

IS ELECTRONIC PAYMENT SYSTEMS A STRATEGIC INNOVATION IN SERVICE DELIVERY? AN ANALYSIS OF HUDUMA CENTRE IN MOMBASA COUNTY, KENYA

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Abstract

Strategic innovation is the intentional use and implementation of service procedures, adoption of new digital platforms to improve efficiency, enhance effectiveness, increase accessibility, promote transparency and responsiveness, and improve service quality. The Huduma Kenya Service Delivery Program (HKSDP) was established to revolutionize service provision in Kenya, setting up integrated one-stop-shop service Centres, supported by digital technologies, that deliver efficient, transparent, accessible, and citizen-centric government services. Nevertheless, service delivery problems are prevalent in high-volume public service centres and require an empirical evaluation of the effectiveness of innovations. One strategic innovation and its effect on service delivery at the Mombasa Huduma Centre, Kenya, has been explored in this study to provide evidence for the digital transformation of the Huduma Kenya Service Delivery Program and the public service in Kenya. In particular, the study highlights one strategic innovation: the Electronic Payment System. Two theories used were: the Theory of Diffusion of Innovations and the Service Quality (SERVQUAL) Theory. The respondents were the 120 employees of Huduma Centre Mombasa who were approached using a census method. Out of the total, 88 questionnaires were completed by 88 employees (73.3%). Results of descriptive statistics: Electronic Payment System strategic innovation was significant and positively correlated with service delivery ($r = 0.731$, $p\text{-value} < 0.05$). The strategic innovation variables together accounted for 70.9% of the variance in service delivery ($R^2 = 0.709$). The results boost workflow effectiveness, minimize service delays and transaction processing time, increase transparency, accountability, communication, and responsiveness. The outcome recommendations for the public service in Kenya, through the Huduma Kenya Secretariat, various Ministries, Departments, Agencies (MDAs), and County Governments (CGs), should invest in integrated digital technologies, institutionalize innovation, enhance organizational capacity, and establish strategic partnerships that accelerate utilization. The results add to knowledge on strategic innovation and offer valuable evidence for policy, public sector managers, researchers, development partners, and government institutions interested in augmenting innovation-driven public service delivery in Kenya.”

Key Words: Strategic Innovation, Electronic Payment System

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

1.1.1 Strategic Innovation

Incorporated throughout the world, strategic innovation has taken Centre stage in the reform of the public sector as governments address the growing demand on them by citizens, fiscal austerity, and the need to deliver services with high efficiency. Strategic innovation in the public sector involves new technologies, processes, and organizational responses to increase the effectiveness, transparency, and responsiveness of public goods and services. “Some of the innovations that countries have embraced across the world, Estonia and Singapore, have been implemented in a bid to improve the efficiency and accountability of the services they offer: service tracking, automated notifications, digital payment systems, and data-driven feedback platforms. In administration, it has been found that innovation is supported by institutional capacity and governance systems, and public trust is improved to a considerable degree (World Bank, 2021; UN DESA, 2022).

As part of broader digital transformation plans, strategic innovation is increasingly being embraced by African governments on the continent level. AUDTSA (2020-2030) considers innovation a driving force towards improved delivery of public, inclusive growth. To solve the long-term problem of inefficiency and limited access, South Africa, Rwanda and Ghana have invested in electronic payment, mobile government services and online platforms of government services.” Nevertheless, studies indicate that infrastructural constraints, shortage of digital literacy, and funding remain some of the reasons that lead to inequalities in innovation results across the continent of Africa, highlighting the need to implement context-related innovation strategies instead of simply embracing the new technologies (African Union, 2020; Tiika et al., 2024).

Strategic innovation has also been on the rise in East Africa, with governments seeking to modernize the administration of the populace and enhance the experiences. The IremboGov Rwanda portal has a digital interface; Tanzania and Uganda have extended e-government portals to alleviate service fragmentation. The empirical research in the area indicates that it has enhanced efficiency and access; it relies on leadership, operational readiness, and the sustainability of the system. Studies also show that the effectiveness of innovation is not only technology, but rather on how public servants can adjust processes (World Bank, 2022; Sebunya, 2025).

Strategic innovation is strongly integrated into the public sector reform models in Kenya, including Vision 2030, the 2010 Kenyan Constitution and the Public Service Delivery Innovation Strategy. Digital platforms such as eCitizen, integrated payment systems and automation of services have been given priority by the government in ensuring efficiency and transparency. Despite these initiatives, research indicates that the implementation of innovation varies at different institutions, where there are delays between the intentions of policies and the outcomes of operations. This has necessitated literature research studies that investigate how certain innovations affect the provision of services in real service settings (Republic of Kenya, 2024; Kemboi and Premanandam, 2025).

1.1.2 Public Service Delivery

The world is now witnessing the transformation of rigid bureaucratic models of public service delivery to citizen-centred and performance-based systems. The new service provision underlines speed, effectiveness, responsibility, and client satisfaction. Higher economies have taken advantage of the digital revolution, such as real-time tracking, auto notifications, and web-based payment systems to minimize waiting time and enhance the reliability of service. The literature indicates that successful delivery of public services is realized when innovation not only increases the efficiency of operations but also the experience of the user, in addition to simply digitalizing the inefficiencies present (Shamsiddinova, 2024; World Bank, 2021).

In Africa, reforms in public service delivery are a governance approach that should help to reduce corruption, enhance access, and increase transparency. Integrated service platforms have been established, for instance, in Kenya, Rwanda, and Botswana to overcome high transaction costs. Nevertheless, empirical evidence suggests that delivery is hindered by existing digital illiteracy and system integration irregularities, especially in high-demand service settings (African Union, 2020; Matovu et al., 2025).

