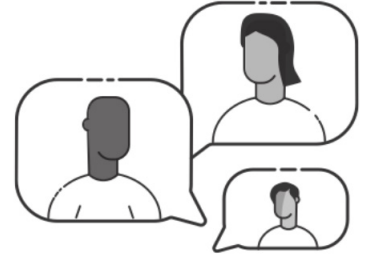


MARKET AND PEOPLE SOLUTIONS TO ACCESS AND ACCOUNTABILITY



THE eCITIZEN STORY IN KENYA

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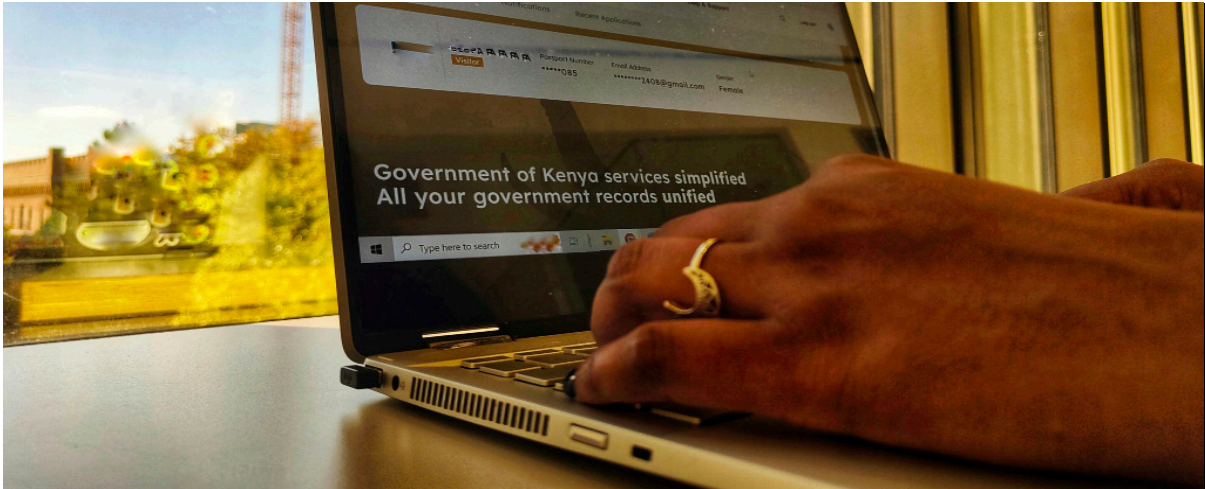
What are the challenges, opportunities, and decision making tradeoffs that bureaucrats face when designing public sector innovations within resource-constrained governments? Over the winter 2022 and summer 2023, MIT GOV/LAB's Governance Innovation Initiative worked with six graduate student fellows and various public sector innovation labs, agencies, and other actors in the Global South to co-produce practitioner-friendly case studies that illuminate context-specific innovations. The first pilot case was researched by Mariama N'Diaye, as part of her Morningside Design Academy Fellowship with the MIT GOV/LAB, while the first cohort of summer research fellows were launched in collaboration with Priscilla King Gray Public Service Center (PKG) and MIT International Science and Technology Initiatives (MISTI).

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Executive Summary

Launched in 2014, the eCitizen platform was Kenya's response to the global digitization drive, which has now made over 5000 digitized government services available to its citizens. This platform works in tandem with the Huduma Centers, which are public kiosks that citizens visit in person to access electronic government services. Through user interviews and secondary literature, this case study explores how citizens interact with the eCitizen-Huduma setup in terms of their experiences of access, privacy, and accountability. The findings show the role of cybercafés as an emergent market solution to bridge the digital divide and fulfill the government's promise of access. Through the voice of different user personas under the names Oliver and Judy, the varying perceptions of accountability is documented - illustrating wide differences in how different sections of society interact with their government. While successful in its image as the salvation from inefficiency and corruption - the need for e-governance to be better designed for diverse user groups is apparent.



The eCitizen platform has a comprehensive list of digitized government services where citizens can interact. Photo by Deepika Raman.

