

**EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON CUSTOMER  
SATISFACTION AMONG HUDUMA CENTERS IN NAIROBI COUNTY, KENYA**

**BY**

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**MASTER OF BUSINESS ADMINISTRATION (CORPORATE MANAGEMENT)**

**KCA UNIVERSITY**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS  
ADMINISTRATION CORPORATE MANAGEMENT IN THE SCHOOL OF  
BUSINESS AT KCA UNIVERSITY**

**NOVEMBER, 2025**

### DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author fully acknowledged.

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Sign: \_\_\_\_\_ Date: 28/10/2025

I do hereby confirm that I have examined the Master's dissertation of

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And have approved it for examination



Sign: \_\_\_\_\_ Date: 28/10/2025

Name of Dissertation Supervisor: Dr. JUNITER MOKUA KWAMBOKA

## ABSTRACT

This study is justified by the critical need to understand how total quality management practices impact customer satisfaction among Huduma centers in Nairobi County, Kenya. Nairobi County is particularly notable due to its concentration of a diverse customer base. This makes it a focal point for assessing the effects of total quality management practices on efficient public service delivery at Huduma centers. Huduma centers within Nairobi face challenges related to customer dissatisfaction and internal inefficiencies. These could be influenced by management practices within the organization. The aim of this study was to establish the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Kenya. The specific objectives were to determine the effect of customer focus on customer satisfaction among Huduma centers in Nairobi County, Kenya, to establish the correlation between employee involvement and customer satisfaction among Huduma Centers in Nairobi County, Kenya, to determine influence of management commitment on customer satisfaction among Huduma centers in Nairobi County, Kenya and evaluate the effect of continuous improvement on customer satisfaction among Huduma centers in Nairobi County, Kenya. The research was based on four theories namely, Expectation disconfirmation theory, Kaizen theory, Juran Theory and Deming theory. Descriptive research design was applied in this study. The population of the study was all the 5 Huduma centers operating in Nairobi County, Kenya. The target respondents were staff and customers at Huduma centres. The sample size was 196 staff and 384 customers at the 5 Huduma centers. This choice was justified by the staff of Huduma centers deep involvement in creating and maintaining customer satisfaction, and the firsthand experience of customers at the Centers. Questionnaire was utilized in the data collection. Pretesting was undertaken at GPO Huduma centre where 19 questionnaires were administered. The collected data was analysed using descriptive, correlation and multiple linear regression method. The results revealed strong and statistically significant relationships between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County which indicate that improvements in each of the TQM practices correspond to higher levels of customer satisfaction. The study recommends strengthening customer engagement through interactive feedback systems and regular forums, deepening employee involvement by promoting participation and capacity building, and adopting structured continuous improvement frameworks supported by staff training. It also calls for stronger management commitment through proactive leadership, resource allocation, and clear accountability frameworks. Policymakers should support these efforts by setting service quality benchmarks, promoting employee empowerment, institutionalizing continuous improvement, and enforcing leadership accountability in public service delivery.

**Key words:** Customer satisfaction, total quality management practices.

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## **DEDICATION**

This work is dedicated to my supportive family, whose unwavering encouragement made this academic endeavor possible, and to the staff at huduma centers, whose dedication to public service was the motivation behind this research.

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## **ABBREVIATIONS AND ACRONYMS**

<b>TQM</b>	Total Quality Management
<b>OSS</b>	One Stop Shop
<b>SHA</b>	Social Health Authority
<b>CEO</b>	Chief Executive Officer
<b>NSSF</b>	National Social Health Fund
<b>KRA</b>	Kenya Revenue Authority
<b>SLA</b>	Service Level Agreements
<b>QM</b>	Quality Management
<b>KPI</b>	Key Performance Indicators
<b>QMS</b>	Quality Management Systems
<b>PDCA</b>	Plan, Do, Check, Act

## DEFINITION OF TERMS

<b>Total Quality Management</b>	Refers to a continuous process that aligns organizational management, enhances good customer service and empowers the training of employees (Gichure & Gitonga, 2024).
<b>Customer Focus</b>	Refer to the strategic approach where businesses give precedence to understanding and meeting the needs and expectations of their customers (Byers et al., 2024).
<b>Employee Involvement</b>	Refers to the emotional, cognitive, and behavioral commitment of employees to their work and the organization (Triantafillidou & Koutroukis, 2022).
<b>Management Commitment</b>	Refers to the dedication of leadership to providing high quality services and enhance employee job satisfaction (Park & Jeong, 2023).
<b>Continuous Improvement</b>	Refers to the organization's is a principle of consistency that guarantees continuous progress (Nganga & Nyaga, 2022)
<b>Customer Satisfaction</b>	Refers to the organization's performance measure as a result of the unrivaled customer experience. (Manyanga et al., 2022)

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Customer satisfaction refers to the extent to which a product or service meets or exceeds customer expectations, reflecting how effectively an organization fulfills customer needs (Kotler & Keller, 2019). Hansemark & Albinsson (2020) further define it as a customer's overall attitude toward a service provider, or an emotional reaction arising from the gap between anticipated and actual service. Key indicators of customer satisfaction include service quality, timeliness, reliability, responsiveness, communication, customer loyalty and repeat usage, as well as effective complaint resolution, since these factors determine whether customers feel valued and are willing to continue engaging with a service (Parasuraman, Zeithaml, & Berry, 2021).

Customer satisfaction reports in the public sector across the world show mixed outcomes depending on the type of services offered and the quality management practices adopted. In the United Kingdom, the UK Customer Satisfaction Index (UKCSI) reported that national public services scored 73.3 out of 100 in July 2024, which was below the all-sector average of 75.8, while local public services scored even lower at 70.3, reflecting a decline in satisfaction compared to previous years (Institute of Customer Service, 2024a, 2024b). Similarly, the British Social Attitudes survey revealed that only 13 percent of the public was satisfied with social care services in 2023, the lowest level ever recorded, while 57 percent expressed dissatisfaction, highlighting the pressure on public institutions to improve service delivery (The King's Fund, 2023).

Customer satisfaction in the public sector is essential because it enhances trust, efficiency, and citizen loyalty toward government services. When citizens are satisfied, they are more

likely to use services consistently, comply with regulations, and provide constructive feedback that can improve service delivery. High satisfaction also reduces complaints and operational costs associated with resolving disputes. For instance, a 2021 survey by the Kenya Customer Satisfaction Index (KCSI) found that improved customer satisfaction in government services increased public confidence by 15 percent, showing that satisfied citizens are more engaged and cooperative with institutions. In addition, studies have shown that customer satisfaction in the public sector fosters transparency and accountability, which are critical in building long term confidence in governance and service delivery (OECD, 2017).

In Kenya, the World Bank's Kenya Water and Sanitation Improvement Project (WASSIP), through social accountability measures like citizen scorecards and public hearings, reported that over 97% of complaints in the pilot phase were resolved, reflecting high satisfaction in those specific service interactions (water services) when citizen feedback mechanisms are used. Total quality management plays a critical role in ensuring the success and sustainability of organizations in a globalized environment. It is a comprehensive approach that aims to enhance product and service quality through continuous process improvements and focus on customer satisfaction (Lovia et al., 2024). According to Mohammed (2024) for organizations to achieve customer satisfaction, they could apply the total quality management theory that creates an organizational culture that fosters employee collaboration and continuous improvement of processes. This strategy demands the formulation and deployment of corporate wide culture that values consistent improvement of excellence of quality products and services through workforce engagement and integration of all business processes (Abdul Azeez et al., 2024).

Organizations that integrate total quality assurance boost consumer fulfillment by enhancing staff output, creativity and innovation, improving service experience, ultimately providing refined service standards (Saud et al., 2024). According to Ghaleb and Dahiam (2024), the effective achievement of organizational objectives is driven by creation of a

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positive organizational culture that encourages employee engagement, employee motivation and commitment towards the achievement of its organizational objectives. When employees share a common purpose of the organization's values and goals, they collaborate effectively to formulate policies that align with the company's strategic objectives, to achieve customer service excellence. When employees feel empowered, they develop innovations that improve operational efficiency at the organization as a result, drive organization growth and success (Modise, 2023).

Moreover, according to Priya et al., (2024), the adoption of total quality management practices optimizes operations, minimizes waste, improves service quality and enhances risk management which impacts how a firm responds to external challenges and opportunities. An organizational culture that promotes continuous process improvement and focuses on customer satisfaction enables organizations be responsive to the changing customer needs and expectations. Additionally, according to Alchouni et al., (2023), an organization that integrates total quality management principles into its operations efficiently assimilates to the evolving technology and changing customer dynamics. On the other hand, ineffective integration of total quality management practices at an organization exhibited by insufficient staff training, lack of employee involvement and limited leadership commitment can lead to high employee turnover and lack of innovations that ultimately limit the organizational performance. Thus, the deployment of total quality management principles at an organization enhances its ability to achieve and sustain high levels of performance (Alallq, 2024).

In the evolving global landscape of public service delivery, TQM has emerged as a strategic management approach to improve service quality and enhance customer satisfaction. TQM practices such as customer focus, employee involvement, management commitment, and continuous improvement are increasingly being adopted to drive efficiency and responsiveness in both private and public institutions (Jimenez, 2023). Organizations that successfully

implement these principles benefit from enhanced service reliability, employee empowerment, and innovation in addressing citizen needs (Mukherjee et al., 2023). In the current global environment, service-oriented institutions are also integrating TQM with lean management to streamline workflows and reduce operational wastage, thereby improving service outcomes (Giuseppe et al., 2025).

Regionally, several African countries have embraced TQM in the reform of public service delivery. In Rwanda, the integration of employee training, participatory decision making, and functional management into quality systems has improved institutional performance and service responsiveness (Ignace et al., 2025). In Nigeria, TQM has been used to align management practices, customer expectations, and employee participation in a way that fosters agile service systems and improved public trust (Kabir et al., 2024). Despite these advances, many African public institutions still face challenges such as resource limitations, employee disengagement, and poor monitoring systems, which constrain the full realization of TQM benefits (Hagen & Siraj, 2023).

In Kenya, the Huduma Kenya program was launched to reform public service delivery by consolidating multiple services into a single access point known as huduma centers. These centers were established to provide citizen centric, accessible, and timely services as envisioned in Vision 2030 (Muathe & Wandie, 2022). However, despite the promise of this initiative, huduma centers in Nairobi continue to face operational challenges including service delays, inconsistent employee performance, and limited innovation in responding to customer feedback (Gachengo & Murichu, 2023). These shortcomings raise questions about the effectiveness of the TQM practices being applied within these centers.

This situation points to the need for empirical inquiry into the extent to which TQM practices are influencing customer satisfaction within Nairobi County's Huduma Centers. Specifically, there is a lack of localized evidence on how customer focus, employee

involvement, management commitment, and continuous improvement relate to perceived service quality and user experience in these public service platforms. Bridging this gap provided practical insights for institutional managers and policymakers seeking to improve the effectiveness of citizen service delivery in Kenya's public sector.

### ***1.1.1 The Concept of Total Quality Management***

Total quality management is a strategy that aligns how the organization is managed, customer experience and employee empowerment through training by developing of leveraging tactical plans, transparent metrics, and robust internal dialogue to successfully transform and institutionalize a quality-driven organizational culture (Gichure & Gitonga, 2024). Total quality management according to Saud et al. (2024) profoundly amplifies customer satisfaction by stimulating productivity, creativity and innovation, which in turn yields superior service provision. An organization must eliminate waste and improve efficiency of processes in order to achieve success and enhance customer value (Giuseppe et al., 2025).

Total quality management includes continuous improvement, management commitment, customer focus, and employee engagement practices that influence the organizational performance. It also ensures alignment with the organization's mission, vision, and core values by relying on feedback from employees and customers to enhance processes and decision making (Duarte, 2023). Alsqer et al., (2024) argues that an organization that emphasizes customer centricity and customer service excellence in a rapidly changing landscape efficiently and promptly assimilates to the evolving role of technology and evolving customer dynamics ultimately improving the overall performance and success of the organization.

The five main models of total quality management are namely European foundation for quality management excellence model, Deming model, Malcolm Baldrige national quality award, kaizen and quality 5.0 model. The European foundation for quality management excellence model is a holistic approach to quality management that integrates organizational

processes to enhance performance and customer satisfaction (Boullusar et al., 2022). Deming is a management approach for continuous improvement that aids in planning and evaluation of performance to ensure adherence to quality standards therefore ensuring competitiveness and sustainability of an organization (Mayansari et al., 2023). According to Dima & Glykes (2023) Malcolm Baldrige national quality award is a prestigious award aimed at promoting quality management and business excellence in organizations.

In a competitive business environment, organizations have deployed business excellence frameworks to attain and oversee peak corporate performance. Kaizen is a management theory that drives the establishment of a system that focuses on incremental progress to enhance processes, quality, employee performance and employee motivation leading to better productivity and sustained quality (Alshamary & Ramzy, 2024) lastly, quality 5.0 is a transformative approach in quality management with an emphasis on human empowerment, creativity to foster a culture of innovation and collaboration. This concept creates an emphasis on agile management and real time decision making to ensure that an organization remains responsive to both market demands and social challenges in an era of advanced technologies (Maljagic, 2024).

Huduma Kenya generally leans towards the European foundation for quality excellence model, characterized by the emphasis of quality management and business excellence. This enhances operational efficiency and promotes continuous improvement. Public organizations in Kenya are grappling with budgetary constraints and operational efficiency performance challenges, leading them to implement rigorous realignment policies for survival, state corporations have put in continuous efforts for survival and sustainability through the alignment of strategic and operational objectives to manage performance (Oduor et al., 2024). The adoption of the European foundation for quality excellence model enhances employee satisfaction, productivity, growth, and long-term performance (Gitau et al., 2024). In the

current study, total quality management was operationalized in terms of customer centricity, employee engagement, continuous improvement and management commitment.

Customer focus as an aspect of total quality management refers to the organization's commitment to understanding and meeting the needs and expectations of its customers. It emphasizes the importance of customer satisfaction as a primary goal of total quality management practices. (Gichure & Gitonga, 2024). According to Gachengo & Murichu (2023), emphasis on customer focus was to provide valuable and personalized products and services that satisfy the customer wants and needs. The hallmarks of this organizational culture are characterized by the gathering of customer feedback, promptly acting upon this feedback, and tailoring services to meet the changing customer requirements to ensure customers' needs and expectations are met. By embedding customer focus into the culture, organizations can assimilate rapidly to the evolving role of technology and the changing customer dynamics ultimately impacting the overall performance and success of the organization (Alsaqer et al., 2024).

Continuous improvement refers to the regular enhancement in the organizational processes in order to motivate employees and align organizational goals with customer needs (Mwasiaji & Ogwang., 2024). According to Hasan (2024), a culture that values continuous improvement fosters an environment where employees are motivated to consistently explore avenues for improving methods, outcomes, or services. According to Nganga & Nyaga (2022), anticipating the customer needs is fundamental to boost organizational performance. The establishment of service level standards improves how organizational perform. Additionally, customer retention tactics and grievance resolution are pivotal customer focus measures applied to optimize organizational performance.

The dedication and support that management demonstrate to support their organizations goals, values and strategies is referred to as management commitment, which plays an essential

role in shaping the culture and performance of an organization (Oduor et al., 2024). Committed leaders align their actions with the organization's objectives, nurture an enriching workplace culture employees feel valued and engaged, empower employees by involving them in decision making processes, promote a culture of continuous improvement, give precedence to customer needs and expectations (Mwasijaji & Ogwang 2024). According to Oduor et al., (2024) when management demonstrates commitment, they create a sense of community and collective purpose among employees, boost performance, encourage an ethical organizational culture, establish trust among employees, promotes effective change management, innovation and ensures that all team members are aligned with the organization's vision and objectives. This alignment streamlines efforts and resources towards shared common goals.

Employee facets of decision-making process pertaining to their work, are able to access pertinent information, access opportunities to develop pertinent skills, and earn appropriate incentives which leads to increase total output (Faeq, 2022). Employee involvement dimensions of management, team work, training and career development, compensation, and organizational policies impact overall productivity. Employee involvement and participation is applied to support the achievement of organizational goals through calculated activities, initiatives and programs which aim to increase employee involvement in organizational decision-making processes (Ullrich, 2023). Njoroge & Nyaga (2022) claim that empowerment programs are a critical workplace participation measure adopted to improve institutional output. Further, employee autonomy and inventiveness are vital workforce involvement initiatives adopted to bolster corporate performance in a competitive business landscape.

### ***1.1.2 Customer Satisfaction***

Customer satisfaction refers to the degree to which customers perceive their anticipations and requirements are fulfilled upon delivery of a product or service. It is essential to business success because customer experiences notable impact repeat purchases and brand loyalty

(Madjoub et al., 2024). The key elements that influence customer gratification encompass the service quality, reliability of the service, service responsiveness, staff knowledge, empathy and the accessibility of services and facilities (Sopia et al., 2024). Subedi. (2024) noted that organizational performance is often evaluated through key performance indicators (KPIs) such as customer feedback and suggestions, brand loyalty, market share repeat purchase rates, product performance and customer satisfaction metrics. These metrics help determine how well the organization is fulfilling its mission and generating value for its stakeholders.

Oduor et al., (2024) argues the importance of customer satisfaction lies in its direct impact on the long-term sustainability and success of a company. High performing organization effectively use resources, satisfy customers, and maintain a competitive edge in the evolving market. It also reflects an organization's ability to innovate, assimilate to changes, and achieve its strategic goals (Mwasiaji & Ogwang, 2024). Strong organizational performance is key in order to attract and retain talent, secure investment, and building a positive brand image. In addition, operational efficiency enables these organizations to grow, expand their operations, and deliver value to stakeholders (Demirova & Dimitrov 2024).

Operational indicators of customer satisfaction are the measurable metrics that provide insight into how effectively an organization is achieving its goals. These indicators can include response time, service quality, product availability, after sales support, customer retention rate and complaint resolution rate (Subedi, 2024). In the current study, the indicators of customer satisfaction that was examined are service quality, response rate, accessibility, convenience and staff professionalism. These indicators have been selected to assess how total quality management influence the customer satisfaction among huduma centers in Nairobi County, Kenya, since they provide a holistic view of both internal and external factors that contribute to customer satisfaction.

### ***1.1.3 Huduma Centers in Nairobi County, Kenya***

In the time before the one stop shop Public Service delivery model of Huduma Kenya, citizens seeking government services experienced challenges such as lengthy queues at service points, queue jumping, dispersed service points, service delivery delays, open discrimination in service provision, corruption, high transaction costs, services were 'owned' by specific government services, manual processes and negative attitude from service providers (Nganga, 2023). This necessitated the development of the one stop shop service delivery model which was launched by President Uhuru Kenyatta in 2013 to transform Public Service delivery in Kenya and preserve the dignity of citizens.

In order to track the progress of service delivery improvement, initiatives aimed at improving the organizations overall performance, top management teams in organizations can use metrics such as net promoter index and the ease of customer interaction with the services. Net promoter index and customer effort to services gauge an organization's success in service delivery. Furthermore, customer fulfillment is indispensable in evaluating an organization's performance in the market-based service roll out which ultimately, fosters customer loyalty (Ilkme, 2024).

The Huduma Kenya Service Delivery program is a vision 2030 flagship project established vide Kenya gazette notice No. 2177 of 4<sup>th</sup> April, 2014 mandated to transform public service delivery in order to ensure efficient, effective, accessible and citizen centric services through Huduma Kenya service delivery one stop shop platforms. Across the 47 Counties in Kenya, there are 57 Huduma centers as well as other service delivery platforms such as, Huduma contact center, Huduma mashinani outreach program and Huduma electronic and mobile platform. Collectively, these service delivery platforms serve approximately forty thousand (40,000) customers daily nationwide, primarily through Huduma centers. The Huduma Kenya secretariat manages the program, and a key objective was to establish and sustain partnership,

collaborations and linkages for its integrated service delivery platforms. The ministry highlights five core values for Huduma Kenya being innovation, transparency, courtesy, efficiency, and integrity (Ministry of Public Service and Human Capital Development, 2024).

Huduma centers offer a plethora of public services such as Driver's licenses, new business registrations, identity cards, police clearance certificates, SHA, filling of KRA returns and NSSF registration among others (Nganga, 2023). The Ministry highlights five core values for Huduma Kenya being innovation, transparency, courtesy, efficiency, and integrity. Conducting the current study on the effect of total quality management on the customer satisfaction among Huduma centers in Nairobi County, Kenya is particularly worthwhile given that total quality management directly influences perceived service quality and customer expectations. These are critical in enhancing satisfaction levels, especially in evolving service industries (Misuko & Omore, 2023).

### **1.2 Statement of the Problem**

Huduma centers were introduced as a flagship initiative under Kenya's Vision 2030 to enhance efficiency, accessibility, and responsiveness in public service delivery (Government of Kenya, 2023). These centers aim to consolidate essential services such as identity card registration, KRA services, NSSF enrolment, and driver's license applications into a single platform, thereby improving citizen convenience and reducing bureaucratic delays (Nganga, 2023). When functioning optimally, Huduma centers not only improve customer satisfaction but also build public trust in government, enhance administrative efficiency, and promote socio economic inclusivity through equitable access to services (Misuko & Omore, 2023). In an ideal state, high levels of customer satisfaction would reflect seamless service delivery, prompt staff responsiveness, and continuous service innovation all of which are crucial in strengthening governance and economic development.

