Chapter 6: A Single Source of Truth

The Kenya School of Government is tucked away in a leafy suburb on the outskirts of Nairobi along Lower Kabete Road. A training institution for civil servants and a venue for many official events, the serene and well-manicured campus is largely inaccessible by *matatu*, Kenya's cheap and ubiquitous form of public transportation. Like most people who arrived that morning in late July 2019, I traveled by private car. Leaving Westlands, the road quickly gave way to a suburban tableau, the drive offering glimpses of the tops of spacious homes cresting the high walls of gated compounds.¹

It was an incongruous place to hold a public event for citizens. This, at least, was the complaint voiced by many members of the audience that day, who attended the Ministry of Interior's hastily put-together public participation forum for the draft 2019 Huduma Namba Bill.² The bill was meant to provide the legislative basis for the government's controversial new project: a master population database³ known as NIIMS (the National Integrated Identity Management System) and a biometrically enabled smart card and unique identity number known as Huduma Namba (Service Number in Swahili). Passage of the bill required public consultation, as stipulated in Kenya's hard-fought and hard-won 2010 constitution.⁴ Yet, as one participant, Mustafa Mahmoud, now co-director of the legal and human rights organization Namati-Kenya,

¹ My observations are based on fieldwork on 31 July 2019 at the Kenya School of Government.

² Republic of Kenya, Ministry of Interior and Co-ordination of National Government, "Public Participation on Huduma Namba Bill, 2019," available as a press release on the website of the Ministry of Information, Communications and the Digital Economy, https://www.ict.go.ke/wp-content/uploads/2019/07/Huduma-Bill-Callfor-Public-Participation.pdf.

³ The term "master" database, though common parlance, has come under scrutiny by companies and programmers for its racist connotations. Elizabeth Landau, "Tech Confronts Its Use of the Labels 'Master' and 'Slave'," *Wired*, 6 July 2020, https://www.wired.com/story/tech-confronts-use-labels-master-slave/.

⁴ Parliament of Kenya: The National Assembly, *Public Participation in the Legislative Process*, Factsheet no. 14, second edition (Nairobi: The Clerk of the National Assembly, August 2022 [first published 2017]).

would later write in an op-ed, "what the Ministry of Interior called public participation was more of 'a boardroom meeting'." ⁵

If it seemed an unsuitable place to hold a public event, it was also an unsuitable time. By July 2019, national registration for Huduma Namba was already well underway. The government had conducted two mass registration drives earlier that year. When I walked around Nairobi in April, during the second registration drive, ⁶ I spotted queues of people, lining up in front of adhoc booths run by registration agents, who donned bright yellow, high-vis vests branded with Huduma Namba logos. They also carried bright red digital tablets provided by the French multinational biometric vendor IDEMIA. ⁷ The registration agents were busy shuffling papers, photographing documents and faces, scanning fingerprints. Amidst this flurry of activity, public criticism was mounting, and civil society groups were pursuing litigation before the Kenyan High Court. A belated public participation forum seemed, to many in the audience that day, a mere dramatization of democratic accountability for what was already a *fait accompli*.

Due to the remoteness of the venue and the limited advertisement of the event, the maroon-carpeted lecture theatre in the Kenya School of Government was filled not with rank-and-file members of the public, but rather with representatives of Kenya's civil society and legal advocacy groups. On the elevated podium platform facing the audience of about 100 people were

⁵ Mustafa Mahmoud, "Huduma Bill public participation a terrible flop," *The Nation*, 26 August 2019, https://nation.africa/kenya/blogs-opinion/opinion/huduma-bill-public-participation-a-terrible-flop-198124.

⁶ Office of the President. Ministry of Interior and Coordination of National Government, "Press Release: Government to Roll Out Huduma Namba Second Phase," available on website of Open Society Justice Initiative, https://www.justiceinitiative.org/uploads/8ab1b612-054f-4b7a-8778-c9682939a566/niims-press-statement-on-roll-out-013120.pdf.

⁷ IDEMIA, already embattled due to electoral controversies, courted additional controversy over their involvement with Huduma Namba. The company, however, insisted that it only provided biometric devices for the registration process and was not involved in the development of any software, including the NIIMS system. Letter from Carole Pellegrino, IDEMIA DPO, to Davis M. Malombe, Kenya Human Rights Commission, "Subject: Your letter ref KHRC/IPJ/21/003," 7 June 2021. For more on IDEMIA's divisive history in Kenya, see Cecilia Passanti and Marie-Emmanuelle Pommerolle, "The (un) making of electoral transparency through technology: The 2017 Kenyan presidential election controversy," *Social Studies of Science* 52: 6 (2022): 928-953.

representatives of Kenya's Ministry of Interior. This bifurcated layout seemed to demarcate, visually and spatially, the divides between the state and civil society.

The mood was tense. After presentations from government representatives, attendees were allowed to stand, make public statements, and ask questions. The answers provided were often met with derisive laughter and rowdy, collective complaints from the audience. A motley range of concerns were raised throughout the half-day event. Legal experts questioned the constitutionality of the Huduma Namba project, which was introduced through a miscellaneous amendment, thus circumventing parliamentary scrutiny. Privacy advocates challenged the government's decision to centralize data, rather than keep such information siloed, as well as the collection of sensitive biometric data, including the proposed collection of DNA—one of the most divisive and outlandish parts of the original draft legislation. Others pointed to the bill's punitive fines, including an exorbitant penalty for late birth registration, which would fall disproportionately on poor women ("Kenya is doing all it can to criminalize poverty," one audience member lamented.) Concerns about the commercial motivations of the government were also raised ("Data is big business these days...We can find that all our data is sold to the highest bidder," quipped one participant). Others complained about the lack of public buy-in and consent for the project, which the government had made compulsory. 10 (As one church

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⁸ For more on civil society opposition and concerns around the constitutionality of Huduma Namba, see Nubian Rights Forum et al., "Press Release: Huduma Namba Stopped!," *NAMATI*, 31 January 2020, https://namati.org/news-stories/press-release-huduma-namba-stopped. The High Court would later declare 23 laws unconstitutional, including the Miscellaneous Act that brought Huduma Namba/NIIMS into force, giving the government 9 months to regularize the bills. Kamau Muthoni, "Your Huduma Namba may be useless in 8 days," *The Standard*, 21 July 2021, https://www.standardmedia.co.ke/national/article/2001418851/why-your-huduma-namba-may-be-useless-in-8-days.

⁹ The collection of DNA and GPS data was later ruled unconstitutional by the Kenya High court. Privacy International, "Kenyan Court Ruling on Huduma Namba Identity System: the Good, the Bad and the Lessons," https://privacyinternational.org/long-read/3373/kenyan-court-ruling-huduma-namba-identity-system-good-bad-and-lessons.

¹⁰ A position later overturned by the Kenya High Court.

representative said: "It criminalizes those who do not participate in process...do I lose my citizenship as a Kenyan?"). 11

But at the forefront of this tense and performative public confrontation were issues of exclusion and historic discrimination. Throughout the back-and-forth discussion, civil society representatives raised the experiences of women, minors, the rural and urban poor, pastoralists, religious and ethnic minorities, and borderland communities who had historically struggled to obtain birth certificates, IDs, and passports.

Although it was not obvious at the time, the Huduma Namba bill would never make it through Parliament. By 2023, the entire project would be scrapped and replaced by its close cousin: Maisha Namba (Life Number). Nor was Huduma Namba the first failed digital identity scheme, having come on the heels of the short-lived National Digital Registry System (NDRS), branded Umoja Kenya, which was launched in 2014. Amidst these various iterations and redesigns, this persistence through failure, these cycles of collapse and rebirth, a tense, uneasy, but sometimes productive relationship between Kenyan authorities and civil society would emerge. This relationship pivoted around ambiguous, competing definitions of "national inclusion."

Central to the "calculative logics" of today's digital identity sector is the promise of inclusivity, the goal of capturing the population as a whole and providing a "legal identity to all" (SDG 16.9). Ambitiously aimed at biometrically capturing the population in its entirety, Huduma Namba; its failed predecessor, Umoja Kenya; and its embryonic successor Maisha Namba have

¹¹ See also Linda Bonyo, @BonyoLinda, "Thread: Public Participation forum on Huduma Bill 2019 at the Kenya," Twitter, 31 July 2019, https://x.com/BonyoLinda/status/1156470212532813824.

¹² Keith Breckenridge, "The failure of the 'single source of truth about Kenyans': The NDRS, collateral mysteries and the Safaricom monopoly." *African Studies* 78:1 (2019): 91-111.

¹³ My thinking was helpfully shaped by participating in a panel organized by Michelle Spektor and Ranjit Singh. "Biometrics and their calculative logics," EASST-4S 2024, Amsterdam, 17 July 2024.

all sought to assign unique identity numbers to every resident of Kenya and build a central population database. Joanne Yao, in reference to Antarctic explorers of the nineteenth century, speaks about "epistemic completion"¹⁴—the desire to map the earth's territory in its entirety, to its remotest frontier. In a similar vein, proponents of Kenya's digital identity infrastructures have promoted the possibility of informational completion. In the words of the former president Uhuru Kenya, the Huduma Namba system would serve as "the authentic single source of truth on identity in Kenya."¹⁵ In information science and information technology, a "single source of truth" refers to a kind of systems architecture that relies upon a master data set—which, in the case of Kenya, was conceptualized as the nation itself.

Writing about Aadhaar, scholars such as Ursula Rao, Ranjit Singh, and Lawrence Cohen have argued that digital identity systems enable governments to reimagine the population as a database. Within this imaginary is a new way of thinking about the social—one in which the state is seen as a "service provider" and its beneficiaries as clients, who are simultaneously conceptualized as market actors, datafied subjects, and users of technology. In this marriage of big data, late capitalism, and digital governance, the database and unique identity number takes preeminence.

