Country report: Kenya county governments' websites analysis report

Douglas Kimemia
Political Science Department, Virginia Commonwealth University, Richmond, VA, USA
E-mail: kimemiadk@vcu.edu

Abstract. Promoting the participation of the citizenry is the cornerstone of socially inclusive governance. Public participation ensures that citizens are heard and can actively participate in the decision that impacts their needs. Besides increasing efficiency, this increased transparency brought about by the universal use and access of ICT has inadvertently led to a reduction in corruption. In 2022, each county has set up a website with different information with varying usefulness and timelessness. Some of the websites are well functioning and organized, while others only have basic information. There's room for more improvements to enhance public participation and E-services.

Keywords: Kenya, county, public participation, websites, governments

1. County governments' websites analysis report

In public administration, E-government is being promoted as a tool to increase public participation and input, reduce corruption, and increase accountability and transparency (Wong & Welch, 2004; West, 2007; Choi & Park, 2013; Srivastava et al., 2016). Literature indicates that the application of Information and Communication Technology (ICT) when fully embraced has improved efficiency, effectiveness, and input inclusion in the public sector (Pathak et al., 2007). One of the gateways that became the path of information is web-based technologies through websites. Websites are a crucial resource that provides information on every aspect of human life and is the most common media in use for the implementation of public information and online services or E-services (Kiruki & Mutula, 2021). The available information posted on a website can be used by the citizens to monitor and influence government processes, especially in instances where feedback is available. The citizens will be more connected and included in governance while the government officials can use this information into providing more efficient services in a transparent way (Yavuz & Welch, 2014). There are also limits of the Internet in fostering civic engagement and public participation through interactive functions. The content presented on a government website has a major impact on public perception of government performance and public trust.

Kenya, which is a developing country with a young democracy, passed a new constitution in 2010 that created two levels of government (national and county). The constitution created 47 counties, which have enumerated functions and limited powers and the rest of the powers are left to the national government. The National Government established a Ministry to manage the process of implementation of the devolved system of government and maintain a link between the two levels and provide some oversight. Over time, the ministry has continued to provide administrative support through the secondment of critical staff

to assist in setting up county structures. In addition, the national government through equitable share allocation funds the county governments while they also generate their funds by levying for different services.

The county governments were implemented in 2013 following a new national election, which brought in a new set of leadership. The county's elected leadership contains the executive headed by a governor and a general assembly composed of Members of the County Assembly (MCAs). These counties have been awarded different functions under the new constitution and the act of parliament. These 47 new county governments are now in charge of overseeing some functions – such as the provision of health care, pre-primary education, physical planning, and maintenance of local roads – which were previously the responsibility of Kenya's national government (Kenya Constitution, 2010).

To keep up with the trend, the county governments were under the pressure to establish websites even though the national government did not have a standard ICT policy cover to guide the counties until 2016 when the Access to Information Act was adopted. The Access to Information Act outlines documents, which public entities are required to make available to the public, without the need for citizens to apply for this information, by publishing it on county government websites. Public service delivery requires that all government services are available online, that every Kenyan has online access, and that government services are delivered quickly and fully at the time and place that they are needed (GoK, 2019).

County governments are required to proactively disclose most of the information they produce, and the citizens can also apply to obtain the information they seek from their county government. Proactive disclosure means public entities continually make information available without waiting for public requests, which is considered active transparency. All public entities are required to administratively and as a matter of course release information to the public, without the necessity of formal applications (GoK, 2019). In 2022, each county has set up a website with different information with varying usefulness and timelessness. Some of the websites are well functioning and organized, while others only have basic information, that can be deemed as less helpful or interactive. Unfortunately, there is a lack of detailed and up-to-date information, which impacts public input and engagement on what their governments are doing.

This study was necessitated after the author realized that they couldn't secure any information on the construction of a commercial building approval process or related information. The author had to rely on the contractors and other people who provided contradictory reports, especially on the fees and other charges, and the approval process duration. The process was inefficient, costly, and encouraged corruption. This raised the question of why such information was not available on the website and why even the government officials did not provide reliable information.