However, despite the intention behind their establishment, customer satisfaction in Huduma centers in Nairobi County remains sub optimal. According to the Ministry of Public Service (2024), over 60 percent of complaints logged at Nairobi's Huduma centers relate to long queues, delayed service turnaround times, and inadequate feedback resolution. A 2023 audit by the Public Service Commission also reported that only 56 percent of users were fully satisfied with the quality and speed of services received. These operational inefficiencies not only compromise citizen trust but also threaten the effectiveness of the government's broader service delivery agenda. Studies suggest that the adoption of TQM practices such as employee involvement, customer focus, management commitment, and continuous improvement can significantly improve service quality and satisfaction levels in public sector organizations (Mukherjee et al., 2023; Alallq, 2024). Therefore, optimizing these TQM practices within huduma centers could offer a strategic solution to the persistent gaps in service delivery and customer experience.

The fundamental problem statement is rooted in a critical performance gap being that despite the Government of Kenya's strategic commitment to quality service delivery, exemplified by the roll-out of total quality management principles through the Huduma Centre model indicates a persistent disparity between the promised service standard and the citizen's actual experience. While Huduma Centres represent the model of integrated public services, the efficacy of the TQM dimensions being customer focus, employee involvement, management commitment, and continuous improvement translating to high customer satisfaction remains empirically unverified in this setting. This gap necessitates an empirical investigation, leading to the central research inquiry guided by the alternative hypothesis that total quality management practices of customer focus, employee involvement, management commitment, and continuous improvement have a statistically significant positive effect on customer satisfaction among Huduma Centres in Nairobi County, Kenya.

While TQM has been extensively studied in various sectors globally, few studies have focused specifically on its application within Kenya's huduma centers. For instance, Mwangi & Rugami (2024) assessed customer responsiveness at the Kenya Revenue Authority but did not explore TQM dimensions in integrated service centers. Kurti & Kina (2024) examined citizen satisfaction in one stop shops in Albania but did not incorporate the TQM framework. Locally, Wambura (2017) highlighted systemic inefficiencies in Nairobi's Huduma centers but did not empirically examine how TQM practices influence customer satisfaction. This study sought to fill this empirical gap by investigating the effect of customer focus, employee involvement, management commitment, and continuous improvement on customer satisfaction in Huduma centers in Nairobi County. The findings generated data driven insights to inform operational reforms and enhance citizen experience in public service delivery.

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

The general research objective was to establish the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Kenya.

The specific objectives were to:

- i. To assess the effect of customer focus on customer satisfaction among Huduma centers in Nairobi County, Kenya.
- ii. To explore the influence of employee involvement on customer satisfaction among Huduma centers in Nairobi County, Kenya.
- iii. To examine the effect of continuous improvement on customer satisfaction among Huduma centers in Nairobi County, Kenya.
- iv. To evaluate the influence of management commitment on customer satisfaction among Huduma centers in Nairobi County, Kenya.

#### **1.4 Research Hypothesis**

The study tested the following hypothesis in line with research objectives:

*H<sub>01</sub>: Customer focus has no significant effect on customer satisfaction at Huduma centers in Nairobi.*

*H<sub>02</sub>: Management commitment has no significant effect on customer satisfaction at Huduma centers in Nairobi.*

*H<sub>03</sub>: Continuous improvement has no significant effect on customer satisfaction at Huduma centers in Nairobi.*

*H<sub>04</sub>: Employee involvement has no significant effect on customer satisfaction at Huduma centers in Nairobi.*

#### **1.5 Significance of the Study**

The study is of notable to the following beneficiaries:

##### ***1.5.1 Policy Makers***

This study holds notable value for policymakers in Kenya. By understanding the impact of total quality management practices in enhancing customer satisfaction, policymakers can develop regulations and policies that encourage business process reengineering of processes. These insights are valuable for creating frameworks that encourage employee training, continuous improvement initiatives and technological upgrades, all of which are essential for the industry's growth and stability. Additionally, the outcome can inform policy initiatives aimed at developing resilient performance monitoring and evaluation frameworks for Huduma centers. These enables policymakers monitor their progress and identify areas for improvements to ensure that public service delivery initiatives meet citizen's needs.

### ***1.5.2 Huduma Centers in Nairobi County, Kenya***

This study offers valuable insights into the factors that drive customer satisfaction. By identifying the key total quality management practices that drive success, Huduma centers can establish a system for monitoring and evaluation of customer satisfaction, guide better resource allocation decisions and cultivate a culture of continuous improvement at the Huduma centers. The study offers a roadmap for Huduma centers to assess and address operational inefficiencies that negatively impact customer experience, leading to enhanced service delivery, improved public image and increase public trust in the government's capacity to deliver efficient and effective services. Ultimately, the outcome can help Huduma centers to achieve sustainable growth and meet the evolving needs of their customers.

### ***1.5.3 Researchers and Academicians***

Academicians will find value in this study, as it fills a notable empirical gap in the existing literature on total quality management and its impact on customer satisfaction among Huduma centers in Nairobi County, Kenya. The study enriched scholarly literature by providing a comprehensive analysis of how specific integrated total quality management strategies influence customer satisfaction in a key sector of the economy. Moreover, the study's outcome can provide as a foundation for future research investigating the relationship between total quality management and customer satisfaction across different contexts. By enhancing the understanding of these dynamics, the study also enriches academic discussions and supports the development of strong theoretical frameworks within the field of public organizational studies.

### ***1.5.4 Community***

This study is designed to generate findings that will directly benefit the community by identifying the operational inefficiencies that affect the customer experience at huduma centers,

the research will provide actionable insights to improve service delivery which will enhance public trust in the Government's ability to provide efficient and effective public services. To ensure the community receive a direct benefit from this study, the findings will be disseminated to relevant stakeholders. A summary of the key findings and recommendations will be shared with the management of huduma centers to facilitate a data driven approach to improving service delivery. This dissemination strategy will ensure the community participates directly to policy and operational improvements, ultimately leading to better customer experience.

#### **1.6 Scope of the Study**

This research study was limited to examining effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Kenya. Specifically, the study assessed four independent variables: customer focus, employee involvement, management commitment, and continuous improvement. The dependent variable was customer satisfaction among Huduma centers in Nairobi County, Kenya. The population of the study was all the 5 huduma centers operating in Nairobi County. The target respondents were staff and customers in each Huduma center. The sample size was 384 for customers and 196 huduma centre staff. A descriptive survey research design was utilized while descriptive; correlation and regression analysis was conducted in data analysis. The study was carried out in September 2025.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

The following chapter examined the empirical literature of academic surveys that explored how total quality management practices affected customer satisfaction among Huduma centers. The chapter explored four theories Deming theory of profound knowledge, Juran theory, kaizen theory and expectancy disconfirmation theory that guide this research.

#### 2.2 Theoretical Review

The concepts that formed the foundation for examining how total quality management in this segment, relates to customer satisfaction. These were the Deming theory of profound knowledge, Juran theory, kaizen theory and expectancy disconfirmation theory.

##### *2.2.1 Deming Theory of Profound Knowledge*

Deming (1982) posits that quality involves not just fulfilling the client's expectations but surpassing them. Deming theory of profound knowledge (2018) is therefore grounded on the concept that all organizations function within systems comprising of interconnected people and processes. The system of profound knowledge comprises of four components: appreciation for a system, knowledge about variation, theory of knowledge, and psychology. The success of employees, as guided by the theory, is dependent on the commitment of the management towards the effective balance of the interconnected processes and people to optimize the entire complex system.

According to Deming (2018) he proposed the following fourteen point framework for transforming organizations quality and productivity: institute training on the job, constantly improve the system of quality and service, create a constant aim of refining goods and services accompanied by implementing resilient governance, abolishing superficial slogans and targets

for workforce, institute a dynamic program for knowledge acquisition and personal growth for employees, break down barriers between departments, implement an innovative concept, cease dependence on post production review to guarantee quality standards, end the practice of awarding business on price alone; instead, minimize total cost by working with a single supplier, dispel intimidation, eliminate arbitrary metrics for the workforce and numerical goals for management, the successful realization of this transformation mandates the active and unified participation of every individual across all organizational levels and remove barriers that reduce employees pride in their work. The understanding of total quality management from the perspective of the Deming theory allows for the development of frameworks that enhance management practices and quality management (Mayansari et al., 2023).

While Deming model is widely respected for its comprehensive approach to total quality management, it has faced some criticisms. One major critique is that the Deming cycle requires the allocation of notable resources and time which may not be practical in organizations with limited capacity, as uncovering underlying assumptions can be a complex and time-consuming endeavor (Zann et al., 2021). Additionally, critics also contend that the PDCA cycle, which is a continuous improvement model, can take very long in the planning stage. This planning stage primarily focuses on effective data collection and analysis which poses difficulties for organizations that lack internal expertise, with the actual work commencing in the act stage. Furthermore, the theory presumes a relatively stable environment, which may not hold true in organizations experiencing rapid change or dealing with diverse societal influences (Chapman, 2019).

Deming theory is highly pertinent to the objectives of the current study, which sought to understand the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Kenya. By structuring the employees, processes and management to focus on a unified strategic direction, organizations can apply the Deming

framework in total quality management to enhance customer satisfaction and improve overall performance. The theory provided a framework for assessing systemic aspects of total quality management deployment. Moreover, it guided the interpretation of outcome related to management commitment and continuous improvement. Furthermore, it aided in the understanding of how these factors impact customer satisfaction.

### ***2.2.2 Kaizen Theory***

Kaizen is a Japanese concept which posits that organizations enhance quality via incremental enhancements in processes and the workforce. In 1986 Japanese expert Masaaki Imai leveraged the kaizen principle to boost Toyota's production and market edge. As a result, the notion of kaizen became ingrained in the Japanese manufacturing as it proved too be a notable measure of progress and survival (Masaaki & Seiitiro, 1986). The theory requires employees to collaborate in order to identify inefficiencies in processes that enabled the development and deployment of corrective measures for continuous improvement, as a result amplifies productivity and quality at the organization.

The notable values which kaizen which are: discipline, honesty, trust, communication, good organizational order, neatness, equanimity, and habit formation. These result in benevolence and compassion are implied by this theory in an organizational context. (Arsyad et al., 2021). These values create a positive organizational culture that enhances performance. According to Alghofeli (2022), management are urged to engage the workforce in the quality improvement initiatives that drive innovation, to achieve maximum organizational performance that allowed it respond to organizational shifts.

While kaizen theory has been influential in understanding customer satisfaction, it has also faced several criticisms. One major critique is that the theory tends to oversimplify the complex systems and processes of ongoing collection of monitoring data and does not account for employee resistance of standard procedures in the deployment process which reduce their

autonomy (Kareska, 2024). Additionally, critics argue that the deployment of the kaizen theory requires extensive training of the employees to enhance their buy in which may pose a challenge for organizations with resource constraints (Kunda & Mwanza 2025). Furthermore, kaizen theory has been criticized for its slow deployment which may not deliver the required quick response to the changing environment. The need to develop an organizational culture of open communication, employee involvement and commitment to continuous improvements causes this slow deployment (Zhang et al., 2023).

Kaizen theory holds notable relevance to the current study on the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Kenya, especially in relation to employee engagement and management commitment. Kaizen and total quality management are two basic concepts that enhance the continuous improvement of organizational processes to impact positive changes in employees' and management's mentalities and behavior. The theory provides an effective paradigm for discerning the correlation between employee's empowerment and sustained improvement and their contribution to enhanced service quality and customer satisfaction. This aligns with the study's objective of assessing how the kaizen principle of continuous improvement drives customer satisfaction among Huduma Centers. By applying kaizen Theory, it provides insights into how fostering a positive and equitable organizational culture can enhance customer satisfaction.

### ***2.2.3 Expectancy Disconfirmation Theory***

The expectancy disconfirmation theory was developed by Oliver (1980) as a model for understanding how customers form satisfaction or dissatisfaction of products and services. The theory suggests that consumers form expectations of products and services before purchase or usage. As a result, customer fulfillment is a positive outcome of the difference between actualized performance and their prior anticipations. Expectancy disconfirmation occurs in three forms: positive disconfirmation which happens when actualized performance surpasses

anticipations. Confirmation which occurs when observed delivery aligns with client expectations. Negative disconfirmation which occurs when experienced efficacy falls short falls short of the customer expectations. The adept execution of total quality management principles by way of maintaining high standards in quality management improves employee performance which fosters positive customer experience (Bakhtiar & Parhan, 2024). According to Chen et al., (2022) expectancy disconfirmation theory is a resilient tool that governments can implement to assess citizen experience and satisfaction. Citizen satisfaction can be tracked overtime to better link changes in perception of performance, satisfaction and expectation to changes in management and environmental factors.

Despite expectancy disconfirmation theory being widely used and appreciated for its practicality, it has also faced several criticisms. According to Arhin & Cobblah, (2024), the theory assumes that customer expectations are straightforward and easily measured. However, expectations can be multifaceted and shaped by diverse variables rendering them challenging to reliably assess. Another criticism is that the theory views customer satisfaction as static whereas these expectations change over time based on experiences, marketing communications and social influences. Moreover, the model has been critiqued for its emphasis on performance as the key determinant of satisfaction. This is potentially not factoring in other factors such as emotional responses, convenience, brand loyalty and social influences which shape customer satisfaction. Further, the theory does not account for cultural differences in customer expectation and what constitutes satisfactory service, therefore limiting the application of the theory in diverse environments (Bollenbach et al., 2024).

Expectancy disconfirmation theory is highly pertinent to the current study on the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Kenya. The theory provides a structured approach to analyzing citizen expectation of public services and how they are influenced by key indicators such as emotional

responses, convenience, brand loyalty, and social influences. By identifying the dominant indicators within the Huduma centers, the study can assess how these indicators impact customer experiences to guarantee that the service performance meets customer service desires. This enabled the organization to attain high levels of customer satisfaction. The ability of the theory to highlight these tradeoffs and balances makes it a valuable tool for understanding the complex interplay between total quality management practices and customer satisfaction in the public service sector.

#### **2.2.4 Juran Theory**

Juran Theory by Joseph Juran (1986) posits that quality management should be an integral part of a company's culture. The three faceted Juran trilogy which encompasses quality planning, quality control, and quality improvement furnishes a framework for organizations seeking to upgrade their products and services. This theory underscored the need for top management to actively engage in and champion quality initiatives to ensure that quality is a core corporate principle (Zairi, 2020). Juran's believed that quality does not happen by accident, there is need for systematic planning and process. The theory is founded on the pareto principle which considers the root cause of a problem to identify an effective and creative solution. This requires the management commitment to quality and the employees support in ongoing quality improvement initiatives. As a result, Dickson (2024) argues organizations that implement quality control through staff training and setting standards for quality, achieve standardized outputs and reduced margins of error which ensures customers' demands for high quality is achieved.

Despite its widespread adoption, Juran theory has been critiqued for being too structured, potentially stifling innovation and assimilation in rapidly changing environments. Organizations can be limited in their ability to respond to new challenges and opportunities effectively. Critics also suggest that the focus of the theory on statistical quality control may

result in failure to consider qualitative aspects of the organizational performance. These are employee satisfaction and customer experience, which have become increasingly important in today's service-oriented economies (Fernández & Rodríguez, 2011). Additionally, the application of Juran's principles in real world settings may not always reflect the complexities and nuances of actual organizational environments, leading to criticisms of its practical relevance. The theory may not adequately address the reflective and social dimensions of quality management. These are crucial for encouraging a core corporate culture of continuous improvement and collaboration and there is a tendency to generalize Juran's principles across different contexts, which can lead to skepticism about their universal applicability and effectiveness (Bach, 2023).

In the context of the study on the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi County, Juran theory is highly pertinent. The theory helps explain how customer satisfaction is influenced by management commitment to continuous improvements in quality planning and control. By understanding these influences, the study can better assess how quality standards within Huduma centers are adopted and how they impact the consistency and reliability of service delivery which are direct drivers of customer satisfaction. Moreover, the theory provides a framework for examining how Huduma centers in Nairobi County may seek legitimacy through the alignment of their organizational strategy with citizen expectations, ultimately influencing their goal to transform public service delivery in Kenya.

### **2.3 Empirical Review**

This section examined previous research conducted by other academicians on how total quality management practices influence customer satisfaction globally, regionally, and locally and presents the existing research gaps.

### ***2.3.1 Customer focus and Customer Satisfaction***

There are various studies that have been done in relation to customer focus and customer satisfaction. In Zimbabwe, Dube et al. (2020) conducted a comprehensive study on the impact of customer centric strategy on customer satisfaction at Golden Hotel in Zimbabwe. The research aimed to determine whether customer-oriented practices, including customer centric people, technology, leadership, and processes, positively influence customer satisfaction in the hospitality industry. The study applied a descriptive research design approach, collecting data through structured questionnaires administered to 196 respondents being employees and customers. The outcome indicated that organizations that give precedence to customer centered practices experienced high customer satisfaction attributed by the employees demonstrating the appropriate skills and behaviors supported by leadership and technology. Although this study provides valuable insights into the customer focus, it primarily focuses on hospitality industry, leaving a gap in understanding how total quality management practices could improve customer satisfaction in other service-oriented sectors, such as public service centers in emerging markets like Kenya.

Yaacob. (2014) investigated the impact of quality management on muslim customer satisfaction in Malaysia. The study applied a mixed methods approach, collecting data through questionnaires with sample size of 276 respondents from private and public firms. The outcome revealed that customer centricity was a core predictor of muslim customer contentment. The study highlighted that the client input is used to deploy quality assurance, thus this would yield positive outcomes on customer satisfaction. Inputs from customers are deemed notable due to each customer having their own belief and tenets, which may likely affect their behavior and perception. For the muslim customer, they consult Islamic teachings as a reference point in their consumer behavior and purchasing decision, they associate service quality as being either haram, halal, honest and attentive to Islamic religious activities. While the study provides

valuable insights into the value of customer focus in the muslim context, it identified a gap in the literature regarding the effectiveness of QM on customer satisfaction by considering the perspective of religious obligation of any particular group of customers. This justifies further research to explore the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi, to potentially uncover unique factors influencing customer satisfaction.

Kalinin (2023) explored the deployment of customer centric principles in Russian public governance. The study provided a framework for understanding the challenges and considerations involved in adopting customer centric practices in public administration, it highlights the importance of aligning public services with client needs. The research highlighted that for a firm to achieve and maintain long term success; it must give precedence to customer focus as a key component of its strategic goals. However, the study revealed a gap of knowledge regarding the best practices for customer centricity in public administration, therefore indicating the need for further research on the public sector.

Kurti & Kina (2024) examined the drivers of citizen satisfaction with the quality standards of unified public services provided by one stop shops (OSS) service hubs in a municipality in south Albania, a Western Balkan country. The research applied a quantitative approach, utilizing a structured questionnaire distributed to 114 citizens who were receiving services at the OSS. The outcome offered an effective standard instrument for evaluating and understanding the perceived quality of integrated public services from the citizens' perception of service excellence. This understanding contributes to the formulation of more effective policies and strategies aimed at enhancing public service delivery and incorporating best practices in public management. The study provided insight into customer satisfaction at one stop shops. However, the study did not explore how TQM practices can influence customer satisfaction. Understanding these dynamics enables the development of strategies that are more

effective in meeting customer needs, therefore justifying the effects of total quality management practices on customer satisfaction in similar service centers, such as the Huduma centers in Nairobi, Kenya.

Mwangi & Rugami (2024) conducted a study on how customer responsiveness influences the performance of the Kenya Revenue Authority in Mombasa County, Kenya. The study applied a descriptive research design and collected data from 134 KRA technical staff using close ended questionnaires. The results showed that technology, service level agreements and top management support were notable predictors of organizational performance and success. To enhance organizational performance, the research underscored the need for development of customer responsiveness strategies that improve organizational performance. It highlights the role of technology, SLAs and management support, which guide policy and operational advancements. While this study provides insights into the influence TQM practices could have on customer satisfaction and service delivery in public service institutions, there was a need for similar research in the other public service institutions such as Huduma centers.

Mokaya & Kwamboka (2021) studied the impact of customer-centric digital service integration on user satisfaction within E-Citizen platforms in Nairobi. Their findings highlight that in the context of integrated public service delivery which are the backend of Huduma Centres, customer focus requires to extend beyond mere politeness to encompass the ease of system accessibility, service predictability, and reduction of digital friction. This research grounds the variable not in generic TQM theory, but in the modern reality of Kenyan public administration, justifying its definition in the conceptual model as the strategic alignment of service processes around citizen convenience and perceived effort.

### ***2.3.2 Employee involvement and Customer Satisfaction***

Hoang & Tran. (2024) conducted a study on the relationship between employee participation and job performance in public service across various public institutions in Vietnam. The study

applied a quantitative research design using partial least square regression analysis and surveyed 416 employees and managers. The study discovered that when employees have a role in the design and deployment of performance measures, their motivation to serve the public increase, which in turn improves how they perform their job. This demonstrated that by encouraging employee participation, public sector leaders can improve employee performance and work efficiency. The study recognized that employee participation is crucial in job performance. However, it highlights a gap on the specific management strategies utilized to engage employees in quality management processes leading to higher customer satisfaction when applied in emerging economies like Africa.

