



**UNIVERSITY OF NAIROBI**

**SERVICE DESIGN AND SERVICE QUALITY IN THE PUBLIC SECTOR: CASE OF  
HUDUMA CENTERS**

**BY**

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## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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**Jim Agwaro**

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Date

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

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**Dr. X.N Iraki**

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Date

## **ACKNOWLEDGEMENT**

I wish to acknowledge my supervisor Dr. Iraki for the guidance and support he accorded me during this research period. I also wish to acknowledge my research assistant Daniel Adoyo who assisted with administration and collection of questionnaires

## **DEDICATION**

I dedicate this research project to the Almighty God without whom I would not have had the grace and strength to complete this journey. To my wife Pepi who has encouraged me throughout this academic journey.

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## **ABSTRACT**

Huduma Centers, Kenya is an initiative of the Government of Kenya that is based on the concept of integrated public service provision and whose main objectives are to provide integrated public services by transforming the service delivery processes (Daily Nation, 2013). The purpose of this study was to analyze the effect of service design on service quality delivery in Nairobi County. It involves the procedure by which and how the services happens. The role of service design within the public sector is to help people think differently about the challenges they face, help people move away from starting with a solution, and support in understanding what the issue that they are trying to solve. Positively disrupting the status quo and opening up possibilities for new types of service models and ways of doing things. The studies seeks to find out the different service designs, automated queuing, process automation and self-service, as adopted by various Huduma Center in the country, their effect on service delivery and customer satisfaction. The study employed a descriptive case study method was used since it enables specialists to retain the meaningful and holistic attributes of events. The population of this study was all the Huduma Centers in Kenya, Huduma Centers in Nairobi City County were selected as the sample for the study. Data collected was analyzed with the aid of Statistical software and presented in the form of tables, pie charts and graphs. Descriptive statistics such as mean scores, standard deviation, regression and correlation were used to analyze data.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The service design world has sprouted from the belief that the customer needs are constantly changing as their demands at a much growing speed (Erl, 2008). An organization that cannot provide their existing customers with what they need, anytime they want it, clients tend to lodge someplace else for the quality services. This has placed service design as a holistic phase in business, it no longer only includes rethinking how an organization works, via making plans and organizing people, infrastructure, conversation and material components of services, however also by way of making use of the human aspect of emotion. Provider layout is constructed frequently upon the 4 Ps : people, process, partners and product (Hollins & Shinkins, 2006). A popular misconception is that 1 P can repair the rest, and lots of corporations consider in enhancing the only the product. Those 4ps must overlap each other in a balanced way to make sure the right blend for the perfect design is obtained. Time-saving and comfort are generally stated with the aid of purchasers who have the motivation to purchase more products. But, time spent waiting to be served may additionally neutralize potential blessings and negatively have an effect on attitudes closer to the first-rate of a service (Brown & Wyatt, 2015).

Consumer-oriented service mindset has been the top undertaking of public sectors and all contributors now focus on clients (Brown & Wyatt, 2015). In the past, when seeking services or products from the public corporations, human beings regularly visited diverse departments, again and again filling out similar paperwork; or going backward and forward departments with files from sections with uncertain obligation division. With a customer-oriented provider attitude, client cost might be the vital basis of administration, direct interplay with clients (human beings),

collecting customer related information, and thereby enhancing quality of service. Managers need to build flexibility into service system design by means of using alternative designs in combination. One technique used to meet the customers is the proper design process. Numerous models are evolved to observe the contingent nature of the overall performance of opportunity designs. Queues are part of life but inconvenient. Waiting is frustrating and customers become agitated. Surveys show that customer frustration sets in after approximately 3 minutes if there's no visible shortening of a queue within that time (Ojasalo & Ojasalo, 2015).

### **1.1.1 Service Design**

Corporate Service Design is a field where client oriented methodologies and ideas are intended to improve administrations work for an association and their customers. A close impeccable administration configuration offers an upper hand for associations and guarantees quality encounters for customers. For instance, institutions that offer quality services over their rivals and raises customers' attention to their services end up with a lot of gain. The complex and multi-disciplinary field of Service Design as indicated by Aurich, Fuchs and DeVries (2004) can address a portion of the key difficulties our general public and economy is confronting. Due to the fact that services have particular ramifications, outlining them is perplexing, multi-disciplinary and iterative process. Service Design falls in the field that permits and energizes abilities from various fields to synchronize. It is a multi-disciplinary method where different involving and covering arenas have been looked into to inquire about applicable existing strategies and devices with plan of applying and embracing the discoveries for development of administrations (Wilson, Zeithaml, Bitner and Gremler, 2012).

When dealing with customer services, the feeling individuals get from the result is vital (i.e. was the customer happy with the experience), the procedure by which the services happens should be

acknowledged (i.e. was it a smooth and productive exchange), and since the service delivery is elusive, the client ought to have the capacity to know occurred (i.e. receipt, and so forth) (Aurich et al., 2004). Service Design tends to address the usefulness and type of services from the client's point of view. It goes for guaranteeing that service interfaces are valuable, usable, and alluring from the customer's perspective and successful, effective and unmistakable from the provider's point (Mager, 2009). An expansive number and variety of choices required to plan and deliver services are made at a few levels in the institution, from the key level to the operational and administration experience levels. One of the significant difficulties for institutions offering services is to guarantee that choices at each of these levels are consistently made and focused on delivery the requested service to the targeted client (Wilson et al., 2012). A growing body of evidence is growing to demonstrate how design driven innovation can be used to in a number of significantly efficient savings, reducing risks and generating big returns on investments for the public institutions.

Abdalla et al (2015) contend that public sector represents 60% of nations' GDP in Africa and as an outcome has a definitive part to play in Africa's financial advancement and aggressiveness, and in addition in its development and speculation endeavors. Most public institutions all over the world are encountering continued difficulties of limited resources and financial inadequacy, which have matched with a more extensive addressing of the authenticity of public institutions at all levels to settle on choices that impact on society. These difficulties require another arrangement of imaginative and outline strategies, engineering and administration structure inside the public sector. Governments around the globe are utilizing design to enable them to design. Configuration subsequently might be a perfect device for making development. Similarly that bigger returns are accomplished by organizations when utilizing outline deliberately, the

effect for the general population area is additionally most noteworthy when configuration is coordinated at a vital level (Brown & Wyatt, 2015)..

### **1.1.2 Service Quality**

Gronroos (1984) characterized service quality as: technical quality, alluding to delivery benefit quality level and useful quality, alluding to service delivery means. Great service quality was consistency of customer quality contribution with expected quality experience. Ishikawa (1990) illuminated quality as a kind of trademark engaging customer or customer pick and arranged to buy. The total institution quality management is not just quest for service quality and product quality, but rather, a sort of good work quality, and what the institutional quality control division does is not quite recently quality control but rather change of total operation management (Ishikawa, 1990). As per Parasuraman, Zeithaml and Berry (1985), service quality delivery is considered as a basic methodology for progress and survival in the present worldwide competitive environment. The service sector plays an undeniably imperative part in the economy of many nations. This study will therefore utilize the four parts of service quality as proposed by Parasuraman et al. (1985) and which are tangibles, reliability, responsiveness and assurance.

The quality measurements: serviceability (responsiveness), flexibility, reliability, performance, appearance (tangibles) and courtesy (empathy) are called external quality measurements (Brady and Cronin, 2001). Execution is the essential working trademark in the lining framework. It can be measured by, for example, the nonappearance or saw nonattendance of waiting time, add up to stay time in the framework not surpassing x units of time and waiting time versus aggressive cost, among others. Flexibility is the lining frameworks worked in capacity to rapidly react to the progressions of interest (Cronin, Brady and Hult, 2000). It can be measured by, for example, the span of a movement crest. Serviceability (Responsiveness) includes capacity of the lining

framework to react to singular needs of a specific client. It can be measured by, for example, an opportunity to react to those individual needs and reply to gripes. Unwavering quality is the capacity to dependably play out the item benefit reliably, proficiently and precisely, and of course by the client. Politeness (Empathy) is the minding, individualized consideration gave to the client, the push to comprehend the client's needs, the capacity to pass on trust and certainty. Appearance (Tangibles) is the quality appearance of the physical condition and materials, offices, gear, work force and correspondences used to deliver the item benefit (Cronin et al., 2000).

The utilization of a variety of measures of service quality in the private division as basic markers of both authoritative execution and general consumer loyalty is broadly acknowledged and has offered ascend to impressive observational research. Associations working within the public sector-health care organizations, police, local government, government agencies, and emergency services have likewise come to understand that client service and quality were basic vital issues in the late 1990s. Nonetheless, it is additionally generally perceived that such public institutions confront specific challenges in measuring service quality. Customer needs and wants are changing as to legislative administrations and their quality necessities. In any case, advantage quality practices in people in general segment is direct and is also exacerbated by challenges in measuring comes about, more significant examination from the all-inclusive community and press, a nonappearance of chance to act in a self-self-assured plan and an essential for decisions to be arranged in law (Teicher et al., 2002).