Learning Case

Innovation Vision

The digital landscape has reshaped the way society interacts with governments, providing avenues for citizens from various walks of life to engage with public services. In a commitment to fostering social equity and promoting accountability, Kenya promulgated its new constitution in 2010 which entrenched better governance by emphasizing principles such as devolution of power, protection of human rights, and enhanced checks and balances. In this spirit, a 2013 presidential directive launched eCitizen- an integrated Government-to-Citizen (G2C) platform for online delivery of e-government services, enabled by digital transactions. The platform aimed to improve governance as well as coordinate the fragmented digitization and integration of independent initiatives across government ministries and agencies.¹ The eCitizen platform is premised on a whole-of-government approach which has digitized nearly 5,000 government services and enabled access for citizens through a Single Sign-On (SSO) capability via the National ID as the unique identifier. It is accompanied by its offline counterparts – the Huduma Centers, public kiosks in every county where citizens can pick up documents, verify/register their biometrics, or follow up on the status of their requests.

From tech-savvy urbanites accessing services via laptops and smartphones to non-tech-savvy users and rural inhabitants utilizing the Huduma Centers for crucial documentation and even traditionalists preferring in-person interactions at government offices, the eCitizen-Huduma setup caters to a diverse range of users. By embracing the distinct modes of engagement preferred by different users, eCitizen not only revolutionizes public service accessibility but also aims to harness the power of technology in delivering transparency and accountability.

This case study aims to unpack the interaction patterns of the diverse user base that uses eCitizen and the performance² of the platform on its promise of accountability. While operationalizing this accountability is not always easy owing to the ever-evolving expectations from different actors, it can be mostly understood as the government's responsibility to the public for its performance. These services also provide uneven access owing to the different points of entry for the different user types, leading to varied perceptions and realities of users' privacy.

The Market Solution to the Promise of Access: Cybercafé

Access to the eCitizen platform hinges upon access to the internet and digital literacy and awareness, while people need to carve time out of their workdays to visit Huduma Centers — a costly undertaking for most.³ As a result, cybercafés have started to fill the gap. While more than half of Kenyans own smartphones⁴ and internet penetration is consistently growing, there is still a huge digital divide⁵ between the segments of the population that can access services on the eCitizen platform themselves and those that can't. At this juncture, cybercafés have evolved as the third informal pillar that sustains this eCitizen-Huduma governance ecosystem. The numerous cybercafés in the country, in a case of collective business innovation, have pivoted from providing basic internet access to now predominantly catering to the digital government needs of the population. Despite widespread internet penetration in the country through mobile internet these cafes still stand to deliver their services to users who are unfamiliar with leveraging the internet for other applications outside communication and entertainment. Cybercafés workers act as the crucial link in empowering citizens to use these services - where they are paid to access the user's account and request services on their behalf. The challenge of access to this platform can be best illustrated through one of our user personas [1] — Oliver.

Oliver works as a boda boda rider [2] with Bolt, a popular ride-hailing service in Nairobi. His day starts early, fueling up his motorbike and hitting the street junctions to escort his passengers to their work days. From Kibera to Karen, Oliver navigates Nairobi's often congested traffic, skillfully weaving between cars and pedestrians with his passengers to make his daily living. Apart from the ride requests on Bolt, he tries to frequent popular pick-up points, negotiating fares directly with haggling customers. Oliver, along with his colleagues, plays a crucial role in the city's transportation network, offering affordability and accessibility to many Nairobians.

While he does not have ready access to a computer, he regularly uses his smartphone for his gig work and is relatively comfortable using most features on this device. However, his first interaction with e-government services did not happen through eCitizen or Huduma. He began using the eCitizen platform three years ago with the guidance of cybercafé staff when applying for his driver's license for the first time. Most citizens in the informal economy, despite their access to smartphones, say the cybercafés were (at least) their first point of interaction with the eCitizen platform. This can be attributed to citizens lacking awareness about the existence of eCitizen services and the requisite digital literacy to navigate the internet to interact with the government.⁶

While those like Oliver and other smartphone-savvy individuals may learn to use the platform themselves after this initial exposure, such a pattern does not extend to the demographic that still uses feature phones [3].⁷ Regardless, the spread of cybercafés into every neighborhood also helps workers in the informal economy to access eCitizen services more promptly. They have to travel longer distances to reach the Huduma Centers and navigate longer lines. Thus, both as a provider of eCitizen services and as a local supplement to the Huduma Centers in each county, cybercafés have established a strong presence in this innovation ecosystem.

While this case is limited by the experiences of interviewed users from Nairobi across socio-economic classes, only surveyed users with access to a computer and the requisite awareness of the services offered by the platform typically access the platform on their own. This could be attributed to the design of not just the



platform, but to the accompanying awareness strategy to promote adoption. In its absence, the common citizen is bereft of accessible knowledge about the platform, the SSO, and the implications on their security that could have empowered them to access these services through other modes.

