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Digital Innovation and Public Service Delivery in Kenya: A Case Study of Huduma E-Government

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ABSTRACT

Purpose: The purpose of this study was to examine influence of digital innovation on public service delivery In Kenya.

Methodology: The study adopted a descriptive research design. Primary data was collected from citizens through structured questionnaires. Data was analyzed and presented using percentages, means and standard deviations.

Findings: Findings indicated a significant influence of digital infrastructure public service delivery in Kenya Huduma Centers. In addition, the study showed a positive influence of digital capabilities on public service delivery in Kenya. Further, the findings showed a moderate positive influence of digital customer relationship on public service delivery in Kenya.

Unique Contribution to Theory, Practice and Policy. The results agrees with the New Public Management theory which asserts that effective customer relationship management is central to improving service quality. For practice the study recommends the government should strengthen digital literacy programs For policy the Ministry of Information, Communication and Technology should develop digital customer relationship policy with clear strategies to boost engagement and satisfaction. Huduma Center should develop user friendly platforms, Develop customer relationship policy to improve responsiveness of digital platform

Keywords: *Digital Innovation, Digital Infrastructure, Digital Capabilities, Digital Customer Relationship, Public Service*

INTRODUCTION

There has been growing interest in how governments can deliver public services more efficiently, and cost-effectively (Edelmann & Mergel, 2021). The combination of constrained public finances and complex social challenges has created a need for increased productivity and new approaches in public service delivery (Shava & Vyas-Doorgapersad, 2022). Innovation in the public sector has thus become an urgent priority, gaining attention in academic literature. Historically, public institutions operated without the pressure of competition or market forces, which limited the motivation to innovate (Mariani & Bianchi, 2023; Anshari & Hamdan, 2023). However, this has changed, as many countries have introduced competition in sectors once solely managed by the government (Ndlovu, Ochara & Martin, 2023). Simultaneously, public institutions are under increasing pressure to adapt and innovate due to the growing volume and complexity of administrative duties, in spite of limited resources (Benaddi, Hannad, El Kettani & Askour, 2022).

Digital innovation is increasingly recognized as a major driver in improving public service delivery. Advanced technologies like artificial intelligence (AI), blockchain and big data have revolutionized government engagement, operations and service delivery (Kniazieva et al., 2023; Diraso, 2020). In many developed nations, digital transformation efforts have led to significant gains in efficiency, transparency and public satisfaction (Mariani & Bianchi, 2023). Estonia's e-Government model enables access to nearly all government services online, significantly reducing bureaucratic processes and improving service accessibility (Edelmann & Mergel, 2021). Similarly, Singapore has realized substantial cost reductions and efficiency gains by implementing e-government systems. Digital platforms have reduced the reliance on physical offices and personnel, cutting operational expenses (Perdana & Mokhtar, 2023). Digital transformation also strengthens citizen engagement by offering more accessible, user-friendly services. Denmark's Borger.dk platform allows citizens to access services, submit applications and receive updates, promoting inclusive governance (Nielsen & Jordanoski, 2023).

In recent years, the Government of Kenya is advancing digitalization to improve public service delivery through initiatives like the Huduma Centres and Personal Data Hubs for the National Population Register and the e-Citizen platform, which includes services such as business registration and immigration (Too & Mutuku, 2023). The digitization of over 107 Civil Registration Centres and the High Court Registry, as well as the Transport Information Management System (TIMS) and National Spatial Data Infrastructure (NSDI), emphasizes the push for public-private partnerships and job creation. The Digital Superhighway initiative aims to enhance the Bottom-up Economic Transformation Agenda (BETA) by building digital infrastructure and expanding internet access, especially in agriculture and MSMEs (Panya & Abuya, 2022). However, challenges remain, mainly in the underdeveloped business process outsourcing (BPO) sector. The 2022–2032 Digital Master Plan outlines pillars for addressing these

gaps and accelerating digital transformation, requiring targeted policy and investments (Okanga, Tri & Thuy, 2018).