Public service delivery innovations have been applied in East Africa in civil registration, transport licensing, health insurance, and business registration sectors. According to research conducted in Uganda, Tanzania, and Kenya, digital platforms have enhanced the accessibility and processing times of services, yet quality results are unevenly distributed in regions and institutions. The literature emphasizes the role of frontline staff capacity and operational systems in converting the innovation into quantifiable improvements in service delivery (Mainda, 2024; Sebunya, 2025).

Before the integrated service reforms, Kenya had long queues, service points, high transaction costs, and manual service delivery in its public service delivery. These setbacks hindered efficiency. These weaknesses were to be solved by the rollout of one-stop-shop service models and online virtual platforms. Recent research, however, indicates that even with significant progress, system downtimes, varying levels of service quality, and unequal use of innovation, in particular in high-volume service centres, are being experienced (Nkanata & Ocholla, 2023; Kemboi and Premanandam, 2025).

1.1.3 Huduma Centres in Kenya and Huduma Centres Mombasa

Huduma Kenya Service Delivery Program was launched in 2013 as a high-profile reform program to revolutionize and redefine service provision through a one-stop-shop model. The program combines services of various ministries, departments, agencies and county government in one platform and is facilitated by electronic payments, queue management, automated notifications, and feedback mechanisms, which are digital. The purpose of the design of the Huduma Centres was to reduce corruption, improve client service, minimize service fragmentation, enhance efficiency, reduce transaction costs, and enhance accountability in the provision of public services (Republic of Kenya, 2013; Huduma Kenya, 2025).

Huduma Centre Mombasa opened its operations on 23rd June 2014, and it is a very high-traffic service Centre. It has an estimated 2,400 clients every day and about 90 services in 28 government ministries, departments, agencies, County Government, and professional bodies. This Centre is

based in one of the largest economic and transport hubs, which is why it is open for long hours to address the high demand for services. It is necessary to utilize strategic innovations such as real-time tracking systems, automated notification systems, e-payment, and feedback systems to ensure timeliness and high customer satisfaction for such volumes of services.

“Although some studies have been conducted in the context of Huduma Centres, the majority of the studies are based on the overall performance of service delivery or organizational factors. It is not well empirically indicated that the effects of particular strategic innovations are isolated and their effect on the results of service provision at Huduma Centre Mombasa is evaluated. Considering the size of the Centre, the range of services, and its strategic significance, it is evident that one must investigate how the personal innovations impact efficiency, timeliness, and satisfaction in the high-demand sphere. The present work addresses this by critically analyzing the effect of chosen strategic innovations applied to service provision in the Huduma Centre Mombasa.”

1.2. Statement of the Problem

Transformation of public goods and services by the Kenyan Government was catapulted with the establishment of the HKSDP as a flagship project to be operationalized under Medium Term Plan II, 2013-2018. The objective was to ensure services were efficient, effective, transparent, accessible and citizen-centric through adoption of strategic innovation under a one-stop shop. Huduma Centres Mombasa is the second largest Very High Traffic Centre in the country, serving 2,400 clients daily, on average, offering 90 services from 28 different Ministries, Departments and Agencies. To achieve the transformation agenda, the centres adopted a strategic innovation, namely: e-payment platform commonly known as e-citizen.

However, even with such strategic innovation, service delivery challenges persist in Very High Traffic public service delivery centres like Huduma Centres Mombasa. The challenges include, but are not limited to: delays in service delivery, inaccuracy in payment transaction, unpredictable service turnaround, long queues and queue jumping, poor client service, and corruption. Though Huduma Centres Mombasa has emerged as a model of a Centre of excellence for integrated public services, there is notably limited availability empirical evidence that shows how this specific strategic innovation influences service delivery at the Huduma Centres Mombasa. The current research studies on Huduma Centres, specifically the Huduma Centres Mombasa, have conducted general examinations of client satisfaction, service quality, work environment, and institutional performance, without isolating the specific influence of particular strategic innovations adopted in the service delivery process. Moreover, there is still a lack of evidence on which of the strategic innovations has significantly contributed to service delivery improvement in very high-traffic service delivery centres.

With such knowledge, policymakers and public service managers are limited in their ability to make data-driven and informed decisions regarding the scalability of strategic innovations within the public sector, especially at the Huduma Centre Mombasa. Without such evidence, strategic innovations risk being implemented in a very general form instead of being intentional in targeting specific result-oriented solutions.

We explored the problem of the insufficient empirical understanding of the influence of a specific strategic innovation: e-payment systems on service provision delivery.

CHAPTER TWO: LITERATURE REVIEW

2.0. Empirical Literature

2.0.1 Electronic-Payment Systems and Service Delivery

Electronic or online payment systems have emerged as a key element of digital service delivery that seeks to enhance efficiency, transparency, and accountability within government operations (Ndung'u & Njoroge, 2025). Wafula and Odhiambo (2021) examined e-payment systems in government institutions in Kenya and focused on the. The research determined that e-payments reduced the risk of handling cash, decreased the time-of-service processing, and enhanced revenue accountability. The research, however, was more inclined towards the financial management results. It did not measure how e-payment systems affect wider service delivery indicators like client satisfaction and service efficiency in one-stop service centres like the Huduma Centres.

Equally, Karanja and Muturi (2022) examined how e-payment platforms affect service delivery in the chosen Kenyan government agencies through the descriptive research design. Their results revealed that e-payments boosted the speed of transactions and abridged the service point queuing time. Although these positive results were observed, the study focused on system adoption and user acceptance. It did not consider the experience of the frontline staff in using e-payment systems in the delivery of services. This creates a disconnect of how e-payments are done in integrated service centres like Huduma Centres Mombasa in terms of operational stimuli.

