, 2005).Service Design is offering a competitive advantage for organizations and ensuring quality experiences for clients. For example it helps organizations to offer better services than their competitors and to raise clients awareness of the service they consume .Service design addresses services from the perspective of customers. It aims to ensure that service interfaces are useful, usable and desirable from the customer's point of view, and effective, efficient and distinctive from the supplier's point of view (Mager, 2004).In other words, it's the connection between prototyping and understanding the needs, wants, feelings of customers at a given period of time during a specific service. It is a strategic approach that helps providers to develop a clear strategic positioning for their service offerings. Services are systems that involve many different influential factors, so service design takes a holistic approach in order to get an understanding of the system and the different actors within the system. Services are delivered and consumed over time.

Service design looks at the experience by focusing on the full customer journey, including the experiences before and after the service encounters (Rae, 2005).Service design, focuses on developing existing services and innovating new ones from the customers, receivers and users point of view, it utilizes the methods and principles of design thinking and emphasizes the meaning of customer experience. There are several key factors that can be used as ideas

regarding what service design provides and what it can do for a company; a) Identifies new value added services for service providers, b) Improves efficiency and effectiveness of already accessible services c) It can be both tangible and intangible and creates inimitable customer experiences. (Fritsche, 2010).

### **2.2.1 Benefits of Service Design.**

Using service design is one of the ways a company can take on the needs of today's customers. There are four main areas in which service design can be used; Innovation, effectiveness and efficiency, growth and quality (Fritsche, 2010). Slow development times are being pressured by rapidly changing customer demands, global outsourcing, and new software's making businesses change gears, only innovation can help companies keep up with this drastic change (Arndt, Berner and Edmondson, 2006). Innovation is the key idea that is shaping corporate life, helping leaders conceive previously unimagined strategic options (Charan and Lafley, 2008). Companies innovate to gain something other companies do not possess so that they can survive. The only constant thing in this world is change, and one of the best ways would be to innovate to keep up with this change. Innovation comes with many benefits including; new ways to reach goals, creating value for the company, keep up with globalization and change, to inspire both employees and clients and also to collaborate and nurture networks.

Innovation in service is most often either technological or behavioral, as well as combination of the two. Further, innovation in service is most often seen as a process (Gallouj and Weinstein, 1997). Additionally, the reason why organizations are not able to innovate effectively and efficiently is because many organizations do not have the right processes or tools to innovate with, or that the business culture itself does not support innovative thinking. This is not the only reason moreover the other reason would be employees are not motivated enough to be creative and contribute towards new ideas or products. Another situation could be that, making products that are not customer oriented and this implies that service design is not been considered. Service design gives that little nudge in the right direction and get ideas flowing having the customer in mind (Gallouj and Weinstein, 1997).

Moreover service design can offer company's customers a way to grow, growth both inside and outside the company. New markets, new jobs and expansion are three of the main ways service design can help with. However, it can also help the company to stay competitive and gain more revenue (Arndt, Berner and Edmondson, 2006).

Lastly service design will enhance the quality of the customers' services. This of course is why the end users will want to use the company for their advantage, because they offer superb quality services. Once the company works out their level of quality with a service design being the base, it becomes a stable process, one that can be used over and over again for the reason that their quality won't fluctuate. The efficiency and effectiveness will increase, which will offer a more positive experience for the customers. These will also aid in the overall improvement of the processes within the organization. When all of these enhancements are made the company's customer relationship will most likely strengthen, giving way to future business (Fritzsche, 2010). Hill et al. (2002) argue that issues relating to service process design and service system structure are strongly influenced by the use of new technologies in service delivery systems, e-channels of service delivery. These technologies represent a wealth of potential benefits for service systems: reduced costs, improved service quality, and increased availability of service operations (Walley and Amin 1994), and can facilitate customer acquisition and retention. There is ample evidence of the growing application of technology to self-service technologies at service encounters (Beatson et al. 2007 and Bitner et al. 2000,) and the swift development of web-based, virtual service environments (Voss, 2003) .

Service Design role focuses on the service interface which is positioned between Service Management and Service Marketing (Sangiorgi, 2009).Service design practice is described as inherently customer and user-centered (Holmlid, 2009 and, Stickdorn, 2010). Service design is seen as holistic with a focus on relations and interactions in systems (Mager, 2009 and Stickdorn, 2010). The design object then becomes how the actors within the system relate and act for value creation. Kimbell (2009) argues, in line with Vargo (2004) and Lusch (2008), that a service perspective is thus fundamental to all design activity, since the value is co-created, whether it is with a product or in a service encounter.

Service design addresses the functionality and form of services from the perspective of customers. This process applies explorative, generative and evaluative design approaches, and the restructuring of existing services is as much a challenge in service design as the development of innovative new services. Although awareness of the impact of design on business success is quite well documented , it is much less so for service companies, where only small percentage of service companies see any role for the design at all (Mager, 2009).

This is changing rapidly, now service design attracts increasing attention (Miettinen et al. 2009). In service design users and stakeholders are brought straight into the development through co-creational practices and inclusion of participatory design approaches. These practices have mostly been known and used within the (Human Computer Interaction-HCI) design area (Holmlid, 2009). Previously services had been both developed and designed, but supposedly not with a design perspective as foundation.

The development of a service design discourse has mainly been driven by reflection on what practitioners do, and there is a noted lack of theoretical development (Sangiorgi, 2009).

There are two mysteries that have been lingering in this context of service design and service management. One is related to the changing nature of design practice ,what happens, and what are the implications for industrial design practice, rather than artifacts, is the objective of the design. The second is the increased emphasis in the literature on the user/customer's role in the value creation and realization of service (Edman, 2011). The emergence of service design was accompanied by several large scale developments; a) the development and growth of networked media technologies, b) the attention paid to the role of design for innovation of new products and services, explicitly by management theory and practice, c) the general phenomena of changing markets, from goods to experience economy, in effect the growing service economy, and d) the more design specific of considering social change as design problems (Kimbellet al. 2009).

Vaajakallio et al. (2009) argue for a general increased interest in a user-centric perspective whereas Kimbell (2009) argues that the attention paid to the role of design for innovation, is focused on designer's creative input in three explicit areas, a) the designer's human-centered approach and methods, b) iterative processes of idea-generation through modeling and prototyping and c) competence in aesthetics and visual forms which are all considered in System Development life Cycle. With the development of electronic service technologies and further new business models featuring self-service, customers' roles in service delivery processes have been transformed from passive recipients of the service product into active co-producers who can effectively influence the quality and efficiency of the service delivery processes. Therefore using electronic service delivery channels such as the internet, customers have been taking over an increasing proportion of the labor involved in services. The changes in service delivery brought about by this customer role transformation go far beyond the implementation of new technologies (Xue, 2003).

### **2.2.2 Challenges of Information System Service Design.**

Parts of service design that is inspired by computer science and service-oriented architectures sometimes seem to assume that people are non-participants in systems, perhaps users of technology, or that they are dutiful components of service systems who will perform specified processes and activities consistent with designers' intentions and management's goals. It is almost as though people who are included within service systems are humans simulating machines. At the other side of service design, there is recognition that people are fallible components of relatively fragile service systems that cannot control participants' activities directly, but can only guide those activities to enable the user achieve their goals. With the dynamism in customers' preferences important to check that what the service system provides is synchronized with the customers' needs (Alter, 2012).

The lack of integration with back-office (how activities), and impacts of system downtime on customer's self-service often leads to slow response time which has a detrimental effect on customer satisfaction. That lack of effective synchrony between the back end and front can result to slow responses and sometime unclear result of system request. This greatly affects the reliability of the system, therefore adversely affecting customer service delivery (Glushko, 2008).

More importantly service design research attempts to model complex service systems with the goal of improving their efficiency, reliability, and other aspects of their performance, while such goals are important, sometimes it seems to drain the spirit of service out of the discussion. Recent studies on quality for multichannel services confirm that customer expectations for the virtual channel are often different than for the person to person (physical) channel (Falk et al. 2007). Furthermore, customers are influenced by the extent of integration and consistency between the two channels. Likewise, the front stage or back stage distinction reconciles the conflicting views about the desirability or inevitability of variability in service delivery. Variability in the front stage often arises when an empowered employee improvises or innovates to satisfy a customer making an unexpected request or complaint. This kind of variability that improves a service experience is usually desirable as long as any relevant information about the unplanned variability is communicated efficiently to the back stage. Otherwise, the benefit of improved service experience for the upgraded customer could be negated by a worse service experience for another customer (Alter, 2012).

### **2.3 Customer Satisfaction.**

Customer satisfaction is a measure of the extent to which products and services supplied by a given organization meets or surpasses customers' needs (Cochran, 2003). Additionally Gustafson et al. (2005) gives another definition that customer satisfaction entails a customer's evaluation of a product or service offering to date. Furthermore, according to Gustafson et al. (2005), overall customer satisfaction has a positive effect on loyalty in situations where customers are satisfied with products or services been offered. Customer satisfaction refers to the extent to which customers are happy and satisfied with the products and services provided by a business. Customer satisfaction is important because when a customer is happy with a service or provider, they are most likely to be loyal and to use a wide range of services offered by a business. Hill et al. (2003) discussed measuring customer satisfaction been valuable since it enables an organization to understand how customers perceive an organization while establishing whether customers' expectations are met. Another benefit of customer satisfaction is that it helps an organization to benchmark its performance against that of other competitors while at the same time increasing profits through improved customer loyalty and retention.