But if the Kenyan authorities touted the prospect of complete, informational accuracy and datafied inclusion (embodied in the concept of a "single source of truth"), the civil society

Joanne Yao, "Imagining Antarctica and Outer Space: Water, Ice, Sky, and Penguins" (seminar presentation, School of Politics and International Relations, Queen Mary University of London, London, 24 January 2024).
 Mohamed Ahmed, "Uhuru orders integrated 'Huduma Namba' ID for all Kenyans," *Business Daily*, 22 January 2019, https://www.businessdailyafrica.com/bd/news/uhuru-orders-integrated-huduma-namba-id-for-all-kenyans-2235670.

Asia Multidisciplinary Academic Journal 23 (2020).

¹⁶ Ursula Rao and Vijayanka Nair, "Aadhaar: Governing with biometrics," *South Asia: Journal of South Asian Studies* 42:3 (2019): 474; Ranjit Singh, "Give me a database and I will raise the nation-state," *South Asia: Journal of South Asian Studies* 42:3 (2019): 501-518; Lawrence Cohen, "The 'Social' de-duplicated: On the Aadhaar platform and the engineering of service," *South Asia: Journal of South Asian Studies* 42:3 (2019): 482-500.

¹⁷ Silvia Masiero and S. Shakthi, "Grappling with Aadhaar: Biometrics, social identity and the Indian state," *South*

groups that attended the public participation forum on that sunny day in July 2019 reminded them of the messy backends and restrictive bottlenecks, the systemic forms of exclusion bracketed off by the government's technopolitical discussion of digital governance. The public forum was replete with emotive stories of border communities blocked from obtaining IDs due to discriminatory vetting procedures; mothers living in remote, disconnected rural areas unable to register their newborns; and stateless people who could not easily prove their nationality. As one representative of the Nubian Rights Forum, a community organization based in Kibra, said: "People are criminalized for being a Nubian, a Muslim, and a pastoralist." For these organizations, "inclusion" was not about translation of the population into a central database; it was a way of demanding recognition and redress from a notoriously unaccountable government.

But, here too, the concepts of "inclusion" and "exclusion" flattened a messier story. ¹⁹
Civil society demands for inclusivity obscured the interplay of visibility and invisibility that had long characterized the state-subject relationship in Kenya. As shown in previous chapters, East Africans have moved across national boundaries; sought refuge and aid; escaped onerous government burdens; and avoided being pinned down by singular legal or national categories by avoiding registration, adopting new nationality documents, or slipping into the refugee system.

The discourse of inclusion bypassed any discussion of these strategies of evasion. It was instead

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¹⁸ Heard while author was in attendance at the event, during fieldwork on 31 July 2019 at the Kenya School of Government.

¹⁹ As Lawrence Cohen has argued, there is reason to question "whether 'inclusion' is an obvious figure for a politics or pragmatics of the good" when discussing digital identity systems. "India as Database: Response to Reetika Khera," *Contributions to Indian Sociology* 53:2 (2019): 333. Similarly, David Murakami Wood & Rodrigo Firmino argue: "It is debatable, in the wider context of contemporary capitalism, whether 'inclusion' and 'exclusion' are the most appropriate categories for assessing identification and surveillance." "Empowerment or Repression? Opening up Questions of Identification and Surveillance in Brazil through a Case of 'Identity Fraud'," *Identity in the Information Society* 2:3 (1 December 2009): 316.

grounded in a rights-based, legal-juridical understanding, based on Kenya's politically progressive 2010 constitution.

This chapter traces the efforts of civil society groups and the Kenyan public to challenge the government's digital identity projects, following their mobilization in the court room, on social media, and in industry spaces. It shows how digital identity infrastructures generated new publics, constituencies, and strategic coalitions, creating a "hybrid forum." A terrain of struggle, the Huduma Namba and Maisha Namba systems allowed undocumented and underdocumented populations, and the groups that represented them, to center their grievances within debates about national inclusion and digitization. At the same time, these public debates revealed competing, incommensurate views of identification, simultaneously understood as a legal-juridical right grounded in Kenya's 2010 constitution; an ethno-securitized concern that reinforced policies like vetting; an abstract form of legal recognition anchored in UN conventions; and a transactional, digitized credential that supplanted "rights" with "access." 21

Seeing like a database

Modeled loosely on Aadhaar,²² Kenya's Huduma Namba system was rolled out quickly. Introduced through an executive order and a miscellaneous amendment act in 2018, which

court.html.

²⁰ Michel Callon, Pierre Lascoumes, and Yannick Barthe, *Acting in an Uncertain World: An Essay on Technical Democracy* (MIT Press, 2009). See also Ash Amin, "Lively infrastructure," *Theory, Culture & Society* 31: 7-8 (2014): 137-161.

²¹ Vijayanka Nair, "Becoming data: biometric IDs and the individual in 'Digital India,'" *Journal of the Royal Anthropological Institute* 27:S1 (2021): 39.

enabled the Uhuru regime to circumvent Parliamentary scrutiny,²³ it was hastily launched in January 2019—a point of contention for many civil society groups, which attempted to slow its roll-out through litigation. However, behind this hurried project was a decade-long effort to upgrade the national identification infrastructure.

To a great extent, Huduma Namba can be traced to a set of wider, global phenomena, including the "digital development-security nexus," the contemporary biometric turn, and the rise of Aadhaar as a model of governance. Hindi for "foundation," Aadhaar is a 12-digit identification number issued by the Unique Identification Authority of India, which Indian residents can register for by providing their biometrics: ten fingerprints, two iris scans, and a facial image. In and of itself, it does not confer any benefits, legal rights, or entitlements. Rather, its main goal is to verify the "selfsame-ness" of the person. In this sense, Aadhaar is a radically minimalist form of identification untethered from notions of citizenship or ethno-communal belonging, and self-consciously designed to curb fraud and cut through inefficient government

²³ Grace Mutung'u and Isaac Rutenberg, "Digital ID and risk of statelessness," *Statelessness & Citizenship Review* 2 348 (2020): 352; Interview with Dudley Ochiel by author, Nairobi, 19 December 2019; Interview with Diana Gichengo by author and Yussuf Bashir [online], 14 July 2021. The lack of Parliamentary scrutiny was also raised during public forums. Public Forum on Huduma Namba Bill at the Kenya School of Government, Lower Kabete campus, 31 July 2019.

²⁴ Mark Duffield, "The digital development-security nexus: Linking cyber-humanitarianism and drone warfare," in *Handbook of international security and development*, 80-94 (Edward Elgar Publishing, 2015).

²⁵ Shruti Trikanad and Vrinda Bhandari, "Surveillance Enabling Identity Systems in Africa: Tracing the Fingerprints of Aadhaar," *Centre for Internet & Society* (2022); and Abdinassir Sagar, *Digital ID: Prospects and Challenges for Somalia* (Heritage Institute, May 2023).

²⁶ Ursula Rao and Vijayanka Nair, "Aadhaar: governing with biometrics," *South Asia: Journal of South Asian Studies* 42:3 (2019): 475.

bureaucracy.²⁷ Having enrolled well over 1.3 billion people since 2009, Aadhaar has become a powerful blueprint for countries the world over, Kenya included.²⁸

These global developments converged with national concerns. Huduma Namba, though informed by systems like Aadhaar, was also a response to years of internal struggle over intractable problems within Kenya's national registration systems. These problems were summed up in a widely cited and scathing report on the issuance of national identity cards by the Kenyan National Commission for Human Rights (KNCHR). Published in 2007, the report described national ID registration as *both* a leaky, unregulated process prone to corruption and fraud *and* a tightly guarded exercise steeped in discriminatory gatekeeping. ²⁹ By the close of the year, Kenya would be wracked by post-election violence, which would usher in a collective process of national reconciliation that culminated in the promulgation of a landmark new constitution in 2010. The long, fraught process of national reconciliation surfaced once again problems related to identification. Canvassing for the new constitution highlighted historical discrimination around citizenship determination and unequal access to identity documents. ³⁰ Witness testimony

²⁷ Bidisha Chaudhuri and Lion König, "The Aadhaar Scheme: A Cornerstone of a New Citizenship Regime in India?" *Contemporary South Asia* 26:2 (3 April 2018): 127–42; Reetika Khera, ed. *Dissent on Aadhaar: Big Data Meets Big Brother* (Orient Blackswan, 2019); Karthik Muralidharan, Paul Niehaus, and Sandip Sukhtankar, "Balancing corruption and exclusion: Incorporating Aadhaar into PDS," *Ideas for India*, 17 April 2020; Silvia Masiero and S. Shakthi, "Grappling with Aadhaar: Biometrics, Social Identity and the Indian State," *South Asia Multidisciplinary Academic Journal* 23 (2020); and Shyam Krishna, "Digital identity, datafication and social justice: understanding Aadhaar use among informal workers in south India," *Information Technology for Development* 27:1 (2021): 67-90.

²⁸ Aaron Martin, "Aadhaar in a box? Legitimizing digital identity in times of crisis," *Surveillance & Society* 19:1 (2021): 104-108.

²⁹ Kenya National Commission on Human Rights (KNCHR), *An Identity Crisis? A Study on the Issuance of National Identity Cards in Kenya* (2007), https://www.knchr.org/Portals/0/EcosocReports/KNCHR%20Final%20IDs%20Report.pdf.