Statement of Research Problem

Public service delivery in Kenya has long been characterised by inefficiencies such as delays, long queues and corruption, prompting the government to establish Huduma Centres as a strategic innovation to address these challenges (Kamau et al., 2022). The Huduma Kenya initiative was designed to streamline access to public services by offering them under one roof, enabling citizens to conveniently obtain essential documents and services—including birth certificates, national IDs, passports, business name registration, marriage certificates, driver's licenses and police abstracts—without the need to move between multiple offices, thereby saving time and reducing costs (Isoka & Namande, 2022). In addition to improving accessibility, Huduma Centres also aimed to curb corruption by minimizing bureaucratic hurdles and promoting transparency. Since the programme began in 2014, 52 operational Huduma centres serve an average of 42,000 people daily, offering 20-55 services each from a total of 73 different government services. (Meru & Kinoti, 2022). However, despite these achievements, service delivery has not been to the public's satisfaction (Too & Mutuku, 2023). Additionally, there is limited empirical evidence to substantiate claims that the innovations at Huduma Centres have significantly improved service delivery—highlighting the need for further investigation into their actual effect. This study, therefore, examined the effect of digital innovation on effective public service delivery in e-government platforms in Kenya.

General Objectives of the Study

The general objective of the study is to examine the influence of digital innovation on public service delivery in Kenya: A Case of Huduma e-government platforms in Kenya.

1.3.2 Specific Objectives

The study specifically intends to:

1. Analyze the influence of digital infrastructure on public service in Kenya Huduma Centers
2. Assess the influence of digital capabilities on public service delivery in in Kenya Huduma Centers
3. Evaluate the influence of digital customer relationship on public service delivery in Kenya Huduma Centers

1.4 Research Questions

The study is guided by the following research questions:

1. To what extent does digital infrastructure influence public service delivery in Kenya Huduma Centers
2. Does digital capabilities influence public service delivery in Kenya Huduma Centers
3. How does digital customer relationship affect public service delivery in Kenya Huduma Centers

LITERATURE REVIEW

Theoretical review

This study was guided by the innovation theory, the new public management theory and the agency theory.

Innovation Theory

Innovation in public service delivery through e-government platforms such as Kenya's Huduma Centres requires more than just advancements in technology. It demands a supportive policy environment and institutional frameworks that enable and incentivize innovation across various levels of governance. As Greenacre, Gross, and Speirs (2012) emphasize, promoting innovation should not be limited to research and development, but must also involve deliberate policy efforts to create systems that facilitate collaboration and effective implementation. In the context of Kenya's digital public services, this implies that institutional readiness, regulatory clarity, and resource availability are just as critical as technological capacity. These elements enhance the ability of digital platforms to deliver efficient, user-centered services, ultimately strengthening trust and engagement between citizens and government.

New Public Management Theory

The New Public Management (NPM) theory emerged in the 1980s as a response to the growing adoption of private sector management practices within public administration. Driven by dissatisfaction with inefficient, bureaucratic, and unresponsive public institutions in countries such as the UK, Canada, Australia, and New Zealand, NPM introduced a shift in public sector governance toward efficiency, cost-effectiveness, and performance-oriented management (Mongkol, 2011; Pollitt et al., 2007). At its core, NPM redefined citizens as 'customers' and emphasized the restructuring of public institutions by introducing decentralized service delivery models, performance benchmarking, outsourcing, and private sector-style corporate governance. It aimed to eliminate administrative rigidity and promote innovation by encouraging transparency, accountability, and responsiveness in public services (Christensen & Lægreid, 2007; O'Flynn, 2007).

Agency Theory

The impact of digital infrastructure on public service delivery through e-government platforms in Kenya can be examined through the lens of Agency Theory, originally developed by Stephen Ross

and Barry Mitnick in 1973. This theory explains the dynamics between principals (citizens) who delegate authority and decision-making to agents (public servants). A key challenge identified by the theory is the principal-agent problem, where agents may act in their own interests due to information asymmetry—having more knowledge about their actions than the principals (Laffont & Martimort, 2002). In the public sector, this can lead to inefficiency, lack of accountability, and increased potential for corruption, ultimately weakening the effectiveness of service delivery.

