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Problems Encountered in Access and Use of E-Government Services in Kenya: Case of Huduma Postal City Square in Nairobi

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ABSTRACT

Governments throughout the globe are increasingly relying on digital technology to improve their day-to-day operations, dissemination of information, decision-making, and provision of services, citizen engagement, and joint problem-solving on matters of public policy. However due to the technological differences, many developing countries lack the infrastructural platform required for the deployment of electronic governance. The study sought to determine the problems encountered in access and use of e-government services at Huduma postal city square in Nairobi. This study used descriptive research method to gather qualitative and quantitative data. Nairobi's Huduma Posta City Square served as the site for the study. The target population for this study includes the individuals who access and use digital public services at Huduma Centres and via e-citizen information centres provided by the government. The key human persons or staff members who were questioned for this study were selected using a systematic method of selection known as purposeful sampling. The study's sample size consisted of 278 people inclusive of 20 employees selected at random; both structured and unstructured questionnaires were used in the research. The interview guide was also used to obtain qualitative data by the researcher. The study revealed that many people have trouble gaining access to and using the government's electronic services at Huduma Centers. These problems are related to privacy, connectivity, lack of public awareness and poor internet speed. The research recommends that electronic data privacy in Kenya should be protected by means of digital signatures; the government should increase investment on ICT support infrastructure and that the county government should facilitate the rapid development, evaluation, and approval of new laws.

Keywords: E-government, Huduma centres, Citizens, Challenges, Kenya

1. BACKGROUND INFORMATION

Rapid development/advancement in ICT systems together with technological innovations has led to socio-economic progress which in turn results to social transformation. In effort to remain relevant as technological transformation continue to unroll, governments across the world continue to shift from traditional paper-based work to provision of digital public services (Giao, 2020). According to Malodia et al., (2021), the adoption of electronic government or digital government entails the utilization of ICT systems by the state in collection and communication of information to the entire public. In developed states across the globe such as the United Kingdom, United States of America, Canada, and second world countries like South Korea, Mongolia South Africa, Brazil, Hungary, the digitization and delivery of government e-services to the public has resulted to Quality service delivery to the public and thus accelerating states social and economic goals Bwalya (2018). With E-government systems, citizen's request is dwelt with online and in real time, thus limiting or totally eliminating paper work because the entire client request is electronically processed and disseminated (Nguyen et al., 2020). According to Bwalya (2018) introduction of e-government enable better interaction between the state and its citizens, for instance, e-government communication capability enables the public to obtain information required such as, travel passports, birth certificate, driving license, filing of court cases, business permits and many more. As Bwalya (2018) notes, the automation of such services where citizens coul electronically fill the e-forms, this reduces the much time required under traditional method, it also reduces human involvement in the exercise and reduces error probability. Since introduction of e-government services in Kenya back in 2013, the state through its periodic audits have recorded a significant transformation in service delivery to the general public. Kinyanjui and Waithaka, (2019) records that, Huduma portal serves an important role in lessening administration procedures while improving information flow from the state to the citizen, from citizen to the government and within the government itself. With e-citizen portal and Huduma Centers that are located all the 47 Counties, Kenyan citizens are able to access government services in an efficient and accountable manner (Mutinda & Kaswira, 2017). Similarly, in view of increasing civil servant productivity, service delivery, public participation in planning and decision making, the government has digitized nearly all its services which are offers through various departments, ministries and agencies (MDAs). In the same way, Kinyanjui and Waithaka, (2019) observes that, integrated technology platforms used by Huduma centers in Kenya compares to one stop shop that provides multiple public services and information. Both authors further indicate that, the integrated horizontal and vertical approach bring on board government ministries, state departments and key agencies. in concurrence, Mutinda and Kaswira, (2017) delivery on government services and related initiatives through e-portal has reduced bureaucracy, complexity associated with traditional paper-based method.