### **1.1.3 Service Design and Service Quality**

The service sector is at the focal point of Kenya's financial development, with regard to World Bank Development Indicators report, which demonstrated that the administration part expanded by 5.2 for each penny in 2014, in front of industry (4.9 for each penny), producing (3.6 for every penny) and farming (2.5 for every penny) (World bank, 2015). This has likewise observed clients' desires becoming more serious. Though certain components of delivery of services may dependably stay receptive to the particular needs of the general population included, it is exceptionally alluring to design however much quality into the service as could be expected. Client waiting time is viewed as a standout amongst the most basic part of administration quality. Research has proposed different ways to deal with the negative effect of waiting. No single service process configuration best in every working condition. Directors should incorporate adaptability with benefit process configuration by utilizing elective plans in combination. There is the requirement for building adaptability into benefit process outlines by exhibiting that holding up time execution must be streamlined if plan techniques are modified in light of progressing changes in benefit framework input parameters (Brown & Wyatt, 2015).

In the eyes of customers and staff, automation of queue management creates a win-win situation by delivering time and cost benefits to both parties (Aurich et al., 2004). Automation and optimization of internal processes lead to a significant rise in service quality and customer loyalty. Consequently, staff members are able to refocus their efforts on selling products and services since their customers are happier and may remain loyal. An example is where customers check into a bank branch by means of a ticket on their mobile phone (barcode) or by printing out a ticket at the kiosk. Queue traffic, customer numbers and peak periods in the branch can be

precisely analyzed and evaluated with the help of business analyzers and reporting tools. A target/actual analysis enables staff deployment planning to be optimized and queue to be reduced during peak periods. This gives rise to improved service quality and greater customer satisfaction (Ojasalo & Ojasalo, 2015)

#### **1.1.4 Huduma Centers, Kenya**

Huduma Centers, Kenya is an initiative of the Government of Kenya that is based on the concept of integrated public service provision and whose main objectives are to provide integrated public services by transforming the service delivery processes (Daily Nation, 2013). It is a program through where the government has provided a one-stop service centers where citizens can seek essential services (Daily Nation, 2013). The main purpose of this program is to enhance the quality of government services to meet the expectations of the citizen. Services offered at Huduma centers include processing Identity cards, birth certificates, NHIF cards, Kenya Revenue Authority pins, certificates of good conduct and many other vital documents. Huduma Centers are now spreading across most of the 47 counties in the country (Chepkorir, 2015).

The Huduma center concept is driving out corruption that hobbles development, according to Wakabi, Gagliardone, Kalemera, Kogen, Stremlau and Nalwoga (2015). An example is that the National Transport and Safety Authority is utilizing the Huduma Centers to facilitate the thorough phases of applying for a temporary driving licenses, book a driving test, get a driving permit, pay charges and furthermore track one's application. Moreover, the Office of the Attorney General and also the Department of Justice has made utilization of these focuses to encourage common relational unions. People in general utilize the communities for business name inquiry and enrollment. Through this program, agents who might parade around Immigration Offices on the appearance of having associations with bureaucratic officers at the



Department of Immigration administrations to help in utilization of travel papers, visas and work licenses have been limited (Wakabi et al., 2015). This is a new concept in Kenya but has been tried elaborately elsewhere. In the USA for example, The United States Postal Service deals with thousands of Post Offices around the nation that can acknowledge international ID applications in the interest of the United States Department of State.

## **1.2 Statement of the Problem**

Service delivery to natives is at the core of what most government organizations do. Errands like paying duties, restoring driving licenses and applying for benefits are frequently the most unmistakable cooperation subjects have with their administration (Karwan and Markland, 2006). Services are in this way basic in forming trust in and view of the public sector. Residents today expect more straightforward, available, and responsive administrations from the general population segment. Also, those desires are rising. Numerous governments have endeavored endeavors to enhance benefit conveyance through online entries or one-stop shops like unified call focuses, yet discover they are as yet unfit to meet the general population's desires (Fountain, 2001). For quite a while Kenyans have been subjected to moving from place to place looking for services from the government. Kenyans and visitors had turned out to be used to being disappointed severally in their journey to seek for public services (Chepkorir, 2015).

Right from independence, the Kenya government has grappled with the issue of poor service delivery to the public (Abdalla, Kiragu, Waswa, Ono, Kariuki and Ikua, 2015). The Government of Kenya in the mid-1990s attempted a scope of mediations to cure this circumstance, retrenching more than 100,000 government employees which had just an insignificant effect on the adequacy or productivity of the civil service. It at that point that the government came up with results-oriented management, however by 2005, dismal outcomes had appeared. In 2013,

the administration presented the idea of Huduma Centers to change the conveyance of open administrations by giving simple access to different administrations and data to the overall population. It expected to give proficient taxpayer supported organizations at the accommodation of the national by amalgamating related administrations inside one building, potentially on a similar floor, adequately making it workable for benefit searchers to get to them helpfully. This is a study on the service design at these centers and the effect it has on service quality.

Various studies have been done focusing on service design and service quality. Lv and Wang (2010) investigated “the influence of service design on public-perceived administrative service quality in e-government”. Results demonstrated that service design has both direct and positive effects on service quality in public service. Hsiao and Lin (2008) explored how “government institutions extended customer-oriented idea throughout the whole organization by means of a service system design and management”. The research found that in the environment of extreme rivalry, public sector was never again composed in the conventional segment progressive framework. Kamiri (2014) determined the relationship between multilevel service design practices and the customer value constellation among mobile phone companies in Kenya. The findings revealed that among strategies that were not popular among mobile companies were partnerships with competitors and the training of suppliers and distributors on customer service.

Mutitu (2014) examined “service delivery design practices and customer satisfaction among commercial banks in Kenya”. The objective of this examination was to decide the conveyance of administration outline and to develop the relationship that exists between benefit conveyance configuration practices and buyer devotion in the business saving money segment in Kenya. The outcomes represented that the plan to benefit conveyance hones raised the least level of desire; though the design to service encounter practices satisfied the most elevated amount of

observation. The outcomes likewise demonstrated that the general mean score of observation was higher than desire in all measurements. Tima (2013) considered data framework benefit plan and client benefit conveyance at Barclays Bank of Kenya. 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. Although the above studied focused on service design and its effect on customer satisfaction/service delivery/service quality, none of them focused on queuing and waiting time as attributes of service quality in the public sector, a gap the present study aimed to fill by asking; what is the effect of service design on the quality of services offered at Huduma Centers?

### **1.3 Objectives of the Study**

- i. To find out the types of service designs used at the Huduma Centers
- ii. To investigate the effect of service design on quality of services offered at Huduma Centers

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

The study will benefit Huduma Centers spread across the country as well as other public organizations offering services. The study will help the management and especially operations managers and customer service managers in these organizations get a deeper understanding of service design and its importance in enhancing service quality. They will be able to identify the challenges facing the service design efforts and hence come up with better design strategies and practices to improve quality and hence customer (citizen) satisfaction.

The study will enable the governments, government agencies and development partners come up with better policies to improve service design to enhance service quality in the public sector.

This will be in the form of increased investment in human, financial and technology resources to enhance service design. It will lead to increased service quality, citizen satisfaction and restore confidence in the public sector.

Findings will also be valuable to future researchers and academicians as it will extend the existing knowledge in service design more so in the public sector besides acting as a source of reference. In addition, the study would suggest areas for further research that future scholars and academicians can further knowledge on. Academicians can do further research on the effect of service design on the service quality in other sectors in the region.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter contains the theoretical where the theories underpinning this study are discussed. Service design techniques are also discussed before reviewing various local and international empirical studies related to the present. Lastly, the research gap that the present study aims to fill is exposed.

#### **2.2 Theoretical Review**

Actor– network theory (ANT), proposed by Latour and Callon (1988), is an approach to manage social theory and research, starting in the field of science contemplates, which considers challenges to be a part of social affiliations. Dismissing how it is best known for its far from being obviously true emphasis on the purpose of containment of nonhumans to act or acknowledge structures or systems or both, ANT is moreover connected with bona fide investigations of standard and principal human science. The Technology Acceptance Model (TAM) is a data based models that shows how customers come to recognize and use an advancement (Davis, 1989). Dispersal of advancements is a theory that hopes to clear up how, why, and at what rate new considerations and development spread. Rogers (1962), an educator of correspondence thinks about, advanced the speculation in his book Diffusion of Innovations.

##### **2.2.1 Actor-Network Theory**

Actor-Network Theory (ANT) was proposed by Latour and Callon (1988) with the point of clarifying complex systems in logical research settings. A branch of science and innovation

thinks about, ANT shares the conviction that more noteworthy basic consideration and exact examination ought to be directed into the act of science. At first, the emphasis was on the research center setting however later ANT examinations incorporate examinations of science and innovation improvement outside the lab, and in the general population and private divisions (Laet and Mol, 2000). Insect moves some normal epistemological feelings by dismissing basic subject/protest, culture/nature, or society/innovation refinements. Elements, regardless of whether individuals or advancements, are not settled and don't have importance all by themselves. Rather, they accomplish criticalness through relations with different elements, and if contrasts exist it is on the grounds that they are created in the relations that deliver them.