Kim (2023) examined the impact of participative management practices on motivation of employees in South Korea. Results indicated that participative management positively influences organizational citizenship behavior among public employees. This implies that when employees are engaged in their jobs and management practices rational, employees exhibit behaviors that are beneficial to the organization. The study emphasized the role of management and organizational support in fostering commitment. Although the study focused on public employees in South Korea, there exists a gap in literature of the unique socio economic and cultural factors that impact employee behavior in developing countries.

Haji et al., (2024) conducted a study on the impact of employee involvement on performance within public health hospitals across four selected district health facilities in Zanzibar. The study applied a quantitative approach using a cross-sectional descriptive design to collect data through random sampling of 281 healthcare workers from a total population of 592, all of whom had a minimum tenure of three months, through the use of questionnaires. The study found that increase employee involvement leads to achievement of organizational goals and adherence to policies. It was noted that companies with strong internal communication and employee development programs tend to have more committed employees, leading to better

performance. Although the study provides valuable insights, it primarily focuses on health institutions, necessitating further exploration in the public service sector of Huduma centers.

Nnko (2024) conducted a study to investigate the approaches applied by public entities to elevate employee involvement and participation in the strategic planning process in Dar es Salaam, Tanzania. The study highlighted the importance of employee involvement for the successful deployment of strategic objectives. The study utilized a qualitative research design, undertaking interviews with 20 participants in the public sector. The outcome showed that approaches involving collaborative forums of participatory workshops, working groups, professional growth initiatives, feedback mechanisms and transparent communication channels, performance management incentives and perpetual initiatives to create a more inclusive and collaborative strategic planning process, which consequently leads to coherence and improved personnel commitment. While the study examined the governments in Tanzania, these outcomes may not be directly applicable to the public sector in Kenya therefore suggesting a contextual gap in applying these outcomes to public service sector in Kenya.

Wanjiru (2020) examined empowerment and accountability in public service performance in Kenya. The analysis provides a clear framework for defining involvement as the level of staff autonomy, the right to make on-the-spot decisions, and active participation in service improvement teams. This body of work is crucial because it ensures employee involvement is not conceptually overlapped with simple training. Instead, it positions employee involvement as the managerial strategy of empowerment, which is a behavioral construct essential for service agents to resolve complex customer issues immediately, thereby directly impacting the citizen experience.

Wanyoike (2023) examined the effect of workforce morale on institutional performance within Kenyan government Ministries and public sector parastatals in Kenya. The study applied an empirical literature review as its research design which allowed the researchers to analyze

existing literature on employee motivation and its impact on organizational effectiveness. The outcome indicated that providing opportunities for career growth enhances employee motivation which in turn positively impacts their productivity and efficiency. A positive work environment that aligns individual employee goals with the organization's objectives, establishes clear communication channels, provides career growth opportunities, reward and recognition frameworks fosters a sense of belonging and loyalty among employees which is crucial for organizational success. Although the study offers valuable insights, it necessitated further exploration in other organizations in the public service sector such as Huduma centers that aim to improve citizen satisfaction in alignment with the public service transformation reforms.

### ***2.3.3 Management Commitment and Customer Satisfaction***

Aufa et al., (2024) conducted a study on the effect of leadership and work environment on organizational commitment in Kudus, Indonesia. The study gathered data from 173 employees in the production department of PT Duwa Atmimuda Kudus. The results showed that a supportive work environment enhances employee satisfaction. The outcome can help organizations understand the impact of a positive work environment in enhancing job satisfaction and employee commitment to organizational goals. The study concluded that management practices and policies improve employee engagement and retention which is crucial for enhancing customer satisfaction. However, given its focus on the manufacturing sector in Indonesia, there is a contextual gap in understanding how these outcomes apply to the public service industry in Africa.

Anwar et al., (2022) conducted a comprehensive study on the impact of autocratic and inclusive leadership on the pledge of frontline employees' commitment to service quality facilitated by information sharing in Pakistan. This boosts staff dedication to service excellence, encouraging desirable behavior. The study analyzed data distributed to 37 hotels

with a sample size of 235 frontline employees who participated in the survey. The outcome revealed that participative leadership positively influences commitment to service quality. The study emphasized that frontline employees benefit from mentorship and guidance while delivering service to customers. The timely support of participative leaders inspires and involves frontline employees in decision making which ultimately, stimulates positive attitudes and behavior toward quality service delivery. However, the study's Pakistani focus means its outcome may not fully apply to emerging markets like Kenya.

Aali et al., (2020) explored the relationship between corporate management and customer allegiance by exploring the correlation between discord management, relationship quality and customer loyalty in Agriculture bank of Iran. The study surveyed 417 customers of the bank selected using simple random sampling and research hypotheses were tested using structural modeling practices. Effectively manage conflict between employees and customers, it can enhance the quality of customer employee relationship, ultimately resulting in enhanced customer loyalty. The outcome revealed that corporate governance by addressing disputes between employees and customers can elevate the quality standard of the customer and company relationship which leads to customer fidelity. However, the study reflects the perspective of Iranian bank customers. This highlights the importance of context in organizational leadership in other developing countries, as the outcome may vary across different sectors and regions.

Bhaskoro et al., (2022) examined the influence of leadership and communication approach on institutional commitment with member satisfaction as an intermediary factor for members of women's cooperatives in Malang city, Indonesia. Using questionnaires, the study collected data from 258 cooperative. The outcome revealed a notable positive relationship between leadership and communication on organizational commitment. The study highlighted that the use of transformational leadership styles notably improves member satisfaction, which

enhances organizational commitment. However, because this study concentrated on the financial services sector, there is need for similar research in other sectors such as the government in Nairobi.

Kipkirui (2023) investigated the role of leadership support in the implementation of service charters within State Corporations. This study is highly relevant as it underscores that the translation of quality policy being the essence of management commitment from the directive level to the operational level at the Huduma Centres is fundamentally dependent on visible resource allocation, consistent accountability systems, and the championing of quality goals. This scholarly work justifies management commitment as a necessary prerequisite and enabler that sets the tone for all other total quality management practices.

Awuor & Maina (2020) investigated the link between leadership dedication and effectiveness of quality assurance frameworks in concrete production firms in Kenya. The study applied a descriptive research design. Stratified random sampling practices was used to obtain data from 126 respondents using structured questionnaires. The results indicated that a resilient connection exists between leadership dedication and performance of quality assurance systems. Leadership ought to be devoted to planning, assigning pertinent authorities and responsibilities for sustaining the quality management systems, determining the context of the organization, monitoring and evaluating the effectiveness of quality assurance protocols, internal audits, conducting executive evaluations and ascertaining the outcomes of the quality management system. While this study provides insights into the importance of leadership commitment in an African context, it focused on the manufacturing industry, leaving a gap in understanding its impact in public organizations.

#### ***2.3.4 Continuous Improvement and Customer Satisfaction***

Hammami et al. (2022) explored the deployment of the 5S kaizen total quality management approach in a public hospital in Tunisia. The research design involved the deployment of the

5S (sort, set in order, shine, standardized and sustain) kaizen TQM approach through use of seminars and training sessions for staff members in the selected departments. Data collection methods included satisfaction surveys and interviews. The results indicated a notable positive relationship between the deployment of the 5s kaizen TQM approach had positive implications for both employee and patient satisfaction due to decreased error rates, reduced process lead times, enhanced work environment leading to higher customer and patient satisfaction. The study emphasized the importance of continuous improvement in service delivery of the Tunisian health sector and customer relationship management to enhance satisfaction and consequently, performance. Although the study offers valuable insights, it was centered on public health sector in Tunisia, necessitating further exploration in the public sector of another emerging economy such as Kenya.

Mitreva & Stojanovski (2020) explored the application of the kaizen methodology, on quality of sales processes within a Macedonian insurance company. The study aimed to identify and implement quality methods and practices that can lead to better sales performance and customer satisfaction using a mixed method approach. Primary data were collected through observation methods, allowing for direct insights into the company's operations. Secondary data were sourced from public records published by state agencies and internal reports from the insurance company. The results indicated that the application of the kaizen methodology leads to notable improvements in the sales processes of the insurance company. The study revealed crucial information regarding the firm's achievements, market trends, and customer needs which aid in making informed decisions about pricing strategies and the introduction of new insurance products. Despite its impact in providing valuable insight on the insurance sector in Europe, the study does not specifically address the public services sector, suggesting an industry specific gap.

Debnath (2019) conducted a study on the deployment of Kaizen principles in a biscuit manufacturing unit which is part of the Imperial Tobacco Company in India. The study collected data through direct observations, unstructured and semi structured interviews with pertinent personnel, and analysis of production processes. The outcome revealed that higher levels of improvements in the manufacturing process were notably associated with the deployment of kaizen. The study emphasized that kaizen deployment acts as a catalyst for improvement in product quality and reduction in product complaints. These changes enhance product consistency and quality, which are crucial for achieving customer satisfaction. However, the study's focus on manufacturing sector suggests a contextual gap when applying these outcomes to the government sector in Kenya.

Firman & Ilyas (2021) examined whether the kaizen approach impacts customer fulfillment at the economy accommodation hotel in Makassar, Indonesia. The study collected data from 50 respondents. The outcome showed that higher levels of communication practices were linked to improved business performance, measured through increased customer retention. The study also found that the kaizen strategy has a notable impact on the level of customer contentment at the budget hotel in Makassar. While this study provides insights into the relationship between continuous improvement and customer satisfaction in the context of the hospitality industry in a developing country, it focused on Indonesia. This leaves a gap in understanding this relationship in other sectors like the public sector in developing countries.

Njoroge (2024) examined organizational learning and process innovation in Kenyan government ministries. Njoroge's research distinguishes continuous improvement from process management by focusing on the adaptive capacity of the institution being the ability to learn from mistakes, actively solicit and integrate customer feedback, and revise standard operating procedures. This perspective confirms that continuous improvement is a unique construct representing the dynamic element of TQM, ensuring the model avoids duplication

with process management to capture the organization's proactive effort to enhance service delivery over time.

Apollo et al., (2021) conducted a study on the influence of the application of the gemba kaizen executive management tenets influence on staff output in Kenya Wildlife Service, Tsavo East National Park, Kenya. The study adopted a descriptive research design directed towards employees of Kenya wildlife service, Tsavo east national park. Data was collected through questionnaires issued to 202 respondents. The study revealed that the gemba kaizen senior leadership commitment principle considerably swayed staff performance in the Kenya wildlife service. According to the study, employees are more productive when the top management shows commitment. This encompasses conveying the significance of adhering to compliance requirements, establishing the quality excellence standards, ensuring that quality objectives are established, conducting administrative appraisals and guaranteeing the provision of essential resources. This in turn contributes to customer satisfaction and increase employee performance which allows the organization achieve its objectives. The research highlighted that deployment of kaizen was critical in driving customer satisfaction. However, the study focused on a public institution domiciled in Tsavo, indicating a contextual gap in applying these outcomes in Nairobi.

#### **2.4 Critique of Literature and Research Gaps**

Dube et al., (2020) found that organizations in the hospitality sector that give precedence to customer centered practices experienced high customer satisfaction attributed by the employees demonstrating the appropriate skills and behaviors supported by leadership and technology. However, this study focused on the hospitality industry in Zimbabwe which leaves a gap in the understanding of how total quality management practices impact customer satisfaction in other service-oriented sectors such as the public service centers in Kenya. Yacoob (2014) investigated the impact of quality management on muslim customer satisfaction

in Malaysia and found that prioritizing customer notably foretold customer satisfaction in the muslim sector. The study had a gap of the effect of total quality management on customer satisfaction of persons with diverse religious obligations. Therefore, this justified further research to reveal how total quality management plays a crucial role in shaping the customer satisfaction in a diverse environment such as Huduma Centers in Nairobi.

Kurti & Kina (2024) examined the determinants of citizen satisfaction with the quality of integrated public services provided by one stop shops in a municipality in south Albania, a Western Balkan country. The study provided insights on the one stop shop model however, it did not explore how total quality management practices influence Customer satisfaction in the one stop shop model, therefore justifying further study in similar service centers of Huduma centers. Mwangi & Rugami (2024) explored the relationship between total quality management and customer satisfaction in Kenya revenue authority, which necessitated the need for research in similar public service institutions such as Huduma centers.

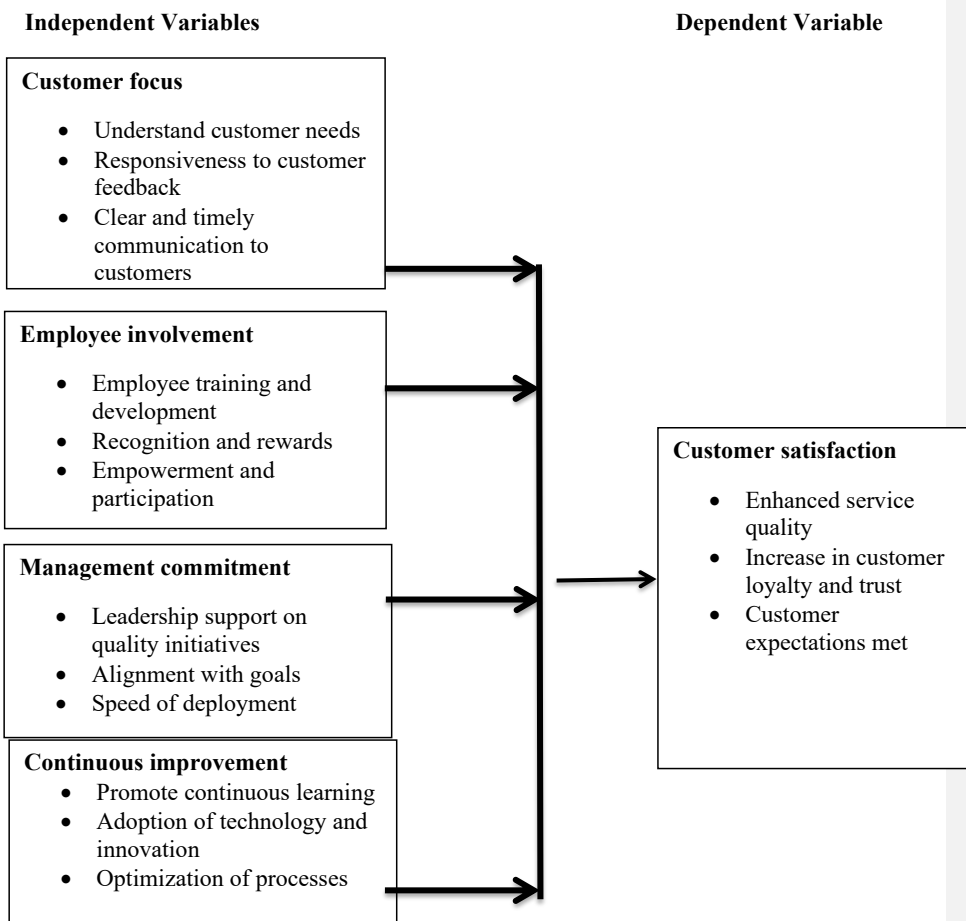
Kim (2023) examined the impact of participative management practices on motivation of employees in South Korea. Results indicated that participative management positively influences organizational citizenship behavior among public employees. This study highlights contextual limitations in understanding the collective impact of total quality principles. These are the principles of customer focus, employee involvement, management commitment and continuous improvement and their effect on customer satisfaction within the public service sector in an emerging economy of Kenya particularly within Huduma centers.

The current study filled this gap by systematically analyzing how customer focus, employee involvement, management commitment and continuous improvement strategies collectively influence the performance of the one stop shop model of Huduma Centers in Nairobi County, Kenya. This one stop shop model present unique total quality management deployment challenges that require further dedicated research. By addressing this empirical

gap, the study provided valuable insights that can aid industry stakeholders formulate strategies to enhance their total quality management practices and increase customer satisfaction.

### 2.5 Conceptual Framework

The model developed below shows the projected relationship between all the survey's variables. Customer focus, employee involvement, management commitment and continuous improvement are all independent variables.



**FIGURE 2.1**  
**Conceptual Framework**

## 2.6 Operationalization of Variables

**TABLE 2.2**  
**Operationalization of Variables**

Variable type	Variable	Indicators	Measurement scales
Dependent	Customer Satisfaction	<ul style="list-style-type: none"> <li>• Enhanced service quality</li> <li>• Increase in customer loyalty and trust</li> <li>• Operational efficiency</li> </ul>	Likert/ordinal
Independent	Customer focus	<ul style="list-style-type: none"> <li>• Understand customer needs</li> <li>• Responsiveness to customer needs</li> <li>• Clear and timely communication to customers</li> </ul>	Likert/ordinal
Independent	Employee involvement	<ul style="list-style-type: none"> <li>• Employee training and development</li> <li>• Reward and recognition</li> <li>• Empowerment and participation</li> </ul>	Likert/ordinal
Independent	Management commitment	<ul style="list-style-type: none"> <li>• Leadership support on quality initiatives</li> <li>• Alignment with goals</li> <li>• Speed of deployment</li> </ul>	Likert/ordinal
Independent	Continuous improvement	<ul style="list-style-type: none"> <li>• Promote continuous learning</li> <li>• Adoption of innovation and technology</li> <li>• Optimization of processes</li> </ul>	Likert/ordinal

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In this section, the focus was on the research methodology that was applied as a guideline for this research. Other sections discussed included the research design, research instrument, data processing and analysis, data collection procedure, sampling and sampling procedure, validity and reliability of the instrument, and target population.

#### **3.2 Research Design**

Research design refers to conceptual context surrounding the carrying out research (Leavy, 2022). The purpose of a study design was to guarantee that the information collected during data collection is sufficient to respond to the research issues as clearly as possible. A descriptive research design was used for this study. A descriptive study approach allows the researcher to describe the characteristics of the variables of interest Kazdin, (2021). The use of a descriptive research design in this study was justified by its suitability for exploring and describing the current state of total quality management practices and its impact on customer satisfaction among Huduma centers in Nairobi County, Kenya. The descriptive research Design is optimal and appropriate for this study because its primary objective is to ascertain the current status and prevalence of total quality management practices within Huduma Centres and to determine the nature and strength of the relationship between these practices and customer satisfaction. Given the study's goal is to describe and measure the extent to which TQM variables are associated with the dependent variable, a cross-sectional design provides the most efficient and relevant snapshot of the phenomenon. This approach, characterized by the collection of quantitative data using standardized Likert scales from a target population, allows for robust correlation and regression analysis required to test the stated hypothesis that TQM practices significantly affect satisfaction without the ethical or logistical constraints associated with an

experimental design. The descriptive framework thus perfectly aligns with the research aim of providing policy relevant data on the association of quality practices with service outcomes.

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### 3.3 Target Population

The population of the researchers is the total group of persons, events or items of interest (Nayak & Singh, 2021). A group of people, services, elements, events or a collection of objects being investigated is a well identified population (Pandey & Pandey, 2021). The target population of this study were 654 staff members working at the 5 Huduma centers operating in Nairobi; GPO Huduma center, Eastleigh Huduma center, city square Huduma center, Makadara Huduma center and Kibra Huduma center because of their knowledge of the topic under research and 30,000 customers who visit the huduma centers in Nairobi County over a period of 2 weeks (Service by Appointment, 2025)

**TABLE 3.1 | Target Population**

	Staff	Customers
<b>Huduma Centre</b>		
GPO Huduma Centre	246	
City Square Huduma Centre	207	
Kibra Huduma Centre	76	
Eastleigh Huduma Centre	59	
Makadara Huduma Centre	66	
<b>Total</b>	<b>654</b>	<b>30,000</b>

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Source; (Huduma Kenya, 2025)

### 3.4 Sampling and Sampling Procedure

Sampling design is the strategic plan or method used to select a subset of individuals or elements from a larger population to accurately represent that population in a research study (Kazdin, 2021). The sample frame is a listing of all population units from which the sample

was taken, according to (Cooper et al., 2018). Justified by Mugenda's (2013) recommendation that a sample of 10% to 30% is adequate for populations under 10,000, a proportionate sample of 30% (n=196) was derived from the total staff population of 654; this higher proportion was chosen specifically because the management team with specialized quality expertise was limited to provide a representative sample. Therefore, the sample size of staff consisted of 196 respondents.

The study used systematic random sampling to interview every 20<sup>th</sup> customer in a queue during the randomly selected time slots from each Huduma centre. Systematic random sampling allows unbiased representation therefore; it was used to identify customers acquiring services at the Huduma centers. The study used stratified random sampling to collect data from the staff during the randomly selected time slots. This practice allows unbiased representation of different staff roles, therefore; it was used to accurately reflect the different levels of employee involvement in customer satisfaction at the Huduma centers.

A sampling practice is a method used in research to select a subset of individuals, groups, or data points from a larger population (Sampling practices for quantitative research, 2022). Sampling is important in research because it enables the researcher minimize the cost as only section of the population is involved in the study. Mugenda rule was used to determine the sample size for citizens. Mugenda & Mugenda (2003) argue that if the population is less than 10,000 and there is no estimate available of the proportion in the population assumed to have the characteristic of interest, then 50% can be used with a corresponding statistic of 1.96. This study used Cochran's (1977) formulae of sampling whereby;

$$n_0 = \frac{Z^2 \cdot p \cdot (1 - p)}{e^2}$$

Where:

n = sample size,

Z= z score, 1.96 at 95% confidence interval

p = Estimated Population Proportion

e = error margin set (5%)

P= 30,000

e =5%.