Empirical Studies

Digital Infrastructure and Public Service Delivery

Molchanova (2020) assessed the effect of digital infrastructure on public service efficiency. The author identifies challenges in implementing digital transformation, mainly on infrastructure and public services. Limited internet coverage, outdated hardware, and lack of system integration were highlighted as key barriers to efficient digital service delivery. Without a robust digital infrastructure, even well-designed customer-centric policies cannot function effectively. The study emphasizes the need for modern IT systems, reliable connectivity, and secure data management to support citizen-focused reforms. Investment in scalable and interoperable platforms is crucial to enable seamless communication between government agencies and the public.

Hamudi (2020) evaluated reforms in digital taxation across African nations, questioning the necessity for enhanced tax policies and infrastructure to secure vital revenue amid digitalization. Through a detailed country-by-country analysis, the study examined proposals, public announcements, and legislation related to both direct and indirect taxation in the digital economy. The digital economy, with its transformative impact on markets, productivity, and operational scalability, is integral to sustainable development by increasing tax revenue. Decman and Maulana (2021) examined digitalization's rapid transformations, offering governments tools to enhance public value through ICTs, particularly amidst declining public trust. Effective transformation relies on inter-organizational cooperation, yet challenges like digital disparity persist. Strengthening trust in government services and personal data protection is vital for better service delivery.

The state of digitization of public services in Ukraine has been evolving due to advancements in information and communication technology, enhancing service delivery and quality. Research by Kniazieva et al. (2023) assesses Ukraine's progress in comparison to Estonia's successful digitalization efforts, aiming to pinpoint best practices and identify challenges. The study combines literature reviews, academic analyses, government reports, and quantitative data from surveys to draw insights. It reveals that while initiatives like the *Diia* platform have improved service access, Ukraine still trails behind some European nations in digitalization. The government's dedication to digital transformation through various strategies indicates a commitment to boost service efficiency and citizen engagement.

Finger and Montero (2023) analysed the challenges faced by traditional public services due to digitalization. They conceptualize digitalization's effect on physical service providers, particularly digital platform business models. Orazgaliyeva, Satyameva, Taghiyev and Nurseiytova (2023) employed comparative, economic-statistical and qualitative content analysis and analyzed data from various institutions, and revealed that e-government infrastructure enhances public administration efficiency. Public administration organizations demonstrated moderate readiness for digital transformation. The study recommends enhancing technological infrastructure and digital human capital to improve e-government public service delivery.

Digital Capabilities and Public Service Delivery

The rapid integration of digital technologies and IT expertise is vital for advancing societies and economies. However, increasing demands from citizens pose challenges for governments, necessitating a reorganization to use new digital tools effectively (Ahmad, 2021). Digital transformation is essential for governments to support digital societies, requiring the leveraging of data skills as a core component (Mittal, 2020).A study by Cruz, Dutz and Rodríguez-Castelán (2022) assessed the adoption and use of digital technologies in Senegal, outlining pathways to maximize their impact on economic transformation, job creation, and poverty reduction. Public service institutions have evolved significantly due to advancements in technology and changing consumer demands. This evolution led to the establishment of Kenya's Huduma Program in 2013, designed to enhance citizen-centric public services via digital technology in one-stop centers nationwide. Kamau, Rotich and Ogollah (2022) investigated the impact of Business Process Re-engineering (BPR) on service delivery.Findings indicated that BPR significantly influences public service delivery, The study advocates for ongoing evaluations and redesigns of processes to improve efficiency, addressing a knowledge gap in Huduma center administration and providing valuable insights for future practices and policies.