This was the case for our other user persona — Judy, who is a corporate executive with a wealth of tech skills and resources (computer, broadband internet, smartphone, tablet, education) at her disposal. She has been using eCitizen since its launch for a variety of services, from filing her taxes to registering her car and now renewing her passport. Her interactions with the platform are unremarkable — another errand in her digital presence - much the same as ordering groceries, renewing her Showmax subscription, or claiming her Reward points. Even when the eCitizen services don't work as intended, she is able to tap into her rich professional networks and the support of her colleagues and family to tackle any challenges she may encounter in accessing these government services.

Perceptions of Privacy in Access

In the absence of strong caution, trusting cybercafé workers with ID numbers, passwords, and other personal information is an increasingly common pattern with the digitization of government services. While some users may be savvy enough to protect their information and simply use cybercafés for internet access and/or guidance to navigate eCitizen on their own- many others (like older, uneducated citizens) are prone to being less shrewd in sharing their information with these cafes to access government services. The potential for malfeasance from having access to several personal identifiers from individuals could be significantly harmful to them. This illustrates how the privilege of privacy is not easily afforded to all.

Judy has interacted with cybercafé staff to generate her KRA pin⁸ to avoid the convoluted online process, which has been reported to include dead links, lack of step-by-step instructions,⁹ etc., and is keenly aware of the opportunities and risks associated. As Judy puts it:

“But the kind of people who access this platform (eCitizen) are not just anybody with a smartphone. It is one thing to own a smartphone and to know how to use it. But it’s also another thing to be able to use it to access those services. It’s normally human nature to use one password for as many things as possible so that you don’t forget. This password might be the password for other things as well. And that’s how the questionable part (of those who have to use cyber cafes) comes in. You become very vulnerable.”

However, what is most curious is the enormous differences in the perception of using cybercafés by these different user groups. Judy inherently trusts the eCitizen platform and the Huduma Centers to work in her best interests and protect her privacy, while being calculative about the adversarial potential of cybercafés to misuse confidential information.¹⁰ Unlike Judy, Oliver feels empowered by his ability to access cybercafés at a fairly low cost:

Discussion Question:

What would you have done to improve users’ awareness and ability to operate within the eCitizen platform, considering the infrastructure and digital literacy constraints of the Kenyan context? What would you do in your context?



“If you don’t have a smartphone, that means you have to go to the cyber (cafe). They can be trusted because they show you how to open an account and teach you to change your password on your own. Sometimes if you have a trustworthy person at your cyber cafe, you don’t even have to change your password.”

While Judy’s misgivings about cybercafés are well-founded, these sentiments aren’t uniformly held by all citizens. Circles of trust have emerged in communities as an organic movement to circumvent the technical divide and access e-government services. These are trusted cybercafés and individuals who are approached through references from church networks, neighbors, or co-workers who seem to deliver access with integrity that makes user groups more assured of their privacy. Within social interactions, as extendable to transactional interactions at cybercafés, individuals from collectivistic cultures like Kenya prioritize connections with in-group members like networks of family and friends, trusting their interactions¹¹ and freely sharing private information.¹² These attributes of societal culture and values that translate to behavioral choices therefore become critical parameters that need to be weighed in importing e-governance concepts across different geographies.¹³



One of the key voices in Oliver’s persona, Patrick, stands on his boda boda outside the Huduma Centre at the Central Business District. Photo by Deepika Raman.

These networks of trust when accompanied by the two-factor authentication required by the eCitizen platform work in tandem to deliver some sense of security, even to the populations that may not necessarily be very well informed about their online privacy. As one cybercafé owner who exclusively provides passport applications and renewals puts it:

“Nowadays the password is not that constant. You can log in today with one password. Next round when you come, you’ll be asked to change that password. They send you OTP (One-time Password) to confirm, which makes it safe. You cannot master someone’s password. But we also tell them to be secretive anyway as a good practice.”

Besides the cybercafés, users also often interact with the Huduma Centers as part of their applications for different requests on eCitizen. Trust and the perception of safety with these centers and the platform itself are uniformly high. While the digital divide that haunts this innovation is unsurprising, it is still promising to see “intelligent intermediaries” like the Huduma Centres and cybercafés that insert a human intermediary between the citizen and the ICT (Information and Communications Technology) infrastructure to ensure that access is extended to all intended beneficiaries.¹⁴

This array of engagement methods where generational, socio-economic, and geographic factors intersect to shape citizens’ preferences and expectations is at the heart of the design challenge that this trifecta of services (eCitizen platform, Huduma Centers, and cybercafés) attempts to serve.