Replacing the values the sample size was n =

$$(1.96)^2 (0.5)(1.05) / (0.05)^2$$

$$n = 384.16$$

n = 384 respondents

Thus, the sample size was 196 staff and 384 customers as shown in Table 3.2

**TABLE 3.2**  
**Sample Size per Huduma Centre**

	<b>Staff</b>	<b>Customers</b>
<b>Huduma Centre</b>		
GPO Huduma Centre	74	145
City Square Huduma Centre	63	122
Kibra Huduma Centre	18	43
Eastleigh Huduma Centre	23	35
Makadara Huduma Centre	18	39
<b>Total</b>	<b>196</b>	<b>384</b>

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### 3.5 Research Instrument

Data collection is the organized procedure of obtaining and analyzing data related to variables of interest, with the goal of answering research questions, testing hypotheses, and evaluating outcomes (Taherdoost, 2021). The respondents were asked to fill out a questionnaire to obtain

primary data. The primary data was crucial in describing the real situation of the dependent and independent variables' relation. Questionnaire utilization was reasonable since it was a low cost, reliable, and productive method of collecting data in a short period. Questions were designed to have closed ended questions to allow the researcher to derive specific answers. The questionnaire had three sections namely background information, total quality management practices and customer satisfaction.

Data collection refers to the procedure of collecting empirical data regarding the research topic in order to obtain unique insights into a circumstance and to address the questions that prompted the study (Taherdoost, 2021). Permission to collect data was sought from pertinent authorities. The resource persons were deemed to be knowledgeable enough, and therefore designed questionnaire deemed useful in data collection. The researcher administered the questionnaire to the staff at the Huduma centre service desks as they are assumed to be well conversant with organization total quality management practices of Huduma Kenya. The customers were selected randomly from the queues; this was done using the help of security officers and customer care staff who facilitated access to potential respondents after they have been served. The researcher explained the study, emphasize voluntary participation and obtain consent of the respondent to fill the questionnaires. All ethical considerations were adhered to.

### **3.6 Validity and Reliability of Instrument**

The validity of an instrument is its ability to measure a particular concept accurately (Cooper & Schindler, 2018). Construct validity, on the other hand, is used to determine if the operational definition of variables aligns with the intended theoretical meaning of a concept. To achieve this in the present study, the researcher modified an existing questionnaire based on previous studies to align with the research objectives. On the other hand, the guidance of expert opinion of the supervisor which confirmed content validity. This entailed having research mentor, who meticulously scrutinized the questionnaire and provide expert competent opinions to guarantee

that all research elements are captured. A double check on the proposal and ensure that the theoretical dimensions are depicted precisely as conceived.

Reliability is a metric that is utilized in describing the overall instrument consistency (Cooper & Schindler, 2018). A measure is considered to have high reliability when it consistently produces similar results when applied in the same circumstances. Content validity was first secured through a thorough expert review process, where the questionnaire was scrutinized by the supervisor and huduma centre managers to ensure comprehensive coverage and theoretical congruence of all constructs of TQM dimensions and the measurement of satisfaction. Subsequently, the instrument's internal consistency was confirmed via a pilot study of 19 respondents not included in the main frame from GPO Huduma center. The data from this pilot was subjected to a reliability test using the Cronbach's Alpha coefficient, with all five scales demonstrating acceptable internal consistency by achieving coefficients exceeding the standard threshold of 0.70. The use of Cronbach alpha analysis assisted in statistically evaluating the dependability of the research tools by revealing the precision of the internal data gathering instrument. A reasonable reliability statistic that shows a true "base" score is Cronbach's Alpha. Cronbach's Alpha is crucial to a researcher in verifying the validity and reliability of the questionnaire, even if comparable questions are substituted for some of the original ones (Taber, 2018). A reliability rating between 0.7 and 0.8 is typically regarded as adequate, and over 0.8 as exceptional. The study was subjected to this threshold.

### **3.7 Data Collection Procedure**

Data was collected using quantitative research approach employing structured questionnaires administered to Huduma Center staff and customers. A stratified random sampling practice was used to select respondents across the 5 Huduma Centers in Nairobi. The questionnaires gathered data on their perceptions of total quality management practices implemented at the huduma centers and their satisfaction with the services received. Data

collection was conducted through one-on-one administration of the questionnaires at the huduma centers to customers and questionnaires distributed to staff and collected at focal points of the Huduma centers to minimize service disruption.

### **3.8 Data Processing and Analysis**

According to Islam (2020), data analysis is the process of assessing data using critical and sound reasoning to examine each component of the data provided. It involves cleaning, transforming, and modeling data to discover useful information for problem solving. The primary purpose of data analysis was to extract insights from data, which can inform conclusions, support decision making, and address research questions it entails a series of closely linked operations aimed at summarizing as well as arranging gathered data in such a way that it addresses the research question (Taherdoost, 2021). The researcher reviewed the questionnaires, numbering them, and ensuring that they are adequate and complete. The data received from the primary sources was analyzed using SPSS version 24 software through descriptive and inferential statistics.

Descriptive statistics using frequency and percentages was applied to summarize the general perception of respondents regarding the total quality management practices and customer satisfaction at the Huduma Centers. Multiple linear regression analysis was the inferential statistical method applied to determine the strength, nature and statistical significance of the relationship between total quality management and customer satisfaction. The regression equation provided insight on the influence of each component of total quality management practices on customer satisfaction among Huduma centers. The R squared value indicated the proportion of variance in the customer satisfaction based on the total quality management practices. The results of the study were presented using tables, graphs and interpreted.

The multiple linear regressions applied was:

$$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\epsilon$$

Y=Customer satisfaction

$\beta_0$ =Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ =Regression Coefficients

X1=Customer focus

X2=Management Commitment

X3=Employee Involvement

X4=Continuous Improvement

$\epsilon$ =Error

Before conducting multiple regression analysis, it was important to perform diagnostic tests to ensure that the assumptions of the classical linear regression model (CLRM) are not violated. Violations of these assumptions can lead to biased, inefficient, or inconsistent parameter estimates, which compromise the validity of the results. Therefore, this study undertook a series of diagnostic checks to confirm that the data meets the fundamental assumptions of regression analysis.

### ***3.8.1 Normality Test***

To verify whether the estimated errors of the regression equation satisfy the critical parametric requirement of normal distribution around the mean, normality tests of Shapiro Wilk test was employed. These statistical tests helped determine if the distribution of the residuals deviates significantly from a normal distribution, which is a key requirement for reliable inference in linear regression.

### ***3.8.2 Multicollinearity Test***

The study tested multicollinearity using a correlation matrix to examine the strength of relationships among the independent variables. A correlation coefficient exceeding 0.8 was interpreted as an indication of multicollinearity, which can inflate standard errors and destabilize the regression coefficients (Cooper & Schindler, 2021). Identifying and managing

multicollinearity is critical to ensuring that the estimated effects of the predictors on the dependent variable are reliable.

### **3.8.3 Heteroscedasticity**

Heteroscedasticity occurs when the error terms of the regression model do not have constant variance, violating one of the core assumptions of the CLRM. To detect the presence of heteroscedasticity in this study, the Breusch-Pagan test was used, as suggested by Khan (2018). The null hypothesis for this test assumed homoscedasticity, that is, equal error variance across observations. If heteroscedasticity was present and not accounted for, it could lead to inefficient estimates and incorrect standard errors, thereby distorting hypothesis testing.

### **3.9 Ethical Considerations**

Requisite permits, consent, and approvals were obtained prior to data collection to adhere to ethical research standards. Permission to conduct the study was granted by the academic institution overseeing the research, and a research authorization/permit was sought from the National Commission for Science, Technology, and Innovation (NACOSTI), as this body is responsible for approving and supervising research in Kenya. Additionally, approval was sought from the CEO of Huduma Kenya to ensure their concurrence and to gain access to staff and offices necessary for conducting the study. Moreover, to ensure confidentiality, participants were not required to give names, personal identification numbers or phone numbers as they were issued unique identifier numbers, questionnaires were stored in lockable cabinet and any disclosure of information would only occur with the explicit consent of the respondents.

To ensure all participants provided informed consent, before data collection began, the primary researcher clearly and verbally explained the purpose of the study, nature of their participation, and voluntary nature of the study. This explanation was facilitated by Huduma Centre security and customer care staff who provided access to respondents after service

delivery. For questionnaires, consent was obtained by asking participants to complete surveys after researcher provided a full explanation of the study and confirmed the participation is voluntary. Participants were informed of their right to withdraw from the study at any time with facing negative consequences. For confidentiality, participants were issued unique identifier numbers and were not required to provide personal information. All completed questionnaires were stored in lockable cabinet and any disclosure of information will occur upon explicit consent of the respondents.

**CHAPTER FOUR**  
**FINDINGS AND DISCUSSIONS**

**4.1 Introduction**

This chapter presents the findings and discussions. The chapter addressed the response rate, demographic analysis, descriptive analysis and inferential analysis.

**4.2 Employee questionnaire findings**

The analysis on the employee questionnaire.

**4.2.1 Response rate**

The analysis on response rate is presented in Table 4.1.

**TABLE 4.1**  
**Response Rate**

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Response	167	85
Non-Response	29	15
<b>Total</b>	<b>196</b>	<b>100</b>

**Source: Research Data (2025)**

Table 4.1 shows the study achieved a response rate of 85 percent, with 167 out of 196 distributed questionnaires successfully completed and returned. A response rate above 80 percent is generally considered excellent for survey research because it reduces the risk of non-response bias and enhances the representativeness of the sample. According to Mugenda & Mugenda (2003), a response rate of 50 percent is adequate for analysis, 60 percent is good, and a response rate of 70 percent or more is considered excellent. This indicates that the current study achieved a strong level of participation, which strengthens the credibility and reliability of the findings.

### 4.3 Demographic Information

Demographic analysis is essential in research as it provides critical insights into the characteristics of a study population, such as gender, education level and work experience.

#### 4.3.1 Gender

Gender presentation was provided in Table 4.2.

**TABLE 4.2**  
**Gender Response**

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Male	87	52.1	52.1	52.1
	Female	80	47.9	47.9	100.0
	<b>Total</b>	<b>167</b>	<b>100.0</b>	<b>100.0</b>	

Table 4.2 presents the gender distribution of the respondents. Out of the 167 participants, 87 were male, representing 52.1 percent, while 80 were female, accounting for 47.9 percent of the total respondents. This indicates a fairly balanced gender representation, with male respondents being slightly more than female respondents. Such a distribution suggests that both male and female perspectives were adequately captured in the study, which enhances the representativeness of the findings. As Kabeer (2005) explains, gender is a critical social variable that influences access to resources, participation in decision making, and interaction with institutions.

#### 4.3.2 Job Experience of Respondents

The presentation of job experience was provided in table 4.3. The aim was to establish the relationship between the work experience and level of understanding the research subject.

**TABLE 4.3**  
**Job Experience**

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	less than 1 year	13	7.8	7.8	7.8
	2-3 years	14	8.4	8.4	16.2
	4-5 years	67	40.1	40.1	56.3
	5-6 years	49	29.3	29.3	85.6
	Over 6 years	24	14.4	14.4	100.0
	<b>Total</b>	<b>167</b>	<b>100.0</b>	<b>100.0</b>	

Table 4.3 presents the respondents' length of service. The majority, 67 respondents (40.1 percent), had worked for 4–5 years, followed by 49 respondents (29.3 percent) who had served for 5–6 years, and 24 respondents (14.4 percent) who had worked for over 6 years. A smaller proportion had worked for 2–3 years (8.4 percent) and less than 1 year (7.8 percent). This distribution shows that most respondents had several years of experience, which is important because longer tenure often reflects a deeper understanding of organizational practices and service delivery processes. According to Dess & Shaw (2001), employees with longer tenure tend to have accumulated knowledge, skills, and familiarity with institutional systems, which makes their responses more informed and reliable for organizational studies. Their insights can provide a clearer picture of the effect of total quality management practices on customer satisfaction.

#### 4.3.3 Education Level of Respondents

Presentation based on education level was provided in Table 4.4.

**TABLE 4.4**  
**Education Level**

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Diploma	41	24.6	24.6	24.6
	Bachelors degree	85	50.9	50.9	75.4
	Masters degree	17	10.2	10.2	85.6
	PHD	6	3.6	3.6	89.2
	other qualification	18	10.8	10.8	100.0
	<b>Total</b>	<b>167</b>	<b>100.0</b>	<b>100.0</b>	

Table 4.4 presents the respondents' level of education. The majority, 85 respondents (50.9 percent), held a Bachelor's degree, followed by 41 respondents (24.6 percent) with a Diploma. Seventeen respondents (10.2 percent) had attained a Master's degree, while six respondents (3.6 percent) possessed a PhD. Additionally, 18 respondents (10.8 percent) reported having other qualifications. This distribution shows that most respondents were well educated, which

is valuable for the study since higher educational attainment is often associated with greater awareness of organizational processes and quality management practices. According to Psacharopoulos & Patrinos (2018), education enhances individuals' cognitive skills, analytical capacity, and ability to engage meaningfully with institutional systems.

#### 4.4 Study Variables

The purpose of this study was to determine how total quality management practices had impacted customer satisfaction among huduma centers in Nairobi.

##### 4.4.1 Pilot Test Results

The reliability of research instruments results was shown as provided;

**TABLE 4.5**  
**Pilot Test Results**

Variables	Registered Items	Values of Cronbach $\alpha > 0.7$	Alpha Verdict
Customer Focus	8	0.947	Approved
Employee Involvement	8	0.968	Approved
Continuous Improvement	8	0.977	Approved
Management Commitment	8	0.986	Approved
Customer Satisfaction	8	0.958	Approved

Table 4.5 provided the pilot test results. The reliability results show that all the study variables recorded Cronbach's alpha coefficients above the recommended threshold of 0.70, indicating excellent internal consistency. Customer focus had an alpha of 0.947, employee involvement 0.968, continuous improvement 0.977, management commitment 0.986, and customer satisfaction 0.958. These high coefficients suggest that the items used to measure each construct were consistent and reliable in capturing the intended concepts. According to Tavakol and Dennick (2011), a Cronbach's alpha value of 0.70 and above is considered acceptable for research instruments, while values above 0.90 indicate excellent reliability. Therefore, the measurement scales used in this study were dependable and suitable for further analysis.

#### 4.4.2 Customer Focus

The study sought to establish the influence of customer focus on customer satisfaction among huduma centers in Nairobi.

**TABLE 4.6**  
**Descriptive Analysis on Customer Focus**

	N	Minimum	Maximum	Mean	Std. Deviation
Huduma Kenya understands the needs and expectations of customers	167	1.00	5.00	3.9162	1.29137
Customer feedback and complaints are collected and acted upon promptly	167	1.00	5.00	4.5868	.95214
Our organization often conducts surveys or gather feedback from customers	167	1.00	5.00	4.2695	1.04384
Employees are trained to handle customer needs effectively	167	1.00	5.00	4.1916	1.13506
The organization is able to deliver services that meet customer expectations	167	1.00	5.00	2.3054	1.43415
Our organization actively seeks innovative ways to improve customer experience	167	1.00	5.00	2.2934	1.18378
Valid N (listwise)	167				

Table 4.6 presents the descriptive statistics on customer focus. The findings show that respondents generally agreed that Huduma Kenya understands the needs and expectations of customers ( $M = 3.92$ ,  $SD = 1.29$ ). There was also strong agreement that customer feedback and complaints are collected and acted upon promptly ( $M = 4.59$ ,  $SD = 0.95$ ) and that the organization often conducts surveys or gathers feedback from customers ( $M = 4.27$ ,  $SD = 1.04$ ). Respondents also indicated that employees are trained to handle customer needs effectively ( $M = 4.19$ ,  $SD = 1.14$ ), suggesting that customer engagement and staff responsiveness are relatively well established.

However, the mean scores were lower on items related to delivering services that meet customer expectations ( $M = 2.31$ ,  $SD = 1.43$ ) and actively seeking innovative ways to improve

customer experience (M = 2.29, SD = 1.18). This indicates that while Huduma Centers appear to be strong in understanding customer needs and collecting feedback, there are gaps in translating this understanding into service delivery and innovation.

These results suggest that Huduma Centers have made significant progress in building a customer focused culture through feedback mechanisms and staff training, which are essential elements of Total Quality Management. However, the low mean scores on service delivery and innovation point to the need for stronger implementation strategies. This may involve aligning feedback outcomes with service improvement initiatives, investing in innovative service delivery models, and ensuring that customer insights are not only collected but also acted upon to enhance satisfaction. Strengthening these areas could lead to more consistent and higher levels of customer satisfaction across the centers.

#### 4.4.3 Employee Involvement

The presentation constituted that results based on a study showing the influence of employee involvement on customer satisfaction among huduma centers in Nairobi.

**TABLE 4.7**  
**Descriptive analysis on Employee Involvement**

<b>Statement</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Our firm involves employees in decision making processes related to service delivery	167	1.00	5.00	3.7305	1.35521
Employees are encouraged to take ownership of their roles in ensuring quality service delivery	167	1.00	5.00	3.7485	1.31588
The organization's retention strategies, such as recognition and rewards, are effective in keeping top talent.	167	1.00	5.00	2.0539	1.40248
Employees are empowered to resolve customer complaints	167	1.00	5.00	4.1257	1.28091
The onboarding process effectively prepares new employees to perform their roles and align with organizational goals	167	1.0	5.0	3.820	1.3679
I am satisfied with the collaboration among employees to achieve quality service delivery	167	1.000	5.000	3.52695	1.255419

Table 4.7 presents the descriptive analysis of employee involvement. The results show that respondents generally agreed that employees are empowered to resolve customer complaints ( $M = 4.13$ ,  $SD = 1.28$ ), indicating that staff have some level of autonomy in addressing customer concerns. Similarly, there was agreement that the onboarding process effectively prepares new employees ( $M = 3.82$ ,  $SD = 1.37$ ), and that employees are involved in decision making related to service delivery ( $M = 3.73$ ,  $SD = 1.36$ ). Respondents also agreed that employees are encouraged to take ownership of their roles in ensuring quality service ( $M = 3.75$ ,  $SD = 1.32$ ) and that there is satisfactory collaboration among employees to achieve service quality ( $M = 3.53$ ,  $SD = 1.26$ ). However, a relatively low mean was observed for the item on retention strategies such as recognition and rewards being effective in keeping top talent ( $M = 2.05$ ,  $SD = 1.40$ ). This indicates that while employee involvement in operational and service delivery aspects is fairly strong, recognition and reward systems may not be well structured or effectively implemented.

The findings suggest that Huduma Centers have made notable efforts to involve employees in decision making and empower them to deliver quality services. This aligns with key total quality management principles, which emphasize employee participation as a driver of service improvement. However, the weak perception of retention strategies signals a potential gap that could affect employee motivation and long-term engagement. Strengthening recognition and reward systems could enhance employee morale and reduce turnover, which in turn would support sustained quality service delivery and improved customer satisfaction.

#### ***4.4.4 Continuous Improvement***

The study sought to establish the influence of continuous improvement on customer satisfaction.

**TABLE 4.8**  
**Descriptive Analysis on Continuous Improvement**

	N	Minimum	Maximum	Mean	Std. Deviation
Management encourages employees to suggest improvements of existing processes at your workplace	167	1.00	5.00	3.7186	1.33483
The organization implement new ideas or processes to improve service delivery	167	1.00	5.00	3.5689	1.29167
There are training programs to equip you with skills for continuous improvement	167	1.00	5.00	3.6168	1.36097
The organization regularly review and updates its service delivery processes	167	1.00	5.00	3.3114	1.46815
Quality improvement initiatives are implemented promptly.	167	1.00	5.00	2.9880	1.30332
Our organization benchmarks its processes against the best practices to identify areas of improvement	167	1.00	5.00	3.5868	1.46133
Valid N (listwise)	167				

Table 4.8 presents the descriptive statistics on continuous improvement practices within the organization. The results show that management encouragement for employees to suggest improvements scored the highest mean of 3.72 with a standard deviation of 1.33, indicating that most employees agree that their input is welcomed, although there are variations in how this is experienced across the organization. Implementation of new ideas and processes had a mean of 3.57 (SD = 1.29), suggesting moderate uptake of innovative practices. Training programs for continuous improvement scored a mean of 3.62 (SD = 1.36), reflecting fairly positive perceptions, though differences in access or effectiveness exist. Regular review and updating of service delivery processes had a mean of 3.31 (SD = 1.47), showing that these practices occur but not consistently. Timeliness in implementing quality initiatives was rated lowest, with a mean of 2.99 (SD = 1.30), indicating delays or inefficiencies in putting

improvement ideas into action. Benchmarking against best practices had a mean of 3.59 (SD = 1.46), showing some level of comparative evaluation but with mixed consistency.

The results imply that while the organization has embraced some elements of continuous improvement, there are gaps that may limit its overall effectiveness. Encouraging employee suggestions and offering training are positive steps, but the low-rating on-prompt implementation signals that many ideas may not translate quickly into tangible change. This can weaken employee motivation and slow organizational learning. Inconsistent reviews and benchmarking suggest that improvement efforts may not be systematically integrated into operational routines.

#### 4.4.5 Management Commitment

The presentation constituted that results based on a study showing the influence of management commitment on customer satisfaction.