Sahur and Amiruddin (2023) evaluated benefits such as improved accessibility, cost reductions, user-centered services, data-driven decisions and heightened crisis response capabilities. However, challenges like bridging the digital divide and ensuring data security remain. As nations embrace digital transformation, aligning services with citizens' evolving expectations is crucial.Certainly, public administration cannot stay detached from the ongoing trends of digitalization, considering its significance in relation to promoting the country's economic growth and enhancing the efficacy of public administration activities (Mariani & Bianchi, 2023). The digital transformation of public administration involves the integration of digital technologies and capabilities within the public sector to enhance service delivery quality and efficiency while promoting transparency and accountability. Furthermore, digital transformation necessitates the enhancement of capabilities and expertise in public administration, along with the formulation and execution of focused and intentional policies (Mkrtchyan & Melkumyan, 2023).

Crăciun, Țăran, Noja and Răcătăian (2023) used two sophisticated methods for modeling longitudinal data gathered from the EU-27 Member States during the 2010–2021 timeframe, specifically structural equation modeling and Gaussian and Mixed-Markov graphical models. The primary findings suggest that government effectiveness improves due to the human capital engaged in intricate tasks that utilize digital services, e-government participants and the integration of digital technologies, alongside the influence of the demand and supply of digital public services through open data. Huaytan et al. (2024) investigated the influence of digital transformation strategies on enhancing efficiency and accessibility in public hospitals, aiming for an improved patient experience. Utilizing a mixed-methods approach, the study compares digital transformation techniques in diverse public hospitals globally, regionally and nationally.

Digital Customer Relationship and Public Service Delivery

Implementing customer-centricity involves rethinking how government agencies interact with citizens (Diraso, 2020). It requires public institutions to understand citizen needs, simplify procedures and enhance digital communication channels. Customer relationship is an emerging approach in public governance focused on placing citizens at the center of public service delivery. Traditionally, public administration has been system-focused rather than user-focused.

On the other hand, Ismail, Ziyadin, Zhuparova and Doszhan (2022) assessed proposals for the modernization of public administration in the context of digital transformation. To solve the stated research problems, general scientific methods of cognition were applied using structurally functional system and comparative approaches, content analysis of information sources, methods of factor and statistical analysis of actual and digital material. Kalinin (2023) examined customer-focus, its relationship with digitalization, differences in the expectations and behavior of private and business clients, the role of the competencies of civil servants, the problems of achieving a positive effect for clients and returning the choice between strict regulation and the variability of public services.

METHODOLOGY

Research Design

This study adopted a descriptive research design. According to Creswell and Creswell (2017), this design involves studying the research variables without making any intentional changes or adjustments, and then analysing the results.

Target population

The study was conducted in the 5 Huduma centers in Nairobi county. These are : GPO, City Square, Makadara, Eastleigh and Kibra. The target population were citizens who visit the Huduma centers. Data from Huduma Kenya (2025) indicated that Huduma centers in Nairobi county serve 10,000 citizens on a daily basis. These were the best suited to give data on digital innovation for

effective public service delivery, as they're the users of the services. Table 1 illustrates the target population.

Table 1: Target population

Huduma centre	Population
GPO	2,800
City Square	2,100
Makadara	1,800
Eastleigh	1,700
Kibera	1,600
Total	**10,000**

Source: Huduma Kenya (2025)

Sampling frame

The sampling frame is the list or database from which a sample is drawn.

Sampling techniques and Sample Size

The study employed the Yamane formula to determine the sample size. Thus,

$$\mathrm{n} = \frac{N}{1 + \mathrm{N}\,(e)^2}$$

Where: : n is the sample size; N = the population of the study and e = the margin error , 0.05. From the formula,

$$\mathrm{n} = \frac{10000}{1 + 10000\,(0.05)^2}$$

$$\mathrm{n} = 385$$

The study employed simple random sampling to select 385 citizens from the 5 Huduma centers. A proportionate sample was obtained for each center. Table 2 illustrates the sample size

Table 2: Sample size

Huduma Centre	Population	Sample
GPO	2,800	108
City Square	2,100	81
Makadara	1,800	69
Eastleigh	1,700	65
Kibera	1,600	62
Total	**10,000**	**385**

Data Collection Procedure

The data collection exercise was carried out across the five Huduma Centres in Nairobi County—GPO, City Square, Makadara, Eastleigh and Kibera, in a day.