On a regional scale, Moyo and Sibanda (2021) researched electronic payment devices in Southern Africa in public service institutions using a mixed-method approach. This paper concluded that e-payments enhanced transparency of the service and minimized corruption chances. It, however, found issues associated with downtime in the systems, network outages, and lack of sufficient staff training. Although the study presents useful regional findings, it was not aimed at high-volume multi-service centres or directly related to delivery outcome measures of timeliness and client satisfaction.

Comparatively, Bannister and Connolly (2021) examined online financial services comparative case studies. The authors established that e-payment systems led to quicker service delivery and enhanced trust among people when combined with other online service platforms. However, the focus of the study was on policy and system-level changes as opposed to the reality of operations in individual service centres. Consequently, the role that e-payment systems play in day-to-day service performance in the eyes of public servants.

Moreover, the World Bank (2022) evaluated digital payment reforms in the provision of public services based on secondary data and country case studies. The report made conclusive findings that e-payment systems are efficient, accountable, and easy to use when there is good infrastructure that would support and institutional capacity. Nonetheless, it identified a gap in localized empirical research in the assessment of the effect that e-payment systems have on service delivery outcomes at particular points of service provision, especially in developing economies.

All in all, current literature shows that e-payment systems can contribute considerably to enhancing service delivery. Nonetheless, there is sparse empirical data that centres on the impact of these systems on service delivery performance in one-stop Centre public services from the perspective of

the staff. This project responds to this by examining how systems can affect service in the context of the Huduma Centres in Mombasa, with specific context-related data to facilitate successful implementation of digital service delivery.

2.1. Theoretical Framework

2.1.1 Diffusion of Innovations Theory

“In 1962, the theory was used to explain the dissemination of new practices, best practices, and technologies in a social system over time. The theory determines five major attributes that examine how. They include: compatibility, relative competitive advantage, observability, measure of complexity, and degree of trialability. The more innovative people or institutions believe that the innovation is more beneficial, convenient, and compatible with their system, the greater the chances of adoption (Diffusion of innovations, 2025). This model offers a powerful perspective on the way strategic innovations affect service provision in state organizations, such as Huduma Centres in Mombasa.

The Diffusion of Innovations Theory and the public service innovation paradigm help to understand why some digital interventions are quickly adopted, while others are resisted. Real-time monitoring, automated messages, online payments, and feedback systems can be considered to be technological innovations that change the common way. The use of technology depends on the type of technology, process, and social environment in which the innovation is adopted. Huduma Centre employees, as well as the employees with whom they interact and serve, are all part of a social system, whose overall perception determines the success or failure of these innovations.

E-payment systems make payments easier, and the national objective is to support cashless government services. Complexity can, however, hinder adoption if employees find these systems challenging to use or when clients are not digitally literate. Observability is also critical; once people can see positive changes reduced waiting time or quicker approvals- then more people will be ready to adopt the innovation (Diffusion of innovations, 2025).

In the theory, the opinion leaders, channels of communication, and organizational culture are also important. Again, referencing a government context, orientation and induction, commitment by the manager, peer influence, and formal training are the determinants of the speed at which staff will adopt and internalize new systems. In case early adopters and users at Huduma Centres prove successful and communicate good experiences to others, the speed of diffusion will likely increase among departments. A poor communication infrastructure can lead to suspicion that will decrease the perceived relative advantage of the innovations.

Diffusion is a dimension that is critical of time (Diffusion of innovations, 2025). The implementation of the digital systems is not the sudden adoption of digital systems but follows the stages: the awareness, persuasion, decision, implementation and confirmation. The different phases would demand specific tactics like awareness, pilot testing and feedback assessment. The theory can

be used to study the integration of strategic innovations into service operations by laying the stages and giving them a structured approach to study.

Therefore, this theory is useful dynamics of digitalization of a public service. It ties technological preparedness, effectiveness of communication and social influence with quantifiable results of efficiency, accuracy, and client satisfaction. In the context of the Huduma Centres Mombasa, the given theory can serve as a basis to examine how strategic innovations affect the quality and speed of services.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

In this section, the chapter provides elaborate information on the research methods and design employed in the study. It provides detailed information about the location where the study was carried out, the population of the study, instrumentation used, the sampling procedure and the sampling size, data collection and data analysis

3.2. Research Design

This research utilized a descriptive research design to identify demographic factors and indicators of strategic innovations. According to Gough & James 2012, this design is very appropriate for collecting information, summarizing it, and presenting it for clarification purposes. Descriptive research design is a research approach in which data is collected to describe existing conditions, practices, relationships, and perceptions as they naturally occur without manipulating any variables. The design was suitable because it enabled the study of relationships among variables within their real-life context. This study design was appropriate as it enabled a systematic investigation of the effects of strategic innovations, namely real-time tracking systems, automated notification systems, e-payment systems, and real-time feedback mechanisms, on service delivery at Huduma Centre Mombasa. It facilitated the collection of quantitative data from staff members who interacted directly with these innovations, thereby providing insights into actual operational experiences. According to Kothari (2004), descriptive research is appropriate when the objective is to describe phenomena using quantitative methods and to analyze relationships among variables. Therefore, the design aligned with the study objectives and facilitated statistical analysis of service delivery outcomes in terms of efficiency, timeliness, and client satisfaction.”