As noted by various researchers, government mostly from the developing nations face immense challenges in they strive to

provide services to the citizens. Recent assessment conducted in Africa nations by United Nations (2020) show that, despite the progressive technological advancements made on ICT sector in the last three decades, majority of African nation haven't cached up yet with modern trends in this field. The report estimates that only 473 million people in Africa have enjoy internet connectivity which translates to 36% internet penetration rate. The slow incorporation of ICT in African states is majorly attributable to poor ICT infrastructure and skills gaps. Additionally, the reports also projected that, as technological innovations continue to deepen, the fore mentioned gaps are likely to cripple the digitization of government service In Africa. Despite the quest by regimes across the globe to adopt e-service delivery, considerable number of government administration continually encounter numerous challenges liked to contextual factors such as resource inadequacy, poor ICT infrastructure and lack of technical capacity, these drawbacks are more common in developing states (United Nations, 2020). According to the United Nations, some states must cope with issues including data privacy, cyber security, and digital inclusion. As noted by Bwalya (2018), considerable number nations that fall under of developing world are yet to achieve meaningful gains from e-government service delivery; this failure is mostly blamed on resistance from public officials, inefficient ICT infrastructure, lack of supportive services, fog computing, business intelligence as well as and other unknown contextual challenges. According to a (2018) United Nations report, change in sustainable development goals (SDGs) is accelerating fast due to the power of digital services that are availed through technology capability. However, the report notes that the changed rate is not even across all nation due to social, economic and policy variations. As a mitigation measure moving forward, this report calls for governments to development of a comprehensive action plan implementable national and global levels. Additionally, this report elucidates the essence of civic education as an indispensable pedal in progressive advancement of social justice, continuous learning and innovation and the use of advanced digital technology in the process. Understanding the situational difficulties and diverse features of e-government, specifically in the context of the undeveloped nations is essential development of Quality e-government system. The challenges and complexity impeding development and implementation of e-Government (Bwalya, 2018) is closely ties on other several components that touch on design features, adoption and use. Planning of E-government strategies and initiatives during epidemic period should be well calculated and appraised so as to adequately sustain citizen's social and economic development agenda.

1.1 Context of the Study

The word Huduma is a Swahili word that translates to service. In Kenya the terminology is widely government organizations. The digitization of government services in the year 2013 led to the launch of Huduma Centre programme, today this initiative remains and falls under the Ministry of Devolution and Planning which is overseen by Huduma Kenya Secretariat. The University of Nairobi consultancy (UoN) agency and Enterprises and Services Ltd (UNES) all working closely with Ministry of Devolution and Planning, championed the conceptualization, formulation, development Huduma digital platforms (Kinyanjui & Waithaka, 2019). Service delivery to Kenyan citizens has greatly improved in all government departments, ministries, and agencies due to transformative effect bright on board by Huduma initiative. It offers a central hub where integration and service delivery to the public can take place on the same platform and in the same building, roof, or room. The most of Huduma Centers are situated in government postal service structures. The pressing quest behind Huduma platform is anchored on the need to improve quality in dissemination government services to the public by fostering accountability, transparency while removing unnecessary bureaucracies in public sector (Kinyanjui & Waithaka, 2019). They further observed that the integrated service delivery (ISD) or the e-government initiative focuses on increasing citizen satisfaction with public services by ensuring that services are delivered in an efficient and excellence manner. With the Huduma platform, citizens can efficiently access certain public amenities or information from the integrated service portal. While relying on Automated ICT systems to deliver services and solutions, the Huduma service Center model serves the public, agencies, ministries and key departments. As Ondego and Moturi (2016), narrates, E-citizen primarily seeks to foster better interaction between the government and its citizen(G2C), therefore the portal delivers services like; licenses, land searches, visa applications, passport, land searches, driving licenses, registration of wedlock, serving notices of marriage and business name search. The system also enables users to register and apply for government services, and quickly pay for those services using mobile payments, debit cards, credit cards, and internet banking. Foreign residents may also apply for government services through Huduma System. Users can sign up to get emails and Text message notifications from the platform every moment an application is prepossessed. From these authors, the e-citizen program aims at transforming delivery of public services, by giving citizens access to a broad range of governmental access to information using integrated online platform. Additionally, Huduma Centers and the county governments offer individuals free services. With the help of Huduma platform, the national value has been strengthened and community cohesion and social economic growth have been promoted.