Customer satisfaction, quality and retention are global issues that affect all organizations, be it large or small, profit or non-profit, global or local. Customer satisfaction is the outcome when expectations are matched by service experience (Butcher, 2000). More emphasis is that customer satisfaction is the leading criterion for determining the quality that is actually delivered and is essential for corporate survival. There are several ways to assess the quality of service and customer satisfaction through subjective measures of quality, which focuses on perceptions and attitudes of the customer, rather than more concrete objective criteria. (Vavra, 1997), suggested that a Customer Satisfaction Measurement (CSM) programme must be incorporated into an organization's corporate culture. Knowledge of customer expectations and requirements are essential because it provides understanding of how the customer defines quality of service and products, and furthermore it facilitates the development of customer satisfaction. In addition, customer satisfaction is recognized as of great importance to all commercial organizations due to the fact of its influence on repeat purchases, and word-of-mouth recommendations (Pizam and Ellis, 1999).

In today's competitive environment, one of the most important goals of corporate culture is retaining and satisfying current and past customers. Instead of waiting for customer to complain because they are not satisfied, a consumer oriented corporate culture, seeks continuous feedback from its customers through repeated customer satisfaction measurements (Vavra, 1997).

### **2.3.1 Employee Satisfaction and Customer satisfaction.**

Employee satisfaction has an impact on customer satisfaction. According to Huber, Herrmaan, and Wrickle (2001), employees who deliver customer satisfaction will not be dissatisfied. Managing employees, especially customer contact employees in the organizations calls for a different staffing strategy. This translates to the fact that employees have to have the necessary knowledge, skills and abilities to perform the task and also be interactively skilled. With regard to the additional complexity and ambiguity created by customer interaction, there are several issues, namely recruiting, selecting, training and rewarding employees for the complex roles they play in customer interactions. Numerous studies support the idea that, there exists a link between employee satisfaction, customer satisfaction, productivity and financial results (Koy, 2003). Employees' performance plays an important role in determining customer satisfaction by demonstrating assurance (Parasuraman et al. 1991).

### **2.4 Electronic Services.**

Banks have traditionally been in the forefront of harnessing technology to improve their products and services. They have over the time been using electronic and telecommunication networks for delivering a wide range of value added products and services. The range of services and products offered by different banks vary widely both in their contents and sophistication. E-banking provides enormous benefits to consumers in terms of the ease and cost of transactions (Liu, 2008). However, it can be thought as a service that allows customers to use computers to access account-specific information and possibly conduct transactions from a remote location such as home or the workplace (Saleh and Andrea, 2002). The growth in e-banking with the increase in the range of interface options available to access online banking solutions has resulted in a steady increase in the number of customers interacting through remote channels to a greater extent than before. E-banking has been around for some time in the form of automated teller machine and telephone transactions.

And now, it has been transformed by the internet, a delivery channel that is fast, convenient, available every time, and from whatever the customer's location (Saleh and Andrea, 2002). E-banking also can increase competition among banks, and allows banks to penetrate new markets and thus expand their geographical reach. Customer can access services more easily from banks outside one's own country through wireless communication systems, which are developing more rapidly than traditional wired communication networks (Gao and Owolabi, 2008).

A more recent e-banking development is wireless internet applications of banking sometimes called mobile banking (M-banking) (Choi et al. 2006, Scornavacca and Hoehle, 2007).

M-banking provides a new channel for banking services, especially for certain remote areas where online internet is still unavailable. Strategic implications and customer perception of m-banking services are explored with a focus on the consumer value creation and a better understanding about the customer-perceived value of m-banking services (Laukkanen and Lauronen, 2005). Electronic distribution channels provide alternatives for faster delivery of banking services to a wider range of customers (Kaleem and Ahmad, 2008). The definition of e-banking varies because e-banking refers to several types of services through which a bank's customers can request information and carry out most retail banking services via computer or mobile phone (Mols, 1998 and Sathye, 1999). E-banking can also be defined as a variety of the following platforms; a) internet banking or online banking, b) telephone banking ,c) mobile phone banking and d ) PC banking (or offline banking) (Kolodinsky et al. 2004).

The design of an e-service determines the key features of a service, the ease of maintaining and improving a service, and the qualities of service experiences delivered through this channel. Yet, in practice, many e-services have been designed according to common sense or common practice (Conallen , 2000), with little thought given to quality as defined by the customer. Practitioner methodologies for web application design and service design are available (Conallen, 2000 and Dubé et al. 1999), yet informal and sometimes even contradictory suggestions remain the common means of describing appropriate electronic service design (Greenspun and Hanson 1999, Nielsen, 2000 and Siegel, 1996). Academic literatures have also approached the electronic service design problem, but typically with an eye toward being more descriptive than prescriptive. Prior research has focused on building conceptual frameworks (Hoffman et al., 1995 and Boyer et al. 2002) or an empirical taxonomy of e-service designs (Spiller and Lohse, 1998, Heim and Sinha, 2002).

Many open service strategy and design issues exist that require further research to identify best practices for e-services Boyer et al. (2002), Moon and Frei (2000) pointed out that self-service may become a burden to the customer without an appropriate service design.

Meuter et al. (2000) used the Critical Incident Study method to investigate the sources of satisfaction and dissatisfaction with self-service technology.

The service outputs can also include several different items, including both product offerings (tangible) and customer satisfaction (intangible). Product offerings relate to the scope and scale of the e-service, while customer satisfaction dimensions reflect how well customers' needs are being met by the content delivered in the e-service.

A more fundamental change in service design than introducing technology to assist a human service provider is to use technology to transform services into self-service ones. This eliminates the frontline employee and moves back the line of visibility between the front and back stage, giving the customer access to information that was previously visible only to the frontline employee. Techniques for designing, prototyping, and evaluating software user interfaces then developed rapidly and continue to evolve along with new technology platforms for self-service applications (Grudin, 1990). A competitor or alternate supplier is often just a click away, the usability and quality of service in a self-service application is an important concern for information system service design. System success is largely determined by the customer experience through the system's interface (Massey et al. 2008). Every service encounter consists of two actors: a service provider and a service consumer (Glushko and Tabas, 2009 and MacKenzie et al. 2006). Actor in this case include both human and computational entities, just as it is in use cases and other system modeling methods (Cockburn, 2000). Services that are one-to-many can be modeled as sets of pairwise ones. The interactions between the two actors take place through an interface that describes what the service does and how it is requested. This service interface is always explicit with computational actors, where well-defined inputs and outputs are a prerequisite for the infusion of computation or automation, and where the interaction is intrinsically and exclusively an exchange of information (Glushko and McGrath, 2005).

## **2.5 Customer service**

Customer service is a series of activities designed to enhance the level of customer satisfaction, that is, the feeling that a product or service has met the customer expectation (Turban, 2002). It plays a vital role in the organization's ability to generate income and revenue (Selden, 1998) and varies by product, firm and the client perception. Blem (1995) defines customer service as all the activities that create a bond between the organization and their clients or customers. Customer service incorporates the following critical aspects; expedient service delivery, open and honest communication, individual personalized service, engendering customer loyalty, problem-solving, under-promising and over-delivering, meeting and exceeding expectations, efficient use of infrastructure, systems and procedures to facilitate efficient operations and, effective use of knowledge management with a focus on customer lifecycle care (Kingstone, 2004 and Zarbock, 2006). Customer service excellence requires every employee, at every level to be focused on customer needs, whether they deliver customer service or not. Therefore For every manager, achieving customer service excellence must be a key objective as it ensures that day-to-day decisions, business processes and communication are focused on customer's real needs (Linton, 1995).

Service quality comprises the degree to which attributes of the service desired by the users are identified and incorporated in the product and service and the degree to which desired levels of these attributes are perceived by the users (Horovitz, 1987). Despite the importance of achieving customer service, there are challenges of attaining desired excellent customer service; a) employees do not know the basics of service and are sent out to perform their job function without a clear understanding of how to attract and retain the customer, b) when the customer comes into contact with the organization, the moments of truth, are not correctly identified and managed by employees and c) managers fail to reward employees when they deliver excellent customer service (LeBoeuf, 1991).

To manage customer experiences, it is important to understand what customer experience means. Many different definitions are given for customer experience but not only does customer experience include interactions with, an organization, people, processes or systems. It also includes interactions with the product (Thompson, 2006), if the organization meets its customer's needs, it becomes a moment of satisfaction, and if the organization exceeds its customer's expectations, it becomes a moment of pleasure. For organizations to

continually achieve levels of satisfaction with regard to service, the organization must ensure that each moment of truth, at the very least, results in a moment of satisfaction.