3.3. Target Population

We used a census; all 120 employees of Huduma Centre Mombasa were included in the study. The target population included frontline service supervisors and technical and administrative support personnel. They were chosen because they are directly engaged in strategic implementation, operation, and management within the Centre. They were most likely to use e-payment systems, making them uniquely able to understand how such innovations affect services.

Huduma Centre Mombasa was chosen as the study site among the Huduma Centres across Kenya; it is one of the busiest Centres, with an average of 2400 clients attending per day. The Centre's dynamic operating environment hosts several Government agencies under a one-stop service delivery model to test the effectiveness of strategic innovations. Frontline staff, supervisors, and technical support staff had a variety of roles in providing detailed information on multiple dimensions of service delivery indicators, including efficiency, timeliness, and customer satisfaction. The study covered all staff categories and allowed the collection of complete and accurate information on the effect of strategic innovations on the services provided by Huduma Centre Mombasa.

The distribution of staff in Huduma Centre Mombasa is as below.

Table 3: Staff Population Distribution at Huduma Centre Mombasa

Staff Category	Total Population
Frontline Service Officers	70
Supervisors	25
Technical/Admin Support	25
Total	120

3.4. Sampling techniques and sample size

3.5.1 Sampling Techniques

The census sampling technique was used. Hence, all 120 staff at the Huduma Centre Mombasa were involved, meaning that all members of the target population were included in the study. Census sampling is a technique in which all units in the population are sampled. The technique is suitable if the target population is relatively small and easy to access and manage. The number of employees at Huduma Centre, Mombasa, for this study was 120, which was manageable for all staff without incurring high costs and taking too much time to collect data. The justification for the census approach was that it was necessary to get a complete and accurate picture of all categories of workers. Kothari (2004) contends that census studies have the advantage of being free from sampling error and more accurate, reliable, and representative. All frontline service officers, supervisors, and technical and administrative support staff were included, ensuring that no important perspectives were missed. This was especially significant because strategic innovations, e-payment platforms, and real-time feedback mechanisms are used by employees in various roles. Thus, the census approach allowed for the study to provide an overall picture of the impact of these innovations on service delivery.

3.5.2 Sample size allocation

The study adopted a census. This means all 120 staff were part of the target population; no sampling procedures were undertaken.

Table 4: Staff Population Distribution (Census)

Staff Category	Total Population	Percentage (%)	Census Allocation (n)
Frontline Service Officers	70	58.3	70
Supervisors	25	20.8	25
Technical and Administrative Support Staff	25	20.8	25
Total	120	100	120

By using a census, the study ensured that findings accurately reflected the operational realities at Huduma Centres Mombasa and provided a strong basis for evaluating the influence of strategic innovations on service delivery.

3.5. Data Collection Instruments

The research instrument used was questionnaires; see Appendix. A structured questionnaire is a type of questionnaire that contains the same questions for everyone who fills it consistent and comparable data. The instrument was suitable for the study since it enabled quantitative data to be collected on staff perceptions and experience on strategic innovations and service delivery at Huduma Centre Mombasa. The items with both closed and open-ended questions were in the questionnaire. Closed-ended questions allowed respondents to choose from the options provided; Likert-scale items were used for the indicators of the real-time tracking system, automated notification system, e-payment service, real-time feedback mechanisms, and service delivery outcomes: timeliness, efficiency, and customer satisfaction. The structured question method was appropriate as it allowed the collection of information from all employees without disrupting the normal operations of the Huduma Centre Mombasa. Kothari (2004) states that a structured questionnaire improves reliability, reduces researcher bias, and allows quantitative analysis of the data. Each staff member was given a questionnaire voluntarily, with consent given. The questionnaires were given to respondents in their hands to make it easier for them to access, to boost the response rate, and to give the respondents a chance to get clarification where they feel it is necessary.” This method helped to gather all the necessary and accurate data needed to meet the goals of the study.

3.6. Data Presentation and Analysis

The answers to the structured questionnaire were coded, entered, cleaned, and analyzed by the Statistical Package for the Social Sciences (SPSS). The data were analyzed using descriptive and inferential statistics.

The demographic characteristics of respondents, the degree of adoption of strategic innovations, and the degree of adoption of service delivery were presented in tables.

The relationships in the study were determined using inferential statistics. Pearson correlation was used to analyze the type and strength of relationship between strategic innovations and service delivery. This was followed by analysis using Regression Analysis to get the overall and individual effect of the independent variables on service delivery.”

$$Y = b_0 + b_1X_1 + \varepsilon$$

$Y = \text{Service Delivery}$

$b_0 = \text{Constant}$

$b_1 = \text{Coefficient of variables}$ $X_1 = \text{Real Time Tracking System}$

$\varepsilon = \text{Error Term}$

“CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

4.1.Introduction

“This chapter focuses on the research findings of the study. It discusses the data analysis techniques used during the study.”

4.2.Response Rate to the Questionnaire

The effectiveness of data collection was assessed by examining the proportion of fully completed and returned questionnaires. Table 4.1 summarizes the distribution of responses to the questionnaires administered to employees of Huduma Centre Mombasa.