Reliable and adequate public information arms citizens with information, and a better decision-making process while promoting active engagement in public participation, which is a cornerstone of socially inclusive governance. Do these websites promote active engagement and public participation by providing more informed information and interactive functions? This report analyzed 47 websites to examine if they are easy to navigate and interactive and if the content is available, relevant, and timely. Due to time, the report narrowed to three departments per county namely a) Finance and Planning/treasury, b) Land, Planning and housing, and c) Health Department. The focus was to see if the websites provide critical information and their interaction with the citizens and provide online services. This county's performance report will contribute to the growing list of evaluations on its performance since its devolution inception in 2013. The report will provide some recommendations on how to improve the websites to increase access and usability of these sites to promote more informed and engaged citizens.

2. Literature review

Responsible governments should ensure that citizens have access to information and public services; and promote participation in public decision-making, which impacts their well-being and their interests. Public Participation is about actions a person or group can take to get involved in issues of government or community that are of concern and interest to them. The public input should be gathered from a wide spectrum of stakeholders within the county, resulting in a wide range of views and concerns and providing fair treatment, meaningful involvement, and social inclusion for all people.

E-government systems could help in the process of easy access to information – for example, in the case of Singapore, the progress of all lawsuits and police cases are accessible to the public through online channels (Srivastava et al., 2016). A similar study conducted in Ethiopia also concluded that strategic implementation of e-Governance can help improve the critical variable in combating corruption-government citizen relationships (Pathak et al., 2007). Besides increasing efficiency, this increased transparency brought about by the e-government has inadvertently led to a reduction in corruption in some cases.

Public participation in Kenya is considered a crucial pillar of the Constitution and is legally required before any policy is enacted. There are multiple laws and the constitution, which require the national and county governments to engage the public and consider their input in the budgetary process among other areas. Public participation is one of the national principles and values of governance, and one of the key objectives of devolution "… to give powers of self-governance to the people and enhance their participation in the exercise of the powers of the State and in making decisions affecting them" (Article 174c, Constitution of Kenya). In addition to the constitution, the Public Finance Management Act (2012), Section 125(2): The County Executive Committee member for finance should ensure that there is public participation in the budget process for the county government. The County Governments Act (2012) also Section 113: Makes public participation in county planning processes compulsory (Kenya Parliament, 2022).

Like other state organs, the county government is required by law to put into place regulatory frameworks, structures, and mechanisms and provide appropriate spaces for all persons to participate, i.e. women and men of all ages, those with a disability, and in difficult to reach in marginalized areas. Citizens often lack adequate information on policy, plans, budgets, programs, and services, all of which are needed for effective public participation. Language and literacy – in communities where there are high levels of illiteracy, meaningful public participation is a challenge, especially when there is inadequate civic education in the local language on the issues in question. Some of the counties have adopted County Public Participation Guidelines (CPPG), which define the framework for citizen engagement and aim at empowering the citizens to demand effective participation in matters of public Governance.[1]

County governments serve people with diverse backgrounds and abilities and should be easy to access and use by all their citizens. Kimura (2018) notes that in theory, the website is believed to eliminate barriers to communication and understanding but many websites and tools present many obstacles that hinder many potential users, particularly those with disabilities from accessing web content. The website should have a feedback feature, which is important in public participation as it contributes to trust and

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[1]Ministry of Devolution and Planning & Council of Governors was established in 2016 based on Article 10 of the Constitution of Kenya. The County Public Participation Guidelines is a timely and welcome resource which, if used well, will strengthen our democracy and governance, increase accountability, inclusivity, ownership and legitimize the various processes of implementing devolution (posted on the preface).

confidence-building between the government and citizens. Feedback is a two-way process, with citizens giving input on governance and service delivery processes, and the Government providing feedback to citizens on their views in public engagement processes and any issues raised by the citizens. However, to be effective it should be timely and communicated clearly in formats and means that are mutually accessible to citizens and the government. Citizen feedback is important as it helps to inform and guide the county government on what is working, what is not, and areas that require attention or improvement. These mechanisms can be meaningful only if they are easily accessible, affordable, and appreciated by the government.