Data processing and analysis

The data collected was categorized and coded. It was then input into Microsoft Excel, then onto SPSS for analysis. Descriptive analysis was explained using percentages, means and standard deviations.

DATA ANALYSIS, RESULTS AND DISCUSSION

Descriptive analysis

The descriptive analysis is presented according to research objectives.

Effect of Digital Infrastructure on Public Service Delivery

The third objective was to assess the effect of digital infrastructure on public service delivery in e-government platforms in Kenya. The results in summarized in Table 5

Table 5: Descriptive analysis for Digital Infrastructure on Public Service Delivery

Statements	N	Mean	Std. Dev
The internet connection at the Huduma Centre is reliable	332	4.50	0.547
The computers and digital devices at the Centre are easy to use	332	4.53	0.546
There are enough digital facilities available for public use	332	4.34	0.522
The government's online platforms load information fast	332	4.30	0.575
Technical support is available when I have problems using digital services	332	4.45	0.550

The results in Table 5 suggest that most respondent felt that the internet connection was reliable (Mean=4.50: Std Dev=0.547), while a significant strongly agreed that the digital devices available were easy to use(Mean=4.53: Std Dev=0.546). The study finding revealed that digital infrastructure had a positive and significant effect on public service delivery. This resonates with the observations of Shava and Vyas-Doorgapersad (2022), who noted that inadequate digital infrastructure including unreliable internet, limited devices, and poor integration of new technologies hinders service delivery in South Africa. Additionally, the respondent were in agreement that there were enough digital facilities for public use (Mean=4.34: Std Dev=0.522). This affirms the work of Mariani and Bianchi (2023) which emphasized the importance of context-sensitive infrastructure development within multi-level governance structures. Furthermore, the respondents also expressed satisfaction with the speed of government online platforms, with a significant proportion agreeing that information loaded quickly (Mean=4.30: Std Dev=0.575). Furthermore, the respondent agreed that technical support was available when needed (Mean=4.45:

Std Dev=0.550). This finding agrees with that of Kniazieva et al. (2023), who noted that while Ukraine has made huge strides through initiatives like the Diia platform, gaps in digital infrastructure remain a major obstacle.

Effect of digital capabilities on public service delivery

The first objective was to assess the effect of digital capabilities on public service delivery in e-government platforms in Kenya. The results is presented in Table 6.

Table 6: Descriptive analysis for digital capabilities on public service delivery

Statements	N	Mean	Std. Dev
Phone can easily be used to get government services.	332	4.27	0.597
It is easy to navigate around government websites.	332	4.23	0.565
Filling out online forms for government services is easy	332	4.44	0.543
Resolution of minor problems when using government websites or apps.	332	4.38	0.550
Internet enhance information from the government.	332	4.37	0.558
Mean		**4.34**	

The Results in Table 6 indicates that the respondents agreed that they could use a phone to get government services (Mean=4.27; Std Dev=0.597). In addition, the respondent asserted that they could navigate government websites (Mean=4.23: Std Dev=0.565). The study established that digital capabilities had a positive and significant effect on public service delivery in e-government platforms in Kenya This finding aligns with Okanga and Thuy (2018), who emphasized the importance of digital proficiency in enhancing interactions between citizens and government.

When asked about filling out online forms, majority agreed that the know how to fill online forms while assessing government services (Mean=4.44: Std Dev=0.543). Similarly 55% agreed that they could resolve minor problems when using government platforms. This affirms the work of Nzimakwe (2021) which highlighted that promoting digital expertise among both citizens and government staff is critical to ensuring responsive and high-quality service delivery. Furthermore majority of the respondent were in agreement that they use internet to obtain government information or services (Mean=4.37; Std Dev=0.558). Indeed, according to Innovation Theory, effective public service delivery is not solely dependent on technological advancements but also on a conducive institutional environment, resource availability, and strategic policy direction (Greenacre et al., 2012).

The results indicate high level of confidence in digital capabilities among respondents. This finding aligns with those of Huaytan et al. (2024), who examined the role of digital transformation strategies in enhancing efficiency and accessibility in public hospitals in Peru.