As per Law (2001), people and non-people (e.g., advancements, establishments and companies) are dealt with as epistemologically equal with the end goal of basic examination and are performing artists because of the fact that they can act and be followed up on. Subterranean insect can be utilized as a hypothetical focal point to examine the improvement and selection of administration advancement. Subterranean insect is a heterogeneous amalgamation of applied, printed and social performers. It is appropriate to clarify and help with the plan of administration frameworks. The improvement and appropriation of administration development requires the reconciliation of various components including individuals, advances and systems crosswise over associations. Advances and interests of on-screen characters should be adjusted and facilitated for fruitful administration development (Sheehan, 2006).

### **2.2.2 Technology Acceptance Model**

In the field of Information Systems, numerous specialists have discovered that data innovation is underutilized in numerous institutions, making enormous financial misfortune their organizations. Subsequently, numerous innovation acknowledgment hypotheses and models have

been created or used to think about data innovation acknowledgment. One of these speculations is the Technology Acceptance Model (TAM) made by Davis (1989). He prescribes that obvious handiness and saw ease of use in are the two most basic individual feelings about using an information advancement. Seen esteem is portrayed as "how much a man assumes that using a particular structure would enhance his or her business execution.

Hat is seen as an intense extension of hypothesis of contemplated activity (TRA), according to Ajzen and Fishbein (1980). Davis (1989) proposed TAM to clear up why a customer recognizes or rejects information development by changing TRA. Hat gives an introduction which one take after exhibiting external variables affect conviction, perspective, and objective to use. Two scholarly feelings are set by TAM: saw handiness and saw accommodation. As showed by TAM, one's authentic usage of a development system is affected particularly or roundabout by the customer's behavioral points, air, saw estimation of the structure, and saw straightforwardness of the system. Hat in like manner suggests that outside factors impact desire and authentic use through intervened outcomes for saw handiness and saw convenience. In service design and particularly in the public sector this model will enable scholars understand how citizens react to the introduction of technology in the service process. It will enable the organization improve the technology depending on the time it will take and the kind of reception the adoption will have.

### **2.2.3 Diffusion of Innovations Theory**

Rogers (2003) characterized a development as an idea, practice, or assignment that is viewed as new by an individual or other unit of gathering. An advancement may have been envisioned a long time earlier, however in the occasion that individuals consider it to be new, by then it may regardless be an improvement for them. The freshness typical for a choice is more related to the three phases (data, impact, and decision) of the progression decision process. Likewise, Rogers

(2003) asserted there is an absence of dissemination research on innovation groups. For Rogers (2003), an innovation group comprises of at least one recognizable components of innovation that are seen as being firmly interrelated. Vulnerability is an imperative deterrent to the adoption of innovations. An innovation's outcomes may make helplessness and results are the movements that occur in an individual or a social structure on account of the gathering or expulsion of a development (Rogers, 2003).

To diminish the vulnerability of grasping the headway, individuals should be taught about its favorable circumstances and detriments to make them mindful of every one of its results. Also, Rogers guaranteed that outcomes can be named alluring versus undesirable (practical or useless), coordinate versus backhanded (prompt outcome or aftereffect of the quick outcome), and foreseen versus unexpected (perceived and expected or not). Rogers' dispersion of advancements hypothesis is a suitable one for exploring the appropriation of innovation in water benefit arrangement (Medlin, 2001). Dispersion explore includes mechanical developments so Rogers (2003) generally utilized the word innovation and advancement as equivalent words. For Rogers (2003), innovation is an outline for instrumental activity that lessens the vulnerability in the reason impact connections engaged with accomplishing a coveted result. It is made out of two sections: equipment and programming. This theory will explain why, and at what rate new technology spreads in the public service sector and hence enable public organizations improve service design to enhance quality.



## **2.4 Service Design Attributes**

### **2.3.1 Automated Queuing**

According to McClure and Joseph (1999), an organization can increase and improve their operational productivity by dealing with the lines in fastest and most practical ways. The essential motivation behind line management framework is to move clients, in through and out of lines, rapidly. The expanded market intensity in the business, everybody is endeavoring to increase competitive advantage. With no or little product differentiation, organizations are endeavoring to separate their offering by making a positive client encounter. For the most part organizations utilized straight or virtual lining styles. In straight line style, people are physically present and remaining in legitimately framed lines. The direct line management takes after the logic of first come, first serve premise. Direct line can be additionally stretched out into single lines or different lines, contingent upon the rate of client stream. Direct line technique expands the speed of client benefit and lessens the sitting tight time and serving time for every client. Direct line style can likewise be incorporated into electronic line administration framework. The direct lines in electronic line administration framework diminish client hold up time and increment operational proficiency by 35% (Agrawal and Granelli, 2004).

With the appearance of line management framework, clients don't need to wait long in line at different client service areas. The organizations across various ventures including banks, retail, telecoms, medicinal services and carriers among others have adjusted the electronic line administration framework to build their business proficiency. As the client goes into any client benefit territory they select an administration and get a ticket by methods for ticket apportioning unit. These tickets are in successive request of first start things out serve premise and further

arranged by the administration client chooses and the counter number on which he will be served.

The client should sit tight for their hand over very highly organized waiting area. The client can likewise pick a choice of SMS warning to use their wait time for other imperative exercises instead of sitting inert. This makes Electronic Queue Management System solid, dealing with the client stream productively. It likewise diminishes the cost of client delegate as the client can without much of a stretch utilize these machines. The contemporary lining frameworks are intended to enable administration to create continuous information about serving time, holding up time, and entry rates.

A definitive objective of Electronic Queue Management System is to give predominant client benefit, increment proficiency, lessen saw holding up time, and improve client encounter (Firoiu & Borden, 2000).

### **2.3.2 Service Process Automation**

In the present exceptionally aggressive condition, Information Technology has been vital to the accomplishment of service business (Erl, 2005). Given the tremendous headways of IT, automation in service processes has turned into a key outline component. In the meantime, service designers must consider the effect of computerization on the client who is commonly required into the service delivery process. For service providers, the principle contention for mechanization is typically the expansion in profitability and the diminishment of work cost. The reaction of buyers to service automation can be blended. Clients may feel awkward with self-service for different reasons or they may esteem the increased opportunity for customization, comfort and control. Along these lines, in face of these conceivably clashing impacts, a

significant comprehension of buyer acknowledgment of automation is basic for outlining the correct level of mechanization into an administration (Scheer et al., 2004).

After IT turned out to be promptly accessible to organizations and service providers, service design ideas and strategies were conceived to deal with innovation mixture in service experiences (Erl, 2005). Broadly useful data innovation like database frameworks, and specific applications for order, customer relationship management and catalog make service operations more productive and solid. Moreover, information technology management has progressively been utilized to additionally engage the frontline worker with the information expected to give customized and fulfilling client encounters. Such innovation guarantees that that the data accessible to all frontline workers is more exact, complete, consistent and open than the implied individual recollections of any of them taken exclusively. Innovation can be utilized exclusively by the cutting edge representative to improve his abilities or by both the bleeding edge worker and the client to all the more straightforwardly upgrades their collaboration. Fitzsimmons and Fitzsimmons (2006) recognize these two cases as innovation helped and innovation encouraged experiences. Be that as it may, the most essential decision is whether the innovation ought to be utilized to supplant the bleeding edge worker completely, leaving a self-benefit experience (Fizsman et al., 2000).

### **2.3.3 Customer Self-Service**

In the realm of administration outline, self-services are frequently seen as a specific class of touch-point in the general administration, or even option methods for getting to a service from a supplier (Gilbert, Balestrini & Littleboy, 2004). The self-service version varies from the human-interceded form, in that contact with the specialist co-op is completed by methods for a machine or an online application. As indicated by Meuter, Ostrom, Roundtree and Bitner (2000), the

present quick paced world is winding up progressively portrayed by technology-facilitated transactions. Creating amounts of customers speak with development to make profit comes about as contradicted to interfacing with a servicer provider employee. Self-service technologies (SSTs) are innovative interfaces that endow clients to deliver an service free of direct administration representative contribution. Cases of SSTs incorporate computerized teller machines (ATMs), robotized inn checkout, managing an account by phone, and administrations over the Internet and online business administrations among others (Bitner, Ostrom and Meuter, 2002).

The continuity with expansion of SSTs passes on the requirement for research that stretches out past the relational elements of service experiences into this IT management. This need is outlined from numerous points of view: For instance, half of all retail banking transactions are presently led without the help of a bank employee. Likewise, albeit some SSTs have turned out to be typical, more creative SSTs keep on being presented (Lin & Hsieh, 2006). For instance, the Internet empowers customers to buy a wide assortment of items without visiting a retail outlet or talk with an administration representative. In a few states, clients can petition for separate or expel an inhabitant utilizing a robotized stand instead of experience the conventional court framework.