Site usability is an important component of website quality, and as Scott (2005) says, developers of government sites "must regularly monitor and enhance the quality of their sites to attract and satisfy users" as site content and site use increase (p. 151). Scott argues that a quality e-government site manifests five characteristics, three of which relate to the expected content: transparency, transactions, and connectivity. Two other components of site quality relate to site design: personalization and usability. Regarding the former, personalization, Scott notes that "there are legitimate privacy issues related to the personalization techniques that require policy debate" (p. 155), but he does point out that sites including personalized features such as personalized e-mail alerts "are regarded as being of higher quality" (p. 155).

Web usability means how user-friendly a website is in terms of design and ease of use to enable the user to interact with it and access its content efficiently and effectively to satisfy his information need (Kiruki & Mutula, 2021). Usability has five quality components that define it including learnability (the easiness with which users complete simple tasks when they interact with the website for the first time); efficiency (the speed at which users can perform tasks once they are familiar with the website); memorability (the easiness with which the users can re-establish proficiency once they revisit the website after a duration of non-use); errors (how many errors users make when using the website, how severe the errors are and how effortlessly the users can resolve them); and satisfaction (how enjoyable it is using website design). Usability is an indispensable condition for the existence of a website because if users find a website difficult to access and use, or the homepage does not indicate what the organization provides and what the users can do, they will leave it for something else. In this scenario, persons with disabilities would not find the website useful at all (Nielson, 2012).

Similarly, Baker (2009) meta-analyzed six studies of e-government usability and found that usability encompasses several variables, including online services, user help, and "legitimacy" (i.e., credibility). He also found that navigation aids, information architecture, and accessibility accommodations play an important role in the extent to which a site is usable. Accessible design improves overall user experience and satisfaction, especially in a variety of situations, across different devices, and for older users. DeLone and McLean's (1992) website's public information disclosure measurement tool focused on four components, which include timeliness, completeness, reliability, and accuracy. The website should be updated often with information frequently, especially during this time when there is increased misinformation and fake information meant to spread conspiracy theories, especially against the governments.

Access to the internet is critical because of the potential opportunities they provide in the world economy described as being knowledge-based and information-driven. It's particularly pressing since the government digitized many services that were previously administered face-to-face in hubs, known as *Huduma* (services) Centers. Nowadays, services such as land searches, motor vehicle registration, paying for trade licenses, or applying for passports are all accessible via e-citizen accounts, the new gateway to government services. Although the digital government offers the potential for revolutionary change, social, political, and economic forces constrain the scope of transformation and prevent government officials from realizing the full benefits of interactive technology.

Despite the emphasis on E-Government in Kenya, internet access remains a challenge. Only 40% of Kenya's population is using the Internet in 2021, which is an increase from 23 % in 2019 based on the World Bank report. It is also clear that most people connecting to the Internet are doing so via a mobile phone, 96.1% to be exact due to the lack of broadband in rural areas. Device ownership is also an interesting metric. When it comes to Internet users aged 16 to 64, 99.7% own a smartphone; 14.4% own a feature phone; about 60% have a laptop or desktop computer, and almost 20% have a tablet. Around 14% of those Internet users have a smartwatch and 4% have a smart home device[2] (DataReportal, 2022). Despite the low internet penetration and age difference in internet usage, it's still challenging to have fast internet and affordable. Internet is sold in "bundles", and most Kenyans in the rural areas must make a choice between buying food and the internet.

3. Methodology and data analysis

The available web content, which refers to any part of a website, including text, images, and forms can lead to temporarily increased website rankings and automatically increase website popularity. Accessible design improves overall user experience and satisfaction, especially in a variety of situations, across different devices, and for older users. The available information can be measured in various ways including content analysis to enhance understanding of the different features (Al-Kabi et al., 2015).

Using information posted on the county government websites, the study analyzed a) Interactivity: Competency of information providers and information users to establish partnerships whose informational interactions have efficiency and effectiveness depending both on the partners' capabilities and on the partnership interaction context; b) Navigation: Measurement of how easy it is for users to acquire the information they want on the website; c) Promotion: Providing both basic information such as locations and contact information, online Processing, which has the competency to conduct secure online transactions and provide order (Ting et al., 2013).