1.2 Statement of the Problem

Due to rapid globalization, fiscal, technological and social changes, régimes across the globe are under constant pressure to ensure singularized provision of citizen-centric services while upholding transparency, efficiency and accountability. Secondly, for those states that have previously witnessed internal conflicts, these nations are even at a greater pressure to win citizen trust by filling service demand gaps that probably occasioned the violence. Thirdly, shifting to e-service delivery enhances relations or partnership between public and private sector. The strengthen partnership is anchored on system transparency accountability and efficiency, however Ang'anyo and Mbatha, (2019) notes that adoption of the e-service delivery model is not an easy task for especially for developing countries. In response to these demands, the government of Kenya has developed and implemented an integrated service delivery platform that seeks to provide its population with quick access on government services such as police abstracts, drivers' licenses, marriage certificates, business permits and property search services (Nguyen et al., 2020). Kenya hoped to change the delivery of public services by giving citizens simple access to a variety of governmental services and information, with this determination, Huduma Centers were created and launched in 2013 with the goal of improving and changing how the general public or residents receive services (Mutinda & Kaswira, 2017). According to Ondego and Moturi, 2016) with Huduma online information portal and physical centers across the counties, citizens can

access various services from many government departments and ministries. As Karippacheril et al., (2016) notes, electronic governance enhances the public scrutiny of info about expenditures and decision procedures, enhancing the credibility of the government while lowering the likelihood of corruption. Traditional digital public services have been used more frequently as social isolation encourages online communication, but electronic government platforms are being used to solve the worldwide COVID-19 situation in creative ways (United, Nations 2020). Although there are challenges with illiteracy, the technological gap, and an inadequate infrastructure, Huduma Centers offer a wide range of services (Mutinda & Kaswira, 2017).

1.3 Purpose of the Study

The purpose of the study was to establish the problems members of public face in the utilization of electronic government services at Huduma Centres in Kenya with a view to proposing strategies to improve access and provision of electronic government services in these Centres.

1.4 Research Objectives

The study sought to establish the problems encountered in access and use of e-government services at Huduma postal city square in Nairobi, to propose strategies to improve access and provision of electronic government services at Huduma Centres.

2. LITERATURE REVIEW

2.1 Problems Encountered in Access and Use of E-Government Services

Governments throughout the globe are increasingly relying on digital technology to improve their day-to-day operations, dissemination of information, decision-making, and provision of services, citizen engagement, and joint problem-solving on matters of public policy. To yet, however, many nations have not mastered the use of digital tools to empower their citizens via transparent and participatory processes and to offer them with services that are easily available, reliable, fast, customized, secure, and inclusive (Naicker, 2020). In an effort to better serve their constituents, governments and businesses have shifted their focus to the online delivery of information, goods, and services. This change is problematic for many people because they lack the requisite skills to access online services, and it is problematic for government agencies and organizations since these services are often underused due to a lack of knowledge on how to access and use them (Alkhateeb & Abdalla, 2021). According to studies conducted in Saudi Arabia, the availability of necessary infrastructure and services is important for the widespread adoption of electronic governance (Baabdullah et al., 2018). However, the authors point out that the availability and delivery of government institutions' online services might be jeopardized when such organizations lack the capacity to do so continuously. Furthermore, the hardware supporting these applications cannot guarantee the required 99.5 percent availability. Due to the digital gaps, many developing countries lack the infrastructural platform required for the deployment of electronic governance. This platform consists of websites as well as other local content (Sarker & Xiaohua, 2018). Efficient application of electronic governance has also been impacted by issues such as online local content rules, ICT infrastructure, and the growth of trained human capital.

The term "digital divide" refers to the gap that exists when comparing the levels of access, distribution, and usage of communication and information technology across groups of people (Mwai & Karume, 2020). In spite of this, the digital gap between the information "haves" and "have-nots" in the states is being narrowed as a result of the widespread adoption of standard service principles, as Naicker (2020) notes. If the government, organizations, and citizens are able to bridge the digital divide, then they will be able to take use of electronic government services. Poor digital governance networks and widespread illiteracy in Africa exacerbate already difficult citizen-government interactions (Nwanisobi & Christopher, 2017), Over 70% of Africa's rural population has trouble accessing and using electronic governance online services because of the complex nature of the technology required to do so. Some users, particularly those in more remote locations, lack the background knowledge and expertise required to make effective use of communication portal apps, and this is especially true of those who are unfamiliar with the e-citizen platform. Successful access to electronic government services may also be affected by the cost or price of Internet connectivity. Additionally, the Huduma Center, a government service hub that works in tandem with the e-citizen portal, is mostly located in populated regions and has perpetually lengthy wait times for those seeking to use it (Mwai & Karume, 2020). There are still a number of obstacles hindering the widespread adoption of e-government services, notwithstanding Kenya's impressive advances in this area (Onyango, 2020). Most people in rural regions are unaware of online services, and Huduma Centres are concentrated in urban areas (Ogola & Nyang'au, 2017), despite the fact that electronic government is a novel method to strengthen the interaction between citizens and governments using an ICT approach. Kamairo (2017) claims that many of the provided email addresses on ministry websites are no longer in use, and that the demand for services at the Nairobi Huduma Centre far exceeds the available resources.