Discussion question:

- / While cybercafés have organically evolved to fulfill this role in the Kenyan ecosystem, how could such intermediaries be identified and intentionally included in the design of e-gov projects?*

The Promise of Accountability

The eCitizen platform makes the various digitized services of the government accessible through its comprehensive dashboard, delivering transparency to the Kenyan government's digitization drive. But alongside transparency, governance innovation is often premised upon the promise of “accountability as a cornerstone of public governance and management.”¹⁵ The US Government Accountability Office (GAO) has a practical and relatively generalizable definition:

“Accountability requires that information regarding the actions and decisions of the person or organization being held accountable must be transmitted; this information must be received and the necessary actions taken; and the information must be used to improve performance, correct deficiencies, or reward superior service.”

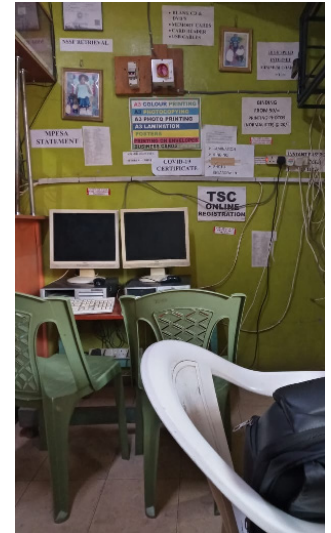
At the outset, user eCitizen was largely accountable, celebrating the elimination of long lines and chasing paper trails when dealing with the government. For instance, Judy is impressed that businesses are able to set up and take off almost entirely online owing to the expansive features of the Business Registration Services, a feat that was earlier bogged down by bureaucratic red tape and the potential for bribery from multiple human interactions. **There is thus overall support for the move to digital services that enable transparency, attempt to eliminate corruption, and improve efficiency.** Oliver marvels at how easily he was able to renew his driver's license for the year and get an instant digital copy on his phone that he could produce at various checkpoints.

Apart from the NTSA (Provisional Driving License) and Business Registration Services, there are several popular services like Police Clearance/Certificate of Good Conduct, Civil Registration Services (Marriage), Foreign Nationals Initial Registration, etc.¹⁷ that produce immediate results or provide timely updates. However, this is not true of all services, as uncovered from further questioning. The platform performance certainly does not live up to the GAO's expectations of accountability.

Perceptions of Accountability

For those accustomed to the digital realm, the novelty of the innovation eventually wears off as people run into problems with the platform. Judy recounts her experience applying for and tracking down her passport. While the application on the eCitizen portal with the Department of Immigration was straightforward, trouble began almost immediately after. She was met with delays and technical difficulties at her appointment to register biometrics at the Department of Immigration.

After submitting her biometrics, she was faced with the challenge of tracking the status of her passport. After receiving infrequent and inaccurate emails and SMS notifications, she resorted to visiting the Department of Immigration in person, only to be told that passports were now being



A cybercafé offering eCitizen services at Utawala, Nairobi-Kenya. Photo by Deepika Raman.

issued at post offices. She then discovered a hidden cost of accessing the issued passports (of 300KES) at the post office that is not laid out in any of the applications she submitted on the eCitizen platform.

“There’s no communication about delays. There’s no communication about the system change. People think you’re supposed to come and pick up the passports from Immigration but after long queues and hours of waiting, they’re sending them to the post office. And at the Post Office, you need to show your payment receipt for collection, but you cannot find this payment link anywhere. Fellow Kenyans who’ve gone through the experience are better communicators than the department. I use the Facebook groups about passports? to navigate this passport process.”

Judy was indignant at the lack of grievance redressal embedded within the eCitizen-Huduma regime that could have helped her with the necessary recourse. While the unclear timelines that Judy faced could be attributed to the overall backlogs reported in 2023 in the issuing of Kenyan passports, one cannot dismiss the inability of the system to be more agile and transparent in interfacing with new applicants.¹⁸

While Judy was deeply cross with the process, she was still able to navigate it at a low personal cost, owing to her hybrid work environment and flexible work hours that allowed her to take the time to follow through on her passport application. While it was little consolation from the severe frustration with the systems and departments, at least she was not income insecure on these days.

Oliver, on the other hand, has to upend chunks of his work day and forgo his ride wages for these hours in order to track down a certificate of good conduct that he hopes to use to seek formal employment. While the cybercafés may help him with his application, and the Huduma Center will follow up with collecting his biometric information, three months have passed since he applied.