Lin and Hsieh (2006) contend that self-service delivery has turned into a noteworthy methods for advancing national focused administration and cost reserve funds, yet governments shift significantly in the range and complexity of their self-benefit activities. Numerous governments have made critical advances, however numerous others have done generally little past empowering essential Internet self-benefit. Self-service delivery in the public sector is normally seen as a procedure by which natives get to taxpayer supported organizations without coordinate

help from or coordinate dealings with government faculty. Be that as it may, there can be helped self-benefit including government work force who encourage residents' self-benefit by giving some level of empowering help (e.g. guiding a citizen to a computer at an in-person focuses) (Gilbert et al., 2004)

To a substantial degree, self-service is led through self-service technologies (SSTs) that are frequently portrayed as stations or modalities and incorporate the Internet, cell phones, electronic booths, and phone interactive voice response (IVR). In nations around the globe, citizens are progressively being urged or required to utilize these advancements to get government services. Self-service activities are more far reaching in the private than in public sector. Governments have committed significant push to encouraging self-service by enhancing on the web access to existing administrations through such means as combining sites and enhancing their visual and specialized components. Be that as it may, consideration should be paid likewise to the degree to which the Internet channel is utilized to offer new or enhanced service (Meuter, 2000).

Mobile technologies offer numerous self-service benefits. For instance, hand-held cell phones are empowering employees to move far from fixed, area based workplaces to scattered or field areas from which laborers can have remote access to their association's Intranet and field information. Governments' present endeavors are centered on upgrading portable access to existing administrations with too little consideration being paid to changes in the outline, route and substance of the versatile channel. Electronic booths are significantly less unavoidable in general society than in the private area and less famous than other administration channels, however the different uses to which open associations are putting administration stands validate their incentive for specific purposes (Meuter, 2000).

## **2.4 Service Delivery in the Public Sector**

Public service leaders are finding that as they move further into the digital age they need to orientate their entire organizations around their end users, or else their investments in digital are likely to fail (Brown & Wyatt, 2015). This is why leading agencies are turning to design-led innovation, or design-thinking. The idea of design-led innovation is driven by a profound comprehension of client needs and an ethos of forming an association, administration or item around that client. This is done utilizing research, fast prototyping, steady criticism and experimentation, to convey brisk, viable outcomes. It is no prevailing fashion: design thinking has turned into a demonstrated way to deal with complex administration or authoritative issues in the private division. But it is often at odds with traditional approaches, policies and the typically risk adverse culture found in the public sector. However the approach is starting to take hold in some governments and is being endorsed by the likes of the United Nations Development Programme, the European Commission, and the World Bank as a way to deliver public service outcomes. Initiatives such as Mindlab in Denmark, plus 18F, GDS and Digital Transformation Office in the US, UK and Australia respectively are among those leading the way (Erl, 2005).

According to Chadwick and May (2014) in the US, there are three noteworthy models of connection related with e-government, the managerial, the consultative and the participatory. In spite of the fact that at any given time these models of connection can remain solitary as the perfect type of inclusion between the gatherings, as a general rule, they cover and give numerous types of communication. To start, the administrative model anxieties a vertical stream of data from the legislature to its nationals. This model is worried about effectiveness, particularly with the expansion in speed while conveying data and administrations, and a decrease of the expenses. This model sets up a customer sort connection between the administration and its subjects.

Second, the consultative model additionally focuses on vertical data stream however is more worried about reacting to necessities of societal enthusiasm as communicated electronically by the subjects. This incorporates online decisions and other contribution from voters and requires a gigantic measure of subject association. The participatory model is the last and most intuitive of the three noteworthy models of association amongst government and nationals (Brady & Cronin, 2015).

## **2.5 Empirical Review**

Lv and Wang (2010) considered the “impact of service design on public-perceived administrative service quality”. The investigation tried to discover the moderating impact of social monitoring. Results demonstrated that social checking and service design have direct positive effects on each measurement of a public-perceived administrative quality service, while social observing assumes critical directing parts in the connection between benefit outline and responsiveness, and that of service plan and transparency, and the directing impacts are both negative. Hsiao and Lin (2008) contemplated service quality in people in public sector. The target of the examination was to research how government establishments expanded customer-oriented idea all through the entire association by methods for a service system management and design. The examination utilized COSES display (client arranged administration improvement framework), helped by top to bottom meeting, to classify benefit techniques gathered and think about open division organization client situated serving individuals attitude and approach. The examination found that in the environment of exceptional rivalry today, public sector was never again sorted out in traditional segment progression framework.

Mutitu (2014) examined “service delivery design practices and customer satisfaction among commercial banks in Kenya”. The objective of this examination was to decide the conveyance of

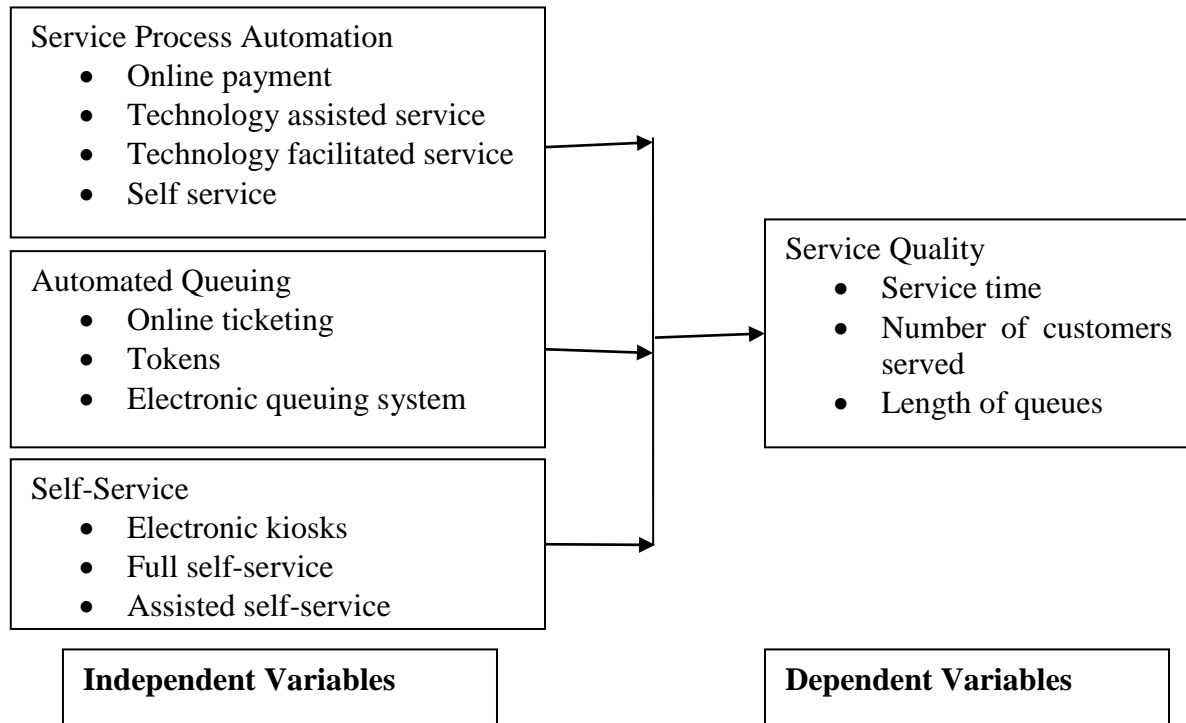
administration outline and to develop the relationship that exists between benefit conveyance configuration practices and customer steadfastness in the business managing an account area in Kenya. The outcomes delineated that the plan to benefit conveyance hones raised the least level of desire; though the design to service encounter practices satisfied the most elevated amount of observation. The outcomes likewise demonstrated that the general mean score of observation was higher than desire in all measurements. Tima (2013) considered data framework benefit plan and client benefit conveyance at Barclays Bank of Kenya. 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.

## **2.6 Summary of Literature and Research Gaps**

Lv and Wang (2010) studied the impact of service design on public-perceived administrative service quality, Lin (2008) conducted a study on service quality in people in general part, Mutitu (2014) examined service delivery design practices and consumer loyalty among commercial banks in Kenya and Tima (2013) considered data framework benefit plan and client benefit conveyance at Barclays Bank of Kenya. The above studies sought to find out the different service designs as adopted by various organizations within and without the country. The studies found out the effect service design had on service delivery and customer satisfaction. However, none of the studies focused on the role played by service design, and particularly automated queuing, process automation and self-service and their effects on service quality. Furthermore, all the above studies were on private companies whereas the present study will be on Huduma Kenya, a public entity. These are the research gaps the present will be trying to fill by investigating the effect of service design on service quality at Huduma Centers.



## 2.7 Conceptual Framework



**Figure 2:1: Conceptual Framework**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Chapter three outlines the methods to be used in carrying out this study. The research design to be used is discussed and justified, population of the study explained, data collection method presented as well as data analysis.

#### **3.2 Research Design**

The study employed a descriptive case study. A descriptive research design deals with the questions of how, what and where (Creswell, 2008). A case study method was used since it enables specialists to retain the meaningful and holistic attributes of events, for example, hierarchical and administrative procedures (Yin, 2009).

#### **3.3 Population of Study**

The population of this study was all the Huduma Centers in Kenya. There are currently 51 fully operational Huduma Centers spread across the country, according to Huduma Centers (2017).