Table 4.1: Summary and Distribution of Questionnaires’ Response

Participants	No. of Questionnaires Issued	No. of Questionnaires Returned	Response Rate (%)
Huduma Centre Mombasa Staff	120	88	73.3
Total	120	88	73.3

Source: Researcher (2026)

A sample of 120 questionnaires was issued to employees of the Huduma Centre Mombasa through the census method. Of these, 88 questionnaires were filled, hence a response rate of 73.3%. The analysis was only done on the 16 questionnaires for different reasons. There were also those employees who were on official leave at the time of collecting data and those employees who had been transferred to other stations but had not yet been assigned their replacement. Moreover, not all staff workers were available to take part in the research as some of them were out on sick leave. Some of the employees refused to submit the questionnaires because it was on an informed consent basis, and voluntary basis, and some of the returned questionnaires were incomplete and could not be analyzed. Mugenda and Mugenda (2003) opined that the range of response should be 50 percent to enable an analysis; 60 percent is good and 70 percent and above is very good. Thus, it was believed that the obtained response rate of this study was adequate in terms of statistical analysis and drawing credible conclusions. The self-administered structured questionnaires and the collaboration of the available employees through the process of data collection also contributed to the acceptable response rate

4.3.Background Characteristics of the Respondents

The participants’ demographic characteristics are provided in Table 4.3. This provides an overview of the composition of participants before inferential statistical analysis. The research was aimed at finding the background details of the respondents so as to give a general description of the employees who took part in the research. The demographic attributes used were their gender, age in years, the highest level of education, job type, and years of working experience at Huduma Centre Mombasa. These attributes were deemed significant as they give an insight into the capabilities of

the respondents to offer credible information about the strategic innovations and service delivery. Table 4.2 shows the results.

Table 4.3: Demographic Characteristics of the Staff Participants

Variable	Category	Frequency	Percentage (%)
Gender	“Male”	34	38.6
	“Female”	54	61.4
Age	“20–29 years”	19	21.6
	“30–39 years”	41	46.6
	“40–49 years”	24	27.3
	“50 years and above”	4	4.5
Highest acquired Level of Education	Certificate	17	19.3
	Diploma	30	34.1
	Bachelor's Degree	37	42.0
	Postgraduate Degree	4	4.6
Job Category	Frontline Service Officers	50	56.8
	Supervisors	9	10.2
	Technical/Administrative Support	29	33.0
Number of Years of Work Experience	Below 1 year	17	19.3
	1to 3 years	34	38.6
	4 to 6 years	12	13.6
	7 years and above	25	28.5

Source: Researcher (2026)

“The study sought to establish the demographic characteristics of the respondents to determine whether they possessed the knowledge, skills, and experience required to provide credible information on strategic innovations and service delivery at Huduma Centre Mombasa. The demographic characteristics examined included gender, age, highest level of education, job

category, and years of work experience. These characteristics were considered important because they influence employees' ability to adopt digital technologies, utilize innovation systems, and effectively deliver public services. Since the study focused on strategic innovations comprising real-time tracking systems, automated notification systems, electronic payment systems, and real-time feedback mechanisms, understanding the respondents' demographic profile provided a basis for assessing the reliability of the information collected. The results are presented in Table 4.3.

The findings indicate that 54 respondents (61.4%) were female, while 34 respondents (38.6%) were male. The higher proportion of female respondents suggests that women constitute the majority of employees at Huduma Centre Mombasa and therefore play a significant role in the implementation of strategic innovations and the delivery of public services. Since frontline public service delivery requires continuous interaction with customers, the representation of both female and male employees ensured that views on the effectiveness of digital innovations were obtained from diverse perspectives. The predominance of female respondents further implies that the findings reflect the experiences of the largest workforce segment involved in implementing electronic payment systems to improve service delivery.

Regarding age, the findings reveal that 41 respondents (46.6%) were aged between 30 and 39 years, 24 respondents (27.3%) were aged between 40 and 49 years, 19 respondents (21.6%) were aged between 20 and 29 years, while only 4 respondents (4.5%) were aged 50 years and above. These findings suggest that most of the employees belong to the economically productive and technologically adaptive age groups. The employees that belong to these age groups have higher chances to have the corresponding digital skills and organizational experience that could help them to apply strategic innovations. The age breakdown thus indicates that the respondent was well placed to determine how electronic systems of payment make service transactions fast and convenient. As a result, the age distribution justifies the validity of the results of the effects of strategic innovations on service delivery.

The result on the highest amount of education reveals that 37 respondents (42.0%) had a bachelor's degree, 30 respondents (34.1%) had diploma degree, 17 respondents (19.3%) had certificate degree and 4 respondents (4.6%) had postgraduate degree. This implies that 71 respondents, constituting 80.7 percent of the respondents, were diploma holders, or above which implies that the workforce at Huduma Centre Mombasa is highly educated. Such a level of education will provide the employees with the necessary knowledge and analysis skills to comprehend, operate, and control digital service delivery systems. Most employees are better placed to adapt to changes in technology, decode electronic information, make digital transactions and use customer feedback to improve its services through employees who have high degree of education. The educational profile thus gives added credibility that the respondents had the capacity to give informed views on the impact of strategic innovations on service delivery.

As far as job category is concerned, the research identified that 50 respondents (56.8%), 29 respondents (33.0%), and 9 respondents (10.2%), were Frontline Service Officer, Technical or Administrative Support Staff, and Supervisor. The predominance of frontline service officers means that most of the respondents have contact with the customers when delivering services and they are the ones who mostly utilize strategic innovation systems. Their reactions thus give realistic

feedback on what works with electronic payment systems in transacting business. The incorporation of the technical support personnel and supervisors in the study also maximized the capture of the views of employees involved with the systems implementation, maintenance, coordination and oversight of the systems, which, in turn, rendered the study with a holistic view on the role of strategic innovations in the service delivery.