The report comprises the 45 county governments' websites as two county websites were not accessible despite having links. Several attempts were made to search for the sites without success. The study was purposely interested in how the county is disseminating COVID-19 updates such as positivity rates, mask mandates, vaccination centers, economic assistance for affected people, or any related information. With less than a quarter of the population vaccinated, the study assumed that the county governments could be communicating the COVID-19 updates and encouraging people to get vaccinated and protect themselves with recent updates on the websites. The main focus was if the information was easily accessible (accessibility and easy navigation of the web site).

In the second department of Land, Physical Planning, Housing, and Building, the study was interested in finding out about the building approval process, duration, and fees. From 2015 to 2019, Kenya's economy achieved broad-based growth averaging 4.7% per year and is projected to expand at 5 % in 2021 (World Bank, 2022). There are a lot of new developments going on and building rental properties is the new investment frontier. The approval process should be efficient to encourage both international and local investors. The study focused on accessible information and web usability.

The third depart of Finance and Economic Planning deals with county finance and budgets. The study was more interested in finding out the current financial year budget or other financial documents with explanations on how the governments spend their money. Finally, it is whether a website could conduct

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[2]Source: Digital 2021: Kenya report from DataReportal and partners Hootsuite and We Are Social.

Table 1
Counties with information and without information

Variables	County with available N = 45		County without information N = 45	
	Counties	Percentage	Counties	Percentage
COVID-19 Information Accessibility	10	22%	35	78%
Building Approval Process	2	3	43	97%
Building Fees and Charges (navigation)	0	0	45	100%
Budget and Financial Docs	41	91%	4	9%
Feedback (interactive)	41	91%	4	9%
Online Services/E-Payments (efficiency)	20	44%	25	56%
Vacancies/Jobs and Tenders	45	100%	0	0
Contact Information (address, telephone, emails) (interactive)	45	100%	0	0

business online or E-online/E-services, or E-payments. For the sake of public participation, a feedback feature, or some ways of how to report or contact the officials was key. The study in this case also focused on the usability, navigation, accessibility, and interactive aspects of the web. For example, the feedback feature was deemed as providing an interactive feature.

The information corrected was coded as 0 = lack of information or 1 = available information even if it was inadequate. The information was analyzed by simply counting the available information among the counties, which could be termed a descriptive analysis. The study based this information on how it was easily accessible, interactive, and web usability.

4. Results

In general, all the counties have websites that are functioning at different levels. Functionality is important for efficiency and avoiding times wastage. Most of the sites have a very good layout with photos, especially of the governors and other public officials interacting with the people. The photos also promote the finished and ongoing public projects and their locations within a county. Some of the counties also track the number of people visiting the sites, which is a good usage indicator. The most current information like budgets and other related documents were found either as downloads or posted under various tabs, which makes it harder to identify their locations without looking for them.

Relevant information accessibility to help citizens make an informed decision is a big challenge. Less than a quarter of the county posted any COVID-19 information including a link to the Health Ministry. The rest of the counties did not even mention COVID-19 or direct the users to where they can find any information. One of the interesting cases was a county that was promoting herbal products as a way of treating COVID-19. Surprisingly, the COVID-19 information was either posted on the front page, on a corner of the website, or in areas that were not easily accessible. Only one county highlighted the number of people affected in the county as the rest of the counties had outdated information that was from the previous year, 2021. The counties did not even have information about vaccination access. Unfortunately, the lack of reliable information opens room for misinformation.

The Health departments have other information such as available hospitals, functions, and emergency services among others being provided. This other information is being used as a promotion of the current administration's accomplishments. It's simply being used as a campaign tool. The counties should at least provide a link to the Ministry of Health which has updated information including positivity rates and vaccination received, arranged according to the counties. Though ideally, the counties should

break it down to helpful information regarding their counties and measures being taken to protect the people. Failure for any critical COVID-19 updates hampers public knowledge and the ability to protect themselves.