³⁰ Grace Mutung'u, *Digital Identity in Kenya: Case study conducted as part of a ten-country exploration of socio-digital ID systems in parts of Africa* (Research ICT Africa, the Centre for Internet & Society, Omidyar Network, 2021), 13, https://researchictafrica.net/publication/digital-identity-in-kenya-case-study-conducted-as-part-of-a-ten-country-exploration-of-socio-digital-id-systems-in-parts-of-africa.

also revealed that ID cards had been weaponized during the post-election violence, used to identify and target members of ethnic groups from opposing sides of the political divide.³¹

Under pressure to resolve these longstanding problems and coalescing around a new ethos of digitization, officials within the Ministry of Immigration and Registration of Persons came to embrace a seemingly elegant techno-solution: the development of a central database that could link together the country's disparate civic, population, and asset registries. Among the recommendations of the KNHRC report was to "fast-track formulation and implementation of the proposed Integrated Population Registration System (IPRS)." Awarded to a Ukrainian firm in 2009, the IPRS combined "data from different sources including birth and civil registration, alien and refugee registration and the national population register," as explained in a 2016 World Bank report. The government also announced the launch of a third-generation e-ID with a chip and enhanced security features—a shiny, new digital identity project that would collapse two years later amidst controversies around the costs and tender. Both initiatives—an upgraded e-ID and a master database—were painted as curatives to the "rampant bureaucratic corruption,

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³¹ Tom Maliti, "Witness describes hundreds being ordered to carry ID cards in their mouths," *International Justice Monitor*, 23 November 2013, https://www.ijmonitor.org/2013/11/witness-describes-hundreds-being-ordered-to-carry-id-cards-in-their-mouth.

³² KNCHR, An Identity Crisis? 27.

³³ World Bank Group, *ID4D Country Diagnostic: Kenya* (2016), 1, https://documents1.worldbank.org/curated/en/575001469771718036/pdf/107277-WP-P156810-PUBLIC.pdf.

³⁴ Kenya Human Rights Commission (KHRC) and UNHCR, *Digital Identification Document (ID) & Citizenship Consultative Meeting: Workshop Report, 17th to 18th January, 2019 (Great Rift Valley Lodge, Nakuru County, January 2019), 25, https://khrc.or.ke/storage/2024/02/Report-of-Digital-Identification-Citizenship-Workshop-Naivasha.pdf; Keith Breckenridge, "The failure of the 'single source of truth about Kenyans': The NDRS, collateral mysteries and the Safaricom monopoly," <i>African Studies*, 78: 1 (2019): 98-99; Reuben M. Kimotho, Director of National Registration, Kenya, "Kenya's Experience in Identification and Registration of Persons," PowerPoint presentation, First Government Forum on Electronic Identity Cards in Africa, Dar es Salaam, 2-4 June 2015, Available at ID4Africa, https://id4africa.com/2015/presentations/7 Kenya Kimotho.pdf; This would have been the fourth substantial design change since 1978. As described in chapter three, the government introduced a new, smaller ID in 1995, which remained on laminated paper until 2011, when the state rolled out a more secure plastic design. For years, efforts to create an upgraded e-ID with a chip and enhanced security features floundered.

ethnic discrimination of a systemic nature and capacity weaknesses" identified in the KNHRC report.³⁵

The Jubilee Coalition embraced this nascent model of a networked state, made modern through digital governance, biometric registration, and database integration. Headed by Uhuru Kenyatta (Kenya's fourth president) and William Ruto (then deputy president), the Jubilee Coalition came to power in 2013, having won the first national elections to use a biometric voter registration system. The Uhuru-Ruto ticket painted itself as the digital presidency. A capacious political idiom, the "digital" became shorthand for a new vision of the nation, which would ostensibly sweep away the country's ethnically divisive, analog past. Torruption and inefficient bureaucracy could be remedied, according to President Uhuru Kenyatta's public speeches, through the digitization of government services. Central to this vision was Huduma Kenya, a flagship project of Kenya Vision 2030. In 2013, to great fanfare, the government opened the country's first Huduma Centre, a self-styled "one-stop shop" and "e-centre" for government services, where "orderly queues" and efficient service were intended to reign. The ruling coalition also launched its eCitizen platform, an online portal for accessing and paying for government services.

³⁵ KNCHR, An Identity Crisis?, 25.

³⁶ For more on Kenya's controversial history with electoral technology, see: Cecilia Passanti and Marie-Emmanuelle Pommerolle, "The (un) making of electoral transparency through technology: The 2017 Kenyan presidential election controversy," *Social Studies of Science* 52:6 (2022): 928-953.

³⁷ Lisa Poggiali, "Digital Futures and Analogue Pasts? Citizenship and Ethnicity in Techno-Utopian Kenya," *Africa* 87:2 (May 2017): 253–77; Henrietta L. Moore and Constance Smith, "The Dotcom and the Digital: Time and Imagination in Kenya." *Public Culture* 32:3 (92) (2020): 513–38.; and Habakkuk Wanyonyi Nakiboli, "Assessing the Digital-Analogue Ideological Positioning of the Jubilee Coalition," *Edition Consortium Journal of Media and Communication Studies* 3:1 (January 30, 2021): 197–204.

³⁸ "Kenya launches Huduma e-centre to cut bureaucracy," *BBC News*, 7 November 2013, https://www.bbc.co.uk/news/world-africa-24855993.

³⁹ Though initially celebrated for curbing bureaucratic corruption and mismanagement, the eCitizen portal has since become mired in scandal around the opacity of its ownership and the destination of its profits. As the ongoing controversy around eCitizen indicates, state digitization efforts have been an opportunity for elite profiteering, corruption, and extraction.

plans to build a more comprehensive biometric database: the National Digital Registry System (NDRS). Branded Umoja Kenya (Swahili for "unity"), the project quite literally tied data management to national unification.

With Umoja Kenya, the government had begun to imagine the nation as a piece of software with a front-end and backend. Within this imaginary, as explained in a 2016 *Business Daily* article, the "front-office" was the public-facing Huduma Centres (the one-stop shop for government services), the "middle ware" were government services, while the "back office" was the NDRS, a master database of all people, land titles, assets, and companies.⁴⁰ As the article explains:

The logic was pretty straightforward. Identity all persons. Then identify all establishments, especially companies. Link persons to establishments. Identify all land (ownership). Identity all assets (ownership). Reverse-link land and assets (and the transactions in between) back to persons and establishments. At bottom, create a national digital registry that provides a 'single source of truth.'⁴¹

Here was a vision of total informational completion. The nation itself, linked together through an ambitious, panoptic data management system, was being reimagined as a database—inclusive of all people and property.

A host of different political and economic agendas motivated the development of this new information infrastructure. This included, yet again, a growing anxiety about foreigners on Kenyan soil. The NDRS was proposed in the wake of a string of retaliatory attacks on civilian targets by the militant group al-Shabaab, following Kenya's invasion of Somalia in 2011.⁴² Almost a year after the Westgate attack, Mwende Gatabaki, the main architect of the NDRS and

⁴⁰ "Did Jubilee miss an opportunity to show off its 'digital' government?" *Business Daily Africa* (7 July 2016), https://www.businessdailyafrica.com/bd/opinion-analysis/ideas-debate/did-jubilee-miss-an-opportunity-to-show-off-it-s-a-digital-government--2120432#google_vignette

⁴² In 2013, two years after Kenya's invasion of Somalia, the NRB and CVRS were brought under the Ministry of Interior, yet another indication of the growing securitization agenda.

then acting Director General of the Kenya Citizens and Foreign Nationals Service, ⁴³ lamented during a press conference: "Why don't we know who enters the country?"⁴⁴ One of the many (unrealized) aspirations of the NDRS was to "weed out fraudulent IDs"⁴⁵ and link border points to existing population registries in order to verify the identities of those entering and exiting the country.⁴⁶

Beyond desires for tighter border security, financial interests also loomed large. The IPRS had facilitated the financialization of the unbanked, accelerating the spread of new forms of fintech and micro-credit by allowing private companies, including the telecommunications giant Safaricom, to run Know Your Customer (KYC) and credit checks, pinging the system for a small fee.⁴⁷ The aim of the NDRS was to build upon this functionality, while addressing some of the technical limitations of the IPRS.⁴⁸ According to historian Keith Breckenridge, the Uhuru regime had hoped to use the system to register "moveable assets like vehicles, farm animals and companies" and thus create a collateral-based credit market.⁴⁹

The Umoja Kenya/NDRS project was never realized, floundering on competing interests between banks and Safaricom and rivalries amongst Kenya's various ministries.⁵⁰ But the

⁴³ The Kenya Citizens and Foreign Nationals had been set up "to harmonise matters of citizenship documentation" under the 2010 constitution, which had revised the country's citizenship laws. Mutung'u, *Digital Identity in Kenya*, 13.

⁴⁴ EDAPS, "Integrated Population Register: a key pillar in a holistic approach to identification," PowerPoint presentation (2014).

⁴⁵ As Faith Nyaunga Nyakundi explains: "The government painted this as an effort to weed out fraudulent IDs and fight terrorism, especially considering the al-Shabaab Westgate Mall attack on September 21, 2013." Nyakundi, "Huduma Namba: Kenya's Transformation into an Informational State," MA thesis, University of Washington, 2020, 11.

⁴⁶ EDAPS, "Integrated Population Register."

⁴⁷ Interview with Ali Hussein by Keren Weitzberg, Nairobi, 9 August 2024; See also EDAPS, "Integrated Population Register: a key pillar in a holistic approach to identification," PowerPoint presentation (2014). The presentation notes that the that the IPRS, through its links with Credit Reference Bureaus and the Communications Commission of Kenya, "made it impossible for borrowers with fake ID or bad debts to access credit."