The findings further indicate that 34 respondents (38.6%) had worked at Huduma Centre Mombasa for between one and three years, 25 respondents (28.5%) had worked for seven years and above, 17 respondents (19.3%) had worked for less than one year, while 12 respondents (13.6%) had worked for between four and six years. These results suggest that the workforce comprises both relatively new employees and experienced personnel. Employees with longer work experience are likely to have witnessed the transition from traditional service delivery approaches to technology-driven systems and are therefore able to compare service performance before and after the implementation of strategic innovations. On the other hand, newer employees provide perspectives based on current digital service delivery practices. The balanced distribution of work experience therefore strengthened the reliability of the findings by ensuring that respondents possessed sufficient institutional knowledge and practical exposure to evaluate the influence of electronic payment systems on service delivery at Huduma Centre Mombasa.

Overall, the demographic profile demonstrates that the respondents possessed appropriate characteristics to provide credible information on the study variables. The predominance of female employees, the concentration of respondents within productive working ages, the high educational attainment, the large proportion of frontline service officers, and the balanced work experience collectively indicate that the respondents were familiar with the strategic innovations implemented at Huduma Centre Mombasa and were therefore well placed to assess their influence on service delivery. These characteristics enhance the credibility and dependability of the findings presented in the subsequent sections of this chapter.”

4.4. Data Presentation and Analysis

This section presents and analyzes findings in relation to the study objectives. The results are organized according to the four strategic innovation variables examined in the study. To summarize respondents’ opinions, descriptive statistics including frequencies, percentages, means, and Std. Dev were employed. The tables provide clear presentations of findings.

4.4.1 Effect of E-Payment Systems

Electronic payment systems in service delivery at Huduma Centre Mombasa were the third objective. Accessibility of payment services, transaction efficiency, difficulty, and enhancing buyer convenience were measured as variables. The results are presented in Table 4.5.

Table 4.7: Electronic Payment Systems at Huduma Centre Mombasa

Statements	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
Electronic payment systems make service payments faster and more convenient	55.7	29.5	8.0	2.3	4.5	4.30	1.00
Electronic payments reduce delays associated with manual payment processes	47.7	36.4	10.2	1.1	4.5	4.21	1.02
Electronic payment systems improve accuracy in payment transactions	51.1	33.0	10.2	1.1	4.5	4.24	1.03
Customers prefer electronic payment options compared to cash payments	43.2	38.6	11.4	2.3	4.5	4.14	1.07
That electronic payment methods enhance transparency in revenue collection	50.0	34.1	10.2	1.1	4.5	4.26	1.01
Aggregate Mean						4.23	1.03

Source: Researcher (2026)

“As shown in Table 4.7 above, 55.7% strongly agreed, 29.5% agreed, 8.0% were neutral, 2.3% disagreed, and 4.5% strongly disagreed that electronic payment systems make service payments more convenient and faster. This statement had the highest mean score with an SD of 1.00, indicating a high degree of agreement and consistency among the respondents. It can be concluded that electronic payment systems facilitate the payment process, save time, and increase customer convenience at Huduma Centre Mombasa. This is in line with Mugo and Kihara (2021), who noted that electronic payment systems enhance efficiency and convenience in transaction processing for public service delivery.

The findings also show that 47.7% of respondents strongly agree, 36.4% agree, 10.2% are neutral, 1.1% disagree, and 4.5% strongly disagree that electronic payment systems are less prone to delays than manual payment systems. The mean score for the statement was 4.21 with a standard deviation of 1.02, indicating high agreement among the respondents. The results suggest that there is no need for lengthy manual processes and waiting time, and that an electronic payment system could improve service delivery. The result is consistent with Njoroge and Wanyoike (2022) who concluded that digital platforms improve operational efficiency and reduce processing time in public institutions.

Regarding payment accuracy, 51.1 per cent strongly agreed, 33.0 per cent agreed, 10.2 per cent were neutral, 1.1 per cent disagreed, and 4.5 per cent strongly disagreed that electronic payment systems improve the accuracy of payment transactions. The mean score was 4.24, and the standard

deviation was 1.03, indicating that the responses were generally in agreement. The results indicate that electronic payment systems reduce transaction errors, providing automatic processing and exactness, making the payment process more reliable and accountable for service delivery. The study by Mburu and Ombui (2021) found that electronic payment systems increase transparency and accountability over transactions in public sector institutions, which supports the current study.

The results also indicate that 43.2% strongly agreed, 38.6% agreed, 11.4% were neutral, 2.3% disagreed, and 4.5% strongly disagreed that customers prefer electronic payment options compared to cash payments. This statement had the lowest mean score 4.14 and the lowest standard deviation (1.07). Despite the lowest mean, respondents, overall, agreed that customers are increasingly adopting electronic payment methods due to their convenience, availability, and usability. This study aligns with Kamau and Mutiso (2023), who found that customers are willing to use digital payment methods as they are more convenient and efficient than cash payments.

The study also showed that 34.1% of the respondents agreed, 4.5% strongly disagreed, 10.2% were neutral, and 50.0% strongly agreed with the statement, "Electronic payment systems improve transparency in revenue collection. The mean score was 4.26 with a standard deviation of 1.01, indicating a high level of agreement and consistency. The results indicate that electronic payment systems enhance accountability by maintaining precise records and reducing the likelihood of monetary mistakes or malfeasance. The results corroborate those of Okello and Kiplagat (2022), who found that electronic payment systems improve transparency and accountability by ensuring secure and traceable financial transactions in public service institutions.

The overall mean score was 4.23 with a standard deviation of 1.03, indicating that participants had a general positive attitude towards electronic payment systems and their impact on service delivery at Huduma Centre Mombasa. The relatively small standard deviation in the overall sample indicates that the effectiveness of the electronic payment systems was consistent. The overall results suggest that electronic payment systems are beneficial in terms of payment convenience, transaction efficiency, payment accuracy, transparency, and customer experience, hence payment service delivery. The results are in line with the findings of Mugo and Kihara (2021), which found that electronic payment systems are an important strategic innovation to enhance efficiency, transparency, and service delivery in public institutions."