2.2 Strategies to Improve Electronic Government Services

According to Kenenissa, electronic administration platforms in France needed a certain level of simplification to make them easier to use (2017). More electronic simplified governance is required for tax-related processes, business registrations and online payments. However, the study noted that rural villages lacked the fundamental knowledge necessary to use the internet, making it difficult to use any government e-services. To ensure the success of electronic government services, become successful, government organizations must streamline their interface e-governance functionalities, perform more training on public awareness, and create digital e-governance centers inside of communities. Use of ICT in dissemination of governance services enhances service delivery efficiency (Almuraqab & Jasimuddin (2017). Therefore, Government ICT technologies must be made more user-friendly by public sector organizations; otherwise, electronic governance projects will only be available to urban populations who have access to such skills and understanding. To successfully deploy community initiatives in electronic governance, the following three abilities are necessary: first, capabilities in information technology, secondly, competencies in data integration, and 3rd, information skill with the society (Mafwiri, 2020). According to Singh and Singh, (2018) ICT skills are essential for those who employ e-governance; this is because end users must understand simple ICT instruction to perform operations. Information literacy skills with the society are soft skills required to perform critical operations with confidence, while

information management capabilities and professionalism are needed to set up and proficiently oversee ICT infrastructure (Lee, 2021). In order to increase the skills required for the adoption of electronic governance, well-managed government entities offer trainings and outreach activities in communities in response to demand from consumers for electronic government competencies. State support to the public in the process of adoption of electronic government services are directly related (Basahel & Yamin, 2017). According to Basahel and Yamin, the government's assistance is essential in creating the regulations that direct the establishment, progress, and adoption of electronic government services. Additionally, government organizations and departments are required to establish mechanisms such information technology design, e-government software, hardware, and skills architecture in order to implement e-government programs, according to government policy on the adoption of electronic government. By building out the infrastructure for electronic governance, it is possible to make it sustainable and give residents access to public services both in rural and urban areas (Christopher & Nwanisobi 2017). In every state the government is responsible for producing ICT learning, in-service training for the common public on how to utilize the e-government programs. According to Verkijika and De Wet (2017) State agencies should make all possible effort to provide avail web translators in indigenous native languages that individuals living in rural areas in can understand, as Sarker and Xiaohua, (2018) suggest, the move necessitates simplifications and changes that will allow citizens to easily access and use government and governance procedures, In Nigeria, Imbamba and Kimile, (2017) revealed the need to establish ICT learning courses for the general public.

3. METHODOLOGY

3.1 Research Design

According to Hammond and Wellington (2020), the goal of study design is to transform an exploratory query, hypothesis, or intuition into a testable theory. The research design specifies what information will be gathered and how it will be analyzed in order to answer the study's primary questions (Tobi & Kampen, 2018). To gather descriptive information for the case study, this study used both qualitative and quantitative research methodologies. The quantitative approach to studying phenomena involves gathering and analyzing numerical data with the use of statistical methods (Goertzen, 2017). There are a number of methods for gathering statistical data through questionnaires that are used in this approach. To gain insight into ideas, perspectives, or experiences, investigators involved in qualitative research gather and analyze qualitative data (Bryman, 2017). It may be utilized to learn more about the issue at hand or to come up with fresh research questions. The study design for this problem includes steps like gathering information, analyzing it, and presenting it. The clients and workers of Huduma Posta City Square in Nairobi Metropolitan were the primary subjects of the research.

3.2 Area of Study

Nairobi's Huduma Posta City Square served as the site for the study. Huduma Posta City Square was one of the first locations to provide citizens access to government services online. The hub is situated in the CBD of Nairobi Metropolitan City, where it serves a large number of customers.

3.3 Target Population

The target population, as defined by Singh et al. (2020), comprises all of the members of a given population that are relevant to the study at hand. According to Thomas & Pencina (2020), it is the total number of people who answered the survey and met the specified conditions.