Blem (1995), Freemantle (1993), LeBoeuf (1991), and Thompson (2006) all note that it is the little things that organizations do that count. When organizations go out of their way to create memorable experiences for their customers, they indirectly create customer satisfaction, which might foster long-term customer patronage. Moreover if organizations get the little details right, it will ensure that they get everything else right. When customers make judgments about the standard of an organization's service, it is these little details that will test whether the organization has a caring attitude towards the customer or not (Freemantle, 1993). Furthermore customers' needs are very specific and therefore if organizations do not address these changing needs, it will result in dissatisfaction and lost opportunities (David, 2005).

Moreover if organizations do not actively pursue methods to identify and address their customers changing needs, their customers will start to experience dissatisfaction and most likely, switch to competitive products and services (David, 2005). Additionally customers judge the quality of service, received by an organization on five factors; reliability, credibility, appearance, responsiveness, and empathy. Importantly the customers wants; a) service they can depend on, b) the security, integrity and assurance that if any problems arise, they will be handled promptly, at no extra cost, c) to be attracted to the culture of the organization, d) the organization to be accessible, available and willing to help and e) to be treated as a special individual, (LeBoeuf, 1991). Positive attitude is very crucial because as customers assess individual behaviors, they also assess the organization's behaviors and attitudes. The attitude of the organization, as perceived by the customer, can determine customer satisfaction and loyalty. And For this reason, employees of the organization should ensure that they make a lasting, positive impression on the customer (Timm, 2001).

Two basic reasons why people are persuaded more by attitude than by logic, is that people are ruled by emotions and these emotions are contagious. Nearly all choices are based on how people feel about a situation and then try to justify those emotional choices to themselves with logic (leboeuf, 1991). Further the inefficiency of a defective support organization can be forgiven by a customer, provided that it also takes positive action to rectify the mistakes and treat the customer with sincere compassion, heart-felt interest and decent accord. Although it

does not take much to please most customers, on the other hand, it takes a lot to alienate a customer. Few organizations recognize this quality of positive attitude and therefore fail to encourage such attitudes. If an organization wants to test its customer service, what it needs to do is to ask its customers how they feel about the front-line staff and the attitudes that they display (Freemantle, 1993).

When customers want a service, they want it fast and the manner in which the organization responds to these demands, will either enhance or diminish the service experience. The effectiveness of service delivery is fundamental to the service experience. Ideally the organization should address the service need with a minimum number of interactions between the customer and staff through various media to enhance efficiency. For example, if a customer is seeking self-service over the internet, they should be able to obtain that service easily, without having to interact with the organization's representatives and without having to switch to a telephone to make a call instead. Customers expect a reasonably prompt response when they make enquiries, the organization should establish time standards and identify critical processes for different activities as this ensures that enquiries are handled efficiently (Linton, 1991).

Additionally organizations must be completely open and honest in their communication with their customers. It is logical to portray the product or service in its best possible light, in spite of the circumstances. Conversely, would be completely illogical to mention a product's weaknesses or shortcomings to the customer during sales. Therefore, a lack of openness is bred into the system of buying and selling. When things go wrong, whatever the circumstance, the organization must inform their customers when the service promise cannot be kept. Proactive communication is one which many organizations fail and argues that an organization can indirectly create goodwill if it contacts its customers about problems before the customers find out about them by other means. By contacting the customer and explaining the problem the organization can keep control of the situation and prevent potential damaging side effects. If customers are informed of problems, they may forgive the delay, the shortfall or the error, but will be unforgiving if they discover that there was a problem and that they were not informed about it at all. Therefore in an age of modern communication, there is no excuse for a failure to communicate with the customer when things go wrong and that staff should take the initiative to communicate with the customer, even when things are going right, as this fosters goodwill (Freemantle, 1993). If the

employees are open and honest with the customers, they have to provide value judgments and only have to report the facts. Honesty and openness also relate to those details of customer service, such as a promise to return a call or to deliver within a few days. Thus, honesty and openness should permeate every facet of customer service (Freemantle, 1993).

Therefore there is great value in receiving complaints from customers as it informs the organization about what it is doing wrong and how it can improve. Loyalty is fostered through the resolution of complaints. If customers are not treated in an acceptable manner, this could have negative effects for business (Katz et al. 1988). Mecer, (2003) defines a complaint as, an expression of dissatisfaction that requires a response. If organizations seek out and identify their customer complaints, not only will this help the organization highlight specific weaknesses in the service chain, but it will help to identify areas in which the organization needs to improve (Linton, 1995).

Moreover, to keep customers, organizations must remain in contact with them. This could be achieved through various means, such as: by telephone, fax, email, letter, customer survey, customer questionnaire, focus groups, feedback forms, mystery shoppers and active listening (Linton, 1995 and Timm, 2001). The customer experience is vital as this moment of truth will be judged by the customer (Blem, 1995, Katz, 1988 and LeBoeuf, 1991).

When employees follow up with their customers, it creates a relationship built on trust between the employee and the customer as well as strengthens the organization's value position (Timm, 2001).

Hence, customer's expectations and customer loyalty work hand-in-hand. Customer's expectations regarding service are specific. They either require help or information, or they have experienced equipment malfunction, or they might have run out of supplies, and the way an organization responds to these expectations will determine in which category that customer will fall; delighted, satisfied or dissatisfied (Katz, 1988). The gaps noted in meeting customer's expectations are; a) customer expectations compared to management perceptions; b) management perceptions compared to service quality specifications, c) service quality specifications compared to actual service delivery and d) actual service delivery compared to external communication; that determine the overall gap amid expectations (Payne et al, 1995). Lastly, System used to provide service to the customer should always work. Although organizations continually try to ensure that system failures do not occur, on the odd occasion,

they do (Freemantle ,1993) .An organization is serious about their customer care, in order to exceed expectations, try to eliminate mistakes and problems at the source. Organizations should continually strive to improve their quality of product and service as this directly impacts how well the product or service satisfies the expected need of the customer (Tack, 1992).

Customer life cycle care in customer service has an important function when it comes to service delivery as it aids in the organization delivering excellent service thereby achieving customer satisfaction and the likelihood of repeat purchases (Gianforte, 2005). Customer life cycle care gives customers the freedom to use all the available communication channels, and they feel that the organization is catering to their needs, thus satisfying their expectations. Customer life cycle care enables organizations to receive extra income and results in happier customers. Most companies will have a customer service policy in place. This proves to customers that they are dedicated to ensuring that customer needs are being met. Also it ensures that staffs in the organization are all working towards the same target. Since competing products are often very similar to each other, customer service and support is what makes the difference (Sawy and Bowles, 1997). Customer service is one possibility to skim the biggest part of the customer lifetime value (Kotler and Keller, 2006).

The usage of IT in customer service is considered as affordable and easy chance .For this reason, design and functionality are recommended to be based on intense research (Piccoli et al. 2004). The key benefit of technology, used in services is the possibility to customize and personalize (Semeijn et al. 2005). This personalization endows the customer a feeling of being special and the company the possibility to target directly.

## **2.6 Service Design and Customer Service**

The purpose of service design is to have processes that consistently deliver high quality services to drive customer satisfaction and customer retention, whilst maintaining process efficiency (Johnston and Clark 2005). Thus, good design gives service businesses leverage to gain a competitive edge in the marketplace (Shostack 1984 and Verma et al. 2002). Therefore design activity should focus on ensuring high standards of both technical service quality (TSQ), the right service outcome, and functional service quality (FSQ), doing things appropriately in the process of delivery, so that the service is perceived as being of good quality (Mohr and Bitner, 1995) and generates customer satisfaction (Dabholkar and Overby,

2005).Service providers assist customers in unlocking value of the service outcome. Moreover, the main emphasis is on information processing where major transformation of services occur (Vargo and Lusch 2004) .Service design comprises both the what which is to be done for the customer and the how which is to be achieved by the service provider (Edvardsson and Olsson 1996).For instance, in retail banking, customers can use traditional (bank branch), automated (ATM) or electronic (internet, phone) delivery processes for a single service outcome. Again, the nature of customer inputs vary according to the channel selected by the customer and will therefore exhibit a variety of process design characteristics. In Barclays, the what, is specified by sales and the how is delivered through operations which heavily relies on the information system. If service design only consisted of the activities where customers were present it would account for lesser percentage of the people employed in establishing what is to be delivered. The how is achieved by customers accessing the system either through ATM ,Mobile banking and internet banking to carry out a number of transactions. The other way the how is achieved is through the back office services which involves the employees carrying out transactions on behalf of the customers. Both means of interaction with the bank's information system has a direct impact on the customers' service delivery, thus affecting customer satisfaction and customer service based on the customer's experience.

## **2.7 Theoretical Framework**

In the Delone and Mclean IS Success Model, systems quality measures technical success; information quality measures semantic success and use, user satisfaction, individual impacts, and organizational impacts measures effectiveness success. The model suggests that an information system is first created, containing various features, which can be characterized as exhibiting various degrees of system and information quality. Moreover, users and managers experience these features by using the system and are either satisfied or dissatisfied with the system or its information products. The use of the system and its information products then influences the individual user in the conduct of his or her work, and these individual impacts collectively result in organizational impacts (Delone and Mclean, 2004).