4.4.2 Service Delivery at Huduma Centre Mombasa

"A study also explored the service delivery at Huduma Centre Mombasa as the dependent variable. This variable was measured using service timeliness, operational efficiency, customer satisfaction, service accessibility, and employee responsiveness. The responses were rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The results are presented in Table 4.9."

Table 4.9: Service Delivery at Huduma Centre Mombasa

Statements	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
Services at Huduma Centre are delivered within reasonable timeframes	46.6	38.6	9.1	1.1	4.5	4.21	1.04
Digital innovations have improved efficiency in service delivery	54.5	31.8	8.0	1.1	4.5	4.32	1.01
Customers experience improved convenience when accessing services	50.0	34.1	10.2	1.1	4.5	4.25	1.03
Service processes at Huduma Centre are more transparent due to technology adoption	48.9	35.2	10.2	1.1	4.5	4.24	1.02
Customers are generally satisfied with services provided at Huduma Centre	45.5	36.4	12.5	1.1	4.5	4.18	1.05
Employees respond effectively to customer needs and enquiries	43.2	39.8	11.4	1.1	4.5	4.17	1.06
Aggregate Mean						4.23	1.03

Source: Researcher (2026)

“As presented in Table 4.9, 46.6% strongly agreed, 38.6% agreed, 9.1% were neither nor strongly disagreed that the services at Huduma Centre are delivered within reasonable time frames; 1.1% disagreed, and 4.5% strongly disagreed. The mean score for the statement was 4.21, with a standard deviation (s.d. =1.04), suggesting high agreement and consistency among the respondents. The findings indicate on-time delivery of services at the Centre, demonstrating enhanced operational efficiency in processing customers’ requests. The results are in line with the study carried out by Kibet and Mutuku (2022), which revealed that digital innovations contribute to the timeliness of public service delivery, as it cuts down processing delays and enhance workflow management.

The results also showed that 54.5% strongly agreed, 31.8% agreed, 8.0% were neutral, 1.1% disagreed, and 4.5% strongly disagreed that digital innovations have enhanced efficiency in service delivery. The score for this statement was the highest, with a mean of 4.32 and a standard deviation of 1.01 points, indicating that it was agreed by the most respondents to a high degree. The results indicate that digital innovations have helped streamline the service processes, increase productivity, and increase operational efficiency at Huduma Centre Mombasa. The results concur with Muchunguzi (2023), who noted that strategic innovations in digital technologies have a positive effect on the efficiency and performance of public service institutions.

Regarding improved customer convenience in access to services, 50.0% strongly agreed, 34.1% agreed, 10.2% were neutral, 1.1% disagreed, and 4.5% strongly disagreed. The overall average score for the statement was 4.25 with a standard deviation of 1.03; thus, the scores were generally in agreement. The results indicate improvements in the ease of access and convenience of government services to customers through the use of technology. This finding aligns with Okello (2021), who confirmed that digital service platforms help to facilitate access to government services and increase customer convenience.

The findings further revealed that 48.9% of the respondents strongly agree; 35.2% agree; 10.2% neutral; 1.1% disagree; and 4.5% strongly disagree that service processes at Huduma Centre are more transparent with the adoption of technology. The mean score for this statement was 4.24 and the standard deviation was 1.02, indicating very high agreement. The results indicate that digital technologies have contributed positively to transparency by monitoring service processes, making them open, traceable, and accountable. This finding agrees with Okoye and Chukwuma (2020), who found that technology adoption enhances transparency and accountability in the provision of public services.

The study also confirmed that 45.5% of the respondents strongly agreed, 36.4% agreed, 12.5% were neutral, 1.1% disagreed, and 4.5% strongly disagreed that customers are generally satisfied with the services offered at Huduma Centre. The mean score for the statement was 4.18 with a standard deviation of 1.05, suggesting that customers are satisfied with the quality of services provided. The results confirm the findings of Kangethe, Wasike, and Mote (2021), who concluded that strategic innovations increase customer satisfaction, quality of service, and responsiveness.

Lastly, 43.2% of respondents strongly agreed, 39.8% agreed, 11.4% were neutral, 1.1% disagreed, and 4.5% strongly disagreed that employees are responsive to customers' needs and enquiries. It has a mean score of 4.17 with a standard deviation of 1.06. While it had the lowest mean, it was agreed that employees respond appropriately to customer needs, which results in quality service delivery. The study is supported by the Organization for Economic Co-operation and Development OECD (2017), which noted that digital transformation fortifies employees' responsiveness and enhances the relationship between public institutions and citizens.

The overall results showed a mean score of 4.23 with a standard deviation of 1.03. This means that the respondents generally agreed that service delivery at Huduma Centre Mombasa is effective. The relatively low aggregate standard deviation indicates that respondents had a uniform opinion about the quality of delivery of service. The results suggest that overall, digital innovations have enhanced timeliness, efficiency, convenience, transparency, customer satisfaction, and employee responsiveness in strengthening service delivery at Huduma Centre Mombasa. The findings are in line with the findings of UNDESA (2022), which concluded that digital innovation is essential for enhancing the efficiency, transparency, responsiveness, and satisfaction of citizens using public services.