Table 1: Target population

Target Population	Frequency	Percentage
Huduma Centre Customers	970	98
Huduma Centre Staff Members	20	2
Total	**990**	**100**

Source: Author, 2022

The target population for this study includes the individuals who access and use digital public services at Huduma Centres and via e-citizen information centres provided by the government. Huduma Posta City Square's employees are also a part of the research population. Twenty employees work at the center every day to help 970 clients' access services.

3.4 Sampling Techniques

According to Gondwe (2020), sampling is the selection of a subset of a population that is statistically valid as a representation of the whole. When doing research, experts use their best judgment to choose a sample from the population from which to draw meaningful conclusions (Kopp et1 al., 2018). The key human persons or staff members who were questioned for this study were selected using a systematic method of selection known as purposeful sampling. Clients that visit Huduma Centre City Square to utilize the e-citizen information portal and other e-government services were selected using a random sample technique. The researcher chose Huduma Posta City Square on purpose to investigate this issue.

3.5 Sample Size

According to Majid (2018), a sample is a set of things from which to choose a statistically valid subset for analysis. In other words, it is the physical manifestation of the target population and includes all the possible units that may be members of the sample that serves as the basis for the selection process. The Krejcie and Morgan table (Krejcie & Morgan, 1970) is suited for any specified population and is widely used for sample size computation among behavioral and social science experts (Memon et al., 2020). However, the Krejcie and Morgan table requires no computations, according to Singh et al. (2020).

S=X2 NP (1-P)/ d2 (N—]) +X2 P (1—P)

Where;

S, Represents the required sample size.
X2 = Represents the desired confidence level (0.05)
N is the population size.
P is the population proportion (assumed to be 0.50 since this would provide the maximum sample size).
d represents the degree of accuracy expressed as proportion (0.05).
s=0.0025(970x0.5) (0.5)/0.0025(970-1) +0.0025x0.5 (0.5) =278

This study consequently considered a sample size of 278 respondents using the Krecjie & Morgan calculation table, as well as 20 employees selected at random. The study's sample

size, or sampling frame, consisted of 278 people. Demonstrate the methods used to determine the sample size.

Table 2: Sample Size

Target [1]Population	Population Size	Sample Size
Huduma Centre Customers	970	278
Huduma Centre Staff Members	20	20
TOTAL		**298**

Source: Author, 2022

3.6 Data Collection Methods

This is the process of gathering evidence to support a claim or position (Clark &Vealé, 2018). Accurate research findings are gathered, measured, and analyzed by following a set approach based on tried-and-true, verified methods (Bhardwaj, 2019). A number of techniques exist for gathering first-hand information. The most important techniques are interviews, questionnaires, experiments, observation, and manipulation models. The study approach included the use of a questionnaire and an interview schedule to gather information. Questionnaires were used to gather information from the workers and customers visiting the Huduma center for various services.

3.6.1 Questionnaires

Information about people's perspectives, experiences, and opinions may be gathered using questionnaires (Krosnick, 2018). According to Grassini and Laumann (2020), surveys are the most common method for collecting such crucial data on the populace. After getting the okay to conduct the study, a research assistant handed out the questionnaire. Both structured and unstructured questionnaires were used in the research. The numeric data came from the Likert-scale-standardized, closed-ended questionnaire, whereas the qualitative data came from the open-ended, free-form survey.

3.6.2 Interviews

Interviews are conversations with a specific goal in mind (Callaghan, 2018). Carlson (2020) argues that the most crucial feature of an interview is to express the belief that the participant's perspective is meaningful and worthwhile. The interview guide was also used to obtain qualitative data by the researcher. Appointments were made with those being interviewed (the employees) to let them know what was going on. As directed by the interview questions, the interviews were done in-person and recorded using a smartphone. The qualitative information obtained from the interviews was encrypted and presented in a narrative format with the quantitative information gathered from the same source device.

3.7 Research Instruments

The questionnaires and interviews used in this study were developed and piloted to guarantee maximum responder comprehension. This helped allay any fears that the participants may have had about the data collection methods. The pilot study for this investigation was conducted at Makadara Huduma Centre, and the sample size was set at 10. A total of 10 surveys were filled out by 8 customers, and 2 interview guides were filled out by 2 employees at Makadara Huduma Centre, for a response rate of 100 percent.