The model of DeLone and McLean was developed to measure the success of information systems, fostering net benefits for users or user groups (DeLone and McLean, 2004). In brief, the model consists of different components. On one hand, there is the quality component, which is divided into system quality, information quality, and service quality. On the other

hand, the usage component is given, where the usage of the website and the from-usage resulting satisfaction is addressed. Lastly, the net benefits of the user are a component as well. Customer support is a type of service and can be applied in the service-quality component. The online customer service area fit into both: information quality as well as system quality. This can be separated by the different tasks, online customer support must fulfill and information task, which is present in all phases of the transaction process (Sterne, 1996). The net benefits are the ultimate impact of the system, which can affect users as well as the company (DeLone and McLean, 2004).

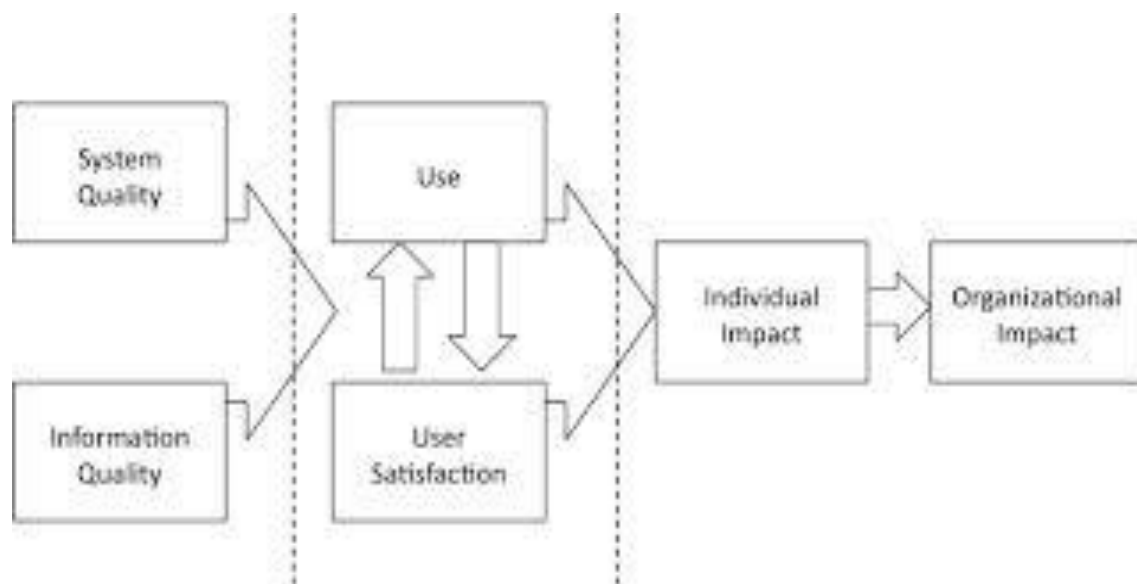


Figure 1. D&M IS Success Model. DeLone and E. McLean, Information Systems Success: Information Systems Research, 3(1), 1992, pp. 60.

The other theory used in the research is Servqual theory. Number of theories has been developed to understand more on customer satisfaction, one aspect that directly affects customer satisfaction is service quality, servqual is a theory that tries to expound on this, servqual is a multi-item scale developed to assess customer perceptions of service quality in service and retail businesses (Parasuraman et al., 1988). The scale decomposes the notion of service quality into five constructs as follows: a) Tangibles - physical facilities, equipment, staff appearance, b) Reliability - ability to perform service dependably and accurately, c) Responsiveness - willingness to help and respond to customer need ,d) Assurance - ability of staff to inspire confidence and trust and e) Empathy - the extent to which caring

individualized service is given. Servqual represents service quality as the discrepancy between a customer's expectations for a service offering and the customer's perceptions of the service received, requiring respondents to answer questions about both their expectations and their perceptions (Parasuraman et al., 1988). The use of perceived as opposed to actual service received makes the servqual measure an attitude measure that is related to, but not the same as, satisfaction (Parasuraman et al. 1988). Service quality is an important tool to measure customer satisfaction (Hazlina et al. 2011). Lee et al. (2000) Gilbert and Veloutsou (2006), Sulieman (2011) and Buttle (1996) suggest that service quality leads to customer satisfaction.

To achieve a high level of customer satisfaction, high level of service quality should be delivered by the service provider as service quality is normally considered an antecedent of customer satisfaction. As service quality improves, the probability of customer satisfaction increases. Quality was only one of many dimensions on which satisfaction was based; satisfaction was also one potential influence on future quality perceptions (Clemes, 2008). Reliability, tangibility and empathy positively related with customer satisfaction and have significant and positive relationship with customer satisfaction (Jamal and Anastasiadou, 2009). Sulieman (2011), Kettinger and Lee (1994) and Pitt et al., (1995) were among the early adapters of servqual to information system context. Their work sought to use servqual to measure the service quality of the information system functions. Since this time concerns have been raised regarding the suitability of servqual to information system context (Pitt et al., 1997, Carr, 2002, van Dyke et al., 1999). Moreover, the result of Ravichandran et al., (2010) indicates responsiveness is the only significant dimension of service quality that affects the satisfaction of customers positively.

In the service quality theory, customers will determine the quality levels of services based on their expectation towards a firm. Hence, customers' expectations serve as the foundation on which service quality is provided. Service quality increases satisfaction from the customer (Oliver, 1980). The success or the failure of service providers depends on how these service providers understand customer satisfaction based on their service performance (Banomyong and Supatn, 2011).

## 2.8 Summary of Literature

The literature review comprises of introduction, which defines Service design of information system, customer satisfaction and customer service. The chapter explains in great depth what service design in e-services means. This is aided by first explaining electronic services which include e-banking, e-channels and e-services. The chapter also tries to bring a tie between system service design and customer satisfaction.

Customer satisfaction is very important because it translates to excellent customer service. It also expounds more on the studies and research done on these concepts. It then addresses the first research question which is on the benefits of information system service design, the second research objective which is on challenges of information system service design and the third research objective which is on customer service and service design. Lastly, is the theoretical framework of this study.

The study used Delone and Mclean model which measures the success of information systems, fostering net benefits for users or user groups. In brief, the model consists of different components. These are quality component, which is divided into system quality, information quality, and service quality. Theory used in the study was Servqual. Servqual explains on how service quality is an important component in achieving customer satisfaction.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter contains the research methodology and procedures followed in the execution of the research work, which entails: the research design, means of data collection and the data analysis method that was used in the project.

### **3.2 Research Design**

This research was conducted through a case study. A case study looked at individuals, a small group of participants, or a group as a whole. A case study is an in-depth study of a particular situation rather than a statistical survey. It is a method used to narrow down a very broad field of research into one easily researchable topic. Whilst it did not answer a question completely, it gave some indications and allows further elaboration and hypothesis creation on a subject. The case study research design is also useful for testing whether scientific theories and models actually work in the real world. Case study has been especially used in social science, psychology, anthropology and ecology. This method of study is especially useful for trying to test theoretical models by using them in real world situations, (Shuttleworth, 2008). The purpose of the study is to determine the relationship between information system service design and customer service delivery at Barclays Bank of Kenya.

### **3.3 Data Collection**

Primary data was used in data collection. Primary data was collected using a questionnaire. The questionnaire had a set of questions which the respondent filled in. The data was collected by providing questionnaires to the first line managers and the staffs within the functions of the bank who directly interact with the systems while serving customers. The employees to be given the questionnaires were based in the following functions: Consumer Credit Team, customer service team, branch, Operations and IT (Information Technology) team, the reason for narrowing down to the mentioned departments is because they are the ones that intensely use the systems for their daily work and are also heavily affected by the system downtime and delivery of customer service.

The questionnaire consisted of questions that the respondent answered either yes or no; it also had a set of questions in the scale of 1 to 5 based on likert scale. Likert scale is a psychometric response scale primarily used in questionnaires to obtain participant's

preferences or degree of agreement with a statement or set of statements. Likert scales are a non-comparative scaling technique and are uni-dimensional it only measure a single trait in nature. Respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale (Bertram, 2006). The reason for using questionnaires is so that to reach to more respondents, and allow flexibility on the side of the respondents.

### **3.4 Data Analysis**

The research will use descriptive quantitative analysis on the collected data. In quantitative research, the information obtained from the participants is expressed in numerical form. In addition, according to Cohen (1980), quantitative research is defined as social research that employs empirical methods and empirical statements. He states that an empirical statement is defined as a descriptive statement about what is the case in the real world rather than what ought to be the case. Hence, empirical statements are expressed in numerical terms; another factor in quantitative research is that empirical evaluations are applied. Moreover, Creswell (1994) has given a very concise definition of quantitative research as a type of research that is explaining phenomena by collecting numerical data that are analysed using mathematically based methods. Data collected from the field was analyzed by descriptive statistics through statistical package for social sciences (SPSS). The software was chosen because it is the most widely used package for analyzing quantitative data. Besides being the most used package, the software also has the advantage of being user friendly. In data analysis all the answers to the different section of the questionnaire will be analysed differently. Demographic data was analysed and interpreted using tables and graphs, then the objectives a) to determine the benefits of information system service design to the employees when serving the customers, b) to establish the challenges experienced by the employees when using information system to serve customers and c) which is on customer service delivery used a table which comprised the count and percentage of the results.

## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

### 4.1 Introduction

This chapter represents data analysis, findings, presentation and interpretation of findings. The purpose of the study was to establish information system service design and customer service delivery at Barclays bank of Kenya. The data was analysed using descriptive statistics where frequencies, percentages as well as standard deviation guided the researcher to interpret the data. The chapter is presented according to the research objectives which includes a) determine the benefits of information system service design to the employees when serving the customers, b) to establish the challenges experienced by the employees when using information system to serve customers and c) to determine the effect of service design on customer service.

### 4.2 General Information

Target respondents were the staff of Barclays bank of Kenya in Nairobi. The return rate of 95 percent was realized. The sample target was 40 respondents and 38 of them returned the questionnaires. This implies that return rate was good since it was more than 80 percent. According to Edwards et al., (2002), a questionnaire return rate of 80 percent and above is absolutely satisfactory. Demographic characteristics of the respondents. Personal information of the staff was based on name of the department, years served in the position, years of service in the bank, gender, age and position held.

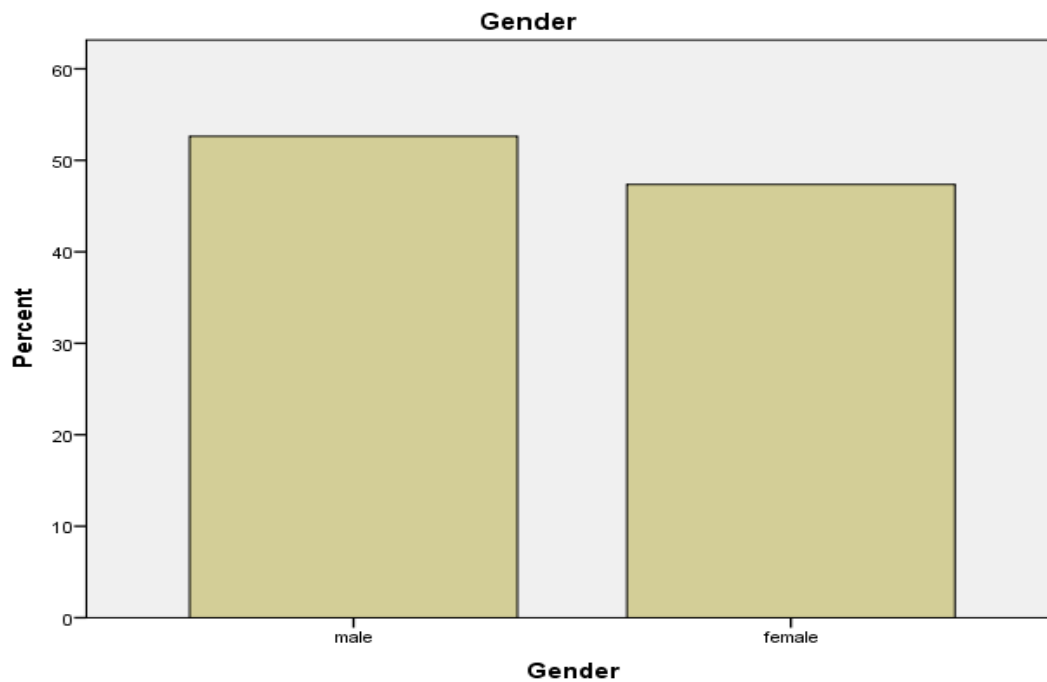
#### 4.2.1 Gender

**Table 4.2.1 Distribution of Respondent by Gender**

	Frequency (n)	Percent
Male	20	52.6
Female	18	47.4
Total	38	100

The distribution between the genders was relatively equal as shown in the table below. According to the findings on the gender of the respondents, majority (52.6 percent) were male while the remaining 47.4 percent of the respondent were female.

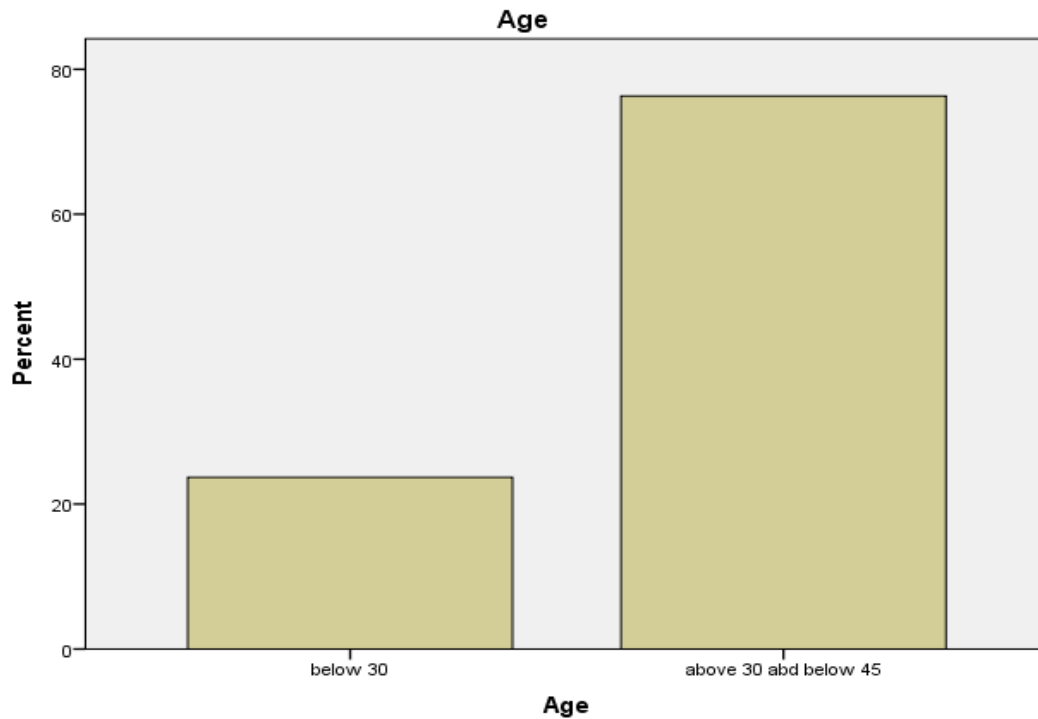
Gender of employees was important since it will help to understand if there were any biases in information system related issues also because mostly males may be associated with the ease of technology use.



**Table 4.2.2 Distribution of Respondent by Age**

	Frequency (n)	Percent
below 30	9	23.7
above 30 and below 45	29	76.3
Total	38	100

Additionally on age more respondents were between the age of above 30 years and below 45 years, none was above 45 and 23.7 percent were below 30 years. This implies that the chosen departments had employees between the age of 30 and 45; this is a stable group of employees who have worked in the bank for some time and have a better understanding of the banks information systems.

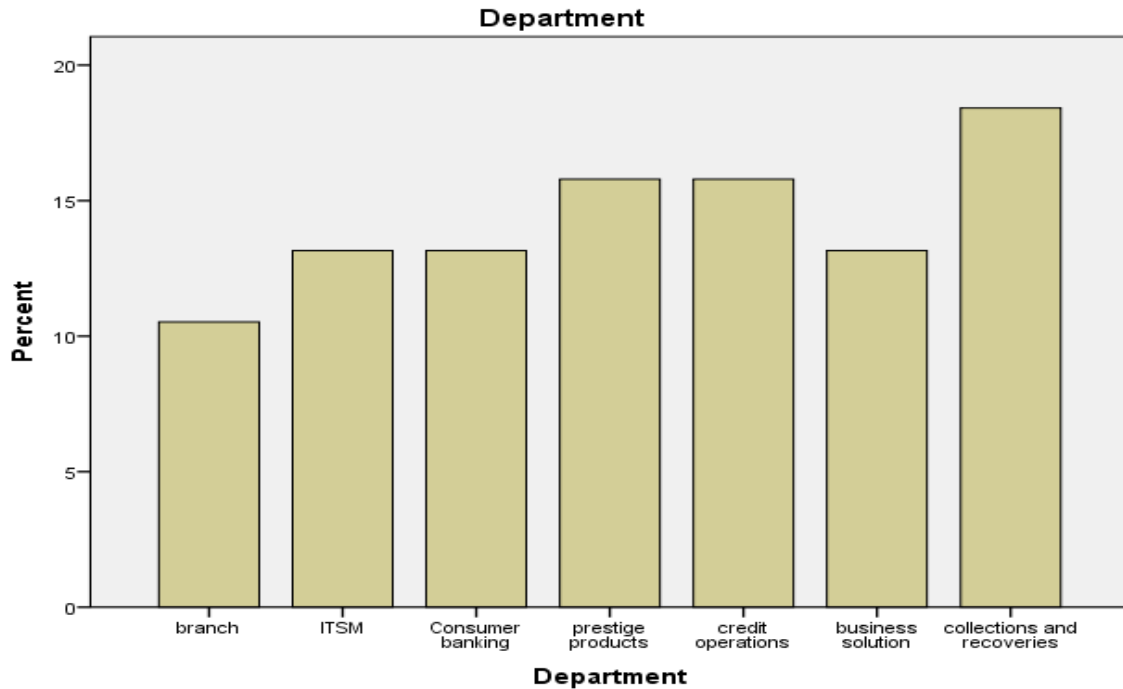


#### 4.2.3 Department

**Table 4.2.3 Distribution of Respondent by Department**

	Frequency (n)	Percent
Branch	4	10.5
ITSM	5	13.2
Consumer banking	5	13.2
Prestige products	6	15.8
Credit Operations	6	15.8
Business Solution	5	13.2
Collections and recoveries	7	18.4
Total	38	100

The departments chosen were based on the level of system interaction the employees had in the daily activities. The results show that the highest number of respondents were from collection and recoveries team, the lowest was from the branch and the others are relatively equal.