⁴⁸ World Bank Group, *ID4D Country Diagnostic: Kenya* (2016), 13, 18.

⁴⁹ Breckenridge, "The failure of the 'single source of truth about Kenyans" 101.

⁵⁰ For more on why the NDRS failed, see Breckenridge, "The failure of the 'single source of truth about Kenyans."

underlying vision would be revived a few years later, when the government publicly announced the launch of the Huduma Namba project and the creation of yet another multi-syllabic database: the National Integrated Identity Management System (NIIMS).

With Huduma Namba, the government's goals were even more ambitious, panoptic, even utopian: biometrically register the entire population from scratch and build a sweeping central database. Like the NDRS, this project was premised on providing each citizen and resident with a unique identity number, an administrative innovation first pioneered in Sweden, which had gained global acceptance in the decades after World War II.⁵¹ As one assistant chief quipped, Huduma Namba would be the "mother of everything," the "mother of all numbers." 52 By assigning each person a permanent personal number from birth, linked to central population register, the Kenyan state would, in effect, be able to trace individuals across their varied interactions with the public and private sector.

With a diverse constellation of purported purposes, Huduma Namba is difficult to apprehend as a singular, coherent object of analysis. The project was justified in the name of streamlining government "service provision," resolving identity fraud, reducing "operational costs," remedying historical injustices, improving "national security," and informing "planning for equitable and sustainable national development."53 Embodying a multiplicity of aims and interests, it defies neat efforts to disentangle "surface" from "hidden" motivations. According to one industry insider, with Huduma Namba, President Uhuru Kenyatta moved identification services more firmly under the NIS (National Intelligence Services), affirming its links to a

⁵¹ "Proceedings of the International Symposium of Automation of Population Register Systems," Volume 1,

Organized by Information Processing Association of Israel and Sponsored by International Computation Centre, Rome and International Federation for Information Processing (1967), courtesy of Keith Breckenridge.

⁵² Conversation with assistant chief during Huduma Namba registration drive by author, Nairobi, 6 April 2019. ⁵³ Robert Mugo, Ministry of Information, Communications and Technology, "Kenya National Integrated Identity Management Systems (NIIMS)." Presentation at the ID4Africa Conference, Johannesburg, June 2019, https://www.id4africa.com/2019 event/presentations/PS1/2-Robert-Mugo-Kenya.pdf.

security agenda.⁵⁴ Though seldom acknowledged in public statements, the system was also intended to help the state extract "lost" tax revenue.⁵⁵ And, to many within Kenya's active Twitter community, the project seemed yet another lucrative tender that would line the pockets of high-ranking officials.⁵⁶ But no single agenda can fully explain this open-ended infrastructure, or why it has persisted amidst iterative failure.

Nor can Huduma Namba be easily reduced to a story of techno-colonialism or data colonialism.⁵⁷ Although neocolonial institutions and agendas have informed the drive for digital identity systems on the continent, these information infrastructures also represent a break from established patterns of colonial extraction, which have historically left a patchwork of concentrated enclaves amidst zones of exclusion.⁵⁸ Intended to buttress the sovereignty and surveillance capacity of the African state, systems like Umoja Kenya and Huduma Namba were motivated by a desire to overcome the informational shortcomings of inherited colonial institutions, bringing the previously excluded into new relations to the state and formal economy.

From the comparative success of the IPRS to the failure of the NDRS (Umoja Kenya) to the rise and fall of NIIMS (Huduma Namba) to the launch of what is now known as the Maisha Integrated Database (Maisha Namba), the Kenyan state would continually reinvent its model of a single source of truth system, suturing the old to the new. Each iteration would empower

⁵⁴ Author's personal communication with biometric vendor representative, Annual General Meeting for ID4 Africa, Cape Town, 20 May 2024.

^{55 &}quot;KRA now targets Huduma Namba data to nap tax cheats," *Business Daily Africa*, 18 April 2022, https://www.businessdailyafrica.com/bd/economy/taxman-targets-huduma-namba-data-base-access-3786650; Concerns about tax collection also came up during interviews and conversations with *paralegals and community activists during the national registration drive*.

⁵⁶ See, for instance, Tweet by Waikwa Wanyoike @waikwawanyoike, "My five reasons on #ResistHudumaNamba," 19 February 2019, 2:23 PM, https://x.com/waikwawanyoike/status/1097864141346361353.

⁵⁷ Michael Kwet, "Digital colonialism: US empire and the new imperialism in the Global South," *Race & class* 60:4 (2019): 3-26.

⁵⁸ James Ferguson, "Seeing like an oil company: space, security, and global capital in neoliberal Africa," *American anthropologist* 107:3 (2005): 377-382.

different factions within the Kenyan government, employ different private vendors, deploy distinct technical architectures, and generate its own novel problems. At the time of writing, it is not yet clear if Maisha Namba project (described in more detail below) will simply go the way of its predecessor, Huduma Namba, becoming yet another expensive state failure. ⁵⁹ But throughout these recursive waves of tech hype and tech failure, a new modality of power was emerging: one that envisioned the nation as a database.

Messy backends

With Huduma Namba, the Kenyan government had offered up another ambitious vision of building a complete central database, a kind of metonym for the nation itself. But this vision would soon run up against the messy backends of Kenya's existing registration and national identity systems.

As early as 1999, Bowker and Star called on researchers to engage in "infrastructural inversion" by "learning to look closely at technologies and arrangements that, by design or by habit, tend to fade into the woodwork" until, that is, they break down.⁶⁰ However, such invisibility can be overstated, as Brian Larkin, notes: "Invisibility is certainly one aspect of infrastructure, but it is only one and at the extreme edge of a range of visibilities that move from unseen to grand spectacles and everything in between." Unlike the IPRS, which was built

⁵⁹ During our interview in 2021, Diana Gichengo (formerly of the Kenya Human Rights Commission) presciently suggested that the entire Huduma Namba project might prove "a white elephant that would finally fizzle out" once the government recognizes it as "big blunder." Interview with Diana Gichengo by Keren Weitzberg and Yussuf Bashir, 14 July 2021. Though Maisha Namba has more international backing, it may prove yet another failed government digitization effort.

⁶⁰ Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and its Consequences* (MIT press, 2000), 34. See also Nikhil Anand, Akhil Gupta, and Hannah Appel, eds, *The Promise of Infrastructure* (Duke University Press, 2018).

⁶¹ Brian Larkin, "The politics and poetics of infrastructure," *Annual Review of Anthropology* 42:1 (2013): 336. See, for example, Jordan Frith, *A Billion Little Pieces: RFID and Infrastructures of Identification* (MIT Press, 2024), 4

behind the scenes, and the NDRS, which was never built at all, the Huduma Namba/NIIMS system required the entire nation to line up and re-enroll in a new national identity system. These registration drives, which allegedly enrolled 36 million people across the country, brought the mundane backend to the forefront, transforming data infrastructures into an object of semiotic spectacle and public debate, turning the queue into a highly visible, collective experience.

Conducted under the aegis of the Ministry of Interior 62 and implemented through chiefly authorities (the administrative vestiges of colonial indirect rule), the rollout of Huduma Namba was inexorably shaped by ethno-securitized tactics. Defying a High Court Order, then-Cabinet Secretary for the Ministry of Interior Fred Matiang'i deployed Moi-era methods of coercion during the registration drive. Moi had been notorious for using forced queuing to fix local elections. Matiang'i, in a more neoliberal fashion, induced people to queue by threating to shut off the phone lines of anyone who failed to register. 63 And, much like the registration drives described in chapter three, concerns with indigeneity colored the Huduma Namba registration process. Settling into well-grooved patterns of discrimination, assistant chiefs and their junior assistants, who served as registration officers, reproduced the logics of gatekeeping that had long informed the process of applying for a national ID, as described in chapter three. 64

For civil society groups, Huduma Namba appeared only to ramify the exclusionary logic of processes such as vetting even as it provided a platform to politicize the very issue. Members

⁶² Robert Mugo, Ministry of Information, Communications and Technology, "Kenya National Integrated Identity Management Systems (NIIMS)." Presentation at the ID4Africa Conference, Johannesburg, June 2019, https://www.id4africa.com/2019_event/presentations/PS1/2-Robert-Mugo-Kenya.pdf.

⁶³ In 2019, Caribou Digital conducted focus groups discussions, which revealed that many people registered due to threats that the government would switch off their phone lines or cut them off from services. Emrys Schoemaker, Tom Kirk, and Isaac Rutenberg. *Kenya's Identity Ecosystem* (Caribou Digital Publishing, 2019), 25, 35, https://www.cariboudigital.net/wp-content/uploads/2019/10/Kenyas-Identity-Ecosystem.pdf.

⁶⁴ Concerns that Huduma Namba/NIIMS would exacerbate historic discrimination were raised throughout the case before the Kenya High Court. See Nubian Rights Forum, Kenya Human Rights Commission, and the Kenya National Commission on Human Rights (Petitioners), "Consolidated Petitions No. 56, 58 & 59 of 2019," Republic of Kenya, High Court of Kenya, Nairobi Constitutional & Judicial Review Division, 30 January 2020.

of civil society groups, who sent out scouts to assess the enrollment process, reported having clients turned away from registration stations due to lack of identification. Such problems were exacerbated by conflicting public messages about what forms of identification (if any) were needed to enroll. In early April of 2019, Matiang'i appeared on Iqra FM, a popular Muslim radio program, to try to clear up confusion. He encouraged those without IDs or birth certificates to visit a Huduma Namba registration centre. He claimed that the government would use the 45-day registration drive to ensure that "any Kenyan who'll have applied for the identifying documents will have them." Time was collapsed in such quixotic government promises. As Zenab Musa of the NRF lamented: "There is no transition period so people can get supporting documents."