#### **3.4 Sampling and Sample Size**

Huduma Centers in Nairobi City County were selected as the sample for the study. These were GPO Huduma Centers, City Square Huduma Center, Huduma Center Kibra, Huduma Center Makadara and Huduma Center Easleigh. In this study, two employees were randomly selected from top level management, middle level management and functional level from the five centers for the interview. Eight customers from each of the Centers were also randomly selected for interview. This gave us a sample size of 70.

### 3.5 Data Collection

In this study, data were collected through questionnaires as they are less expensive, are familiar to most people and are significant in reducing bias that may arise from other forms of data collection tools. The questionnaire will apply open and close ended inquiries. Likert scale was used to allow respondents rank according to their levels of agreement. This study collected secondary data from literature review and observations to meet its objectives. Questionnaires were dropped to the respondents and collected later to allow time and space for filling (Ngechu, 2004).

### 3.6 Data Analysis

Data were analyzed using the IBM Statistical Program for Social Sciences ((SPSS) version 21. Descriptive statistics was used to summarize the data. This included percentages and frequencies. Graphs were used to present the data collected for ease of understanding. Measures of central tendency were used (mean, standard deviation median, mode and percentages). Multivariate regression was used to determine effect of service design on quality of services in the public sector using the case of Huduma Kenya. The regression model is;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Where: Y = Service quality

X<sub>1</sub>= Automated queuing

X<sub>2</sub> = Service process automation

X<sub>3</sub> = Customer self-service

ε = Error term/Erroneous variables

$\beta_0$  = constant/the minimum change in Y when the rest of the variables are held at a constant zero

$\beta_1$  = measures the rate of change in service quality as a result of the rate of change in automated queuing

$\beta_2$  = measures the rate of change in service quality as a result of the rate of change in service process automation

$\beta_3$  = measures the rate of change in service quality as a result of the rate of change in customer self-service

## CHAPTER FOUR

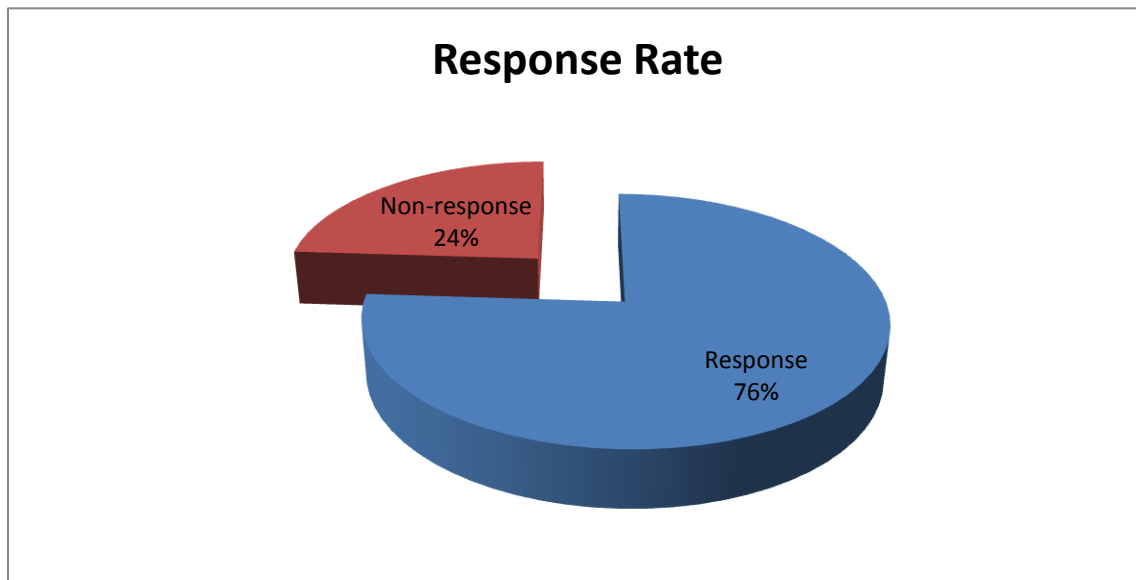
### DATA ANALYSIS AND INTERPRETATION OF FINDINGS

#### 4.1 Introduction

This chapter presents the data analysis and interpretations of the findings. Data was analyzed using Statistical Package for Social Sciences and summarized using tables, charts, frequencies and percentages.

#### 4.2 Response Rate

The study targeted 70 respondents in collecting data with regard the effect of service design on quality of service at Huduma Kenya. Of these, 53 questionnaires were filled and returned hence response rate of 76% as shown on Figure 4.1. According to Mugenda (2008), a response of above 50% is good for conclusion. The high response rate was achieved because the questionnaire was short and questions direct.



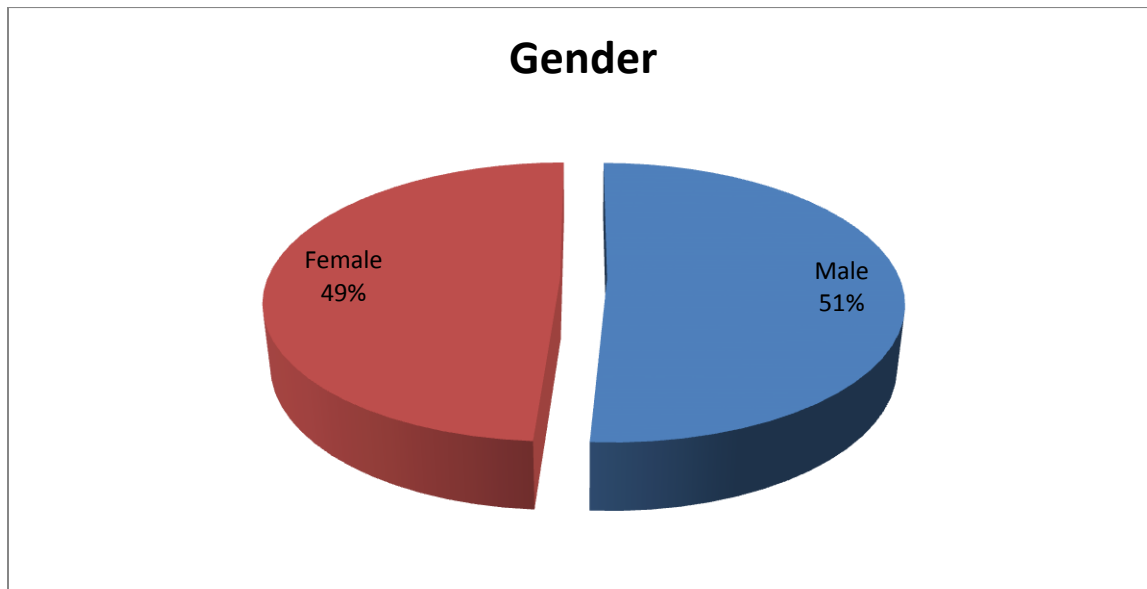
**Figure 4. 1: Response Rate**

### 4.3 General Information

As part of the general information, the researcher requested the respondents to indicate their age bracket, name of huduma centre they visited or worked, highest level of education, Name of government agency/ministry the workers represent/customers visited, employees position in the organization, number of years the employees have worked in the public sector and number of years served at Huduma Centre.

#### 4.3.1 Gender

The study sought to find out the gender of the respondents. The findings are shown in Figure 4.2.

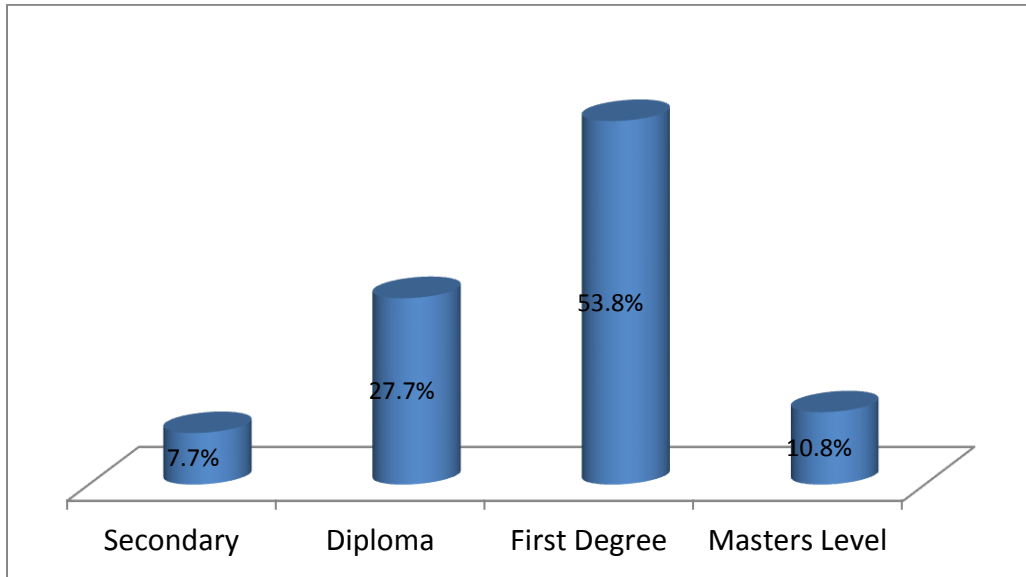


**Figure 4. 2: Gender Representation**

From the findings, 51% (27) of the respondents were male while 49% (26) were female. This represents the general population at Huduma Kenya, meaning the organization has equal representation of both genders, making it reliable for generalization and conclusions about behavior of Kenyan population.