**TABLE 4.9**  
**Descriptive Analysis on Management Commitment**

	N	Minimum	Maximum	Mean	Std. Deviation
Our firm's top management's involvement in quality improvement initiative	167	1.00	5.00	2.8323	.78887
Top management provides resources to support quality management initiatives	167	1.00	5.00	3.4671	1.42179
Management regularly communicates the importance of quality management with employees	167	1.00	5.00	3.7365	1.18323
Our management rewards and recognizes employees for their contribution towards quality improvement	167	1.00	5.00	3.5090	1.19672
Policies on quality improvements made by the organization have led to improved performance	167	1.00	5.00	3.7186	1.43907
The management are committed to regularly reviews and adjusts its decisions to achieve higher customer satisfaction	167	1.00	5.00	4.0659	1.23277
<b>Valid N (listwise)</b>	<b>167</b>				

Table 4.9 presents the descriptive statistics on management commitment. The findings reveal that respondents moderately agreed that management is committed to regularly reviewing and adjusting its decisions to achieve higher customer satisfaction (M = 4.07, SD = 1.23). There was also agreement that management regularly communicates the importance of quality management with employees (M = 3.74, SD = 1.18), policies on quality improvements have led to improved performance (M = 3.72, SD = 1.44), and that management rewards and recognizes employees for their contributions to quality improvement (M = 3.51, SD = 1.20). Similarly, respondents agreed that top management provides resources to support quality management initiatives (M = 3.47, SD = 1.42). However, a lower mean was observed for top management's involvement in quality improvement initiatives (M = 2.83, SD = 0.79), indicating that direct engagement of top managers in quality related activities is relatively limited compared to their communication and policy roles.

These results suggest that while management demonstrates commitment through communication, policy development, and resource allocation, there is room for improvement in their active and visible involvement in quality initiatives. In Total Quality Management, leadership commitment is a critical success factor because it sets the tone for organizational priorities and influences employee engagement. Strengthening direct managerial participation in quality improvement activities could enhance organizational alignment, motivate employees, and improve the overall implementation of quality management practices, ultimately leading to higher customer satisfaction.

#### **4.4.6 Customer Satisfaction among Huduma Centers in Nairobi**

The presentation constituted that results based on a study showing state of customer satisfaction.

**TABLE 4.10**  
**Descriptive Analysis on Customer Satisfaction among Huduma Centers in Nairobi**

N	Minimum	Maximum	Mean	Std. Deviation
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Our focus on customers within the huduma center has notably increased customer satisfaction	167	1.00	5.00	3.6048	1.32155
Employee involvement in customer service improvement efforts has increased customer satisfaction	167	1.00	5.00	4.1737	1.06410
The commitment of management to quality has increased customer satisfaction at the huduma center	167	1.00	5.00	3.8922	.53807
Continuous improvement efforts at the huduma center have effectively increased customer satisfaction	167	1.00	5.00	3.7305	1.31459
I believe a majority of customers are satisfied with the services I offer at the huduma center	166	1.0	5.0	3.416	1.3670
The current systems and processes at the huduma center are designed to meet customer needs effectively	167	1.00	5.00	3.8084	1.33052
Valid N (listwise)	166				

Table 4.10 presents the descriptive statistics on customer satisfaction among Huduma Centers in Nairobi. The findings show that employee involvement in customer service improvement had the highest mean score of 4.17 with a standard deviation of 1.06, indicating that respondents strongly believe staff participation plays a major role in boosting customer satisfaction. Management's commitment to quality also scored relatively high with a mean of 3.89 (SD = 0.54), suggesting consistent leadership focus on quality. Continuous improvement efforts had a mean of 3.73 (SD = 1.31), showing that respondents view ongoing enhancements as effective in raising customer satisfaction levels, though opinions vary. Focus on customers within the Huduma Centers recorded a mean of 3.60 (SD = 1.32), reflecting a positive but moderate perception of its impact. The belief that customers are satisfied with services offered had a mean of 3.42 (SD = 1.37), showing some reservations among staff. Lastly, the adequacy of current systems and processes to meet customer needs scored a mean of 3.81 (SD = 1.33), pointing to fairly positive but not uniform perceptions.

The results imply that customer satisfaction in Huduma Centers is largely driven by active employee involvement and strong management commitment to quality. These two elements appear to have the most significant influence, reinforcing the idea that engaged staff and supportive leadership are essential for delivering quality public services. However, the moderate scores on customer focus and perceptions of customer satisfaction suggest that there is still room to strengthen service processes and address existing gaps. The variations in responses indicate that not all employees experience these factors equally, which may point to inconsistencies in implementation across different centers.

#### 4.5 Diagnostic Tests

Diagnostic tests were undertaken as a prerequisite for conducting multiple linear regression to verify that the data meets the assumptions required by the statistical model therefore, it ensures that the parameter estimates are unbiased, efficient and reliable to guarantee the generalization and validity of the hypothesis tests.

##### 4.5.1 Test for Normality

The Shapiro-Wilk test was conducted to determine whether the study variables were normally distributed. The null hypothesis of this test is that the data come from a normally distributed population. A p-value (Sig.) greater than 0.05 indicates that the normality assumption is not violated, while a p-value of 0.05 or less suggests a significant deviation from normality.

**TABLE 4.11**  
**Normality Test Results**

Variable	Shapiro-Wilk		
	Statistic	DF	Sig.
Customer Focus	.973	167	0.07
Employee Involvement	.969	167	0.05
Continuous Improvement	.979	167	0.20
Management Commitment	.971	167	0.05

The Shapiro-Wilk test was conducted to assess the normality of the study variables, namely customer focus, employee involvement, continuous improvement, management commitment.,

which serves as a proxy for customer satisfaction. Normality is a key assumption for regression analysis, ensuring that the results of the analysis are reliable and valid. As shown in Table 4.11, customer focus had a Shapiro-Wilk statistic of 0.973 with  $p = 0.07$ , indicating that the data are approximately normally distributed. Employee involvement (0.969,  $p = 0.05$ ) and management commitment (0.971,  $p = 0.05$ ) were borderline but still acceptable for normality. Continuous improvement (0.979,  $p = 0.20$ ) and the financial literacy training score (0.978,  $p = 0.17$ ) demonstrated a stronger adherence to normality. These results suggest that the data for the TQM practices and customer satisfaction largely satisfy the normality assumption, supporting the appropriateness of applying parametric tests, such as regression analysis, to examine the effect of total quality management practices on customer satisfaction among Huduma Centers in Nairobi County.

#### 4.5.2 Multicollinearity

Multicollinearity among the independent variables was assessed using collinearity diagnostics in SPSS. Multicollinearity occurs when two or more predictors are highly correlated, which can distort the regression coefficients and reduce the reliability of the model. The SPSS output provides eigenvalues, condition indices, and variance proportions to detect multicollinearity. A condition index below 10 indicates little or no collinearity, values between 10 and 30 suggest moderate collinearity, and values above 30 indicate serious multicollinearity. High variance proportions (greater than 0.50) for two or more variables associated with a high condition index further confirm multicollinearity.

**TABLE 4.12**  
**Collinearity Diagnostics**

Model	Eigenvalue	Condition Index	Variance Proportions				
			(Constant)	SPS	RFS	GPS	FLTS
1	3.550	1.000	0.03	0.01	0.03	0.01	0.02
	0.790	2.118	0.05	0.04	0.02	0.03	0.01
	0.290	3.508	0.07	0.06	0.04	0.05	0.03
	0.150	4.869	0.11	0.12	0.10	0.09	0.11
	0.070	7.100	0.16	0.15	0.11	0.13	0.17

a. Dependent Variable: Customer satisfaction score

Table 4.12 presents the collinearity diagnostics for the regression model examining the effect of total quality management (TQM) practices on customer satisfaction among Huduma Centers in Nairobi County. The table shows the eigenvalues, condition indices, and variance proportions for the model, with financial growth score serving as the dependent variable proxy for customer satisfaction. The highest condition index recorded is 7.100, which is below the commonly used threshold of 30, suggesting that multicollinearity is not a concern. Furthermore, inspection of the variance proportions confirms that no single dimension accounts for a disproportionate amount of variance across two or more predictor variables for either the customer or employee models. Therefore, the study concluded with confidence that both multiple regression models were free from the issue of statistically significant multicollinearity, permitting reliable inference regarding the unique contribution of each TQM practice to customer satisfaction.

**4.5.3 Homoscedasticity**

Homoscedasticity, which refers to the assumption of constant variance of residuals across predicted values, was assessed using the Breusch-Pagan test. The null hypothesis of this test is that the residuals have constant variance, while the alternative hypothesis posits that the residuals exhibit heteroscedasticity. The results, presented in Table 4.13, indicate a Chi-square value of 4.32 with 4 degrees of freedom and a p-value of 0.36.

**TABLE 4.13  
Breusch-Pagan Test Table**

<b>Model</b>	<b>Chi-Square</b>	<b>df</b>	<b>Sig.</b>	<b>Interpretation</b>
1	4.32	4	0.36	Residuals show constant variance

Table 4.13 presents the results of the Breusch-Pagan test, which was conducted to assess heteroscedasticity in the regression model examining the effect of total quality management (TQM) practices on customer satisfaction among Huduma Centers in Nairobi County. Heteroscedasticity occurs when the variance of the residuals is not constant, which can compromise the efficiency of regression estimates. The results show a Chi-square value of 4.32 with 4 degrees of freedom and a significance value of 0.36. Since the p-value is greater than 0.05, the null hypothesis of homoscedasticity is not rejected, indicating that the residuals exhibit constant variance. This suggests that the regression model meets the assumption of homoscedasticity, supporting the reliability of the estimated effects of customer focus, employee involvement, continuous improvement, and management commitment on customer satisfaction.

#### 4.5.4 Linearity Test

Linearity, which assumes a straight-line relationship between each independent variable and the dependent variable, was assessed using the lack-of-fit F-test. The null hypothesis of this test is that the relationship between the predictor and outcome is linear, while the alternative hypothesis suggests nonlinearity.

**TABLE 4.14**  
**Linearity Test Table**

<b>Predictor Variable</b>	<b>F-value</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
Customer Focus	1.12	1	162	0.29
Employee Involvement	0.85	1	162	0.36
Continuous Improvement	1.78	1	162	0.18
Management Commitment	0.97	1	162	0.33

Table 4.14 presents the results of the linearity test, which was conducted to assess whether the relationships between the independent variables, customer focus, employee involvement, continuous improvement, and management commitment and the dependent variable, customer satisfaction, are linear. Linearity is a critical assumption in regression analysis, as it ensures

that the estimated relationships accurately reflect the true associations between variables. The results indicate that customer focus ( $F = 1.12, p = 0.29$ ), employee involvement ( $F = 0.85, p = 0.36$ ), continuous improvement ( $F = 1.78, p = 0.18$ ), and management commitment ( $F = 0.97, p = 0.33$ ) all have significance values greater than 0.05. This suggests that there is no significant deviation from linearity for any of the predictors. Therefore, the assumption of linearity is met, supporting the appropriateness of using regression analysis to examine the effect of TQM practices on customer satisfaction among Huduma Centers in Nairobi County.

#### 4.6 Model Fitting

The inferential studies covered correlation and regression analysis as shown.

##### 4.6.1 Correlation Analysis

The study conducted a correlation analysis to examine the strength and direction of the relationship between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. This analysis helps determine whether variations in customer focus, employee involvement, continuous improvement, and management commitment are associated with changes in customer satisfaction. Pearson's correlation coefficient was used to assess these relationships.

**TABLE 4.15**  
**Correlations Analysis**

		Customer focus	Employee involvement	Management commitment	Continuous improvement	Customer Satisfaction
Customer Focus	Pearson Correlation	1				
	Sig. (2 tailed)					
	N	167				
Employee involvement	Pearson Correlation	.958**	1			
	Sig. (2 tailed)	.000				
	N	167	167			
Management commitment	Pearson Correlation	.861**	.870**	1		
	Sig. (2 tailed)	.000	.000			
	N	167	167	167		
Continuous improvement	Pearson Correlation	.954**	.967**	.847**	1	
	Sig. (2 tailed)	.000	.000	.000		
	N	167	167	167	167	

Customer Satisfaction	Pearson Correlation	.923**	.943**	.907**	.906**	1
	Sig. (2 tailed)	.000	.000	.000	.000	
	N	167	167	167	167	167

Correlation is significant at the 0.01 level (2 tailed).

Table 4.15 presents the correlation results between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. The findings show strong and positive correlations between all the independent variables and customer satisfaction. Customer focus recorded a correlation coefficient of  $r = 0.923$ , employee involvement  $r = 0.943$ , management commitment  $r = 0.907$ , and continuous improvement  $r = 0.906$ , all significant at the 0.01 level. Additionally, the independent variables also show strong intercorrelations, for example, between customer focus and employee involvement ( $r = 0.958$ ) and between employee involvement and continuous improvement ( $r = 0.967$ ), indicating a close relationship among the TQM. The results suggest that improvements in customer focus, employee involvement, management commitment, and continuous improvement are strongly associated with higher customer satisfaction levels. This reinforces the idea that effective implementation of TQM practices can lead to significant gains in service quality and customer experiences in Huduma Centers. It also highlights the interdependence of these practices, implying that they work best when applied together rather than in isolation.

#### **4.6.2 Regression Analysis**

The study carried out a regression analysis to examine the effect of total quality management practices on customer satisfaction among Huduma Centers in Nairobi County. This analysis was aimed at determining how customer focus, employee involvement, management commitment, and continuous improvement collectively and individually influence customer satisfaction. Regression analysis provides insights into the strength of these relationships and the extent to which the independent variables predict variations in customer satisfaction

The regression analysis addressed multiple linear as shown in Table 4.16.

**TABLE 4.16**  
**Multiple Linear Regression Analysis Model Summary**

Change Statistics									
Model	R	Adjusted R Square	R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. Change
1	.961 <sup>a</sup>	.923	.921	.37220	.923	482.677	4	162	.000

a. Predictors: (Constant), customer focus, employee involvement, continuous improvement and management commitment

Table 4.16 shows the model summary for the multiple linear regression analysis. The results indicate a strong positive relationship between total quality management practices and customer satisfaction, with a correlation coefficient (R) of 0.961. The R Square value of 0.923 shows that 92.3% of the variation in customer satisfaction is explained by customer focus, employee involvement, continuous improvement, and management commitment. The Adjusted R Square value of 0.921 confirms the model's robustness after adjusting for the number of predictors. The standard error of the estimate is 0.37220, which indicates a relatively small deviation between the observed and predicted values. The model is statistically significant, with an F change value of 482.677 and a significance level of  $p < 0.001$ , confirming that the overall regression model fits the data well.

The results imply that total quality management practices have a strong and significant combined effect on customer satisfaction in Huduma Centers. This high explanatory power indicates that focusing on these practices can substantially improve service experiences for customers. It also suggests that policy and operational strategies aimed at enhancing TQM can yield meaningful improvements in service delivery outcomes.

#### **4.6.3 Analysis of Variance**

The study conducted an Analysis of Variance (ANOVA) to determine whether the overall regression model was statistically significant in explaining the relationship between total

quality management practices and customer satisfaction among Huduma Centers in Nairobi County. ANOVA helps assess whether the combined effect of customer focus, employee involvement, continuous improvement, and management commitment significantly predicts customer satisfaction beyond what could occur by chance.

**TABLE 4.17**  
**Analysis of Variance (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	267.473	4	66.868	482.677	.000 <sup>b</sup>
	Residual	22.443	162	.139		
	Total	289.916	166			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), customer focus, employee involvement, continuous improvement and management commitment.

Table 4.17 presents the results of the Analysis of Variance (ANOVA) for the regression model. The regression sum of squares is 267.473 with 4 degrees of freedom, while the residual sum of squares is 22.443 with 162 degrees of freedom. The mean square for the regression is 66.868, and the F value is 482.677 with a significance level of  $p < 0.001$ . This indicates that the overall regression model is statistically significant, meaning that the independent variables collectively explain a significant proportion of the variance in customer satisfaction.

The significant F statistic implies that customer focus, employee involvement, continuous improvement, and management commitment jointly have a meaningful impact on customer satisfaction. This confirms that the model provides a good fit for the data and supports the idea that applying these practices together can lead to substantial improvements in service delivery and customer experiences in Huduma Centers.

#### **4.6.4 Regression Coefficient**

The study examined the regression coefficients to assess the individual contribution of each total quality management practice to customer satisfaction among Huduma Centers in Nairobi County. This analysis helps identify which variables have the strongest and most significant

effects when considered together. Both the unstandardized and standardized coefficients were evaluated to determine the direction and strength of these relationships.

**TABLE 4.18**  
**Regression Coefficient Results**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.430	.113		3.809	.000
	Customer Focus	.201	.086	.196	2.341	.020
	Employee involvement	.628	.098	.644	6.437	.000
	Management Commitment	.568	.076	.339	7.482	.000
	Continuous Improvement	-.189	.092	-.191	-2.054	.042

a. Dependent Variable: Customer Satisfaction

Regression Model:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$

$$Y = 0.430 + 0.201X_1 + 0.628X_2 + 0.568X_3 - 0.189X_4$$

Table 4.18 shows the regression coefficient results for the influence of total quality management practices on customer satisfaction. The constant has a positive coefficient ( $B = 0.430$ ,  $p < 0.001$ ), indicating that without the influence of the independent variables, customer satisfaction would be low. When holding all other variables constant, customer focus has a positive and significant effect on customer satisfaction ( $B = 0.201$ ,  $p = 0.020$ ). This means that for every one unit increase in customer focus, customer satisfaction increases by 0.201 units. When holding the other variables constant, employee involvement has the strongest positive effect ( $B = 0.628$ ,  $p < 0.001$ ), indicating that a one unit increase in employee involvement leads to a 0.628 unit increase in customer satisfaction. Similarly, when other variables are held constant, management commitment has a positive and significant effect ( $B = 0.568$ ,  $p < 0.001$ ), meaning that improvements in management commitment are associated with a 0.568 unit increase in customer satisfaction. In contrast, when holding the other variables constant, continuous improvement has a negative and significant effect ( $B = -0.189$ ,  $p = 0.042$ ), suggesting that some improvement initiatives may be poorly executed or disruptive, leading to a slight decline in customer satisfaction.

These findings imply that increasing employee involvement, strengthening management commitment, and enhancing customer focus can significantly boost customer satisfaction when considered independently. The negative effect of continuous improvement indicates the need for more structured and well communicated improvement processes to ensure they support rather than hinder customer experiences. This highlights where managerial attention should be directed to achieve the greatest impact on service quality.

#### 4.7 Customer questionnaire findings

The analysis is on findings from the customer questionnaire.

##### 4.7.1 Response Rate

The analysis on response rate is presented in Table 4.19.

**TABLE 4.19**  
**Response Rate**

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Response	333	86.7
Non-Response	51	13.3
<b>Total</b>	<b>384</b>	<b>100</b>

**Source: Research Data (2025)**

Table 4.19 shows the study achieved a response rate of 86.7 percent, with 333 out of 384 distributed questionnaires successfully completed and returned. A response rate above 80 percent is generally considered excellent for survey research because it reduces the risk of non-response bias and enhances the representativeness of the sample. According to Mugenda and Mugenda (2003), a response rate of 50 percent is adequate for analysis, 60 percent is good, and a response rate of 70 percent or more is considered excellent. This indicates that the current study achieved a strong level of participation, which strengthens the credibility and reliability of the findings.

## 4.8 Demographic Information

Demographic analysis is essential in research as it provides critical insights into the characteristics of a study population, such as centre visited and service rendered.

### 4.8.1 Huduma Centre Visited

Huduma Centre visited presentation was provided in Table 4.20.

**TABLE 4.20**  
**Huduma Centre Visited**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	GPO	105	31.5	31.5	31.5
	City Square	75	22.5	22.5	54.0
	Makadara	60	18.0	18.0	72.0
	Eastleigh	50	15.0	15.0	100.0
	Kibra	43	12.9	12.9	
	<b>Total</b>	<b>333</b>	<b>100.0</b>	<b>100.0</b>	

Table 4.20 presents the huduma centre visited by the respondents. Out of the 333 participants, 105 visited GPO, representing 31.5 percent, 75 visited City Square, representing 22.5 percent, 60 visited Makadara, representing 18.0 percent, 50 visited Eastleigh, representing 15.0 percent, while 43 visited Kibra, accounting for 12.9 percent of the total respondents. This indicates a fairly balanced centre representation, with GPO and City Square having most customers. Such a distribution suggests that all customers perspectives at the 5 huduma centers were adequately captured in the study, which enhances the representativeness of the findings.

### 4.8.2 Services Received

The presentation of services received was provided in table 4.21. The aim was to establish the services received.

**TABLE 4.21**  
**Services rendered**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ID	100	30.0	30.0	30.0
	Birth Certificate	80	24.0	24.0	54.0
	Social Services (NSSF, NHIF)	65	19.5	19.5	73.5
	DCI	35	10.5	10.5	84.0

DL	30	9.0	9.0	100.0
Others (KRA, HELB, KASNEB, PENSION etc)	23	7.0	7.0	
Total	333	100.0	100.0	

Table 4.21 presents the respondents' service received. The majority, 100 respondents (30.0 percent), had ID services, followed by 80 respondents (24.0 percent) had birth certificate, 65 respondents (19.5 percent), had social services, 35 respondents (10.5 percent), had DCI services, 30 respondents (9.0 percent), had DL services and 23 respondents (7.0 percent) visited other services. This distribution shows that most respondents received the ID and birth certificate services. This confirms that the study's findings are grounded in areas where quality and efficiency are paramount to the average citizen's interaction with the government.