He has made several visits to the Huduma Center, but the status of his application remains the same — police clearance verified, but certificate not dispatched. For a certificate with a validity of only a year, such a delay is significant. Yet Oliver isn’t one to complain — maybe because he does not have the avenue to. Once again, the unidirectional flow of information from the platform to the citizen user doesn’t allow for feedback that could have captured the citizen’s journey with its many celebrations and frustrations.

Nonetheless, the ability of users to easily access services through a cybercafé or a Huduma Center makes it easier for users to overlook delays in getting their good conduct certificate, or when they might receive their replacement IDs. Perhaps this generous perception could be attributed to Kenya’s high score (of 70) on power distance in the Hofstede index.¹⁹ The index is used to understand how societal



Huduma Centre at the bustling Kibera neighbourhood. Photo by Deepika Raman.

cultures and values translate into behavioral choices in different populations, and Kenya's power distance score could indicate that citizens expect and accept that power is distributed unequally in their contexts.

Another recurring issue is poor server performance from traffic overload around annual deadlines for filing taxes and paying business registration dues. While this complaint is not unique to the eCitizen platform and can be seen across geographies,^{20,21} the anticipated delays certainly disincentivize service adoption.^{22,23} The time periods of high traffic (like tax filing and business registration deadlines) could be mapped and planned for, but they aren't.

Conclusion

Kenya's ICT policy²⁴ states two key missions in using ICT for Public Service Delivery:

"All government services to be available online. Every citizen to have online access and that government services are delivered quickly and fully at the time and place that they are needed [...] Revenue collection to be transparent and accountable."

Correspondingly, through the eCitizen-Huduma ecosystem, Kenya has eliminated the conventional in-person citizen-government interactions that were weighed down by allegations of corruption, bribery and lack of transparency. The eCitizen platform excels in its interface and usability, making it straightforward for citizens to access its most popular services with little difficulty. But without the emergence of the cybercafés, where would the penetration of these services stand? What would success have looked like if non-state actors were more active participants in designing this governance innovation? In such an intentional setting, how would the burden of privacy and security be distributed? The eCitizen platform cannot be viewed as a digitization exercise alone when it aims to formalize an economy that is made up of mostly informal labor. This is a context that is seen in many Global South economies. Enabling access to government services is therefore a heterogeneous endeavour across the different user groups. While Judy calls this communication gaps, Oliver attributes it to lack of awareness. Ultimately it is the shortcomings of digital government projects to curate campaigns that are targeted to empower different groups of users. While billboards and pamphlets might help the most common users to be familiar with the presence and offerings of the platform they must be accompanied by robust campaigns to mainstream conversations on user privacy.

While there are always inefficiencies that creep into institutions of such scale, an evolution of interactive feedback channels could lead to more agile processes that iterate to optimize user interactions with the services offered. Currently, the eCitizen platform does not have channels together user feedback or mechanisms for grievance redressal.

For this innovation to thrive, Oliver and Judy must feel empowered to not only hold their government accountable to them but also consent to and participate in enhancing their interactions with their government (through submitting their experiences to generate data-driven insights to build more seamless processes) as they embrace this digital enterprise.

Discussion Question:

Are these shortcomings in platform design a limitation in the ICT infrastructure, the skills of relevant teams, the procurement contracts of third parties building these systems, or a lack of political motivation to deliver public services that prioritizes citizen satisfaction?

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NOTES

[1] This case study distributes key ideas from interviews between two personas, Oliver and Judy, who represent different segments of the population. Each persona borrows from the experiences of multiple citizens interviewed to represent the rich plurality of experiences that color the user segment. Any direct quotations in this case study are taken from different user interviews that constitute the personas of Judy and Oliver.

[2] Boda bodas are motorcycle taxis commonly used for transportation in many East African countries that can navigate congested city streets and rough rural terrain, making them a convenient and accessible means of transportation, especially in areas with limited public transportation options.

[3] Feature phones are similar to the older generation of mobile phones that offer primarily call and text features. While some feature phones might have internet and location services, their capabilities are limited in comparison to a smart phone.

A NOTE ON METHODOLOGY

This case draws from 15 interviews with citizens in Nairobi who have used the eCitizen platform to avail services from the government. All interviews were in person. In addition to these interviews, there were also observational field notes on the operations of Huduma Centers, cyber cafes, and interviews with managers of these establishments. While the interviews provided deep insights into the user journey of the citizens interacting with the eCitizen innovation, their biggest limitation was that they over-represented people from Nairobi, where internet and smartphone penetration, education levels, and concentration of Huduma Centers is relatively high compared to more rural counties. Therefore, they will not be necessarily indicative of the user experiences in non-urban contexts.

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Endnotes

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