The reliability and validity of the research tools were determined by analyzing and assessing the acquired data. With the help of superiors and fellow information professionals, a trial run of questionnaires and interviews was done to make sure everything was running well before the official research began. It was obvious from the pilot study that the research instruments were able to gather the kind of information in which the study was interested, and it seemed that all respondents understood the questions asked within the scope of the inquiry. The research demonstrated uniformity in response among participants based on pilot instruments. This suggested a high level of internal consistency, suggesting that the research tools were adequate.

3.8 Data Collection Procedures

The research questions and objectives informed the approach of data collection. In-depth interviews with Huduma Posta City Square employees were done, and a research assistant was handpicked and given extensive training to collect questionnaire data.

3.9 Data Analysis and Presentation

Quantitative and qualitative techniques were used to assess and display the data gathered after the data gathering operation. Data analysis software, the Statistical Package for the Social Sciences, was used to code, input, and compute descriptive statistics from questionnaire data (SPSS Version 25). Graphs, line plots, and 2-dimensional pie charts were used and interpreted to display the findings. The research question was used to categorize the qualitative data from the interviews, which was then synthesized and reported in frequency distribution tables. The data is presented both numerically and narratively. The quantitative findings were analyzed using thematic analysis.

3.10 Ethical Considerations

Flick (2018) suggests taking precautions to avoid revealing any participant's identity to avoid compromising the anonymity of their coworkers. This author argues that data anonymization and the sparing use of contextual information are prerequisites for sound scientific inquiry. In order to prevent plagiarism, all of the information sources and other works that were used are credited. Participants gave their time to this study willingly. There was also careful attention paid to preserving people's identity and privacy. The University of Nairobi, Huduma Posta City Square, and the National Commission for Science, Technology, and Innovation all provided the necessary letters of permission for the study (Nacosti).

4. DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Problems encountered in Access of Electronic Government Services

Participants in the study were prompted to elaborate on the barriers they face while attempting to utilize the electronic government services available at Huduma Centre. Inadequate internet services and connections, insufficient information infrastructural facilities, lack of communications technology leadership and culture, lack of internet legislation and policies, inadequate financial resources and dedication, lack of digital

skills awareness and readiness, lack of trust and honesty in online services, lack of digital skills awareness and readiness, lack of trust and honesty in internet platforms, information and data security, and inadequate energy and power infrastructure were some of the problems that were revealed.

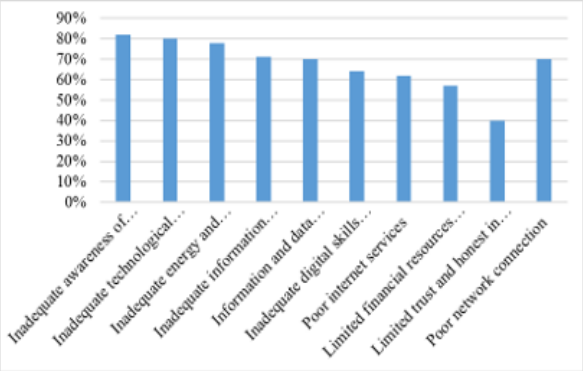

Figure 1: Access and Usage Issues that Customers Face

As shown in the figure above, Insufficient understanding of digital policy was cited by 82% (203 participants), poor technical culture and leadership was cited by 80% (198 participants), and inadequate power and energy infrastructure was cited by 78% (193 participants).

Inadequate internet services were cited by 62% (154) of respondents, while 70% (174) of respondents reported problems with information and data security, 64% (159) of respondents said they lacked the necessary digital skills, and 57% (141) said they lacked the necessary financial resources and dedication, and 40% (99) said they didn't trust or find online information to be honest. These results are in line with those reached by Kaswira (2017), who found that a large proportion of Kenyans living in rural areas and slums lack the skills necessary to use the Internet. They also found that the elderly, those from disadvantaged socioeconomic backgrounds, and those located in remote or underserved areas were particularly unable to use the Internet. The study's qualitative data showed that a lack of network connectivity was the primary barrier to providing services at Huduma Centre.