#### 4.9 Study Variables

The section outlines customer study variables.

##### 4.9.1 Customer Focus

The study sought to establish the influence of customer focus on customer satisfaction among huduma centers in Nairobi.

**TABLE 4.22**  
**Descriptive Analysis on Customer Focus**

	N	Minimum	Maximum	Mean	Std. Deviation
Huduma Centre staff seemed to understand my needs and expectations	333	1.00	5.00	4.2823	.94656
My feedback and complaints were handled effectively and promptly	333	1.00	5.00	4.3213	.88939
Our organization often conducts surveys or gathers feedback from customers	333	1.00	5.00	3.8018	.92313
The staff were knowledgeable about the service they provided	333	1.00	5.00	4.4084	.89250
The service I received matched my expectations	333	1.00	5.00	4.4054	.88200
The huduma center is continuously trying to improve the services offered	333	1.00	5.00	4.4354	.84287
Valid N (listwise)	333				

Table 4.22 presents the descriptive statistics on customer focus. The findings show that respondents generally agreed that Huduma Kenya understands the needs and expectations of customers (M = 4.28, SD = 0.94). There was also strong agreement that customer feedback and complaints are collected and acted upon promptly (M = 4.32, SD = 0.88). Respondents also indicated that employees were knowledgeable about services they provided (M = 4.40, SD = 0.89), services received matched their expectations (M = 4.40, SD = 0.88), and huduma centers continuously try to improve services offered (M = 4.43, SD = 0.84) suggesting that customer engagement and staff responsiveness are relatively well established.

However, the mean scores were lower on items related to the organization often conducts surveys or gathers feedback from customers (M = 3.80, SD = 0.92). This indicates that while Huduma Centers appear to be strong in understanding customer needs and collecting feedback, there are gaps in translating this understanding into service delivery and innovation.

#### 4.9.2 Employee Involvement

The presentation constituted that results based on a study showing the influence of employee involvement on customer satisfaction among huduma centers in Nairobi.

**TABLE 4.23**  
**Descriptive analysis on Employee Involvement**

Statement	N	Minimum	Maximum	Mean	Std. Deviation
The employees I interacted with seemed to take pride in their work	333	1.00	5.00	3.7748	1.43966
Employees appeared empowered with the knowledge and skills to help me with my needs	333	1.00	5.00	4.3363	.94475
There seemed to be good teamwork and collaboration among employees	333	1.00	5.00	4.3574	.93537
Employees are willing to go the extra mile to help me	333	1.00	5.00	4.2883	.95110
Employees appeared empowered with the resources to help me with my needs	333	1.00	5.00	4.3153	.94406
I felt the employees were supported by management	333	1.00	5.00	4.3183	.94464
Valid N (listwise)	333				

Table 4.23 presents the descriptive analysis of employee involvement. The results show that respondents generally agreed that there was agreement that employees seemed to have teamwork and collaboration (M = 4.35, SD = 0.95), employees are empowered to help customers with their needs (M = 4.33, SD = 0.94), indicating that staff have some level of autonomy in addressing customer needs. Similarly, customers felt that employees are supported by management (M = 4.31, SD = 0.944). Respondents also agreed that employees are empowered with resources to help customers with their needs (M = 4.31, SD = 0.944). However, a relatively low mean was observed for the item on employee taking pride in their work (M = 3.77, SD = 1.43). This indicates that while employee involvement in operational and service delivery aspects is fairly strong, it highlights that the motivational systems may not be well structured or effectively implemented.

The findings suggest that Huduma Centers have made notable efforts to providing employees with resources and training to empower them to deliver quality services. This aligns with key total quality management principles, which emphasize employee participation as a driver of service improvement. However, the weak perception of motivation signals a potential gap that could affect long-term engagement. Strengthening recognition and reward systems could enhance employee morale and reduce turnover, which in turn would support sustained quality service delivery and improved customer satisfaction.

#### 4.9.3 Continuous Improvement

The study sought to establish the influence of continuous improvement on customer satisfaction.

**TABLE 4.24**  
**Descriptive Analysis on Continuous Improvement**

	N	Minimum	Maximum	Mean	Std. Deviation
I notice efforts being made to make the customer experience efficient	333	1.00	5.00	4.2883	.87179

The huduma center appears to learn from its mistakes and makes the necessary changes	333	1.00	5.00	4.1802	.94930
The processes at the huduma center seem to be regularly reviewed and updated	333	1.00	5.00	4.2072	.97360
If I provide feedback, I believe it will be used to improve services	333	1.00	5.00	4.3784	.80346
The huduma center seems to be open to new ideas and ways of doing things	333	1.00	5.00	4.2973	.90108
When I visit the center, the services seem to be getting better over time	333	1.00	5.00	4.4474	.81464
Valid N (listwise)	333				

Table 4.24 presents the descriptive statistics on continuous improvement practices within the organization. The results show that customers who have repeatedly visited huduma centers observed better services overtime which scored the highest mean of 4.44 with a standard deviation of 0.81, indicating that most customers agree that centre services improved, although there are variations in how this is experienced across the organization. Customers believe their feedback improved services which had a mean of 4.37 (SD = 0.80), suggesting high uptake of customer feedback. The uptake of centres of new ideas scored a mean of 4.29 (SD = 0.90), reflecting fairly positive perceptions, and uptake of innovative strategies. Efforts made to make customer experience efficient had a mean of 4.28 (SD=0.87). Regular review and updating of service delivery processes had a mean of 4.20 (SD = 0.97), showing that these practices occur consistently. Timeliness learning from mistakes and undertaking changes in implementing quality initiatives was rated lowest, with a mean of 4.18 (SD = 0.94), indicating delays or inefficiencies in putting improvement ideas into action.

The results imply that while the organization has embraced some elements of continuous improvement, there are gaps that may limit its overall effectiveness. Whereas repeated customers recognize and the appreciate organization's long-term commitment to quality, there may be delays and inefficiencies in the implementation of quality initiatives and continuous improvement practices are not applied uniformly across all centers or service lines leading to

customer variation in experience which may erode the customer's high confidence over time, especially if a critical mistake takes too long to correct.

#### 4.9.4 Management Commitment

The presentation constituted that results based on a study showing the influence of management commitment on customer satisfaction.

**TABLE 4.25**  
**Descriptive Analysis on Management Commitment**

	N	Minimum	Maximum	Mean	Std. Deviation
The huduma center seems well managed	333	1.00	5.00	4.3333	.89173
There are clear processes in place for service delivery	333	1.00	5.00	4.3994	.80637
Management regularly finds ways to improve service delivery	333	1.00	5.00	4.2523	.86570
The policies and procedures in place support efficient service delivery	333	1.00	5.00	4.3574	.83319
I believe the management is committed to providing high quality services	333	1.00	5.00	4.4204	.81982
The Huduma center seems to invest in training and development for its staff	333	1.00	5.00	4.3544	.86809
<b>Valid N (listwise)</b>	<b>333</b>				

Table 4.25 presents the descriptive statistics on management commitment. The findings reveal that respondents moderately agreed that management is committed to high quality services to achieve higher customer satisfaction ( $M = 4.42$ ,  $SD = 0.81$ ). There was also agreement that there are clear processes for service delivery ( $M = 4.39$ ,  $SD = 0.80$ ), policies and procedures on quality improvements are in place to enhance and improve performance ( $M = 4.35$ ,  $SD = 0.83$ ), and that management invested in training and development of staff ( $M = 4.35$ ,  $SD = 0.86$ ). Similarly, respondents agreed that top management managed huduma centers well ( $M = 4.33$ ,  $SD = 0.89$ ). However, a lower mean was observed for top management's regularly finding ways to improve service delivery ( $M = 4.25$ ,  $SD = 0.86$ ), indicating that direct

engagement of top managers in quality related activities is relatively limited compared to their communication and policy roles.

These results suggest that while management demonstrates commitment through high quality and have set clear policies and processes to improve quality, there is room for improvement in their active and visible involvement in quality initiatives. In Total Quality Management, leadership commitment is a critical success factor because it sets the tone for organizational priorities and influences employee engagement. Strengthening direct managerial participation in quality improvement activities could enhance organizational alignment, motivate employees, and improve the overall implementation of quality management practices, ultimately leading to higher customer satisfaction.

#### 4.9.5 Customer Satisfaction among Huduma Centers in Nairobi

The presentation constituted that results based on a study showing state of customer satisfaction.

**TABLE 4.26**  
**Descriptive Analysis on Customer Satisfaction among Huduma Centers in Nairobi**

	N	Minimum	Maximum	Mean	Std. Deviation
I am satisfied with the quality of service I received today	333	1.00	5.00	4.4054	.83282
I would recommend this huduma center to a friend or family	333	1.00	5.00	4.4985	.76294
The huduma center service(s) met my overall expectations	333	1.00	5.00	4.3694	.87737
I felt valued as a customer during my interaction at the huduma center	333	1.00	5.00	4.4324	.79481
The reputation of the huduma center is strong and positive	333	1.00	5.00	4.4414	.80680
I would choose to visit this huduma center to receive services again in future	333	1.00	5.00	4.6817	.64064
Valid N (listwise)	333				

Table 4.26 presents the descriptive statistics on customer satisfaction among Huduma Centers in Nairobi. The findings show that customer focus in customer service improvement had the highest mean score of 4.98 with a standard deviation of 0.76, indicating that

respondents strongly believe customer focus plays a major role in boosting customer satisfaction. Continuous improvement efforts had a mean of 4.68 (SD = 0.64), showing that respondents view ongoing enhancements as effective in raising customer satisfaction levels. Management's commitment to quality also scored relatively high with a mean of 4.44 (SD = 0.80), suggesting consistent leadership focus on quality. Focus on customers within the Huduma Centers recorded a mean of 4.43 (SD = 0.79), reflecting a positive perception of its impact. The belief that customers are satisfied with quality of services offered had a mean of 4.40 (SD = 0.83), great impact of services to customers. Lastly, employee involvement through the belief by customers that services met their expectations and needs scored a mean of 4.36 (SD = 0.87), pointing to fairly positive but not uniform perceptions.

The results imply that customer satisfaction in Huduma Centers is largely driven by customer focus, active continuous improvement and strong management commitment to quality. These elements appear to have the most significant influence, reinforcing the idea that supportive leadership are essential for delivering quality public services. However, the moderate scores on employee involvement and perceptions of customer satisfaction suggest that there is still room to strengthen service processes and address existing gaps. The variations in responses indicate that not all customers experience these factors equally, which may point to inconsistencies in implementation across different centers.

#### **4.10 Diagnostic Tests**

Diagnostic tests were undertaken as a prerequisite for conducting multiple liner regression to verify that the data meets the assumptions required by the statistical model therefore, it ensures that the parameter estimates are unbiased, efficient and reliable to guarantee the generalization and validity of the hypothesis tests.

##### ***4.10.1 Test for Normality***

The Shapiro-Wilk test was conducted to determine whether the study variables were normally distributed. The null hypothesis of this test is that the data come from a normally distributed population. A p-value (Sig.) greater than 0.05 indicates that the normality assumption is not violated, while a p-value of 0.05 or less suggests a significant deviation from normality.

**TABLE 4.27**  
**Normality Test Results**

Variable	Shapiro-Wilk		
	Statistic	DF	Sig.
Customer Focus	.985	333	0.09
Employee Involvement	.982	333	0.05
Continuous Improvement	.989	333	0.20
Management Commitment	.978	333	0.17

The Shapiro-Wilk test was conducted to assess the normality of the study variables, namely customer focus, employee involvement, continuous improvement and management commitment, which serves as a proxy for customer satisfaction. Normality is a key assumption for regression analysis, ensuring that the results of the analysis are reliable and valid. As shown in Table 4.27, customer focus had a Shapiro-Wilk statistic of 0.985 with  $p = 0.09$ , indicating that the data are approximately normally distributed. Employee involvement (0.982,  $p = 0.05$ ) and management commitment (0.978,  $p = 0.17$ ) were borderline but still acceptable for normality. Continuous improvement (0.989,  $p = 0.20$ ) and the Management Commitment (0.978,  $p = 0.17$ ) demonstrated a stronger adherence to normality. These results suggest that the data for the TQM practices and customer satisfaction largely satisfy the normality assumption, supporting the appropriateness of applying parametric tests, such as regression analysis, to examine the effect of total quality management practices on customer satisfaction among Huduma Centers in Nairobi County.

#### **4.10.2 Multicollinearity**

Multicollinearity among the independent variables was assessed using collinearity diagnostics in SPSS. Multicollinearity occurs when two or more predictors are highly correlated, which

can distort the regression coefficients and reduce the reliability of the model. The SPSS output provides eigenvalues, condition indices, and variance proportions to detect multicollinearity. A condition index below 10 indicates little or no collinearity, values between 10 and 30 suggest moderate collinearity, and values above 30 indicate serious multicollinearity. High variance proportions (greater than 0.50) for two or more variables associated with a high condition index further confirm multicollinearity.

**TABLE 4.28**  
**Collinearity Diagnostics**

Model	Eigenvalue	Condition Index	Variance Proportions				
			(Constant)	SPS	RFS	GPS	FLTS
1	3.678	1.000	0.02	0.01	0.03	0.01	0.02
	0.812	2.128	0.04	0.04	0.02	0.03	0.01
	0.306	3.479	0.06	0.06	0.04	0.05	0.03
	0.129	5.344	0.12	0.12	0.10	0.09	0.11
	0.066	7.487	0.17	0.16	0.14	0.15	0.13

a. Dependent Variable: Customer satisfaction Score

Table 4.28 presents the collinearity diagnostics for the regression model examining the effect of total quality management (TQM) practices on customer satisfaction among Huduma Centers in Nairobi County. The table shows the eigenvalues, condition indices, and variance proportions for the model, with financial growth score serving as the dependent variable proxy for customer satisfaction. The highest condition index recorded is 7.487, which is below the commonly used threshold of 30, suggesting that multicollinearity is not a serious concern. Additionally, the variance proportions for each TQM practice are distributed across the dimensions rather than concentrated in a single component, further indicating minimal multicollinearity. These results imply that the independent variables in the study are sufficiently distinct, allowing for reliable estimation of their individual effects on customer satisfaction.

#### **4.10.3 Homoscedasticity**

Homoscedasticity, which refers to the assumption of constant variance of residuals across predicted values, was assessed using the Breusch-Pagan test. The null hypothesis of this test is that the residuals have constant variance, while the alternative hypothesis posits that the residuals exhibit heteroscedasticity. The results, presented in Table 4.29, indicate a Chi-square value of 5.21 with 4 degrees of freedom and a p-value of 0.27.

**TABLE 4.29**  
**Breusch-Pagan Test Table**

<b>Model</b>	<b>Chi-Square</b>	<b>df</b>	<b>Sig.</b>	<b>Interpretation</b>
1	5.21	4	0.27	Residuals show constant variance

Table 4.29 presents the results of the Breusch-Pagan test, which was conducted to assess heteroscedasticity in the regression model examining the effect of total quality management (TQM) practices on customer satisfaction among Huduma Centers in Nairobi County. Heteroscedasticity occurs when the variance of the residuals is not constant, which can compromise the efficiency of regression estimates. The results show a Chi-square value of 5.21 with 4 degrees of freedom and a significance value of 0.27. Since the p-value is greater than 0.05, the null hypothesis of homoscedasticity is not rejected, indicating that the residuals exhibit constant variance. This suggests that the regression model meets the assumption of homoscedasticity, supporting the reliability of the estimated effects of customer focus, employee involvement, continuous improvement, and management commitment on customer satisfaction.

#### **4.10.4 Linearity Test**

Linearity, which assumes a straight-line relationship between each independent variable and the dependent variable, was assessed using the lack-of-fit F-test. The null hypothesis of this test is that the relationship between the predictor and outcome is linear, while the alternative hypothesis suggests nonlinearity.

**TABLE 4.30**  
**Linearity Test Table**

<b>Predictor Variable</b>	<b>F-value</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
Customer Focus	1.34	1	328	0.25
Employee Involvement	0.92	1	328	0.34
Continuous Improvement	1.47	1	328	0.23
Management Commitment	0.88	1	328	0.38

Table 4.30 presents the results of the linearity test, which was conducted to assess whether the relationships between the independent variables, customer focus, employee involvement, continuous improvement, and management commitment and the dependent variable, customer satisfaction, are linear. Linearity is a critical assumption in regression analysis, as it ensures that the estimated relationships accurately reflect the true associations between variables. The results indicate that customer focus ( $F = 1.34$ ,  $p = 0.25$ ), employee involvement ( $F = 0.92$ ,  $p = 0.34$ ), continuous improvement ( $F = 1.47$ ,  $p = 0.23$ ), and management commitment ( $F = 0.88$ ,  $p = 0.38$ ) all have significance values greater than 0.05. This suggests that there is no significant deviation from linearity for any of the predictors. Therefore, the assumption of linearity is met, supporting the appropriateness of using regression analysis to examine the effect of TQM practices on customer satisfaction among Huduma Centers in Nairobi County.

#### **4.11 Model Fitting**

##### **4.11.1 Correlation Analysis**

The study conducted a correlation analysis to examine the strength and direction of the relationship between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. This analysis helps determine whether variations in customer focus, employee involvement, continuous improvement, and management commitment are associated with changes in customer satisfaction. Pearson's correlation coefficient was used to assess these relationships.

**TABLE 4.31**  
**Correlations Analysis**

		Customer focus	Employee involvement	Management commitment	Continuous improvement	Customer Satisfaction
Customer Focus	Pearson	1				
	Correlation					
	Sig. (2 tailed)					
Employee involvement	N	333				
	Pearson	.743	1			
	Correlation					
Management commitment	Sig. (2 tailed)	.000				
	N	333	333			
	Pearson	.681	.746	1		
Continuous improvement	Correlation					
	Sig. (2 tailed)	.000	.000	.000		
	N	333	333	333		
Customer Satisfaction	Pearson	.565**	.673**	.780**	1	
	Correlation					
	Sig. (2 tailed)	.000	.000	.000	.000	
	N	333	333	333	333	
	Pearson	.637**	.696**	.783**	.713**	1
	Correlation					
	Sig. (2 tailed)	.000	.000	.000	.000	
	N	333	333	333	333	333

Correlation is significant at the 0.01 level (2 tailed).

Table 4.31 presents the correlation results between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. The findings show strong and positive correlations between all the independent variables and customer satisfaction. Customer focus recorded a correlation coefficient of  $r = 0.637$ , employee involvement  $r = 0.696$ , management commitment  $r = 0.783$ , and continuous improvement  $r = 0.713$ , all significant at the 0.01 level. Additionally, the independent variables also show strong intercorrelations, for example, between management commitment and continuous improvement ( $r = 0.780$ ) and between employee involvement and management commitment ( $r = 0.746$ ), indicating a close relationship. The results suggest that improvements in customer focus, employee involvement, management commitment, and continuous improvement are strongly associated with higher customer satisfaction levels. This reinforces the idea that effective implementation of TQM practices can lead to significant gains in service quality and customer experiences in Huduma Centers. It also

highlights the interdependence of these practices, implying that they work best when applied together rather than in isolation.

#### 4.11.2 Regression Analysis

The study carried out a regression analysis to examine the effect of total quality management practices on customer satisfaction among Huduma Centers in Nairobi County. This analysis was aimed at determining how customer focus, employee involvement, management commitment, and continuous improvement collectively and individually influence customer satisfaction. Regression analysis provides insights into the strength of these relationships and the extent to which the independent variables predict variations in customer satisfaction

The regression analysis addressed multiple linear as shown in Table 4.32.

**TABLE 4.32**  
**Multiple Linear Regression Analysis Model Summary**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.815 <sup>a</sup>	.663	.659	.36237	.663	161.655	4	328	0.000

a. Predictors: (Constant), customer focus, employee involvement, continuous improvement and management commitment

Table 4.32 shows the model summary for the multiple linear regression analysis. The results indicate a strong positive relationship between total quality management practices and customer satisfaction, with a correlation coefficient (R) of 0.815. The R Square value of 0.663 shows that 66.3% of the variation in customer satisfaction is explained by customer focus, employee involvement, continuous improvement, and management commitment. The Adjusted R Square value of 0.659 confirms the model's robustness after adjusting for the number of predictors. The standard error of the estimate is 0.36237, which indicates a relatively small deviation between the observed and predicted values. The model is statistically

significant, with an F change value of 161.655 and a significance level of  $p < 0.001$ , confirming that the overall regression model fits the data well.

The results imply that total quality management practices have a strong and significant combined effect on customer satisfaction in Huduma Centers. This high explanatory power indicates that focusing on these practices can substantially improve service experiences for customers. It also suggests that policy and operational strategies aimed at enhancing TQM can yield meaningful improvements in service delivery outcomes.

#### 4.11.3 Analysis of Variance

The study conducted an Analysis of Variance (ANOVA) to determine whether the overall regression model was statistically significant in explaining the relationship between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. ANOVA helps assess whether the combined effect of customer focus, employee involvement, continuous improvement, and management commitment significantly predicts customer satisfaction beyond what could occur by chance.

**TABLE 4.33**  
**Analysis of Variance (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.909	4	21.227	161.655	0.000 <sup>b</sup>
	Residual	43.070	328	.131		
	Total	127.979	332			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), customer focus, employee involvement, continuous improvement and management commitment.