Effect of Digital Customer Relationship on Public Service Delivery

The second objective was to assess the effect of digital customer relationship on public service delivery in e-government platforms in Kenya. The results is as presented in Table 7.

Table 7: Descriptive analysis for digital customer relationship on public service delivery

Statements	N	Mean	Std. Dev
The government's digital platforms respond quickly to my requests.	332	4.34	0.556
I find it easy to communicate with government officials through online services.	332	4.28	0.568
The digital services make me feel valued as a citizen.	332	4.34	0.539
I trust the information provided by government websites.	332	4.25	0.541
The online government services keep me informed about my service requests.	332	4.33	0.581

The results in Table 7 indicate the respondents agreed that the government's digital platforms respond quickly to their requests (Mean=4.34: Std Dev=0.556). Similarly, most of the respondent strongly agreed that communicating with government officials through online services was easy. This affirms the works of Edelmann and Mergel (2021) which stressed the importance of co-production in digital service delivery, emphasizing stakeholder engagement and collaborative service design.

A sense of being valued was also reflected, with a significant number of respondent (Mean=4,34, Std Dev=0.459) agreeing that digital services made them feel appreciated as citizens. This finding contrasts with the conclusions drawn by Kalinin (2023), who emphasized the critical role of a customer-focused approach in digitalized public administration. Trust in government information was high, with majority of the respondent (Mean=4.25: Std Dev=0.541) strongly agreeing that they trusted information provided on government websites. Additionally, most respondents were in strong agreement (Mean=4.33: Std Dev=0.581) that online government services kept them informed about their service requests. This agrees with the NPM theory which asserts that effective customer relationship management is central to improving service quality, responsiveness, and citizen satisfaction.

Public Service Delivery

The study examined digital innovation for effective public service delivery.

Table 8: Descriptive analysis for public service delivery

Statements	N	Mean	Std. Dev
The services I receive at the Huduma Centre meet my expectations	332	4.28	0.537
Government services are delivered in a timely manner	332	4.27	0.565
The staff at the Huduma Centre are helpful	332	4.36	0.527
Satisfaction with the quality of government services is high	332	4.24	0.536
It is easy to access the services I need at the Huduma Centre	332	4.39	0.546

The results in Table 8 indicate that most of respondents agreed that the services received at the Huduma center met their expectations (Mean=4.28, Std Dev=0.537). Finger and Montero (2023) further support this finding by conceptualizing how digital platforms transform traditional public service models. Their analysis highlights that governments with well-developed digital infrastructure comprising both hardware and software are more capable of providing efficient, transparent, and responsive services. In addition, the respondent were in support of the statement that government services offered at the Huduma centers were timely (Mean=4.27; Std Dev=0.565).This finding aligns with Orazgaliyeva et al. (2023) which emphasize that digital infrastructure not only improves the efficiency of public administration but also supports the broader readiness of institutions for digital transformation. Their study recommends bolstering both infrastructure and digital human capital to maximize the benefits of e-government. Kenya's significant positive outcomes suggest that the country is advancing on both fronts, particularly through capacity-building in Huduma Centres.

Furthermore most of the respondent strongly agreed the staff at the Huduma Centre were helpful (Mean=4.24; Std Dev=0.536). Moreover, the respondents agreed that it was easy to access the services they needed (Mean=4.24: Std Dev=0.546), indicating a strong and consistent positive perception of public service delivery among the respondents. This confirms the Agency Theory which highlights the importance of reducing information asymmetry between citizens (principals) and public servants (agents).

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of findings

The study analyzed the effect of digital infrastructure on public service delivery in Kenya. Digital infrastructure had significant effect on public service delivery. There was positive experience with internet connectivity (Mean = 4.50, Std = 0.547), Computer and digital service access (Mean = 4.53, Std = 0.546), digital facilities availability (Mean = 4.34, Std = 0.22), ability of the platform to load information faster (Mean = 4.30, Std = 0.75) and availability of technical support (Mean = 4.45, Std = 0.550). There was a positive experience with the technical aspects of accessing government digital services. The results showed that internet connection was reliable and the digital devices were easy to use. There was a general agreement that sufficient digital facilities

were available for public use. Participants also expressed satisfaction with the speed at which government platforms operated and felt that technical support was accessible when needed.