#### 4.3.2 Academic qualifications of the respondents

The respondents were asked to indicate their highest academic qualifications. Their responses were as shown in figure 4.3 below.



**Figure 4. 3: Academic Qualifications of the Respondents**

From 4.3 above, 53.8% indicated that their highest academic qualifications was the first degree level, 27.7% indicated highest academic qualifications was diploma, 16.9% indicated KCSE level, 10.8% indicated Masters level and 7.7% indicated secondary level. From these findings, we can derive that most representatives most noteworthy scholastic capabilities was degree level, thusly the respondents can give valid data in light of their abnormal state of comprehension on the topic and will likewise comprehend client needs speedier subsequently brisk basic leadership. Very much prepared people know the degree desires and profundity of their occupations and will have the capacity to add building squares to their demonstrable skill as they advance through their vocations (Priti,1999).

### 4.3.3 Number of years in the Public Service and at Huduma Center

The study sought to establish the number of years the employees had worked in the public are as shown in sector. The responses table 4.1 below.

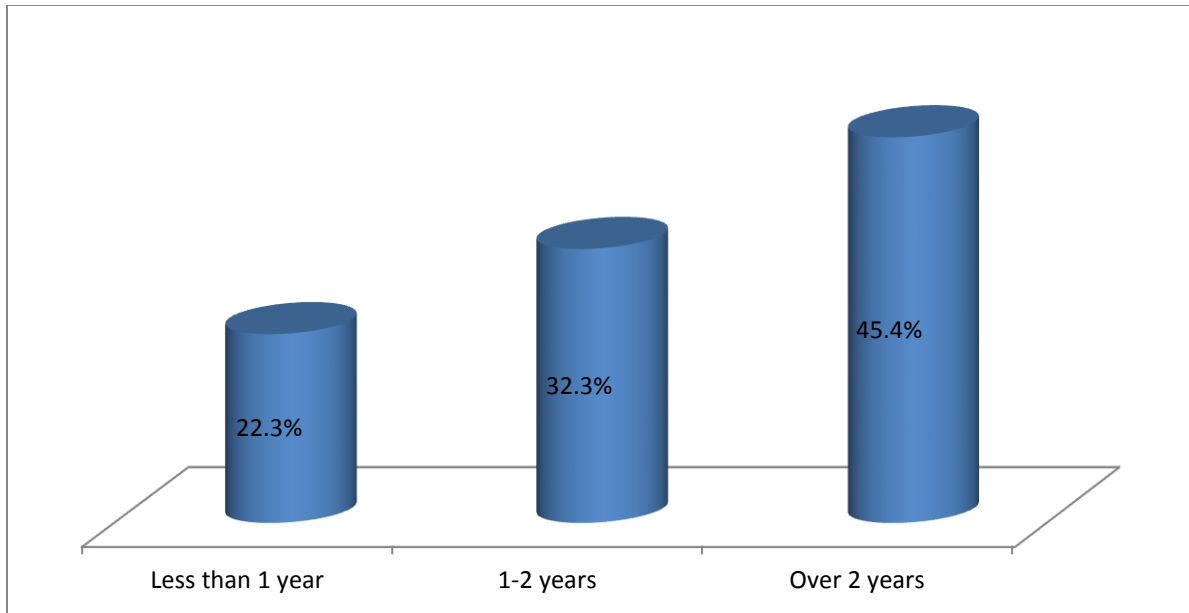
**Table 4. 1: Number of years worked in the Public Service**

<b>Years</b>	<b>Frequency</b>	<b>Percentage (%)</b>
0-5	2	14
6-10	8	63
11-15	1	9
Over 15 years	2	14
<b>Total</b>	<b>12</b>	<b>100</b>

From the results, majority of the employees working at the Huduma Centre have been in the public sector for a period of between 6 and 10 years as shown by 63%, followed by equal number of those who had worked between 0 and 5 years and over 15 years as shown by a response rate of 14%. We can conclude therefore that majority of the employees at Huduma Centre have had enough experience in the public sector.

The study further sought to establish the number of years the employees had worked at Huduma Kenya. The responses were as shown on Figure 4.4.





**Figure 4. 4: Number of years served at Huduma Centre**

The results show that most employees had worked for more than 2 years at Huduma center. This is enough time to understand the dynamics of service quality, hence true picture of quality of services offered at Huduma Kenya. The employees have been at Huduma Kenya long enough to understand its operations. According to Bedard and Chi,1993, work encounter is the power which can be gotten by the training after some time from past encounters and direct input and the general learning which prompt achievement of undertakings with high caliber. Experience likewise empowers respondents to give tried and true and exact reaction.

The objectives of this study was to find out the types of service designs used at the Huduma centers and investigate the effect of service design on quality of services offered at Huduma Centers. The part below shows the analysis the respondents' view on the questions in the questionnaire and the interpretation as per the objectives.

#### 4.4 Service Design

The study sought to find out the types of service designs used at Huduma Kenya and how they affect quality of services rendered. Results are shown on Table 4.1.

**Table 4. 2: Type of Service Design Used**

	Mean	Std. Dev
Automated queuing	4.234	0.342
Service process automation	4.987	1.234
Customer self-service	3.023	0.998

From the findings, service process automation was the most used service design with as it had the highest mean followed by automated queuing then customer self-service. Meaning that Huduma Kenya has automated most of its operations. However, the organization has not yet to ensure that customers can access some services from start to finish from the comfort of their homes without having to visit a Huduma centre or affiliated government ministries. According to Scheer et al., (2004), service designers must consider the effect of computerization on the client who is commonly required into the service delivery process. The essence of self service is to reduce time and costs and service designers must ensure complete comfort and control by the client (Scheer et al., 2004).

#### 4.5 Effect of Service Design on Quality of Services

##### 4.5.1 Service Process Automation

The respondents were further requested to indicate their levels of agreement with the following statements on service process automation. Responses were as indicated table 4.2 below.

**Table 4. 3: Service Process Automation**

	<b>Mean</b>	<b>Std. Dev.</b>
At Huduma Centre, the process is highly automated	4.756	0.726
Customers can pay online for services	4.621	1.075
Citizens/customers can serve themselves from their smartphones/PCs	4.354	1.118
We have a management system for managing the service process	4.522	0.833

From the findings, the majority agreed that the process at Huduma Kenya is highly automated and that customers are able to pay online. However, many of the respondents were of the view that the process, however, automated it is, has not reached to the point where the customer initiated the process from start to finish. This means that as far as process automation as a service design is concerned, the organization is yet to enable customers to access the service from the comfort of their homes. Customers still have to travel to the nearest center to get assistance. This implies that despite the advancement of communications technology in Kenya, the same has not been fully exploited to enhance service delivery especially in the public sector. The banking sector has taken advantage of ICT in Kenya especially the mobile phone by introducing mobile banking that has been successful, whereas Huduma center has been embracing the same at a snail pace.

### 4.5.2 Automated Queuing

The respondents were requested to indicate their level of agreement with the following statements on automated queuing. Their responses are as shown on Table 4.3.

**Table 4. 4: Automated Queuing**

---

	<b>Mean</b>	<b>Std. Dev.</b>
At Huduma Centre, customers get tickets from a ticket dispenser for service	4.946	1.014
A customer can book for the service online	4.125	0.756
We have a first come first serve policy	4.806	0.632
We don't have cases of some customers jumping the queue	4.667	1.323
Every customer must follow the queue	4.625	0.834

---

On automated queuing, findings show that dispensing of tickets has been the most used by the organization followed by the rule of first come first served. The tickets have enhanced the adherence of the first come first served rule. The findings however show that some customers may jump the queue and others may be favored. The organization has to ensure that first come first served rule must be adhered to by all customers regardless of status except in special cases where sick, elderly or pregnant women are involved. On reliability of service delivery, many of the respondents agreed that waiting period before being served has reduced because of automated queuing.

### 4.5.3 Self-Service

The respondents were further requested to indicate their level of agreement with the following statements on self-service. Their responses are presented on Table 4.4 below.

**Table 4. 5: Customer Self-Service**

	Mean	Std. Dev.
Our website enables customers to initiate the service process	3.712	0.6436
Customers can serve themselves online	3.710	0.6373
An employee only directs the customer on what to do then the customer completes the process by himself	3.161	0.6823
We use self-service technologies	3.456	0.6773
Our website is user friendly for customers to serve themselves	3.471	0.4090

It was found that majority of the respondents find the organization’s website as enabling for customers to initiate the service process. However, for some services like application of passport, customers can only initiate the process then visit the center to complete the remaining processes, meaning that the service process does not allow for full self-service. The systems are not fully automated resulting to a lot of time is wastage where customers are again driven to queues to get services. The organizations also incurs labor costs as a result of personnel to serve customers at the centers, a cost that could be reduced through full automation of services.