In supplementary submissions to the Kenya High Court, the NRF noted that the "NIIMS procedures concerning treatment of undocumented Kenyans or those without accurate documentation of Kenyan nationality, to extent described at all, reflect—rather than resolve—discriminatory vetting." A government spokesman would later acknowledge that ten percent of Huduma Namba applicants were turned away due to the absence of a national ID or birth certificate. 70

⁶⁵ Interview with civil society staff members by author, Nairobi, 9 April 2019; Ayang Macdonald, "Kenya's Huduma Namba digital ID scheme could exclude millions of citizens, Forum warns," Biometric Update, 31 January 2021, https://www.biometricupdate.com/202101/kenyas-huduma-namba-digital-id-scheme-could-exclude-millions-of-citizens-forum-warns. It should also be noted that, in areas of the country where citizenship determination was less fraught, there were reports of undocumented people being allowed to enroll in Huduma Namba.

⁶⁶ Interview with Shafi Ali, Zena Musa, and Naima Ibrahim of the Nubian Rights Forum by author, Nairobi (Kibra), 10 April 2019; *Interview with Aisha Khagai, Laura Goodwin, and Mustafa Mahmoud Yousif of NAMATI by author, Nairobi, 9* April 2019.

⁶⁷ Michael Musyoka, "CS Matiang'i Issues Urgent Notice to Kenyans Without IDs," *Kenyans.co.ke*, 9 April 2019, https://www.kenyans.co.ke/news/38646-cs-matiangi-issues-urgent-notice-kenyans-without-ids.

⁶⁸ Interview with Zenab Musa by author and Asha Jaffar, Nairobi (Kibra), 9 March 2022.

⁶⁹ "First Petitioner's Further Submissions," Republic of Kenya, High Court of Kenya, Nairobi, Constitutional and Human Rights Division, Petition No. 56 of 2019 as Consolidated with Petitions 58 and 59 of 2019.

⁷⁰ Bronwen Manby, "The Sustainable Development Goals and 'legal identity for all': 'First, do no harm,'" *World Development* 139 (2021): 7.

As court procedures laid bare, the Huduma Namba system was tethered to longstanding infrastructures of documentary and biometric citizenship. This also stood at odds with the disruptive promises of digital identity: frictionless governance, streamlined universality, and a future horizon of "legal identity for all." This vision was perhaps best articulated by Nandan Nilekani, the architect of Aadhaar, whose long shadow hung over Huduma Namba. In a 2011 *New Yorker* profile, Nilekani contrasted Aadhaar with older models of identification, which were "largely driven by anxiety about border security." Nilekani's scheme, as the piece explains, was "more liberal, and more economically oriented," its aim to "remind citizens of their 'rights, entitlements, and duties'" and "oblige the state to improve services." If traditional ID schemes had been tainted by a dark history of genocidal violence associated with Hutu Power in Rwanda or German National Socialism, ⁷² here was a vision of identification freed from older nationalist concepts of citizenship, indigeneity, and ethnic purity.

Open to anyone resident in a country, schemes like Aadhaar seemed, at first glance, to offer a more inclusive model of belonging than traditional national ID systems. Its radical simplicity—facilitated by instantaneous authentication, mathematical precision, and a stripped-down idea of bare personhood and biological uniqueness—deemphasized identification based on legal status or ethno-religious and communal belonging.⁷³ For this reason, the World Bank ID4D

⁷¹ Ian Parker, "The I.D. Man," *The New Yorker*, 26 September 2011, https://www.newyorker.com/magazine/2011/10/03/the-i-d-man.

⁷² Timothy Longman, "Identity Cards, Ethnic Self-Perception, and Genocide in Rwanda," in *Documenting Individual Identity: The Development of State Practices in the Modern World* eds. Jane Caplan and John Torpey, 345-359 (Princeton University Press, 2001); Jim Fussell of Prevent Genocide International, "Group classification on national ID cards as a factor in genocide and ethnic cleansing," Presentation to the Seminar Series of the Yale University Genocide Studies Program, 15 November 2001.

⁷³ Keith Breckenridge, *Biometric state: The Global Politics of Identification and Surveillance in South Africa, 1850 to the Present* (Cambridge University Press, 2014). Breckenridge maintains that "in almost every respect the new biometric systems are the political antithesis of Galton's eugenicism" because they "in fact hinge on improving the prosperity of those at the bottom of the social order" and "offer intensely individualised identification in place of race and caste" (166).

initiative has often held up Aadhaar as a paradigmatic model, encouraging countries "to provide proof of legal identity to all people" by making "foundational ID systems accessible to all resident non-nationals." Many World Bank-funded digital identity schemes attempt to circumvent "difficult questions about the legal status of those it registers;" instead creating a "transactional" identity" that, in theory, anyone resident in a particular territory—whether citizens or otherwise—can access. 76

Similar hopes circulated around Huduma Namba when it was first announced. According to Ali Shafi, chairman of the NRF, Matiang'i had personally promised him that Huduma Namba would help undocumented Nubians secure recognition.⁷⁷ The UNHCR also expressed early support for the initiative, hoping it would facilitate the "local integration" of refugees—a central tenant of the UN's 2018 Global Compact on Refugees.⁷⁸

But such prospects were never realized. Like many data platforms,⁷⁹ digital identity systems are often talked about as cloud-based, immaterial artifacts that sweep away paper-based

74 https://id4d.worldbank.org/guide/eligibility

⁷⁵ Digital Welfare State and Human Rights Project, *Paving a Digital Road to Hell? A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID* (Center for Human Rights and Global Justice, NYU School of Law, June 2022), 6.

⁷⁶ In reality, there have been ongoing concerns about Aadhaar being used to disenfranchise ethnic and religious minorities. See Silvia Masiero, "A New Layer of Exclusion? Assam, Aadhaar and the NRC," *LSE Blog*, 12 Sept 2019, https://blogs.lse.ac.uk/southasia/2019/09/12/a-new-layer-of-exclusion-assam-aadhaar-and-the-nrc/; and Syed Mohammed, "Aadhaar notice to Hyderabad Muslims sparks NRC fears," *The Hindu*, 19 February 2020, https://www.thehindu.com/news/national/telangana/aadhaar-notice-sparks-nrc-fears/article30863240.ece.

⁷⁷ Interview with Shafi Ali by author, Nairobi, 1 August 2019.

⁷⁸ Interview with senior official, the UN Refugee Agency (UNHCR) Kenya, by author, Nairobi, 7 January 2020. As a senior UNHCR official in Kenya told me, the Agency was encouraged by the government's efforts to include non-citizens in the NIIMS system as they sought to integrate refugees into Kenya's existing health, education, and bureaucratic systems, thus reducing dependence on parallel services. Ironically, the short-lived Huduma Namba was never linked to any actual huduma (services). On the website for its #IBelong Campaign, the UNHCR notes that the Huduma Namba "provides an opportunity for stateless persons to be registered with authorities as a person on the territory of Kenya." https://www.unhcr.org/ibelong/kenya-joint-strategy.

⁷⁹ In recent years, scholars of infrastructure have reminded us that digital platforms and data systems, far from being immaterial artifacts, depend on a host of material infrastructures—from the laying of undersea cables to the creation of resource-intensive data centers to the physical labor of IT professionals. See, for instance, Kathryn Furlong, "Geographies of infrastructure II: Concrete, cloud and layered (in)visibilities," *Progress in Human Geography* 45:1 (2021): 190-198; and Devika Narayan, "Platform capitalism and cloud infrastructure: Theorizing a hyper-scalable computing regime," *Environment and Planning A: Economy and Space* 54:5 (2022): 911-929.

bureaucracies. But their systems frequently depend upon "older identification routines" and "existing paper-based ID documents." Writing about Aadhaar, historian Tarangini Sriraman argues that: "far from being an electronic identifier that is insulated from the host of administratively restrictive genres of ID documents like ration cards and job cards," India's globally influential, landmark program "is parasitic on their continued relevance." To even enroll in the Aadhaar program and receive a unique identity number, one typically needs to provide documentation satisfying criteria for proof of identity and proof of address. Those at the margins of society who lack such documentation can instead rely on an "introducer," a third party who can supply their own proof of identity and address and vouch for their identity.

Nevertheless, as a 2015 Right to Information request revealed, only 0.03 percent of those with an Aadhaar number had registered via the introducer system, belying the notion that "Aadhaar is identity for those who lack identity."

Huduma Namba's architecture—which relied on physical smart cards and never included the option of registration through an introducer—was never as technically novel as Aadhaar. It was also fettered more explicitly to Kenya's existing national ID infrastructure. Soon after the government started printing and distributing the much-ridiculed Huduma Namba cards, stories began to circulate on social media about its resemblance to the national ID.⁸⁴ It was not lost on members of the public that the supposedly transformative smart cards were almost identical to their old ID cards. In fact, the very *namba*—the unique identifier that would become the "single"

⁸⁰ Ursula Rao, "Population meets database: Aligning personal, documentary and digital identity in Aadhaar-enabled India," *South Asia: Journal of South Asian Studies* 42:3 (2019): 539.

⁸¹ Tarangini Sriraman, *In Pursuit of Proof: A History of Identification Documents in India* (Oxford University Press, 2018), 228. Ursula Rao similarly argues that "the technical routine of the Aadhaar procedures depends directly on other older identification routines." Rao, "Population meets database," 539.

⁸² Sriraman, In Pursuit of Proof, 210.

⁸³ https://rethinkaadhaar.in/myths.