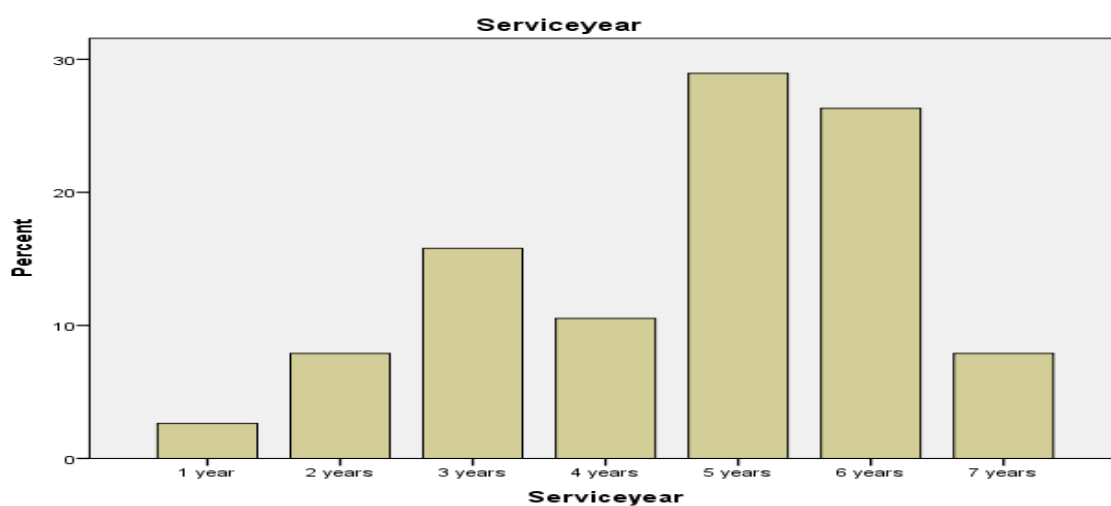


**Table 4.2.4 Work Experience of the Respondents**

The findings show that employees who have served for 5 years to 6 years were the most in the sampled departments. The least being those that served for 1 year and 7 years. This shows that the departments had employees who have served the bank for some time and were more familiar and understood the information systems used in the bank better.

**Table 4.2.4 Distribution of Respondent by Number of Service Years.**

	Frequency(n)	Percent
1 year	1	2.6
2 years	3	7.9
3 years	6	15.8
4 years	4	10.5
5 years	11	28.9
6 years	10	26.3
7 years	3	7.9
Total	38	100



#### 4.2.5.Banks' E-services

The findings show that the bank offers all the e-banking services showed in the table below.

**Table 4.2.5 Distribution of Respondent by Number of E-Services Offered by the Bank**

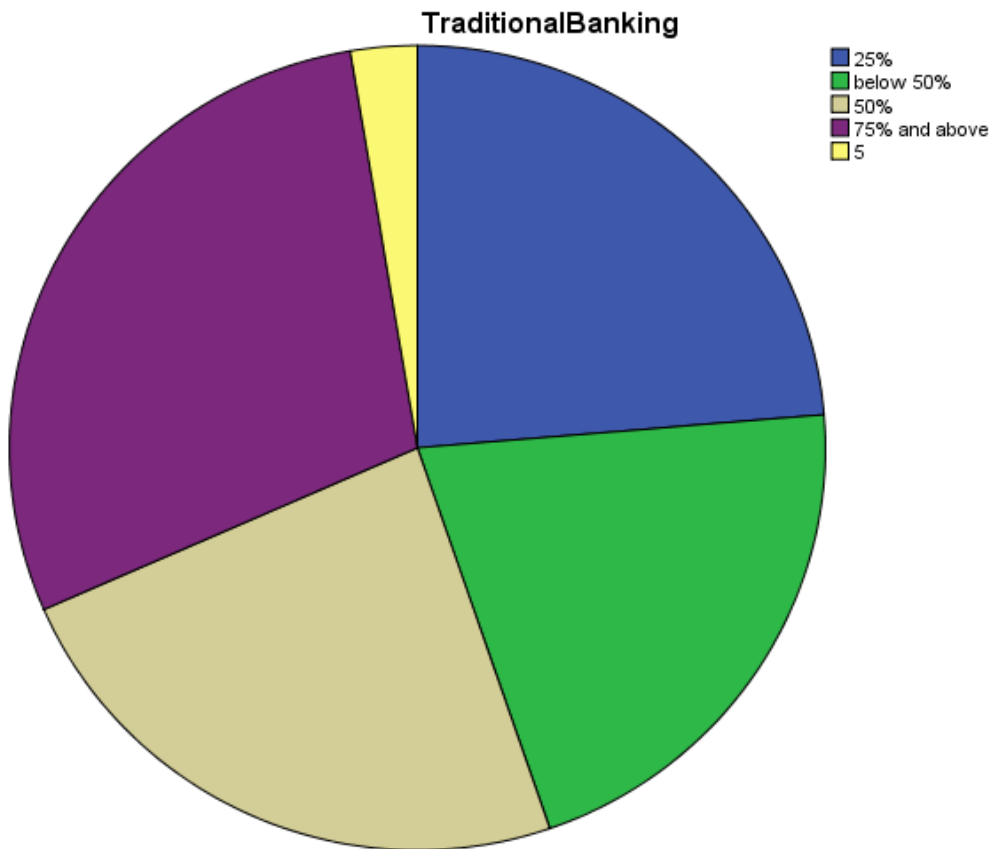
	no		yes	
	Count	Row N %	Count	Row N %
Atm	0	0.00%	38	100.00%
Telephonebanking	0	0.00%	38	100.00%
PcBanking	0	0.00%	38	100.00%
InternetBanking	0	0.00%	38	100.00%
MobileBanking	0	0.00%	38	100.00%

#### 4.2.5.1 Traditional Banking

**Table 4.2.5.1: Distribution of Respondent by Number of Traditional Banking**

	Frequency(n)	Percent
25%	9	23.7
below 50%	8	21.1
50%	9	23.7
75% and above	11	28.9
5	1	2.6
Total	38	100

The findings show that despite the e-banking services offered by the bank still a high percentage (28.9 %) of customers use the traditional way of banking. This means that the bank has high number of customers still going to the banking hall to carry out their transactions.



#### 4.3 Benefits of Information System Service Design

From the findings those who strongly agreed on the benefits of service design had a high and equal distribution on every aspect of the benefits. The lowest percentages were on those who strongly disagreed on the benefits of the service design. This finding indicates that service design is vital for achieving customer service delivery. From the findings most respondents agreed that system service design is important for service delivery and this is supported by the high percentage it scored, surprisingly customer satisfaction received the highest score on neither category this can be attributed to respondents not understanding the connection between service design and customer satisfaction. The findings are shown in the table below.

**Table 4.3: Distribution of Respondents by Number of Benefits of Information System Service Design**

	strongly agree		agree		neither		disagree		strongly disagree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
service delivery	30	78.90%	8	21.10%	0	0.00%	0	0.00%	0	0.00%
service design	15	39.50%	14	36.80%	7	18.40%	2	5.30%	0	0.00%
cust satisfaction	12	31.60%	17	44.70%	3	7.90%	3	7.90%	3	7.90%
achieve growth	24	63.20%	11	28.90%	1	2.60%	2	5.30%	0	0.00%
goals	21	55.30%	16	42.10%	1	2.60%	0	0.00%	0	0.00%
creates value	20	52.60%	13	34.20%	3	7.90%	2	5.30%	0	0.00%
inspire employees	18	47.40%	17	44.70%	2	5.30%	1	2.60%	0	0.00%
globalisation	24	63.20%	13	34.20%	1	2.60%	0	0.00%	0	0.00%
expansion	14	36.80%	12	31.60%	5	13.20%	6	15.80%	1	2.60%
competition	20	52.60%	14	36.80%	2	5.30%	2	5.30%	0	0.00%
positive experience	15	39.50%	19	50.00%	3	7.90%	1	2.60%	0	0.00%

#### 4.4 Challenges of Information System Service Design

From the findings of challenges faced on information system service design those who agreed on the stated points had the highest percentage and those who strongly disagreed had the lowest percentage. This shows that despite the benefits of service design the bank faces certain challenges in achieving customer service delivery. From the table below poor integration between the front stage and back stage scored the highest 65.8 percent, this means that this was the greatest challenge felt by the employees. Lack of enough training on computerized transaction came second with 44.7 percent. This implies that training on how to handle the system is a challenge faced by those who are handling the system.