For the Land, Physical Planning, Housing, and Building department, only one county (Machakos County) had information posted on its website that explained the building approval process, required documents, and waiting period. None of the other 44 counties provided any information on the fee or charges required to pay. An organization's website can be one of the most essential tools for meeting the needs of your citizens, so optimizing it around the citizen experience is crucial. This was such a surprise that these county governments have limited or no information regarding the building and approval process. In the recent past, Kenya has had buildings under construction collapse due to poor construction, which can be attributed to a lack of government oversight. Lack of information makes it challenging for the public to hold government officials accountable. Based on the available information on these websites, the construction engineers and county officials are the only ones familiar with the process, which exacerbates the corruption and building owners' exploitation. When a building collapse most of the people that get affected are individuals working there who sometimes get trapped and their families as well. The building owners lose their investments, which impacts the economy.

For the Finance and Budgeting department, the study was hoping to find the approved annual budget and related financial documents posted on the Finance department tab. However, only one county had posted its current budget and relevant documents, the rest of the counties, 90% had documents posted as downloads or in some other places. Navigating it requires extra time to access the documents, which were not usable as they had missing information. They did not provide critical information that can enlighten how counties spend the taxpayers' resources. However, the counties have all highlighted the mega projects completed, ongoing, and proposed. The emphasis is very clear with very colorful pictures of completed projects or ongoing ones. All the counties advertise the available county jobs and tenders, though some of the links are inactive, which raises the question of how often these websites are updated. This is a legal requirement to enhance transparency and accountability but very little is elaborated on the recruitment process. Some of the counties have posted the list of short-listed and successful candidates, the costs of the projects, and those awarded the tenders. At least two counties also provided a way to report corruption incidences. While counties are seeking this information there is no evidence that it's acted upon at all or not.

The challenge remains with the petty corruption that occurs between the public officials or civil servants and service recipients. Petty corruption involves small-scale everyday bribes and kickbacks. The amount involved is usually modest and is commonly found in transactions involving the implementation of existing laws, rules, and regulations or in the regulation of business dealings with inefficient bureaucracy.

More than 20 counties, which is almost half the county governments have online services/E-payments or E-services, which make it easier to pay online. The study didn't test whether those E-payments are efficient, reliable, and easier to use. Some of the counties also have a link that connects users with e-citizen, which is a national portal, where one can receive services such as passports and driving licenses. The E-payments are also located at the top of the websites which makes them more visible and easier to access. However, there is an equity question for citizens who have no means of paying online as most people still rely on cash than credit cards. Overall, these counties have a more progressive idea, which needs to be nurtured to enhance public service.

E-participation through the feedback button is available. With exception of just two counties, all the other governments had a feature where one could contact, leave a message, or feedback. At least three counties had a feature specifically labeled as E-participation, which was a deliberate effort to seek citizens'

input. All these counties have some aspects of social media features such as Twitter and Facebook. Most of them had some tweets from the governors though most of them were self-promotion. Easily and efficiently capturing feedback will only help as you consider updating your engagement strategies.

Whether the information was being acted upon or even considered is a different case but at least the feature is there. Citizen feedback is important as it helps to inform and guide the county government on what is working, what is not, and areas that require attention or improvement. These mechanisms can be meaningful only if they are easily accessible, affordable, and appreciated by the government.

The Kenyan constitution provides for public participation as one of the principles and values of governance. While public participation can take different forms including public forums, E-participation should be encouraged as the world moves more toward technology. The county governments should continue to explore meaningful ways to achieve E-participation.

5. Recommendations or suggestions

The websites in general are somehow operational with exception of two counties, which might be under repair. However, the general layout and organization of information for easier access requirements should be addressed to increase user satisfaction. Some information on the websites could not be accessed due to the design of the websites. Most of the sites are overcrowded with information and photos that distract users. The three Departments examined had very limited information posted there that would be deemed current and resourceful. The departments need to update their information and have more interactive information than just being a dump site. Critical information like health updates should be made easily accessible.