⁸⁴ See, for example: Post by @TrackTheCorrupt, *Twitter*, 20 October 2020, https://twitter.com/TrackTheCorrupt/status/1318509917465202689?s=20&t=x7bmocm_yM1UIq6Zn3OSLQ.

source of truth" for Kenyans—was the same as many people's national ID number with the addition of two digits—10—at the beginning. Rumors circulated that the chip in the cards was empty, making them functionally identical to their "dumber" predecessors. Ref The legislation that amended the Registration of Persons Act, codifying the NIIMS system, also revealed the state's ongoing dependence on existing identification architecture. Under the 2020 NIIMS regulations, adults seeking to enroll in Huduma Namba were required to provide either a birth certificate/notification number or an identity card or passport number. Ref The ICT Cabinet Secretary boldly announced in late 2020 that the Huduma Namba card would replace the national ID from December 2021 (a date that came and went with little fanfare), introducing a circular logic. For most adult citizens, registering for Huduma Namba was thus contingent upon being in possession of a national ID, the very card that Huduma Namba would ostensibly eliminate and replace.

Weighed down by this bureaucratic history, the hope of radical inclusivity embodied in the promise of digital identity seemed to slip away. As writer and political analyst Nanjala Nyanbola argued, Huduma Namba was "layered over a history of exclusion." ⁹¹

⁸⁵ Interview with Abdiwahab Robow by Abdul Adan and author, Nairobi, 3 February 2023; Interview with Benjamin by Abdul Adan and author, Nairobi, 31 January 2023; Interview with Sadam Hussein Ukurey by Abdul Adan and author, Nairobi, 25 January 2023; Interview with Toffi Adan by Abdul Adan and author, Nairobi, 20 January 2023.

⁸⁶ Communication with civil society staff member by author [WhatsApp], 14 September 2021.

⁸⁷ Interview with Diana Gichengo by author and Yussuf Bashir, 14 July 2021.

⁸⁸ Government of Kenya, *The Registration of Persons (National Integrated Identity Management System) Rules* (2020).

⁸⁹ Mercy Asamba and Hillary Orinde, "Huduma Namba to replace National ID from December 2021," *The Standard*, 29 June 2023, https://www.standardmedia.co.ke/article/2001394356/huduma-namba-to-replace-national-id-from-december-2021.

⁹⁰ Interview with Diana Gichengo by author and Yussuf Bashir, 14 July 2021.

⁹¹ Holly Ritson, "'We are not Data Points': Highlights from our Conversation on the Kenyan Digital ID System," Center for Human Rights & Global Justice, NYU School of Law, 9 November 2020, https://chrgj.org/2020/11/09/we-are-not-data-points-highlights-from-our-conversation-on-the-kenyan-digital-id-system/. See also Nanjala Nyabola, "National digital ID initiatives have a trust problem," *Rest of* World, 5 May 2021, https://restofworld.org/2021/kenya-digital-id/.

Digital infrastructures on trial

As the Huduma Namba national registration drive was unfolding across the country, civil society groups were mounting legal challenges to its roll-out. These took the form of several major legislative actions before the Kenya High Court. 92 The most prominent was a case brought by the Nubian Rights Forum, the Kenya Human Rights Commission, and the Kenya National Commission on Human Rights, whose petitions—each of which challenged the constitutionality of Huduma Namba/NIIMS on similar grounds—were consolidated into a single case. In April 2019, in response to this case, the three-judge bench in the High Court in Nairobi issued an interim ruling, which prohibited the government from making registration mandatory, though did little to slow down the national roll-out. According to NRF activist Yasah Kimei, the petitioners were focused on four main issues: the problem of exclusion and discrimination (the NRF's main area of concern); the lack of public participation; the risks posed by data centralization; and the broader question of data protection. 93 Other national and international civil society organizations supported the case either behind the scenes or, as in the case of the Haki Centre and Law Society of Kenya, as interested parties. While winning only limited legal concessions, the NIIMS case became a locus of counter-politics.

By drawing people into new relations and arrangements, infrastructures make and unmake publics. 94 The Huduma Namba system (and the High Court case it engendered) became

⁹² In total, there have been four cases challenging Kenya's national digital identity systems: Okiya Omtatah Okoiti vs. The Attorney General (Kenya) & Others (2019); the Nubian Rights Forum and Others vs. The Attorney General (Kenya) (2019); The Republic vs. Joe Mucheru, Cabinet Secretary Ministry of Information Communication and Technology, and Others, ex parte Katiba Institute and Yash Pal Ghai (2020); and the Haki na Sheria Initiative vs. Attorney General (Kenya) & 4 Others (2023).

⁹³ Interview with Yasah Kimei by author and Yussuf Bashir [online], 29 June 2021.

⁹⁴ Stephen J. Collier, James Christopher Mizes, and Antina von Schnitzler, "Preface: Public infrastructures/infrastructural publics," *limn* 1:7 (2016); and Nikhil Anand, "A Public Matter: Water, Hydraulics, Biopolitics," in *The Promise of Infrastructure*, eds. Nikhil Anand, Akhil Gupta, and Hannah Appel, 155-172 (Duke University Press, 2018).

a "hybrid forum," ⁹⁵ a polyvalent, heterogenous space where expert and non-expert testimony could be heard and where a range of concerns—from issues of statelessness to state overreach to the misallocation of public funds—could be aired and debated. On Twitter and other social media spaces, live updates of the court proceedings intermingled with critiques from digital rights campaigners, which were framed within data protection frameworks, and messianic warnings from evangelical leaders, who equated Huduma Namba with the "mark of the beast."

New, heterogenous constituencies also formed around the controversy. The case brought national and international civil society groups into coalition, bridging ethno-regional divides and once-siloed conversations around digital rights and statelessness. The NRF, for example, called cybersecurity and privacy specialist Anand Venkatanarayanan, who had testified in the Supreme Court case against Aadhaar, as an expert witness, thus linking the NIIMS case to a transnational story, woven by civil society groups, about the harms of digital ID. Due to North-South funding inequities, such civil society alliances were inherently asymmetric; but they were nevertheless generative of a new, transnational avenue of claims-making.

This hybrid forum also enabled minoritized populations, who had long faced discrimination in access to identification, to center their struggles within a broader narrative about infrastructural repair and national redress. As Laura Bingham, now a professor of law at Temple University, who was involved in the legal proceedings, explained:

The fact that there was recourse to court, to have a hearing, an actual hearing, days long, with live testimony, and that was broadcast on networks...It was so publicly accessible and you have a society that's, you know, captivated by that kind of politics. I think all of that was a combination that helped the Nubians and the Somalis and other communities to put their struggle at the center of this national story.⁹⁶

⁹⁵ Michel Callon, Pierre Lascoumes, and Yannick Barthe, *Acting in an Uncertain World: An Essay on Technical Democracy* (MIT Press, 2009).

⁹⁶ Interview with Laura Bingham by author [online], 13 November 2024.

By making claims on Kenya's hard-fought and oft-invoked constitution, the petitioners appealed to an everyday "public grammar" around which a shared national imaginary had formed. ⁹⁷ And at the forefront of this nationalist story, strategically named as first petitioner, was the Nubian Rights Forum. Founded in the late 1990s, the NRF, based in Kibra, had helped to consolidate a historical narrative around which Kenyan Nubians had coalesced. Though Nubians have complex and fluid origins, many today claim descent from colonial *askari* (soldiers) recruited by the British from Sudan. ⁹⁸ Characterized as a martial race of "detribalized" natives during the colonial era, this population struggled after independence to fit into indigenous categories and were often considered ethnic "strangers." ⁹⁹ As longstanding Nairobi residents linked to the very founding of the city, who were often perceived as more "indigenous" than other Muslim groups, Nubians served as sympathetic victims, stand-ins for marginalized communities writ large, and model citizens in the courtroom.

The civil society coalition that supported the NIIMS also did an artful job of connecting Nubian testimony to a national narrative. One of the witnesses, Ahmed Khalil, an elderly retired police officer and businessman, had been waiting for over a year for a replacement national ID when he took the stand. ¹⁰⁰ Cases like his were portrayed, not as anomalous outliers confined to

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⁹⁷ Ambreena Manji, *The struggle for land and justice in Kenya* (James Currey, 2020), 12.

⁹⁸ Many of Kenya's Nubians also have ties to relatives and kin in Uganda, where some originate.

^{99 &}quot;Today's Kenyan Nubians," as Sam Balaton-Chrimes explains, "are a marginalized minority, discriminated against in access to national identity cards, unrecognized (at least until 2009, and then only ambiguously) as a tribe of Kenya, and landless." Samantha Balaton-Chrimes, "The Nubians of Kenya: Citizenship in the Gaps and Margins," in *Citizenship, Belonging and Political Community in Africa*, ed. Emma Hunter (Ohio University Press, 2013). For more on the history of the Nubian community of Kenya, see Timothy Parsons, "Kibra Is Our Blood': The Sudanese Military Legacy in Nairobi's Kibera Location, 1902-1968," *The International Journal of African Historical Studies* 30:1 (1997): 87-122; Adam Adam Hussein, "Kenyan Nubians: standing up to statelessness," *Forced Migration Review* 1:32 (2009); Samantha Balaton-Chrimes, "Indigeneity and Kenya's Nubians: seeking equality in difference or sameness?" *The Journal of Modern African Studies* 51:2 (2013): 331-354. ¹⁰⁰ See testimony of Ahmed Khalil Kafe in Nubian Rights Forum, Kenya Human Rights Commission, and the Kenya National Commission on Human Rights (Petitioners), "Consolidated Petitions No. 56, 58 & 59 of 2019," Republic of Kenya, High Court of Kenya, Nairobi Constitutional & Judicial Review Division, 30 January 2020.

the minority group experience, but as a wider problem that fractured the Kenyan nation: "The case affects the rights of all people in Kenya, while also addressing how NIIMS will disproportionately affect marginalized communities." When interviewed in 2021, in the midst of the appeals case, Yasah Kimei noted that "close to 5 million Kenyans face discrimination in access to documentation." Mustafa Mahmoud of Namati-Kenya, another civil society group that supported the case, argued that Huduma Namba would make marginalized groups, included the disabled, "feel even less Kenyan than before, because they realize there's another document that adds to the list of things that [they] will never achieve." 103

The petitioners' arguments exhausted the language of data protection. Amidst the trial, likely in an effort to fend off mounting criticism, the Parliament hastily passed the 2019 Data Protection Act, the country's first comprehensive data protection legislation, loosely modeled on Europe's General Data Protection Regulation (GDPR). Yet the petitioners' case went far beyond data governance concerns to encompass a broader array of historic grievances, which both foregrounded minority concerns and spoke to widely held concerns about public accountability.