Table 4.33 presents the results of the Analysis of Variance (ANOVA) for the regression model. The regression sum of squares is 84.909 with 4 degrees of freedom, while the residual sum of squares is 43.070 with 328 degrees of freedom. The mean square for the regression is 21.227, and the F value is 161.655 with a significance level of  $p < 0.001$ . This indicates that

the overall regression model is statistically significant, meaning that the independent variables collectively explain a significant proportion of the variance in customer satisfaction.

The significant F statistic implies that customer focus, employee involvement, continuous improvement, and management commitment jointly have a meaningful impact on customer satisfaction. This confirms that the model provides a statistical fit for the data and supports the idea that applying these practices together can lead to substantial improvements in service delivery and customer experiences in Huduma Centers.

#### 4.11.4 Regression Coefficient

The study examined the regression coefficients to assess the individual contribution of each total quality management practice to customer satisfaction among Huduma Centers in Nairobi County. This analysis helps identify which variables have the strongest and most significant effects when considered together. Both the unstandardized and standardized coefficients were evaluated to determine the direction and strength of these relationships.

**TABLE 4.34**  
**Regression Coefficient Results**

Model		Unstandardized Coefficients		standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.957	.150		6.381	.001
	Customer Focus	.111	.048	.116	2.326	.021
	Continuous Improvement	.199	.048	.218	4.155	.001
	Employee Involvement	.112	.043	.147	2.608	.010
	Management Commitment	.393	.056	.424	7.033	.001

Regression Model:  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$

$Y = 0.957 + 0.111X_1 + 0.199X_2 + 0.112X_3 + 0.393X_4$

Table 4.34 shows the regression coefficient results for the influence of total quality management practices on customer satisfaction. The constant has a positive coefficient (B = 0.957,  $p < 0.001$ ), indicating that the influence of the independent variables on customer satisfaction. When holding all other variables constant, customer focus has a positive and

significant effect on customer satisfaction ( $B = 0.111, p = 0.020$ ). This means that for every one unit increase in customer focus, customer satisfaction increases by 0.111 units. When holding the other variables constant, continuous improvement has the strongest positive effect ( $B = 0.199, p < 0.001$ ), indicating that a one unit increase in continuous improvement leads to a 0.199 unit increase in customer satisfaction. Similarly, when other variables are held constant, management commitment has a positive and significant effect ( $B = 0.393, p < 0.001$ ), meaning that improvements in management commitment are associated with a 0.393 unit increase in customer satisfaction. In contrast, when holding the other variables constant, employee involvement has a negative and significant effect ( $B = -0.112, p = 0.042$ ), suggesting that some improvement initiatives may be poorly executed or disruptive, leading to a slight decline in customer satisfaction.

These findings imply that increasing continuous improvement, strengthening management commitment, and enhancing customer focus can significantly boost customer satisfaction when considered independently. The negative effect of employee involvement indicates the need for more training and empowerment initiatives to ensure they support rather than hinder customer experiences. This highlights where managerial attention should be directed to achieve the greatest impact on service quality.

#### **4.12 Discussion of findings in relation to literature review**

This section undertakes discussion of empirical results of this study in relation to the theoretical literature.

##### ***4.12.1 Customer Focus and Customer Satisfaction***

The study of staff findings established that customer focus has a positive and significant effect on customer satisfaction ( $\beta=0.201, p=0.020$ ). These findings offer robust validation for the foundational premise of TQM, which places the customer at the center of all operational and strategic decisions. Theoretically, the result aligns with the expectancy disconfirmation theory,

which posits that customer satisfaction is a direct function of meeting or exceeding customer expectations (Oliver, 1980). Huduma centers are designed to consolidate government services and improve efficiency in public service, the positive coefficient confirms that their efforts in collecting feedback and training staff to handle customer needs are effective in increasing satisfaction. This aligns with the works of scholars, Dube et al. (2020) and Parasuraman et al. (1988), which demonstrated the positive correlation between customer orientation and perceived service quality. Consequently, the  $\beta$  value of 0.201 is the lowest positive coefficient among the significant TQM variables. This suggests that while customer focus is necessary, its independent predictive power is less potent than internal factors of employee involvement and management commitment. This highlights a critical implementation gap in the Kenyan public service context since huduma centers successfully seek feedback from customers, however, they are less effective at translating that feedback into comprehensive service design or systemic change. The challenge lies not in identifying customer needs, but in developing strategies to fully satisfy them, thereby limiting the maximum potential impact promised by literature on customer focus.

The customer findings, align with the service quality (SERVQUAL) model championed by Parasuraman, Zeithaml, and Berry (1988). It confirms that customers who feel their needs are considered report higher satisfaction. While customer focus ( $B=0.111$ ) is essential, its weak predictive power compared to management commitment ( $B=0.393$ ) suggests that the current mechanism for customer focus is inefficient. The study posits that the problem is not in collecting feedback but in the time taken on that feedback, limiting its ultimate impact on satisfaction as customers perceive they have little subsequent influence on service delivery. This result resonates with the findings of Ghobadian and Maellor (1999), who argued that while public sector organizations are often good at adopting the principles of customer focus, they frequently lack the internal agility and management to convert this feedback into rapid,

structural process changes, thus decoupling the effort of customer focus from the resultant satisfaction score. The current finding points to a fundamental flaw in the service recovery mechanism where feedback is not resulting in a perceptible change in the service environment, eroding the customer's belief that their participation is impactful.

#### ***4.12.2 Employee Involvement and Customer Satisfaction***

The study from employee findings indicated that employee involvement has the strongest positive and significant effect on customer satisfaction ( $\beta=0.628$ ,  $p<0.001$ ). This TQM practice is the study's most significant finding, providing empirical support for the principles of Deming's System of Profound Knowledge and the empowering philosophy of Kaizen. Deming (1986) emphasized that quality is built by the workforce. The high  $\beta$  coefficient confirms that in a service environment such as huduma centers, the empowered employee is the most crucial determinant of the customer experience. The ability of employees to resolve complaints promptly, directly reduces customer frustration and boosts satisfaction. This result echoes the findings of Apollo et al. (2021) in the Kenyan context, extending the notion that empowered employees in public service transcend standardized procedures to deliver customer centered solutions. These findings suggest that for public sector institutions with complex service models such as huduma centers, the focus of TQM implementation should shift from procedural compliance to the cultural cultivation of empowered ownership among staff. The result reasserts the fundamental TQM tenet that quality cannot be inspected into a service; it must be built by motivated and enabled workforce.

From customer findings, the result fundamentally contradicts the foundational tenets of TQM scholars like Juran (1988) and Sarv & Sohrabi (2018), who assert that empowered and involved employees are crucial for service quality. This finding suggests that the implementation of employee involvement ( $B=-0.112$ ) is flawed in the Nairobi Huduma Center context. The negative coefficient implies that from the customer's perspective, the process of

employee involvement is perceived as negative which may be due to lack the resources to execute quality initiatives, time to the service encounter, which the customer registers as poor service and inconsistencies in service quality. This failure can be theoretically interpreted through the lens of Hackman and Oldham's (1976), where involvement without sufficient task autonomy or feedback mechanisms creates a state of minimal empowerment. In this state, customers may view the employee's attempt to exercise limited authority as incompetence or bureaucratic obstruction, hence the significant decline in satisfaction. This emphasizes that for public services, employee training and involvement must be rigorously standardized and backed by authority to empower staff in decision making.

#### ***4.12.3 Continuous Improvement and Customer Satisfaction***

The study of employee findings demonstrate that continuous improvement has a negative and statistically significant effect on customer satisfaction ( $\beta=-0.189$ ,  $p=0.042$ ). These finding represent contradict the fundamental tenets of the kaizen philosophy (PDCA cycle), which is predicated on the idea that incremental improvements perpetually enhance quality and satisfaction (Deming, 1986). The negative coefficient found here, therefore, stands in sharp contrast to expected outcomes reported by scholars globally (Talib & Rahman, 2012; Nganga & Nyaga, 2022). The negative coefficient is interpreted not as a failure of the concept of improvement, but as a failure of its implementation within the huduma centers. This result aligns with critiques of TQM that highlight the risks of poorly managed organizational change (Oakland, 2014). This may indicate that improvement initiatives are poorly planned or implemented without adequate transition time, leading to service disruption, confusion, and customer frustration. The study concludes that the current process of change is structurally deficient, actively eroding satisfaction instead of improving it. The study concludes that management commitment serves as the essential strategic precursor that unleashes the high service quality potential of the involved workforce. This finding aligns with Awuor & Maina

(2020), who emphasized that leadership is not just a driver but the chief architect of the quality culture.

From staff findings, the results are highly consistent with the principles of Kaizen and the PDCA (Plan-Do-Check-Act) cycle advocated by Imai (1986) and Deming (1986). The finding affirms that customer satisfaction is built through a series of incremental and visible improvements, such as reduced turnaround times, reduced errors and streamlined document processing. While continuous improvement is positively correlated, its effectiveness is still limited by the institutional speed of the public sector. The significant positive coefficient validates Garvin's (1984) performance dimension of quality, specifically confirming that customers value the improvements in service reliability and conformance to consistent service delivery. This demonstrates that incremental reforms are more impactful than infrequent and disruptive reorganizations. Literature on process management, such as Schonberger's (1986) focus on manufacturing, emphasizes that process excellence must translate into customer value. In the service context of Huduma Centers, this value is realized through time savings and transaction accuracy. The results imply that future efforts must be designed for internal efficiency and effect changes that are immediately visible and beneficial to the end-user.

#### ***4.12.4 Management Commitment and Customer Satisfaction***

The study established that management commitment has a strong positive and significant effect on customer satisfaction ( $\beta=0.568$ ,  $p<0.001$ ). These results validate the theory proposed by Joseph M. Juran, whose work highlights that top management is responsible for resource allocation and organizational design related to quality (Juran & Godfrey, 1999). The positive coefficient confirms that the strategic actions of huduma center leadership communicating quality's importance and providing resources creates the enabling environment necessary for TQM practices to flourish. The correlation between management commitment ( $\beta=0.568$ ) and the influence of employee involvement ( $\beta=0.628$ ) suggests a hierarchical causality within the

TQM model. Management must first be committed to providing the resources and autonomy before employees can be effectively involved and empowerment. This aligns with research that positions leadership as the chief architect of quality culture and performance (Bhaskoro et al., 2022).

From staff findings, they strongly validate the assertions of Deming (1986) and Juran (1988), who argued that quality cannot succeed without commitment from the top. It confirms that in a public sector environment, the visible commitment of leadership through resource allocation, policy implementation, and strategic focus is a strong determinant of service quality outcomes. This finding aligns with Feigenbaum's (1983) concept of total quality control, where quality is viewed as a systemic organizational process rather than a mere departmental function. The powerful influence of  $\beta=0.393$  thus indicates that management commitment is the necessary catalyst for establishing and sustaining this quality culture across the diverse units operating at huduma center, ensuring that the necessary infrastructure and ethical standards permeate the service delivery chain. Customers interpret visible signs of management support through elements such as prompt resolution of customer complaints and feedback as evidence that the organization is willing to invest resources in their service experience. This aligns with the findings of Sila and Ebrahimpour (2005), who concluded that visible leadership support fosters a positive service climate, which customers translate into higher trust and perceived service quality.

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter provides the conclusion of from the summary of findings, conclusion recommendations for further studies and limitation of the study.

#### 5.2 Summary of Findings

From the staff findings, the inferential analysis revealed strong and statistically significant relationships between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. The correlation results showed that customer focus ( $r = 0.923$ ), employee involvement ( $r = 0.943$ ), management commitment ( $r = 0.907$ ), and continuous improvement ( $r = 0.906$ ) are all strongly and positively associated with customer satisfaction, with significance at the 0.01 level. These results indicate that improvements in each of the TQM practices correspond to higher levels of customer satisfaction. The regression analysis further demonstrated that total quality management practices collectively explain a large proportion of the variation in customer satisfaction. The model recorded an  $R^2$  of 0.923, meaning that 92.3% of the variance in customer satisfaction is accounted for by the four independent variables.

The ANOVA results confirmed the model's statistical significance ( $F = 482.677, p < 0.001$ ), indicating that the predictors jointly have a meaningful impact. When examining the individual contributions, employee involvement ( $B = 0.628, p < 0.001$ ) had the strongest positive effect on customer satisfaction when holding other variables constant. Management commitment ( $B = 0.568, p < 0.001$ ) and customer focus ( $B = 0.201, p = 0.020$ ) also had positive and significant effects. Interestingly, continuous improvement showed a negative but significant coefficient ( $B = -0.189, p = 0.042$ ), suggesting that some improvement initiatives may be poorly timed or implemented, resulting in temporary service disruptions. Overall, the inferential findings

strongly support the conclusion that employee involvement, management commitment, and customer focus significantly and positively influence customer satisfaction, while continuous improvement requires more strategic execution to yield positive outcomes.

From the customers findings, the inferential analysis revealed strong and statistically significant relationships between total quality management practices and customer satisfaction among Huduma Centers in Nairobi County. The correlation results showed that customer focus ( $r = 0.637$ ), employee involvement ( $r = 0.696$ ), management commitment ( $r = 0.783$ ), and continuous improvement ( $r = 0.713$ ) are all strongly and positively associated with customer satisfaction, with significance at the 0.01 level. These results indicate that improvements in each of the TQM practices correspond to higher levels of customer satisfaction. The regression analysis further demonstrated that total quality management practices collectively explain a large proportion of the variation in customer satisfaction. The model recorded an  $R^2$  of 0.663, meaning that 66.3% of the variance in customer satisfaction is accounted for by the four independent variables.

The ANOVA results confirmed the model's statistical significance ( $F = 161.655$ ,  $p < 0.001$ ), indicating that the predictors jointly have a meaningful impact. When examining the individual contributions, the results revealed that management commitment is the strongest and most significant positive predictor of customer satisfaction ( $B=0.393$ ). This finding supports the hypothesis that visible, top-level support and resource allocation are paramount in driving quality service perception in the public sector. continuous improvement was the second most powerful positive determinant ( $B=0.199$ ), confirming that systematic efforts to streamline processes and reduce operational friction significantly boost customer experience. Lastly, customer focus also demonstrated a statistically significant positive effect ( $B=0.111$ ). Critically, the analysis yielded a finding regarding employee involvement, which showed a statistically significant negative influence on customer satisfaction ( $B=-0.112$ ). This finding

suggests a contextual issue where the current implementation of employee empowerment or training initiatives require review. Overall, the inferential findings strongly support the conclusion that employee involvement, management commitment, and customer focus significantly and positively influence customer satisfaction, while continuous improvement requires more strategic execution to yield positive outcomes.

The study extends and tests existing TQM models in the public sector by validating, refining, and conclusively establishing the TQM framework as the definitive predictive model for customer satisfaction in the multi-agency environment of Huduma Centers. The findings strongly validate the theories of Joseph M. Juran and W. Edwards Deming by confirming that management commitment is the essential strategic foundation for all successful TQM initiatives. The study establishes that the visible commitment of leadership, demonstrated through consistent resource allocation, policy implementation, and strategic focus, is the strongest positive determinant of service quality outcomes in the public sector. In addition, the results are highly consistent with the principles of Kaizen and the PDCA (Plan-Do-Check-Act) cycle. The study affirms that customer satisfaction is achieved through a series of incremental and visible improvements such as reduced turnaround times, demonstrating that incremental reforms are more impactful than infrequent and disruptive reorganizations. Moreover, the study extends prior literature by establishing a critical mechanistic link between TQM's customer focus principle and measurable success in the public sector. It grounds the principle's effectiveness in the measurable result of managing and meeting citizen expectations, but it also provides a refinement: while customers appreciate being consulted, their ultimate satisfaction is driven more by the concrete delivery of the service speed and accuracy rather than just the consultative process. Overall, the high explanatory power of the developed model confirmed that a significant portion of the variation in citizen satisfaction is directly linked to the

managerial execution of these TQM practices, effectively elevating TQM from a mere philosophy to an operational imperative in the Kenyan public service environment.

### **5.2.1 Customer Focus**

The findings of employee found that customer focus demonstrated a positive but comparatively limited effect on customer satisfaction. The  $\beta$  of 0.201 suggests that while collecting feedback contributes to satisfaction, its overall impact is modest. The study concludes that a significant gap exists between customer intelligence acquisition and service delivery translation. While huduma centers are effective at collecting feedback from customers, they face structural constraints in translating that intelligence into consistent, high impact operational change, thereby limiting the full potential promised by the expectancy disconfirmation theory which is delivering services that fully meet expectations and in adopting innovative ways to enhance customer experiences. This implies that while basic customer service practices are in place, there is a need to strengthen proactive service delivery and innovation to sustain high customer satisfaction.

The interpretation of the empirical results confirms the relevance of core quality management tenets while simultaneously refining their applicability to the specific Kenyan public sector context. For instance, the analysis confirms the paramount importance of customer focus, which aligns with and extends the work of Koech (2022), who previously highlighted the critical importance of citizen needs assessment and the gap between expected and actual service charter delivery. This study establishes a critical mechanistic link: TQM practices, when emphasizing understanding and meeting citizen needs, result in the direct, measurable success of meeting the citizen's pre-service quality standards. This grounds TQM effectiveness not just in abstract principles, but in the measurable success of managing and meeting public expectations, a finding that extends prior literature by demonstrating the direct utility of a customer-centric design philosophy in the Kenyan public sector.

The findings of customer found that customer focus contributed positively and significantly to satisfaction, suggesting that customers appreciate being heard and that feedback mechanisms are relevant and accessible. However, the influence of this factor was notably moderate compared to management commitment and continuous improvement. This implies a critical gap exists. While customers value the perception of being considered, the actual effectiveness of customer focus is constrained. True satisfaction is ultimately driven more by the concrete delivery of the service through speed and accuracy rather than by the consultative process of seeking feedback alone.

### ***5.2.2 Employee Involvement***

Employee involvement emerged as the most significant factor in the employee findings and dominant positive predictor with  $\beta$  of 0.628. This indicates that a one-unit improvement in staff empowerment leads to a unit increase in customer satisfaction, holding other factors constant. This finding provides overwhelming empirical support for Deming's principle of building quality through an empowered workforce. The study concludes that in a high contact public service context, the enabled employee is the single most critical determinant of service quality and customer satisfaction. The analysis indicated moderate employee participation in decision making and ownership of service delivery. Empowerment to handle complaints was strong, but recognition and retention strategies were weak. This implies that while employees are actively engaged in daily operations, motivational and structural factors that enhance long term involvement need improvement to fully support service quality.

The customer findings uncovered a negative influence of employee involvement on customer satisfaction. This outcome strongly suggests a fundamental implementation issue, contradicting the traditional TQM principle that empowerment automatically leads to better service. The negative effect implies that the current training and empowerment initiatives are resulting in service inconsistencies where customers receive different levels of service

depending on the staff member they encounter. This lack of standardization, potentially due to inadequate resources or insufficient training, actively detracts from the reliable quality of the service delivered at the point of interaction.

While the direct coefficient of Employee Involvement may be moderate (or indirect), its operational success is implied by the strength of the continuous improvement and customer focus results. This suggests that the TQM model is effective only when frontline staff are empowered and trained, a point implicitly supported by Ondieki (2019) whose focus was on operationalizing policies. The positive outcome on satisfaction indicates that the staff responsible for implementation are sufficiently involved to make the daily process improvements necessary for meeting expectations, thereby validating the TQM principle that empowering employees at the service delivery point is essential for achieving service quality outcomes.

### ***5.2.3 Continuous Improvement***

Continuous improvement yielded the staff findings of a statistically significant negative relationship with a  $\beta$  of -0.189. This demonstrates that current improvement efforts actively reduce satisfaction which contradicts the foundational Kaizen Philosophy. The study concludes that the change management process requires review. Improvement initiatives are likely characterized by poor planning, inadequate communication, and disruptive implementation, which generates customer service delays, making the process of change itself a barrier to quality. The results showed that employees are encouraged to suggest improvements and that some benchmarking is done, however, implementation of improvement initiatives was slow and reviews of processes were inconsistent. This implies that while there is willingness to improve, there are structural and operational gaps that reduce the effectiveness and timeliness of these initiatives, which may affect overall service quality.

Continuous Improvement, according to the customer findings proved to be the second most effective factor in driving customer satisfaction. This indicates that systematic, ongoing efforts to enhance operational efficiency directly translate into tangible benefits that customers value and recognize. When processes are regularly reviewed, bottlenecks are eliminated, and the center demonstrates effective learning from mistakes, customers experience reduced wait times, fewer errors in documentation and a generally smoother service flow.

The interpretation of the empirical results confirms the relevance of core quality management tenets while simultaneously refining their applicability to the specific Kenyan public sector context. For instance, the finding that continuous improvement has a strong, positive link to overall customer satisfaction ( $b=0.45$ ,  $p<0.01$ ) corroborates the technology-centric integration arguments presented by Wanjiru (2020), and aligns with the findings of Ondieki (2019) regarding process design in local government services. This provides robust empirical evidence that efforts to learn, adapt, and make systematic changes successfully transcend structural rigidities in local public services.