**Table 4.4: Distribution of Respondents by Number of Challenges on Information System Service Design**

	strongly agree		agree		neither		disagree		strongly disagree	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
changesofcustomerpreferences	15	39.50%	14	36.80%	4	10.50%	4	10.50%	1	2.60%
customer centric system	5	13.20%	19	50.00%	5	13.20%	6	15.80%	3	7.90%
limited scope	10	26.30%	25	65.80%	2	5.30%	1	2.60%	0	0.00%
integration	25	65.80%	11	28.90%	1	2.60%	1	2.60%	0	0.00%
computerized transaction	17	44.70%	15	39.50%	5	13.20%	1	2.60%	0	0.00%
innovation challenges	15	39.50%	20	52.60%	3	7.90%	0	0.00%	0	0.00%
customer oriented	10	26.30%	17	44.70%	5	13.20%	4	10.50%	2	5.30%
new technology	14	36.80%	13	34.20%	5	13.20%	4	10.50%	2	5.30%
aspect of performance	7	18.40%	6	15.80%	9	23.70%	10	26.30%	6	15.80%

#### 4.5 Customer Service Delivery

From the findings 100 percent of the respondents agreed that service design plays a big role in customer service delivery. This is because the employees have first-hand benefit of it. Further 92 percent of the respondents ticked yes for system down time as the major factor that is affecting customer service delivery. This has also been noted as the major reason for customer dissatisfaction. Moreover the researcher noted that system down time was connected to employees' knowledge of how to handle automated systems, this got 89.5 percent. User interface got 86.5 percent this means that 33 respondents agreed that the system's user interface helped them achieve better service delivery to the customers. The researcher also noted that from the findings rigorous training was important in helping the employees serve customers better, it scored 89.5 percent. Additionally 65.8 percent of the respondent felt that the bank did not offer them enough training on the information system in place thus this affected their service delivery. Furthermore 65.8 percent also chose that they did not have a thorough knowledge of the information system in place, this means that the employees attribute good service delivery to their ability to fully handle the system and also to manage the customers in the event of un-foreseen disruptions or prolonged system downtime.

**Table 4.5: Distribution of Respondents by Number of Customer Service Delivery**

	no		yes	
	Count	Row N %	Count	Row N %
Service delivery and customer effectiveness	7	18.4%	31	81.6%
Role in customer service delivery	0	0.0%	38	100.0%
System downtime	3	7.9%	35	92.1%
Rigorous training required	4	10.5%	34	89.5%
Was enough training offered	13	34.2%	25	65.8%
Thorough knowledge	13	34.2%	25	65.8%
Automated transactions	4	10.5%	34	89.5%
System service design	6	15.8%	32	84.2%
User interface	5	13.2%	33	86.8%

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the study, research findings, conclusions and recommendations; the chapter also gives suggestions for further studies. The purpose of the study was to establish information system service design and customer service delivery at Barclays bank of Kenya, it evaluated the extent to which service design impacts customer service delivery, it focused on the employees opinion and view on the service they offer to the customers and how the service design of the information system helps or affects their service delivery. The objectives of the study were to a) determine the benefits of information system service design to the employees when serving the customers. b) To establish the challenges experienced by the employees when using information system to serve customers and c) to determine the effect of service design on customer service. The study utilized case study design and targeted the staff of Barclays bank of Kenya in Nairobi so as to get accurate information. The staffs chosen were from 7 different departments, the department were based on the level of system interaction the employees have in their daily work. All of the above respondents were selected using a systematic random approach. Primary data which used questionnaires were used in data collection.

#### **5.2 Summary of the Findings**

This section presents the findings from the study. On demographic information 52.6 percent of the respondents were male. Out of the 38 respondents 29, which is 76 percent, were at the age of above 30 years and below 40 years. The departments chosen had employees in the stated age and had served for averagely 5 years. And on the benefits of information system service design according to the findings, majority (78.9 percent) said that service design is important for service delivery while 63.30 percent believe that service design helps the bank achieve growth and globalization. Concerning the extent to which service design helps them attain their goal was at 55 percent, responses that the service design gave them a positive experience was the lowest at 39.50 percent while 52.6 percent reported that the system's service design helped to create value in their daily work. Further on challenges of information system service design 65 percent of the respondents strongly agreed that lack of integration was the major challenges, 44.70 percent also agreed that lack of knowledge in computerized

transaction was a challenges, however 65.80 percent chose neither for limited scope in personal banking transaction meaning this was not well understood by the respondents. Regarding customer centric system had the lowest score of 13.20 percent this means that the respondents believe that the systems are customer centric. On whether change of customer preferences was a challenge 39.5percent chose strongly agreed. Findings also indicated 23.70 percent disagreed that focus on efficiency and other aspects of the system affected service design.

And lastly on customer service delivery, information system service design plays a big role in customer service delivery 100 percent of the respondents strongly agreed with it. Additionally 92 percent strongly agreed that system downtime was the major cause of customer dissatisfaction, moreover system down time has a greater percentage affecting service design. The contributing factors of these from the study were training offered to the employees, system service design and number of years served in the bank. System service design got 84.2 percent respondent ticking yes, this means that the respondents appreciated the importance of information system service design in customer service delivery. User interface received 86.8 percent meaning that the system's interface is also important in enabling the employees achieve customer service.

### **5.3 Conclusions**

The conclusion is in the sequence of the objectives on the benefits of information system service design to the employees when serving the customers we found out that Barclays bank of Kenya has good information system service design this is clearly seen by the responses on the benefits. This means that the employees actually feel the importance of service design and are the direct beneficiaries of it. On the challenges experienced by the employees when using information system to serve customers, from the study despite the benefits of service design there were challenges to achieving excellent customer service delivery. These means that the bank needs to look for ways to eliminate those challenges so that better customer service is achieved.

And lastly on the effect of service design on customer service, from the findings trainings on information system had more impact on customer service delivery as compared to the service design.

#### **5.4. Limitations Experienced in The Study.**

Some of the limitations experienced while carrying out the study were; challenge in getting enough literature review to support the topic of study. This was a challenge because not so many materials had expounded concept of service design in information system. Another challenge was while determining which departments to involve in the sampling process. This is because many departments had merging roles. Additionally getting the questionnaires back on time was a major challenge, delays in gathering the questionnaires led to delayed data analysis and interpretation.

#### **5.5 Recommendation for Further Studies**

The researcher makes the following recommendations.

Customer service delivery as a major driver to performance of any organization should be enhanced. Customers should be kept informed on any changes made or proposed through an effective communication channel by the bank to the customers.

The management of different departments should consider frequent training of employees on customer services and handling of information system. This is because training acts as a refresher on how to handle the system. This will also ensure that in case of system's upgrades the employees will always be up-to-date.

The bank should also check on the system downtime and get ways to minimize it because from the study it was the major challenge in system service design. System downtime affects the employees' productivity and if it is not noted and corrected earlier it will also affect customer service delivery.

The bank should also consider ways of tapping on the benefits of system service design in order to achieve growth and sustain competition. From the study the benefits of service design are numerous and can be used as a growth point for the bank.

#### **5.6 Suggestions for Further Studies**

Given the scope and limitations of this study, the researcher suggests the following areas for further studies.

A study should be undertaken under a survey study which would ensure elimination of any bias experienced in this study, because it would involve other players in the industry. The involvement of more than one bank will help to get better and enriching result which will be useful in the industry.

A study should also be carried out to establish the impact of information system service design on the customers directly for comparative purpose. This is because the study will help establish of similar challenges are faced by both the employees and the customers.

Further research should be carried out on e-service design to enable electronic services to have a standard service design understood by those in that field.

A study should be carried out with further analysis deeper than descriptive analysis.