The case also captured (and was amplified by) the zeitgeist of social media, where many Kenyans had mobilized around the hashtag #ResistHudumaNamba. In this way, the petitioners fed into popular laments about the hollowness of postcolonial citizenship. Throughout the registration drive, government spokesmen had claimed that Huduma Namba would improve service delivery. The project's tag line—*Huduma Namba kwa Huduma Bora*—the Service Number for Better Service—quickly became a source of public derision online. Disparaging the

¹⁰¹ Open Society Justice Initiative, *Kenya's National Integrated Identity Management System*, Briefing Paper (September 2019), 3, https://www.justiceinitiative.org/uploads/8f3b665c-93b9-4118-ad68-25ef390170c3/briefing-kenya-nims-20190923.pdf.

¹⁰² Interview with Yasah Kimei by Keren Weitzberg and Yussuf Bashir [online], 29 June 2021.

¹⁰³ Interview with Mustafa Mahmoud by Keren Weitzberg and Yussuf Bashir [online], 29 June 2021.

austere welfare state, many Kenyans questioned what services the government had offered in the first place. ¹⁰⁴ Meanwhile, critics raised concerns that the project would facilitate state surveillance, further consolidating power within the Ministry of the Interior and enabling the detailed tracking of people's financial transactions and tax payments. As the project unfolded, fears of state overreach gave way to speculation about government waste and mismanagement. At a cost of over 10 billion Kenyan shillings, and amidst rumors that the data collected was unusable, Huduma Namba came to be widely derided on social media platforms as a white elephant project. ¹⁰⁵

In January 2020, the High Court issued a final ruling of the NIIMS case, which can be described as a partial legal success for the petitioners. The judges, while not finding NIIMS unlawful, ruled that it could not go forward without "an appropriate and comprehensive regulatory framework" to address issues such as exclusion and data protection and deemed the collection of GPS and DNA data unconstitutional. ¹⁰⁶ By and large, the state proceeded to ignore the ruling. The Office of the President painted the judgement as a victory for the government, claiming that it had been "vindicated on most of the issues." ¹⁰⁷ Though the petitioners appealed

¹⁰⁴ See, for example, @MisterAlbie, "You guys who who took the Huduma Namba how is life treating you?" 22 August 2019, 7:30 AM, https://x.com/MisterAlbie/status/1164424496687828993; Rasna Warah @RasnaWarah, "I got my ID for Free. What services is this govt providing with taxes?" Twitter, 8 November 2023, 5:48 PM, https://x.com/RasnaWarah/status/1722310098188406991

¹⁰⁵ Interview by author with Diana Gichengo of KHRC, Nairobi, August 7, 2019; Interview by author with Okoiti Okiya Omtatah, Nairobi, December 20, 2019; Interview by author with Dudley Ochiel, Nairobi, December 19, 2019; Interview with data protection expert by author and Yussuf Bashir, online, 3 September 2021.

¹⁰⁶ For a summary of the judgement, see Privacy International, "Kenyan Court Ruling on Huduma Namba Identity System: the Good, the Bad and the Lessons," 24 February 2020, https://privacyinternational.org/long-read/3373/kenyan-court-ruling-huduma-namba-identity-system-good-bad-and-lessons; and Grace Mutung'u and Jaaziyah Satar, "Huduma Namba Judgement Summary," Centre for Intellectual Property and Information Technology Law, Strathmore University, 6 March 2020, https://cipit.strathmore.edu/huduma-namba-judgement-summary/.

¹⁰⁷ Office of the President: Ministry of Interior and Coordination of National Government, Press Release, "Government to Roll Out Huduma Namba Second Phase," Accessed on Open Society Justice Initiative website, https://www.justiceinitiative.org/uploads/8ab1b612-054f-4b7a-8778-c9682939a566/niims-press-statement-on-roll-out-013120.pdf.

the High Court judgement, their case was quickly overtaken by national and international events. The Covid-19 pandemic, state delays in appointing judges to the Court of Appeal, and the prioritization of the Building Bridges Initiative—a controversial bid to amend the constitution, which was later overturned by the High Court—slowed down the appeals process. ¹⁰⁸ The election of William Ruto, who proceeded to scrap Huduma Namba and launch the Maisha Namba project in its place (as discussed below), would stall the appeals case indefinitely.

Despite such modest and ambiguous legal gains, the petitioners unequivocally won in the arena of public opinion. In so doing, they constructed a vision of national inclusion decoupled from securitization concerns, in which minority groups served as stand-ins for the nation.

Maisha Namba meets civil society

These tense encounters between civil society and the state would also come to shape the Maisha Namba system, first introduced in November 2023. On the campaign trail, Ruto had accused the Uhuru regime of using the Huduma Namba project to rig the upcoming election. Upon taking office, he declared Huduma Namba a "complete fraud," shortly before unveiling Maisha Namba. Its very name suggested continuity with the previous system, betraying an elite political consensus around digital ID. Yet Ruto, from early on, took a different approach to civil society, seeking to co-opt and assimilate its critiques.

¹⁰⁸ Interview with Yasah Kimei by author and Yussuf Bashir (online), 29 June 2021; Interview with Mustafa Mahmoud by author and Yussuf Bashir (online), 29 June 2021; and Kenya Human Rights Commission (KHRC), "Open letter to the president of the Court of Appeal on the deliberate delays in the Huduma Namba appeal case," Press Release, 11 June 2021, https://www.khrc.or.ke/2015-03-04-10-37-01/press-releases/751-deliberate-delays-in-the-huduma-namba-appeal-case.html.

^{109 &}quot;Huduma Namba was fraud, we lost Sh14 billion-Ruto," *The Star*, 30 June 2023, https://www.the-star.co.ke/counties/coast/2023-06-30-huduma-namba-was-fraud-we-lost-sh15-billion-ruto.

Maisha Namba consists of four elements: a unique personal identifier assigned to every person from birth; 110 a third-generation, upgraded national ID; a digital ID, accessible via a smartphone app; and a centralized (or, by some accounts, federated 111) database, now known as the Maisha Integration Population register. Despite its obvious resemblance to the Huduma Namba system, the basic architecture of Maisha Namba was a departure in several key respects, a reflection both of lessons learnt and of different alliances, international relationships, and ethos within the often-competitive digital identity sector. Whereas the Uhuru presidency had hired Idemia (a French company with a sorted history in Kenya) to supply enrollment kits and the German company Muehlbauer AG to print smart cards, the Ruto regime turned instead to IN Groupe, which had purchased the identity management arm of Thales Groupe, Kenya's previous provider of national IDs. Rather than courting controversy by requiring the entire population to re-enroll, the Ruto administration instead built upon the country's existing identification infrastructure, issuing Kenyans Maisha cards only when Kenyans registered for or renewed their national IDs. The project also had more explicit links to birth registration, likely the imprimatur of the United Nations Development Programme (UNDP), which provided technical advice on the project and had long advocated for civil registration as the foundation for legal identity. Pakistan's National Database and Registration Authority (NADRA), which had built Kenya's passport system, also consulted on the project. This, too, was the marker of a political

¹¹⁰ For adults who had already received a national ID, their national ID numbers will serve as their Maisha Nambas.

¹¹¹ Although government representatives frequently described the database underpinning Maisha Namba as "centralized," the government's expert witness in the High Court case brought by the Haki na Sheria Initiative has since described the system as "federated." This also suggests that the government may be building on the existing IPRS system. "Expert Opinion by Mr. Bruno Moreau," as it relates to Petition No. E524 of 2023 between Haki na Sheria Initiative (Petitioner) and the Honourable Attorney General (1st Respondent), Cabinet Secretary of the Ministry of Interior and Coordination of National Government (2nd Respondent), Director General of Kenya Citizens and Foreign Nationals Management Service (3rd Respondent), Principal Registrar of Briths and Deaths (4th Respondent) and Principal Registrar of Persons (5th Respondent).

relationship: Julius Bitok, then Principal Secretary of Immigration and Citizen Services, had once been the Ambassador to Pakistan.¹¹²

But arguably one of the most significant shifts in the government's approach was its efforts to actively court civil society. Seeking to preempt the controversies that had embroiled them in several High Court cases, Bitok instead tried to co-opt civil society groups through consultative workshops and the development of a digital identity working group. Some civil society groups initially engaged (however cautiously) in these meetings, hoping to affect government policy, before eventually returning to more oppositional strategies, including further litigation. As these overtures demonstrate, the state had come to see civil society as a constituency capable of courting international attention and donor funding, which needed to be contended with, even if in tokenistic ways.