Website accessibility and easy navigation are critical for users anywhere. It would be important to make the information strategically placed on the websites for easier access. This is helpful for citizens with limited internet access and operating from their mobile phones, and other devices with small screens The information should be updated frequently to be relevant. The organization and layout require prior knowledge of the information needed to be coupled with patience to access some of the documents, which are buried underneath. Others are posted in areas that do not correspond with the departments. At some point, it felt like going through a maze, where you can't figure your way in or out easily. The study recommends that information should be organized and posted under the right department e.g. budget in the Finance department. This will also reduce crowded sites e.g. Mombasa county. This requires that the website tab be labeled clearly for easier tracing.

Some of the information is difficult to obtain and technical to understand especially the finance documents, which raises issues of learnability. Learnability is the easiness with which users complete simple tasks when they interact with the website for the first time. The county governments should ensure that citizens continually access timely information on public issues in a language and format that is easy to understand. Surprising only one county had an option of accessing the information in a different language. Given the low literacy rates and that majority of the people in Kenya speak Kiswahili, it would be appropriate to have some documents translated into a language mostly spoken in a county. A well-organized site should keep the user more interested in reading more and coming back for more. Therefore, it's important to make valuable information as easy to find as possible to find. They should consider adding a rotator so that when critical information comes up, they are ready to add information, so citizens see it easily on their first visit.

The counties should increase more online services/E-services/E-payments presence and make it more efficient. To increase transparency and reduce corruption instances, the charges should be directly posted

on the websites. This will save money and time for the citizens who have to travel for hours to the county headquarters. Otherwise, there is a lack of information on charges for any of the services, especially with the building process. Such information is critical for local and international investors who want to plan themselves accordingly. Increased investment and foreign direct investment positively impact the economy and lead to improved human standards who secure good jobs. Lack of information also affects how the citizens perceive their inclusion in the decision-making process.

Effective public participation is a two-way process, and the county government should ensure that they pay attention to the feedback whether positive or negative provided by the citizens. It is important to find out the extent these governments rely on the received feedback and comments from the public to improve their services. It should also be important to test the public perception and interest in E-participation. The Web must be accessible to provide equal access and equal opportunity to people with diverse abilities. Access to information and communications technologies, including the Web, is defined as a basic human right in the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD). Accessibility can enhance your brand, drive innovation, and extend your market reach.

There's an increased need for confidentiality, privacy, and data protection due to rising cases of hacking and access of people's information to scammers. While the study did not test how personal data like bank account number or credit card information is handled there should be some assurance from the part of the government that the data will be protected, and necessary measures are put in place. To ensure that there's no retaliation among the citizens who provide negative feedback or report unethical practices should have their personal details or any recognizable identifiers protected. At least a data protection policy should be accessible on the website for the users to read on how their personal information will be protected and used.

To have fair public participation information posted on the websites or any government portals should be void of any political biases of the public officials. The public officials should reduce or eliminate political campaign information or information geared to promote the elected officials including the governors as opposed to citizens' interests. Public officials and especially the governors should have separate Twitter accounts that only communicate government affairs. Unfortunately, these activities are carried out with public resources and by public officials, which should be deemed unethical and illegal. Some of the Tweets with political ambitions posted included "Addressed the 'Azimio Mtaani Murang'a' rally that was presided over by H.E @RailaOdinga at the Ihura Stadium, Muranga." The tweets were a governor bragging about attending a public meeting organized by one of the presidential candidates in the upcoming general election this year. To avoid being abused by the politicians, the sites should be citizen-centered as opposed to being geared to governor-centered. Such kind of approach will attract citizens of all political persuasions and also have more trust in the government as serving all people.

The county governments have a big room for improvement, especially in how they E-communicate with the citizens using the websites. It will also require the citizens to continue to demand more interactive webs that provide more timely information. Given that the county governments have only been in existence for less than ten years, they seem promising if the right people and skills are identified. The national government has a role in setting standards that the county governments can follow. The government should also work on increasing internet access and broadband in rural areas to make E-government a reality.

While these recommendations are more specifically for the county governments, the study believes they can also apply to municipal governments, especially in developing countries. There is a need to have a government web presence that encourages more public participation and good governance. They can also demand accountability and increase transparency. These allow citizens to report any concerns and provide feedback to their governments for efficient services. More interactive features like feedback and e-payments can increase public input and more informed decisions and implementation of public policies.

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