## REFERENCES

- AdilaSosianika(2012). "An investigation of the relationship between customers' perception of internet retail service quality, customer satisfaction and customer loyalty amongst University students".p(2-15).
- Ahmad, S. (2002). "Service failures and customer defection: a closer look at online Shopping experiences". *Managing Service Quality*, 12(1):19–29.
- Ayyanar G.(2012).”Customers’ Satisfaction in Public and Private Sector Banks and their Comparison” Vol. 5 (11)-p(45-54).
- Bassey, NsikanEdet, Okon, UbokudomEtim and Umorok, UmoEtesin, (2011) *African Journal of Business Management* Vol. 5(20), pp. 7987-7991, Retrieved on 21<sup>st</sup> Aug 2013,Available online at <http://www.academicjournals.org/AJBM> <http://www.service-design-network.org/content/sdn> <http://www.ukessays.com/essays/management/relationship-marketing-in-the-banking-industry.php#ixzz2bSpOwNW1>
- Barbara Krumay and Roman Brandtweiner (2010).”Are Customer Service Offerings Influencing E-Loyalty?” *A Graphical Chain Model Approach in the Austrian Mobile PhoneService Provider Industry*(345-349).
- Bitner, M.J. (1990). "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses". *Journal of Marketing* 14(2): 69-82.
- Bitner, M.J. Booms, B.H. & Mohr, L.A. (1994).”Critical Service Encounters: The Employee Viewpoint.” *Journal of Marketing* 14(4): 95-106.
- Chase, R. B. (1978), "Where does the customer fit in a service operation?" *Harvard Business Review*, 56(6), 137-142.
- Churchill, G.A &Surprenant, C. (1982).”An investigation into the Determinants of Consumer Satisfaction”. *Journal of Marketing Research*, 14(4): 491-504.

- Dabholkar, P.A., Thorpe, D.I., & Rentz, J.O. (1996). "A measure of service quality for retail stores: scale development and validation". *Journal of the Academy of Marketing Science*, 24(1), 3-16.
- Dabholkar, P. (1994), "Technology-based service delivery: a classification scheme for developing marketing strategies", JAI Press Inc., Greenwich, CT, pp. 241-71.
- DeLone, W. H. and McLean, E. R. (2004). "Measuring e-commerce success: Applying The delone & McLean information systems success model" *International Journal of Electronic Commerce*, 9(1):31 – 47.
- Erik Brynjolfsson and Shinkyu Yang (1996): "Information Technology and Productivity" *Advances in Computers, Academic Press*, Vol. 43, pg 179-214, 1996.
- Jamal Ahmand.(2002) ."Customers Satisfaction and Retail banking: An Assessment of some of the key Antecedents of Customers' Satisfaction in Retail Banking"; *International Journal of Bank Marketing*, 20 (4), 146-60 (2002) .
- Jason Dedrick and Kenneth L. Kraemer 2001: "The Productivity Paradox: Is it Resolved? Is there a New One? What Does It All Mean for Managers?" Retrieved on Aug 15<sup>th</sup> from: <http://repositories.cdlib.org/crito/business/118> p(6-15,24-27).
- Jiaqin Yang and KhTanveer Ahmed(2009).international. *Journal. Electronic Finance*, Vol. 3, No. 2,115-118-121.
- Kuehn, A. (1960). "Consumer brand choice as a learning process ".*Journal of Advertising Research*, 2:10 – 17.
- Kristin R. Fritsche.(2010). "What is Service Design?": Retrieved on 11<sup>th</sup> Sep 2013 [publications.theseus.fi/bitstream/handle/10024/.../Fritsche\\_Kristin.pdf](http://publications.theseus.fi/bitstream/handle/10024/.../Fritsche_Kristin.pdf):24-32.

- Mager, B., & Sung, T. J. (2011). "Special issue editorial: Designing for services". *International Journal of Design*, 5(2), 1-3.
- Oliver, R. L. (1999). "Whence customer loyalty?": *Journal of Marketing*, 63:33 – 44.
- Parasuraman, A., Zeithaml, V. and Berry, L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, Fall, pp. 41-50.
- Sriramesh, S. A. (2004). "Influence on the power of customer service professionals in Organizations": A case study. *Journal of Customer service Research*, 5(1), 1-25.
- Tamining Jepchirchir, (2012). "Influence of customer care service on organizational performance: The case of Gracia Garden Hotel, Nairobi- Kenya", p(4-6)
- Warren Carlos Meyer (2008). " Investigating Customer Service Excellence at Lakeside Spar". *Journal of Marketing Research* 14(4):21-42.

## **APPENDICES.**

### **APPENDIX 1: LETTER OF INTRODUCTION**

Dear Sir/Madam,

#### **RE: REQUEST FOR RESERCH INFORMATION.**

I am a student at the University of Nairobi pursuing a Master degree in Business Administration (MBA). I am undertaking a research project on information system service design and customer service delivery at Barclays Bank of Kenya as part of the academic requirements for the award of the stated degree.

I would be grateful if you could spare some time and fill the questionnaire that I have provided answering the questions as honestly has possible. The information you give shall be treated with utmost confidentiality and shall be used solely for this research problem. A copy of the same shall be availed to you on request.

Any additional information you might consider necessary for this study will be highly appreciated.

In case of any queries pertaining to this research project, kindly contact me on this cellphone line: 0727780551.

Thank you in advance.

Yours sincerely

Judy Tima

## APPENDIX 2 :QUESTIONNAIRE

### QUESTIONNAIRE FOR INFORMATION SYSTEMS SERVICE DESIGN AND CUSTOMER SERVICE DELIVERY AT BARCLAYS BANK OF KENYA.

Please tick (✓) the box that matches your answer to the questions and give the answers in the spaces provided as appropriate. The information you provide will be treated with utmost confidentiality.

#### SECTION A: Personal Information

1) Name (Optional):-----

2) Gender : Male ☐ Female ☐

3) Age :

Below 30 ☐

Above 30 and below 45 ☐

Above 45 ☐

4) Position held.....

5) Name of your Department.....

6) Number of years of service in the bank.....

7) Number of years served in the position.....

#### SECTION B: General Information

These questions try to establish the extent to which the bank's information system service design is of benefit to the employees. It will have a mix of yes/no questions and questions asked on a scale of 1-5; 1.Strongly Agree, 2. Agree, 3.Neither, 4.Disagree, 5.Strongly Disagree.

1.Which of the following e-banking products/services are offered ? :

i) ATM facility? Yes ☐ No ☐

ii) Telephone Banking Yes ☐ No ☐

iii) PC Banking Yes ☐ No ☐

iv) Internet Banking Yes ☐ No ☐

v) Mobile Banking Yes ☐ No ☐

2. What was your first reaction when you heard about the banks information system?

a) Efficiency, Yes ☐ No ☐

b) Cost cutting, Yes ☐ No ☐

c) Better customer service delivery, Yes ☐ No ☐

3. Do you consider the implementation of an effective information system as a growth point for the bank. Yes ☐ No ☐

4. How many customers are still using traditional way of banking transaction?

a) 25% ☐

b) Below 50% ☐

c) 50% ☐

d) 75% and above ☐

### SECTION C: Benefit of Service Design

1. Do you agree that the information system has a direct impact on the service quality.	1	2	3	4	5
2.Do you agree with the view that efficient information systems leads to better service delivery.					
3.Is PC banking tied to good information system service design.					
4.Do you achieve customer satisfaction when using the system to serve the customer.					
5.Do you agree that good information system makes the bank achieve growth					
6. Does the information system service design help you as a point of interaction of the system to achieve new ways to reach goals.					
7. Does the banks information system service design create value for the company.					
8. Does the system's service design inspire the employees and clients to achieve their goals					
9. Does the system's service design help the bank to keep up with globalisation and change.					
10. Does service design offer new markets, new jobs and expansion for the bank.					
11. Does the system service design help the bank to stay competitive and gain more revenue?					
12. Does system service design offer a more positive experience for the customer.					

## SECTION C: Challenges of Service Design

These questions try to establish the challenges faced by the bank because of the service design of its systems. Questions asked will be on a scale of 1-5; 1.Strongly Agree, 2. Agree, 3.Neither, 4.Disagree, 5.Strongly Disagree.

1.Is the fast change of customer preferences the reason why the bank faces system related challenges.	1	2	3	4	5
2. Does the concentration on systems effectiveness reduce the banks focus on customer centric information systems					
3.Is limited scope for personal advice on banking transactions a challenge in achieving effective service design.					
4. Does lack of effective integration between the front-end part of the system and back end part of the system a contributing factor to customer satisfaction.					
5. Is lack of knowledge about computerized transactions a challenge in customer service delivery.					
6. Is lack of right processes or tools to innovate a challenge to achieving an effective system service design.					
7. Is making products that are not customer oriented a challenge to system service design.					
8. Does new technologies in service design affect service delivery.					
9. Does focus on improving system efficiency, reliability and other aspect of performance lead to neglect of service design.					

## SECTION D: Customer Service Delivery

1. Do you consider your service delivery to the customer effective? Yes ☐ No ☐

2. In your own opinion, do you agree that the information system plays a big role in enhancing customer service delivery? Yes ☐ No ☐

3. Is system downtime a cause of customer dissatisfaction? Yes ☐ No ☐

4. Is Rigorous training required for the bank employee to handle the information system?  
Yes ☐ No ☐

5. Was the training provided by the bank to you enough to handle the information system?  
Yes ☐ No ☐

6. In your opinion what are the problems that employees face while serving the customer's using the systems.

(Please tick if you agree with the statements given below):

a) Lack of thorough knowledge of technology. Yes ☐ No ☐

b) Lack of confidence in handling automated transactions. Yes ☐ No ☐

c) Information system's service design. Yes ☐ No ☐

d) Information system's user interface. Yes ☐ No ☐