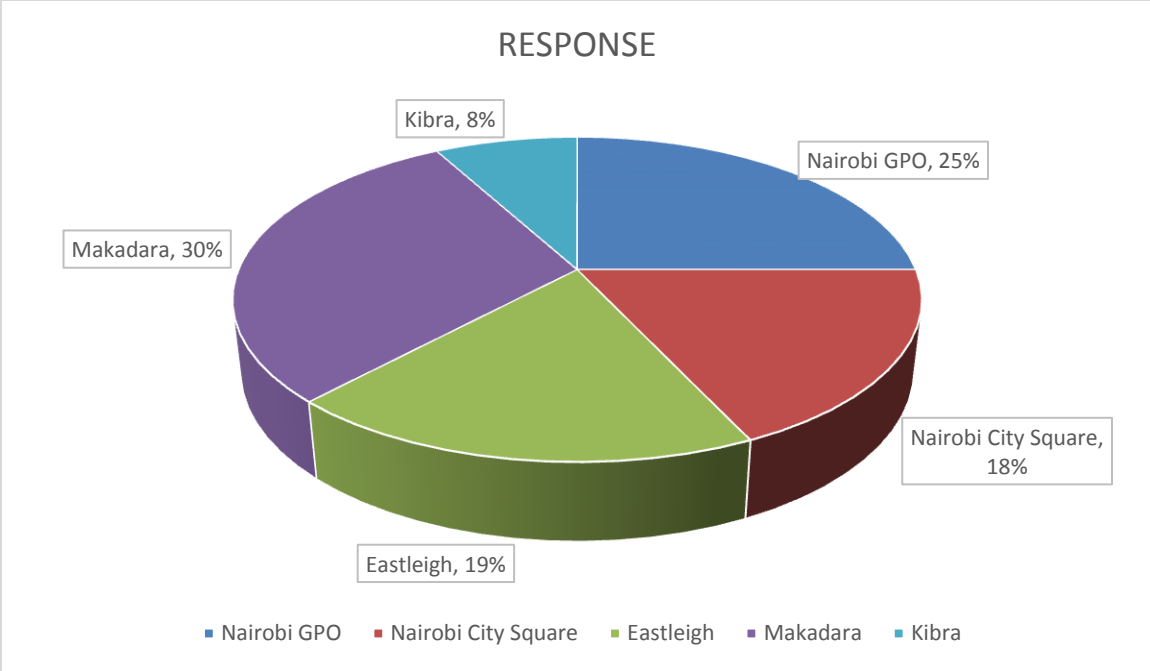
## **4.6 Customer Response**

### **4.6.1 General Information**

The respondents were requested to indicate Huduma centers they had sought for services in Nairobi county and government agency/ministry they had visited vis a vis the services they got.

### **4.6.2 Name of Huduma Centre**

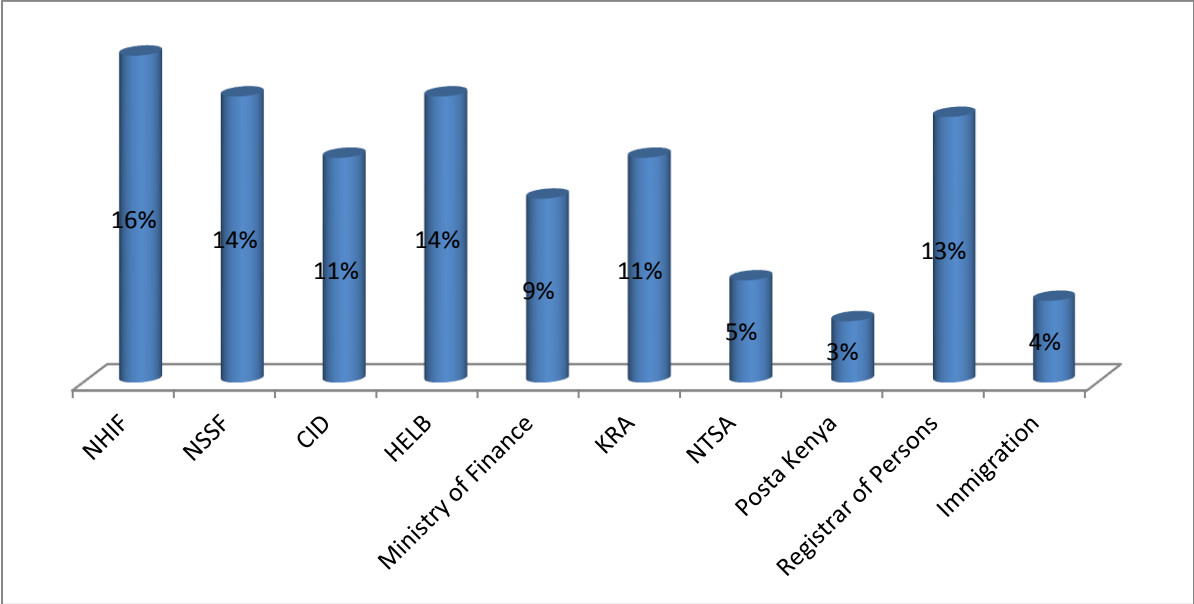
The respondents were asked to indicate names of the Huduma centre they had visited to seek services. Their responses were as shown in figure 4.3.



**Figure 4. 5: Name of Huduma Centre**

From the findings, 30% indicated they visited Makadara, 25% GPO, 18% City Square, 19% Easleigh, and 8% Kibra. This means that majority of Huduma Kenya customers in Nairobi were from the Eastlands side of the City where most lower income earners reside and are likely to require government services, they also lack ICT enabled gadgets like 4G mobile phones, laptops or even computers to access Huduma services online. According to Sang (2015), in the colonial days, most Africans were settled in Eastlands area of Nairobi while Europeans were housed in Karen and Nairobi West. Indians settled in Parklands. Today, most of the high end part of the society live in the same areas while the majority of low income earners live in Eastlands which has also many slums settlements like Mathare, Mukuru and Kariobangi. According to the 2009 census by KNBS (2009), Eastlands is the most populated area in Nairobi City. This is followed by the GPO which is accessible by most city dwellers and people from the countryside.

The respondents were further requested to indicate the government agency/ministry they had visited. Their responses were as shown on Figure 4.7.



**Figure 4. 6: Government Agency/Ministry Visited**

According to the findings, majority of the customers visited NHIF services followed by HELB and NSSF services at 16% and 14% as shown in the figure 4.6. Other offices that had a large number of visits were KRA, CID and registration of persons with immigration and Posta Kenya having few interactions on that particular day. NHIF, a government hospital insurance fund, is a service sought by most people from all status, genders and ages. This is the same for HELB whose customers are almost all university students. These three services will be sought by a majority population at any given day as compared to KRA services which are mostly accessed during filing tax returns. CID services (certificate of good conduct) are only sought when one is applying for a new job.

### 4.6.3 Service Quality

The respondents were requested to indicate their level of agreement with the following statements on Service Quality. Their responses were as shown table 4.6 below.

**Table 4. 6: Level of Agreement with Statements on Service Quality**

	<b>Mean</b>	<b>Std. Dev.</b>
It took me a long time to get served	2.40	0.547
I was forced to move from one desk to another in search of one service	2.908	1.286
The queues were too long	2.188	1.167

The respondents disagreed that the queues were too long at the Huduma center as shown by a mean score of 2.188, they also disagreed that it takes too long to get served as shown by a mean score of 2.400. From these findings, we can conclude that service quality at Huduma Kenya has dismal improvement, more than three years after its inception. This is due to low means in each of the service quality attributes. There is obviously great improvement in the way citizens get their services at government offices today as compared to before the introduction of Huduma Kenya. However, as found, the service quality (here measured in terms of time taken and length of queues), is not as perfect. Huduma Kenya has consumed huge taxpayer's money and is expected to perform. The main problem is service design that has not enabled full utilization of technology to enhance seamless service delivery.

### 4.7 Multiple Regression Analysis

Multivariate regression was used to determine the effect service design on the quality of service in the public sector using the case of Huduma Kenya. The regression model is;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Where: Y = Service quality



$X_1$  = Automated queuing

$X_2$  = Service process automation

$X_3$  = Customer self-service

$\varepsilon$  = Error term/Erroneous variables

#### 4.7.1 Regression Analysis

A multiple regression analysis was done to test the correlation among predictor variables. The research utilized statistical package for social sciences (SPSS V 21.0) to code, enter and calculate the estimations of the multiple regressions.

**Table 4.7: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0.872	0.766	0.751	0.573

**Source: Researcher (2017)**

Coefficient of determination discloses the degree to which changes in the dependent variable can be reflected by the adjustment in the independent variables or the rate of variation in the dependent variable (service quality) that is determined by the service process automation, automated queuing and customer self-service. The three independent variables that were studied, explain only 76.6% on the relationship between the independent variables and the quality of services represented by the  $R^2$ .