4.5. Inferential Statistics

In this section, the research study applied inferential statistical techniques to examine the relationship between strategic innovations and service delivery at Huduma Centre Mombasa. The analysis included Multiple Linear Regression Analysis. To determine the strength and direction of the relationship between the study variables, correlation analysis was used; regression analysis was used to determine the influence of the strategic innovations on service delivery. Accordingly, p -values < 0.05 were statistically significant for service delivery at Huduma Centre Mombasa.

4.5.1 Regression Analysis

The significance of the relationship between the dependent variable and independent variables was assessed using multivariate regression analysis. Multiple linear regression analysis was conducted to determine the extent to which strategic innovations collectively influence service delivery at Huduma Centre Mombasa. The analysis examined the contribution of electronic payment systems in explaining variations in service delivery.”

Table 4.11: Results of MLR Analysis

R	R-Square	Adjusted R Square	Std. Error of Estimate
0.842	0.709	0.699	0.384

Source: Researcher (2026)

The summary findings in Table 4.12 show a correlation of 0.842, demonstrating a strong positive relationship between strategic innovations and service delivery at Huduma Centre Mombasa.

The $R^2 = 0.709$ indicates that real-time tracking systems, automated notification systems, electronic payment systems, and real-time feedback mechanisms jointly explain 70.9% of the variation in service delivery. Other factors excluded in this study may account for the remaining 29.1% of service delivery.

Table 4.12: Overview of ANOVA Findings

Source	Sum of Squares	Df	Mean Square	F	Sig.
Regression	34.862	4	8.716	59.842	0.000
Residual	16.743	83	0.202		
Total	51.605	87			

Source: Researcher (2026)

“The results from the ANOVA shown in Table 4.12 suggest that the regression model was statistically significant ($F(4,83) = 59.842$, $Sig. = 0.000$). The significance value obtained (0.000) is lower than the significance level used in this study (0.05) so the null hypothesis of this study that there is no significant influence between strategic innovations and service delivery is rejected. This

indicates that the regression model is both statistically significant and appropriate for explaining the variability in the service delivery at the Huduma Centre Mombasa.

The results show that real-time tracking systems, automation of notification systems, electronic payment systems and real-time feedback systems work together to give a strong prediction of service delivery at Huduma Centre Mombasa. Hence, the regression model can be used to explain the relationship between strategic innovations and service delivery.”

Table 4.13: The Overview of Multiple Regression Analysis

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
Intercept	0.612	0.274		2.234	0.027
Electronic Payment System	0.331	0.064	0.356	5.172	0.000
0.174	0.056	0.201	3.107	0.002	

Source: Researcher (2026)

“All the strategic innovation variables were found to have a positive and statistically significant relationship with service delivery at Huduma Centre Mombasa as indicated in the regression coefficients in Table 4.14.

The standardized coefficient ($\beta = 0.356$, $\text{Sig} = 0.000 < 0.05$) was the highest for the electronic payment systems. This proves that effective e-transactions have a significant impact on minimizing delays, customer convenience, and customer satisfaction.

electronic payment systems had a positive and statistically significant effect on service delivery. The significance value of all the predictor variables was less than 0.05, indicating that all the strategic innovations predict service delivery improvement at Huduma Centre Mombasa. The study findings support the study objectives and establish that the strengthening of digital innovations can improve the efficiency, transparency, responsiveness and customer satisfaction in the delivery of public services.”

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This summarizes the results, draws conclusions, and makes inferences for policy and practice recommendations for future research. The research aimed to assess the impact of strategic innovations on service delivery in Huduma Centre Mombasa. In particular, the effect electronic payment systems on service delivery was analyzed.”

5.2. Summary of Findings

“The research found that the electronic payment system has a strong effect on service delivery at Huduma Centre Mombasa. The respondents shared the view that electronic payment systems are simpler and faster to use, reduce delays experienced in manual payment platforms, make the transactions more accurate, give customers greater preference to digital payment platforms, and increase revenue collection transparency. Inferential analysis also supported the hypothesis that there is a positive and statistically significant impact of electronic payment systems on service delivery.

In general, the research found out that strategic innovations exert a lot of effect on the delivery of services in Huduma Centre Mombasa. The regression analysis established that the electronic payment systems as a strategic aspect of innovation, significantly predict a significant percentage of the variation in service delivery as the implementation of strategic innovations enhances efficiency, transparency, responsiveness, and customer satisfaction.”

5.3. Conclusions

“The study concludes that electronic payment systems have a significant effect on the service delivery of Huduma Centre Mombasa. The majority of respondents agreed on the advantages of electronic payment systems, including making payments more convenient, decreasing delays, increasing transaction accuracy, promoting electronic payment options, and increasing transparency in the collection of revenue. The study hence concludes that improving E-Payments improves service delivery.

The study concludes that strategic innovations have an impact on service delivery at Huduma Centre Mombasa generally. The results conclude that strategic innovations with sustained investments will improve efficiency, transparency, responsiveness, and customer satisfaction in public service delivery.”

5.4. Recommendations for policy and practice

Based on the study, it is recommended that Huduma Centre Mombasa should continue to invest in secure, efficient electronic payment systems to enhance reliability, integration, and accessibility of payment systems. This will enable payment convenience, minimize transaction delays, ensure accuracy of transactions, and boost the transparency of revenue collection.

5.5.Recommendations, Advice and Suggestions for Future Studies

“Other factors that could influence service delivery at the Huduma Centres should be investigated in future research, such as the organizational culture, competence of the employees, leadership practices and resource availability. It is recommended that additional studies be conducted in other Huduma Centres in Kenya to determine whether a similar impact on service delivery in different operational settings. Last, future research is needed to understand the impact of new technologies like artificial intelligence, big data analytics, and digital government integration on service delivery within public bodies.”

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