The study assessed the effect of digital capabilities on public service delivery in Kenya. Findings showed that there is a positive influence of digital capabilities on public service delivery in Kenya .There was a high level of confidence among participants in using digital tools to access government services. Most respondents reported that they could effectively use a phone (Mean = 4.27, Std = 0.597) and navigate government websites ((Mean = 4.23, Std = 0.565). Majority of the respondent were able to complete online forms (Mean = 4.44, Std = 0.543) and resolve minor issues on the government platforms (Mean = 4.38, Std = 0.550),In addition they agreed that the could find government-related information online (Mean = 4.37, Std = 0.558). These results suggest a generally strong digital literacy and readiness to engage with e-government services.

The study evaluated the effect of digital customer relationship on public service delivery in Kenya Huduma Center. Results revealed a positive effect of digital customer relationship on public service delivery in Kenya There were positive perceptions of government digital platforms. The platforms were responsive to citizens' communication needs (Mean = 4.34, Std = 0.556) and the communication with government officials online being easy (Mean = 4.28, Std = 0.568). Many respondents felt valued as citizens when using these digital services (Mean = 4.34, Std = 0.539) . In addition, there was a strong sense of trust in the information provided on government websites (Mean = 4.25, Std = 0.541), and users felt well-informed about the progress of their service requests through these platforms (Mean = 4.33, Std = 0.581).

Conclusions

The study concludes that:

Digital infrastructure influences public service delivery Kenya to a greater extend. The digital infrastructure positive influence public service

Enhanced digital capabilities significantly improve public service delivery in Kenya. Strong digital literacy supports streamlined interactions, reduces service delays, and increases accessibility, thereby strengthening the performance and responsiveness of public services delivered through digital platforms.

Digital customer relationship has a positive but statistically insignificant effect on public service delivery Kenya.

Recommendations

Based on the conclusion, the study recommends:

1. Based on the result and conclusion on the analysis of the influence of digital infrastructure on service delivery

1.1. Government authorities prioritize investment in robust digital infrastructure to ensure reliable internet connectivity and the availability of user-friendly devices for public use.
1.2. The Ministry of ICT and relevant agencies should work to expand and maintain sufficient digital facilities across urban and rural areas to support equitable access to e-government services.
1.3. Additionally, Huduma Center Management should make continuous improvements in platform speed and the provision of accessible technical support are essential to enhance user experience and system reliability. These measures would collectively strengthen the efficiency, accessibility, and overall quality of public service delivery through digital platforms in Kenya.

2. Based on the finding and conclusion on the analysis of the influence of digital infrastructure , The study recommends that:
   1.1. The government, through the Ministry of Information Technology and relevant agencies, strengthen digital literacy programs to equip citizens with the necessary skills to engage effectively with digital services.
   1.2. Information and Communication Department in Huduma center should prioritize the development of mobile-friendly and user-friendly platforms that support easy navigation, form completion, and issue resolution.
   1.3. The governments should expand public access to digital resources by establishing digital hubs equipped with internet access and support services. Additionally, government agencies should implement real-time technical support and feedback mechanisms to ensure continuous improvement of platform responsiveness and user experience.
3. Based on the results of the assessment of the influence of digital capabilities, the study recommends:
   3.1. Huduma Center Management and e-government platform managers should develop digital customer relationship policy to enhance citizen engagement and satisfaction. This includes improving the responsiveness of digital platforms and ensuring clear, timely communication between government officials and users to enhance trust and a sense of value.
   3.2. The Ministry of ICT should priorities training for government staff on effective online communication can further improve interactions on these platforms. Although the direct effect on service delivery is currently minimal, these efforts would contribute to better public service experiences and lay the foundation for stronger digital customer relationships in the future.

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