**Table 4. 8: Summary of ANOVA Results**

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	430.361	3	86.072	137.193	0.000
	Residual	140.533	62	0.627		
	Total	570.894	66			

Source: Research Data (2017)

a. Predictors: (Constant), service process automation, automated queuing and customer self-service

b. Dependent Variable: service quality

From the ANOVA statistics in table 4.6 above, the probability value of 0.000 which is less than 0.05 indicates that the regression relationship was highly significant in predicting how service process automation, automated queuing and customer self-service influenced the quality of services at Huduma Kenya.

Table 4.9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.781	1.423		5.468	.0000
Automated queuing	0.863	0.112	0.642	7.705	.0000
Service process automation	0.771	0.161	0.483	4.242	.00017
Customer self-service	0.683	0.171	0.574	4.509	.0000
Dependent variable: service quality					

**Source: Research Data (2017)**

From the regression results, multiple regressions were obtained as follows;

$$Y = 4.781 + 0.863X_1 + 0.771X_2 + 0.683X_3 + 0$$

Where; X1 = automated queuing, X2 = service process automation, X3 = customer self-service and Y= service quality

According to the model, all the variables were significant as their significance value was less than 0.05. Automated queuing, service process automation, customer self-service and service quality had a positive relationship with service quality. From the model, taking all factors

(automated queuing, service process automation, customer self-service and service quality) constant at zero, service quality at Huduma Kenya was 4.781.

This infers that automated queuing contributed mostly to improvement of service quality while customer self-service had the least significant effect. This is in agreement with McClure and Joseph (1999) who argued that an organization can increase and improve their operational productivity and quality by dealing with the lines in fastest and most practical ways. The two objectives of the study have been achieved. The study has used one of the two measures of customer reliability and satisfaction, that is, quality assurance framework (OECD, 2013) to establish that the services at Huduma Centres, Nairobi, to establish that indeed customers are satisfied with the level of speed the automated queuing has affected.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary, conclusion and recommendations based on the findings and interpretations of the research. Further, we close the chapter by providing suggestions for further research.

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

The services at Huduma center are highly automated hence enabling customers to pay online for services and reducing queues at Huduma stations. The employees on their side have a management system for managing the service process. The service design at Huduma Centre has led to improved service delivery hence quality services. This is in line with Agrawal and Granelli (2004) that electronic queue management system reduces customer wait time and increases operational efficiency by 35%.

The study reveals that at Huduma Centre, customers get tickets from a ticket dispenser for service which has hugely contributed to first come first serve policy at the five centers. The ticket dispense has also been attributed to the end of cases of ‘jumping the queue’ as stated by the respondents. However, the study found that customers are not able to complete services they require before visiting the service centers. The results are in agreement with McClure and Joseph (1999) that an organization can increase and enhance their operational efficiency by managing the queues in quickest and most cost effective ways. Borden (2000) also elaborated that Electronic Queue Management System provides superior customer service, increase efficiency, reduce perceived waiting time, and enhances customer experience.

On the self-services offered at the two centers, it was established that customers can serve themselves online especially when applying for services like company registration and Driving License renewal services hence the adoption of self-service technologies. This is in accordance with Lin and Hsieh (2006) that self-service delivery has become a major means of promoting citizen-centered service and cost savings. The found that Huduma website enables customers to initiate some service processes before approaching the Huduma center employees, the website is user friendly for customers to serve themselves and that an employee only directs the customer on what to do then the customer completes the process.

The study also found that there was an increase in the number of customers served per day at Huduma Centres. This is due to reduction of queue length resulting from shorter service time/employee at the centers. These results are a clear indication of improvement in quality service delivered at Huduma Centers to customers. The results contradict those of (Teicher et al, 2002) that service quality practices in public sector organizations are slow. The customers who visited the centers were found to frequent the NHIF, NSSF, Helb and registration of persons at the center while Posta Kenya and immigration office had the lowest number of visits. This could be due to the large number of youths and students seeking for HELB loans and NHIF covers.

The customers also confirmed that it takes a shorter time to get served. The study further found that customers are most of the time served in one desk as opposed to the claim of being sent to one desk after the other in order to get served. Aurich et al.(2004) also cited that automation and optimization of internal processes has led to a significant rise in service quality and customer loyalty. Consequently, staff members are able to refocus their efforts on selling products and services since their customers are happier and may remain loyal.

### **5.3 Conclusions**

The study concludes that services at Huduma center are highly automated hence have enabled customers to pay online for services. This in turn has led to a significant rise in service quality. Citizens/customers are also able to serve themselves from their smartphones/PCs. The study finds that the service processing automation and automated queuing system has reduces customer wait time and increased operational efficiency to a great extent.

The introduction of Huduma center has enabled customers to fully serve themselves online especially when applying for services like company registration and driving license renewal hence the adoption of self-service technologies. This has been made possible as the Huduma website is user friendly for customers as it enables them initiate the service process before approaching the Huduma Centre employees to complete the process like immigration services.

With automated queuing through ticketing, clients experienced less troubles in following the administration counters that offered the administrations they required. They didn't need to enquire for heading that caused superfluous postponements. Clients were likewise mindful when they were to be served and to what extent they were to hold up before their turn comes to.

### **5.4 Recommendations**

From the summary and conclusions, the study recommends that government agencies must pay attention to service quality indicators in order to safeguard and improve service delivery to the public. In order to improve on service quality all the aspects of service quality dimensions in the areas of service processing automation, automated queuing system and self-service are adopted to reduce service time.

The study recommends Huduma center to improve on customer wait time such as fast and efficient services. To increase quality service delivery, the centers' management should continuously enhance the commitments of their staff on service quality through continuously training, and reinforcing good customer care practices.

The study therefore recommends more training for customers to create awareness of the available services and the procedures to be followed in service delivery especially on the use of their portal.

According to the research done at the Huduma Centres, the clients communicated the deficiency of representatives. The clients griped of postponements during childbirth endorsement administration and great lead counters. In such manner, the investigation prescribes the work of more gifted staff to give quality and effective administrations.

### **5.5 Limitations of the Study**

One of the limitations of this study is that not all Huduma centres in Kenya were visited. The conclusions drawn on the sampled centers may not apply to all the centers in other parts of the country especially in rural areas since service needs are different from those of urban areas. Different centers in different parts of the country may experience different challenges which may affect service quality. Another drawback is some of the people approached did not want to be interviewed, others arguing that the information was to be used for political purposes. This was reduced by assuring them that the information was for academic purposes only.

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

From the study, the researcher suggests further research in the area of service design and service quality in Huduma Centres outside of Nairobi. This may give comprehensive information on the



service design and service quality in Huduma Centres in Kenya as a whole and how to limit ICT challenges especially in rural areas. Further research can be done on the effect of employees' involvement on the implementation of self-service processes in private organizations agencies as this thesis focused solely on service design and service quality at Huduma Centers which are public institutions.

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## APPENDIX I: QUESTIONNAIRE FOR EMPLOYEES

### Section A: General Information

1. Gender: Male ( ) Female ( )
2. Name of Huduma Centers

<b>Centers</b>	<b>Tick</b>
GPO	
City Square	

3. Highest Educational Qualification

	<b>Tick</b>
Primary	
Secondary	
Diploma	
Bachelor's degree	
Master's degree	
Other (please specify)	

4. Position in the organization

<b>Position</b>	<b>Tick</b>
Top Management	
Mid-level Management	
Functional Level	

5. Number of years worked in the Public Service

<b>Years</b>	<b>Tick</b>
0-5	
6-10	
11-15	
Over 15 years	

6. Number of years served at Huduma Centers

<b>Years</b>	<b>Tick</b>
Less than 1 year	
1-2 years	
Over 2 years	

**Section B: Service Process Automation**

How much do you agree with the following statements?

1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly agree

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
At Huduma Centers, the process is highly automated					
Customers can pay online for services					
Citizens/customers can serve themselves from their smartphones/PCs					
We have a management system for managing the service process					

**Section C: Automated Queuing**

How much do you agree with the following statements?

1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly agree

	1	2	3	4	5
At Huduma Centers, customers get tickets from a ticket dispenser for service					
A customer can book for the service online					
We have a first come first serve policy					
We don't have cases of some customers jumping the queue					
Every customer must follow the queue					

**Section D: Self-Service**

How much do you agree with the following statements?

1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly agree

	1	2	3	4	5
Our website enables customers to initiate the service process					
Customers can serve themselves online					
An employee only directs the customer on what to do then the customer completes the process by himself					
We use self-service technologies					
Our website is user friendly for customers to serve themselves					

**Section E: Service Quality**

What is the effect of service design on the following?

	<b>2014</b>	<b>2015</b>	<b>2016</b>
Number of customers served per day			
Length of queues			
Average service time/employee			



**APPENDIXII: QUESTIONNAIRE FOR CUSTOMERS**

**Section A: General Information**

Which desk at Huduma Centers did you visit today?

<b>Organization</b>	<b>Tick</b>
NHIF	
NSSF	
CID	
HELB	
Ministry of Finance	
KENYA REVENUE AUTHORITY	
NTSA	
Posta Kenya	
Registrar of Persons	
Immigration	
Other (please specify)	

**Section B: Service Quality**

How much do you agree with the following statements?

1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly agree

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
It took me a long time to get served					
I was forced to move from one desk to another in search of one service					
The queues were too long					

**Thank you!**