One of the Centre's managers stated: "One of the primary difficulties that we have daily is network failure which impacts our service delivery to a bigger level. Since we function mostly as a virtual office, most network issues originate with third-party service providers. We are unable to provide our services to you effectively and efficiently when their network is unreliable. Open-ended questions showed that low levels of awareness, questionable and insufficient infrastructure, deficient IT skills among users, absence of clarity in legal and policy framework, risk of privacy and high security, and lack of inter - departmental harmonization and collaboration were major obstacles to the effective implementation of electronic government services at Huduma Centres.

According to the interviewees, the Huduma Centres have also improved the fair treatment of citizens, enhance accountability in service delivery, facilitated easier access to information, boosted the reliability of that information, cut down on wasted time, expanded citizens' ability to use a wider range of government services, raised the level of satisfaction they feel toward those services, and lowered the burden of bureaucracy. Consistent with what Baabdullah (2018) argues, these findings highlight the need of readily accessible infrastructure and government services for the widespread adoption of e-government. These findings are in accordance with those of previous research by Imbamba & Kimile, (2016), which concluded that more electronic government initiatives are needed to increase digital inclusion and get more people involved in government operations online. Study respondents were asked to highlight emerging digital technologies that should promote delivery of services at Huduma Centres

Table 3: Emerging Digital Technologies

Emerging Technologies	N	Percentage (%)
Online information portal	174	70
Mobile platforms and applications	208	84
Digital platforms and devices	191	77
Social media platforms	176	71
Internet and websites	198	80
Disruptive technologies robotics, wearables	57	23

Online information portals, mobile platforms and apps, online platforms and technologies, social media networks and web and internet sites, disruptive technologies, robots, and wearables were among the emergent technologies studied. As one example of an emerging digital technology, 208 respondents (84%) named mobile platforms and apps; 77% named digital platforms and devices; 71% named social media platforms; 70% named an online information portal; and 23% named disruptive technologies, robots, and wearable.

4.2 Strategies to Improve Electronic Government Services

Study participants were asked to choose strategies to improve customer delivery of electronic government services.

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Table 5: Strategies for Improvement

Strategic Improvement	N	Percentage (%)
Training capabilities	159	64
Digital platforms and tools	149	60
Technological infrastructure	221	89
Expand the services	211	85
Internet connections	198	80
Human personnel	124	50
Mobilization of resources	149	60

Source: Research data, (2021)

According to respondents, there is a need to improve ICT skills among employees and citizens through training and education based on the qualitative data. The public has to be informed about e-services and given updates. Interviewees were questioned about potential projects to improve electronic government services at Human Centers. Results indicate that a variety of tactics were used to enhance public awareness and access to electronic government services at Huduma Centers, including the construction of a customer service desk, adoption of social media platforms, use of free call lines, ongoing training of employee's investment in connectivity network infrastructure, advancement of security software control

measures, and cooperation with other state offices. The results are consistent with Mafwiri's (2020) assertion that the government should be in charge of creating training courses and capacity-building initiatives for government officials who are in charge of implementing and adopting electronic governance, as well as creating ICT training clinics to instruct the public at large on how to utilize specific programs.

5. CONCLUSION & RECOMMENDATIONS

5.1 Conclusions

According to the study's findings, many people have trouble gaining access to and using the government's electronic services at Huduma Centres. These problems include, but are not limited to, those related to privacy, connectivity, hyper-governmental surveillance of citizens, information reliability, over-promising and under-delivering, public awareness, internet speed, equality in access to the internet, ambiguity, and interconnectivity. The study's findings suggest a number of techniques that can be used to enhance Huduma Centers' access to and delivery of electronic government services. Among them are the construction of a customer service desk that aids in raising public awareness, through use of free phone lines, social media platforms, and ongoing staff training, as well as investments in communication network infrastructure and the creation of software security control measures.

5.2 Recommendations

The government should provide protections for citizens' personal information and digital identities. Building privacy and trust in a network environment using optimal security techniques like encryption and authentication is essential in this context. Electronic data privacy in Kenya should be protected by means of digital signatures, and the country's government should facilitate the rapid development, evaluation, and approval of new laws. In order to raise the level of services offered to citizens, the government needs to continue training staff members in customer service. Such training ought to be done regularly to provide center staff the abilities they need to deal with a variety of clients, particularly in light of the fact that clients have varying personalities, attitudes, and perceptions. In this situation, emotional intelligence and interpersonal skills are the most crucial abilities. In order to train the people in digital literacy, the government must collaborate with other players, such as public libraries.

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