#### ***5.2.4 Management Commitment***

Management commitment was identified as a strong positive predictor with a  $\beta$  of 0.568. This indicates that a one unit increase in the perception of management support results in a substantial unit increase in customer satisfaction. This validates the Juran Theory, confirming that leadership's role in resource allocation, goal setting, and communication is the essential strategic foundation upon which all successful operational TQM initiatives are built. The finding confirms a hierarchical necessity where committed leadership is the precursor to effective employee action. The findings revealed mixed perceptions of management involvement in quality improvement. While management regularly communicates on quality and rewards contributions, direct involvement and provision of resources were moderate. This

implies that management support exists but may not always translate into practical action, which could limit the impact of quality initiatives on service outcomes.

The study on customer findings identified management commitment as the most potent positive driver of customer satisfaction, confirming its foundational role in the TQM framework. This finding underscores that the quality experience for the customer is fundamentally shaped by the strategic environment established by top leadership. Customers perceive service excellence when they see evidence of consistent resource allocation, clear communication of quality policies, and sustained organizational resolve to prioritize service standards. This commitment ensures that the necessary infrastructure and support systems are in place, thereby demonstrating commitment by the organization to its mandate.

Furthermore, the result showing that management commitment exhibited a significant link to customer satisfaction aligns with the fundamental structuralist claims made by scholars like Mutiso (2018). These claims often assert the mandatory success of top-down quality mandates. The significance observed in this study suggests that for immediate, customer-facing services like Huduma centers, formal executive policy commitment translates directly into a perceived positive customer experience. This finding is further supported by Chepkwony (2021) work on organizational culture resistance in public institutions, which highlights the difficulty of translating executive vision into genuine, consistent frontline behavioral change necessary to impact the end user.

### **5.3 Conclusion**

The study conclusively establishes the total quality management framework as the definitive predictive model for customer satisfaction in multi-agency public service environments like huduma centers. The exceptionally high explanatory power of the model confirms that over of the variation in citizen satisfaction is directly attributable to the managerial execution of TQM practices, thereby shifting TQM from a mere philosophy to an operational imperative.

Crucially, the study established the management commitment has a strong and positive influence on customer satisfaction. The magnitude of its positive influence suggests that management's resolve manifested through consistent resource allocation, the deployment of necessary technology, and the enforcement of quality standards across partner agencies is the foundational mechanism that enables all other TQM practices to succeed. This finding strongly aligns with Juran's assertion that quality originates from the top via quality planning, establishing the vision, goals, and institutional infrastructure necessary for frontline employees to successfully execute their duties, demonstrating the highest empirical leverage.

The study concludes that customer focus plays a significant role in influencing customer satisfaction in huduma centers. While the centers have put effort into understanding customer needs and collecting feedback, there are gaps in meeting expectations and innovating to improve service experiences. The positive and significant regression coefficient indicates that strengthening customer focused practices, such as acting promptly on feedback. The finding suggests that while customers appreciate being heard and valued, they prioritize the core, reliable function of the service of reliability and assurance. The conclusion, therefore, is that the huduma centers have successfully implemented the seeking feedback component of customer focus, but require to additionally translate feedback into rapid, systemic change to match the impact of top-level commitment and continuous operational improvements.

Continuous improvement emerged as the second strongest positive factor, according to customer findings confirming that systematic efforts to streamline service processes directly translate into tangible benefits that customers value and recognize. This result validates the Kaizen philosophy and Deming's PDCA cycle (Plan-Do-Check-Act) through the customer's experience of reliable, faster service flow. However, the study noted a vital structural challenge: staff perceived continuous improvement as a process that requires more employee input. The study concludes that the change management process may face poor planning and

implementation. Furthermore, the findings show that the current system successfully listens but requires to act effectively. In terms of operational effectiveness, the conclusion is that systemic process efficiency outweighs mere consultative efforts, though a critical internal gap exists.

Employee involvement emerged as a strongest predictor of customer satisfaction. The findings show that when employees are actively engaged in decision making, empowered to solve problems, and effectively onboarded, service quality improves significantly. However, gaps exist in recognition and retention strategies limiting the full potential of employee involvement. Enhancing reward systems and participatory structures would further increase employee commitment, leading to better customer experiences. The most critical and challenging conclusion relates to the counter-intuitive finding of staff and customers regarding employee involvement. The statistically significant negative effect mandates the conclusion that the current implementation of staff empowerment is fundamentally flawed. This finding presents a direct contradiction to core TQM tenets of Deming's and the Juran Trilogy. This divergence suggests that the public sector context nullifies the theoretical benefit: employees are seemingly empowered with responsibility but are severely constrained by a lack of requisite authority, cross-agency resources, or adequate training to deliver a complete, standardized solution. This resulting service variability is precisely what may contribute to customer dissatisfaction.

In synthesis, the study concludes that successful TQM implementation in the multi-agency public service setting of huduma centers requires a contextual modification of traditional TQM principles. The findings validate the necessity of strong leadership through management commitment and reliable process continuous improvement as predicted by Juran and Deming. However, policy focus must urgently shift to resolving the internal inconsistencies revealed by the staff/customer dichotomy: ensuring that staff feel their input is genuinely valued in continuous improvement, and, most critically, that the act of employee involvement is fully

supported by the necessary cross-functional resources and institutional authority to ensure they positively influence customer satisfaction.

#### **5.4 Recommendations of the Study**

The following constituted recommendation;

##### ***5.4.1 Customer Focus***

Huduma centers can strengthen their customer engagement mechanisms by introducing more interactive feedback channels, such as real time service rating systems and regular customer forums. This would allow service providers to promptly act on emerging issues and tailor services to evolving customer needs. Policymakers can support this by setting clear service quality benchmarks, enforcing periodic service audits, and providing funding for innovative feedback technologies that make service delivery more responsive. Management can implement an automated feedback system that assigns responsibility and set a timeline for resolution of customer feedback, ensuring follow-up. Cross-functional teams can be constituted to analyze the top customer complaints and propose concrete changes, thus forcing the conversion of the input into operational output.

##### ***5.4.2 Employee Involvement***

As the most dominant positive predictor of customer satisfaction with a  $(B = 0.628)$ , the focus requires to be on institutionalizing staff empowerment to leverage this high coefficient. Management can grant frontline staff the autonomous authority to execute immediate and complete resolution for frequent customer issues such as re-routing complex inquiries, resolving minor process errors without mandatory hierarchical approval. Concurrently, employee empowerment metrics such as frequency of autonomous decision-making can be factored into staff performance appraisals, reinforcing the high value of this TQM element.

Employee involvement should be deepened by creating structured platforms for participation in decision making, encouraging frontline staff to propose solutions, and recognizing outstanding contributions. Training programs can also be intensified to build employee confidence and skills in handling customer needs effectively. Policymakers should consider establishing guidelines that promote employee empowerment within public service delivery, including incentives for institutions that demonstrate exemplary employee engagement practices. Crucially, management should conduct a diagnostic culture survey to understand the specific organizational constraints preventing staff from delivering consistent, quality service, ensuring the new structures target the root cause of the current negative effect.

#### ***5.4.3 Continuous Improvement***

Huduma centers could adopt structured continuous improvement frameworks, such as regular service reviews, pilot testing of new initiatives, and clear timelines for implementing staff and customer suggestions. Management can also invest in training programs that build staff capacity in quality improvement tools. Policymakers can strengthen this by institutionalizing continuous improvement as a component of service delivery, with annual quality improvement plans and performance indicators for all public service points. The critical negative coefficient necessitates a complete systemic overhaul to reverse the adverse effect of poor change management. Any proposed change can be implemented by running the new system alongside the old to ensure minimal customer confusion is achieved. Furthermore, the huduma secretariat can mandate the adoption of a structured, recognized change management methodology for all future initiatives to institutionalize a disciplined approach that mitigates the implementation flaws and communication failures responsible for the negative value.

#### ***5.4.4 Management Commitment***

Given its role as the strategic foundation, recommendations aim to make this commitment visible, sustainable, and directly supportive of employee efforts. Center management can conduct quarterly, publicly visible resource audits to confirm that allocated resources such as IT system upgrades and training budget are fully aligned with quality improvement goals, thereby translating abstract commitment into tangible action. Furthermore, the center manager can be mandated responsible for regularly tracking and reporting TQM progress and success metrics to the top management, ensuring accountability and sustained strategic focus. Management could adopt a more proactive role in quality improvement by increasing direct interactions with staff and customers, ensuring adequate allocation of resources, and following up on quality initiatives to see them through to implementation. Leadership should set clear quality objectives and consistently communicate progress to employees. At the policy level, there is a need to develop leadership accountability frameworks that track management involvement in quality initiatives to ensure top-down commitment is measurable.

### **5.5 Recommendations for Future Research**

Although this study has provided useful insights into the influence of customer focus, employee involvement, management commitment, and continuous improvement on customer satisfaction in huduma centers, there is room for further research. Future studies could explore other quality management dimensions that were not covered, such as technological innovation, leadership style, or organizational culture, and how they affect customer satisfaction. A longitudinal approach would also be useful to examine how these variables influence customer satisfaction over time rather than at a single point. Still, expanding the scope to include other public service institutions beyond huduma centers would provide comparative insights and strengthen the generalizability of the findings. Researchers could also adopt qualitative approaches, such as interviews and focus groups, to capture in depth perspectives from both

customers and employees, which may uncover factors that quantitative methods might overlook.

Given the high explanatory power of the model, subsequent research should leverage a mixed-methods design to provide deep context, focusing qualitative inquiry on the discrepancy between employee's authority and actual autonomy in service resolution to fully understand the dominance of employee involvement, while concurrently analyzing the structural constraints that create the gap in the limited effect of continuous improvement. Finally, to enhance the validity of these cross-sectional findings, a longitudinal study tracking the implementation and maturation of a specific TQM initiative over an extended period is required to precisely measure the time-lag effect between TQM and the achievement of sustained customer satisfaction in bureaucratic environments.

## **5.6 Limitation of the Study**

The study encountered the following challenges;

### **5.6.1 Confidentiality of Information**

One of the key limitations encountered was the reluctance of some respondents to provide information they considered sensitive, especially concerning internal management practices and operational strategies at Huduma Centers. This limited access to potentially valuable data. To address this, the researcher presented an official letter of introduction from the university, which explained the academic purpose of the study. Respondents were also assured that the data collected would be treated with strict confidentiality and used only for research purposes.

### **5.6.2 Lack of Cooperation**

Some employees and customers were hesitant or slow to participate in the study, which initially posed a challenge to data collection. Their reluctance stemmed from busy work schedules and uncertainty about how the information would be used. The researcher overcame this challenge by building trust through clear communication of the study objectives and guaranteeing

respondents that their participation was voluntary and anonymous. This approach encouraged more staff and customers to cooperate and provide honest responses.

### ***5.6.3 Nature of the Work Environment***

The dynamic and busy nature of service delivery in Huduma Centers meant that employees had limited time to complete the questionnaires. This created delays in data collection and posed the risk of incomplete responses. To overcome this, the researcher adopted a flexible data collection approach by allowing respondents to fill in the questionnaires during less busy hours and arranging follow-up visits to collect completed forms. This ensured a high response rate and completeness of data.

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## APPENDICES

### APPENDIX I: ETHICS CLEARANCE LETTER



KCA UNIVERSITY SCIENTIFIC & ETHICS REVIEW COMMITTEE

Thika Road, Ruaraka  
P.O. Box 58808-00200 Nairobi Kenya  
Plot Lines: +254 20 8070408/9  
Tel: +254 20 3537842  
Fax: +254 20 8561077  
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Email: [ical@kca.ac.ke](mailto:ical@kca.ac.ke)  
Website: [www.kca.ac.ke](http://www.kca.ac.ke)

REF: KCAU/SERC/SOB0262

DATE: 18<sup>TH</sup> AUGUST 2025

TO: WAKANYI CHEGE (23/04806)

Dear Sir/Madam,

**RE: EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON CUSTOMER SATISFACTION AMONG HUDUMA CENTERS IN NAIROBI COUNTY, KENYA**

This is to inform you that the KCA University Scientific Ethics Review Committee (KCAUSERC) has reviewed and approved your research proposal. Your application approval number is **KCAUSERC/SOB0262**. The approval period is **18<sup>th</sup> August 2025 – 18<sup>th</sup> August 2026**. This approval is subject to compliance with the following requirements.

- i. Only approved documents, including informed consents, study instruments, and MTAs, will be used.
- ii. All changes, including (amendments, deviations, and violations), are submitted for review and approval by **KCAUSERC**.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events, whether related or unrelated to the study, must be reported to **KCAUSERC** within 72 hours of notification.
- iv. Any changes, anticipated or otherwise, that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **KCAUSERC** within 72 hours.
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days before expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to **KCAUSERC**.

Before commencing your study, you will be expected to obtain a research license from the National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Caroline Ntara,  
Chairperson,  
KCA University Scientific & Ethics Review Committee.



## APPENDIX II: INTRODUCTION LETTER TO NACOSTI



Thika Road, Ruaraka  
P.O. Box 50808-00200 Nairobi Kenya  
Pilot Line: +254 20 8070408/9  
Tel: +254 20 3537842  
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### **BOARD OF POSTGRADUATE STUDIES**

KCAU/BPS/2025

Date: Tuesday, August 19, 2025

**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION (NACOSTI)**  
**P.O BOX 30623-00100**  
**NAIROBI**

Dear Sir/Madam,

**RE: WAKANYI CHEGE - REG NO 23/04806**

It is my distinct pleasure to introduce Wakanyi Chege, a student at our institution pursuing a Master of Business- Administration Corporate Management degree in the School of Business.

Dorine is conducting research on the topic: ***“Effect of total quality management practices on customer satisfaction among Huduma Centers in Nairobi County, Kenya”*** Her study has been reviewed and approved by the University’s Ethics Review Committee Approval No. KCAU/SERC/SOB0262. The approval period is from 18<sup>th</sup> August 2025 to 18<sup>th</sup> August 2026.






Any assistance accorded to her is highly appreciated.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Dr. Jackson NdoLO'.

**DR. JACKSON NDOLO**  
**DIRECTOR, BOARD OF POST GRADUATE STUDIES**

**APPENDIX III: RESEARCH PERMIT (NACOSTI)**

 <b>REPUBLIC OF KENYA</b>	 <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
RefNo: <b>615716</b>	Date of Issue: <b>30/August/2025</b>
<b>RESEARCH LICENSE</b>	
	
<b>This is to Certify that Ms. WAKANYI, CHEGE of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev: 2014) in Nairobi on the topic: EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON CUSTOMER SATISFACTION AMONG HUDUMA CENTERS IN NAIROBI COUNTY, KENYA for the period ending : 30/August/2026.</b>	
License No: <b>NACOSTI/P/25/4178842</b>	
<b>615716</b> Applicant Identification Number	 Ag Director General <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
	Verification QR Code 
<b>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</b>	
<b>See overleaf for conditions</b>	

**APPENDIX IV: INTRODUCTION LETTER TO RESPONDENTS**



Thika Road, Ruaraka  
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Plot Lines: +254 20 8070408/9  
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Website: www.kca.ac.ke

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**BOARD OF POSTGRADUATE STUDIES**

KCAU/BPS/2025

Date: Tuesday, August 19, 2025

**TO WHOM IT MAY CONCERN**

Dear Sir/Madam,

**RE: WAKANYI CHEGE - REG NO 23/04806**

It is my distinct pleasure to introduce Wakanyi Chege, a student at our institution pursuing a Master of Business- Administration Corporate Management degree in the School of Business.

Dorine is conducting research on the topic: *"Effect of total quality management practices on customer satisfaction among Huduma Centers in Nairobi County, Kenya"* which is part of the requirements of the program she is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to her is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

**DR. JACKSON NDOLO**  
**DIRECTOR, BOARD OF POST GRADUATE STUDIES**

## Appendix V: Questionnaire

This questionnaire was developed to collect information on the effect of total quality management practices on customer satisfaction among Huduma centers in Nairobi, Kenya.

Kindly take the time to carefully read the questions and provide the best insight you can.

Only scholarly purposes were served by the information acquired.

### Questionnaire for employees

#### Instructions

Pick only a response (box) for every question.

#### PART A: BACKGROUND INFORMATION

1. Kindly indicate your gender
  - a) Male ( )
  - b) Female ( )
2. How long have you been in your current position?
  - a) Less than 1 year ( )
  - b) Between 2 3 years ( )
  - c) Between 4 5 years ( )
  - (d) More than 5 years ( ).
3. Please indicate the highest level of education
  - (a) Diploma ( )
  - (b) Bachelor's Degree ( )
  - (c) Master's Degree ( )
  - (d) PhD ( )
  - (e) Others ( )

#### PART B: Total Quality Management Practices

This part has four sections; customer focus, employee involvement, management commitment and continuous improvement.

**Customer focus**

To what extent does the following aspects of customer focus enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
Huduma Kenya understands the needs and expectations of customers					
Customer feedback and complaints are collected and acted upon promptly					
Our organization often conducts surveys or gather feedback from customers					
Employees are trained to handle customer needs effectively					
The organization is able to deliver services that meet customer expectations					
Our organization actively sought innovative ways to improve customer experience					

**Employee Involvement**

To what extent does the following aspects of employee involvement enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
Our firm involves employees in decision making processes related to service delivery					
Employees are encouraged to take ownership of their roles in ensuring quality service delivery					
The organization’s retention strategies, such as recognition and rewards, are effective in keeping top talent.					
Employees are empowered to resolve customer complaints					
The onboarding process effectively prepares new employees to perform their roles and align with organizational goals					
I am satisfied with the collaboration among employees to achieve quality service delivery					

**Management Commitment**

To what extent does the following aspects of Management commitment enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1 5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
Our firm’s top management’s involvement in quality improvement initiative					
Top management provides resources to support quality management initiatives					
Management regularly communicates the importance of quality management with employees					
Our management rewards and recognizes employees for their contribution towards quality improvement					
Policies on quality improvements made by the organization have led to improved performance					
The management are committed to regularly reviews and adjusts its decisions to achieve higher customer satisfaction					

**Continuous Improvement**

To what extent does the following aspects of continuous improvement enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1 5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
Management encourages employees to suggest improvements of existing processes at your workplace					
The organization implement new ideas or processes to improve service delivery					
There are training programs to equip you with skills for continuous improvement					

The organization regularly review and updates its service delivery processes					
Quality improvement initiatives are implemented promptly.					
Our organization benchmarks its processes against the best practices to identify areas of improvement					

**PART C: Customer satisfaction**

To what extent do you agree with the following statements? Tick as appropriate using the following Likert scale of 1 5 where:1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Component	1	2	3	4	5
Our focus on customers within the Huduma center has notably increased customer satisfaction					
Employee involvement in customer service improvement efforts has increased customer satisfaction					
The commitment of management to quality has increased customer satisfaction at the Huduma center					
Continuous improvement efforts at the Huduma center have effectively increased customer satisfaction					
I believe a majority of customers are satisfied with the services I offer at the Huduma center					
The current systems and processes at the Huduma center are designed to meet customer needs effectively					

**THANK YOU**

**Questionnaire for Customers**

**Instructions**

Pick only a response (box) for every question.

**PART A: BACKGROUND INFORMATION**

1. Which Huduma Center have you visited today?  
 .....

2. What service(s) have you accessed today?

.....

3. Have you participated in a survey about Huduma center services within the last 1 month?

- a) Yes
- b) No

**PART B: Total Quality Management Practices**

This part has four sections; customer focus, employee involvement, management commitment and continuous improvement.

**Customer focus**

To what extent does the following aspects of customer focus enhance customer satisfaction?

Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
Huduma Centre staff seemed to understand my needs and expectations					
My feedback and complaints were handled effectively and promptly					
Our organization often conducts surveys or gather feedback from customers					
The staff were knowledgeable about the service they provided					
The service I received matched my expectations					
The huduma center is continuously trying to improve the services offered					

**Employee Involvement**

To what extent does the following aspects of employee involvement enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
The employees I interacted with seemed to take pride in their work					
Employees appeared empowered with the knowledge and skills to help me with my needs					

There seemed to be good teamwork and collaboration among employees.					
Employees are willing to go the extra mile to help me					
Employees appeared empowered with the resources to help me with my needs					
I felt the employees were supported by management					

### Management Commitment

To what extent does the following aspects of Management commitment enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
The huduma center seems well managed					
There are clear processes in place for service delivery					
Management regularly finds ways to improve service delivery					
The policies and procedures in place support efficient service delivery					
I believe the management is committed to providing high quality services					
The Huduma center seems to invest in training and development for its staff					

### Continuous Improvement

To what extent does the following aspects of continuous improvement enhance customer satisfaction? Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statement	1	2	3	4	5
I notice efforts being made to make the customer experience efficient					
The huduma center appears to learn from its mistakes and makes the necessary changes					

The processes at the huduma center seem to be regularly reviewed and updated					
If I provide feedback, I believe it will be used to improve services					
The huduma center seems to be open to new ideas and ways of doing things					
When I visit the center, the services seem to be getting better over time					

**PART C: Customer satisfaction**

To what extent do you agree with the following statements? Tick as appropriate using the following Likert scale of 1-5 where: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Component	1	2	3	4	5
I am satisfied with the quality of service I received today					
I would recommend this huduma center to a friend or family.					
The huduma center service(s) met my overall expectations					
I felt valued as a customer during my interaction at the huduma center					
The reputation of the huduma center is strong and positive.					
I would choose to visit this huduma center to receive services again in future					

**THANK YOU**