Against this backdrop, the Ruto regime also made a seemingly bold policy reversal—one explicitly designed to curry favor with civil society groups, Kenya's Muslim and Somali populations, and the international donor community. On April 8th, 2024, during an official Iftar dinner in State House to mark the end of Ramadan, President Ruto declared an end to the much-hated citizenship vetting process. Dressed in a kanzu and kofia, alternating between Swahili and English, Ruto painted a picture of a new generation no longer imperiled by religious and regional inequalities: "We want every child in Kenya whether Christian or Muslim and from whichever

¹¹² These insights were derived from fieldwork experience at the annual general meetings of ID4Africa in Cape Town (21-24 May 2024) and Addis Ababa (20-23 May 2025).

¹¹³ Christien Muchira, "Government seeks civil society hand in digital ID rollout," *KBC*, 20 September 2023, https://www.kbc.co.ke/government-seeks-civil-society-hand-in-digital-id-rollout/; and Ayang Macdonald, "Civil society teams up with Kenyan govt to champion digital ID sensitization efforts," *Biometric Update*, 2 November 2023, https://www.biometricupdate.com/202311/civil-society-teams-up-with-kenyan-govt-to-champion-digital-id-sensitization-efforts">https://www.biometricupdate.com/202311/civil-society-teams-up-with-kenyan-govt-to-champion-digital-id-sensitization-efforts.

part of the country to get equal opportunities and treatment. From the beginning of May this year, a few days from now, there will no longer be vetting for people who want to get IDs."¹¹⁴

When the new guidelines were released a few weeks' later, however, it became clear that vetting had not, in fact, ended. While vetting committees had been nominally abolished, applicants from "border and cosmopolitan counties" would still be required to meet additional evidentiary burdens: Unlike other Kenyan citizens, they would need to be identified by a local chief or assistant chief, who would have to sign and affix their thumbprint to the relevant registration form. A "parent" or "biological relative" would also need to provide a thumbprint to "authenticate the applicant." In addition, their applications would undergo security screening by the National Intelligence Service (NIS) and Directorate of Criminal Investigations (DCI). 115

By abolishing vetting committees, responsibilizing chiefly authorities, and relying more heavily on biometric and background security checks, the directives simultaneously reinforced old ethno-securitized patterns while elevating new digital and biometric tools of verification and authentication. In a press statement released in early May, a coalition of civil society groups protested that: "the directives dissolved vetting committees while retaining an unequal and potentially arbitrary system for ID applications." Observers and civil society representatives also noted that, by holding chiefs "personally... responsible for inclusion errors," the new guidelines were "creating an incentive to deny ID access," thus perpetuating the discretionary

¹¹⁴ Mary Wambui, "Ruto announces end to 'discriminative' vetting for IDs," *The Eastleigh Voice*, 9 April 2024, https://eastleighvoice.co.ke/kenyan%20ids/32159/ruto-announces-end-to-discriminative-vetting-for-ids.

¹¹⁵ Ministry of Interior and National Administration, State Department for Immigration and Citizen Services, National Registration Bureau, "Registration Guidelines for Issuance of National Identity Cards in Border, Urban/Cosmopolitan and Settlement Counties," April 2024, 10.

¹¹⁶ Open Letter from the Haki Centre, The Nubian Rights Forum, Paranet, Namati Kenya, and the Haki na Sheria Initiative, "Government must not replicate discriminatory, arbitrary nature of vetting in new ID guidelines," *Hapa Kenya*, 8 May 2024, https://hapakenya.com/2024/05/08/government-must-not-replicate-discriminatory-arbitrary-nature-of-vetting-in-new-id-guidelines/.

¹¹⁷ Julie Zollman, Nanjia Sambuli, and Catherine Wanjala, *Citizen Experiences with DPI: Kenya's Digital ID Transition* (Center for Financial Inclusion, August 2024), 26.

and restrictive bottlenecks described in chapters three and five. When, in early 2025, Ruto traveled to Wajir County to performatively sign a new presidential decree abolishing vetting, opposition leaders accused him of trying to "increase votes and rig the 2027" elections, 118 referencing the longstanding practicing of using ID issuance to sway the outcome of electoral contests. Under Ruto, ID issuance appeared no less politicized or discriminatory.

Civil society representatives also complained that, rather than abolishing vetting, the new guidelines had simply pushed this ethno-securitized process further into the data-driven backend, rendering it opaquer and more difficult to navigate. As Khasida Abdullah of Haki na Sheria noted at the 2025 annual general meeting of ID4Africa: "Vetting is happening behind the back door." According to the guidelines, the abolishment of vetting committees had been made possible through the digitization and integration of records and the development of automated information infrastructures, which had enabled the NRB to more effectively "authenticate client's information online" and digitally reconstruct an applicant's personal, educational, and family history. One civil society leader explained that these techno-political shifts had further invisibilized the vetting process: "In the real sense they've not ended it [vetting], they've just made it harder because they're now in an invisible system that no one knows how it is mutating." These changes could potentially suppress the kinds of negotiation, "fictive" kinship making, and evidentiary games discussed in the previous chapter, which, for some, have been a route towards accessing Kenyan citizenship.

¹¹⁸ Victor Abuso, "Ruto scraps mandatory vetting for ID card issuance in norther Kenya," *The Africa Report*, 12 February 2025, https://www.theafricareport.com/376584/ruto-scraps-mandatory-vetting-for-id-card-issuance-in-northern-kenya/

¹¹⁹ Khasida Abdullahi, Program Manager, Haki na Sheria Initiative, Panel S3: Fostering Trust and Respecting Dignity in Digital Systems, ID4Africa Annual General Meeting, Addis Ababa, 21 May 2023.

¹²⁰ Ministry of Interior and National Administration, "Registration Guidelines for Issuance of National Identity Cards in Border, Urban/Cosmopolitan and Settlement Counties," 8-9.

¹²¹ As quoted in Zollman, Sambuli, and Wanjala, Citizen Experiences with DPI, 27.

These new procedures also reflect the imprint of Pakistan's NADRA system. Bitok would later explain that Maisha Namba made use of family trees to confirm citizenship: "The Maisha ecosystem assigns a unique number at birth linked to a family tree, eliminating the need for further verification by the time one applies for an ID at 18." As anthropologist and historian Zehra Hashmi explains, the Pakistani government has, over several decades, built a sweeping biometric system structured around family trees to differentiate "genuine citizens" from Afghani and Bangladeshi migrants, suturing the colonial anthropological obsession with kinship to a modern information system. Today, individuals in Pakistan must prove ties of blood or marriage to other verified citizens within the NADRA database "in order to meet the expectations of an ethno-securitized state," a technique that has clearly come to influence's Kenya's NRB. Linking an individuating technology (biometrics) to ethno-communal and intergenerational belonging, as Heshmi argues, can be highly problematic for those with cross-border family ties. This has troubling implications for a country like Kenya, with its long, contested history with the borderlands.

According to Ursula Rao, a national biometric system may not fundamentally "change the ground on which official identity routines are built, but it alters the technical terrain people must navigate to become rights-bearing citizens." With the development of systems like Maisha Namba and with the ostensible abolishment of vetting committees, political subjects are

¹²² "Gov't dissolves vetting committees, Chiefs to be held accountable for ID issuance," *Citizen Reporter*, 29 PArl 2024, https://www.citizen.digital/news/govt-dissolves-vetting-committees-chiefs-to-be-held-accountable-for-id-issuance-n341259.

¹²³ Zehra Hashmi, "Making reliable persons: managing descent and genealogical computation in Pakistan," *Comparative Studies in Society and History* 63:4 (2021): 949.

¹²⁴ Zehra Hashmi, "Identification and Misrecognition in an Identity Database," in *Parables of AI in/from the Majority World: An Anthology*, eds. Rigoberto Lara Guzmán, Ranjit Singh, and Patrick Davison, *Data & Society* 7 (2022): 101-110.

¹²⁵ Ursula Rao, "Population meets database: Aligning personal, documentary and digital identity in Aadhaar-enabled India," *South Asia: Journal of South Asian Studies* 42:3 (2019): 537.

produced not only through socially and bureaucratically embedded relations within the country, but also through their inclusion in (or exclusion from) integrated, digital platforms. This makes questions of political membership and the social contract itself contingent upon data entry, hit/no-hit determinations, and internal coherence across an interoperable system that bridges previously siloed, semi-digitized databases. Such a system is not a digital facsimile of the "real;" it is an additional layer with its own truth-claims, which mediates access to legal rights and entitlements.

This also makes "the digital" an increasingly important terrain of contestation for civil society groups. Having won only limited concessions at the national level, Kenyan civil society groups are increasingly turning to the international arena, as I explain below, to make claims on this discursive and technical battleground.

Extractive infrastructures

"Litigation is also collaboration." This quip was made by Mustafa Mahmoud at the 2024 annual general meeting (AGM) of ID4Africa in Addis Ababa. Mahmoud was moderating a discussion with a nascent coalition of civil society organizations from East, Southern, and Central Africa, who had recently begun attending the annual digital identity conference and trade exposition. His tongue-in-cheek comment was a reference to several ongoing cases: Haki na Sheria had recently launched a case challenging Maisha Namba on similar grounds as the

¹²⁶ Jean Baudrillard's concept of the "hyperreal" is instructive here. See Jean Baudrillard, *Simulacra and Simulation* (University of Michigan Press, 1994).

¹²⁷ Mustafa Mahmoud, Co-Director, Namati, Kenya, Panel S3: Fostering Trust and Respecting Dignity in Digital Systems, ID4Africa Annual General Meeting, Addis Ababa, 21 May 2023.

¹²⁸ The panel included representatives of the Initiative for Social and Economic Rights (ISER) in Uganda; the Haki na Sheria Initiative in Kenya; Lawyers for Human Rights in South Africa; Common Cause Zambia; and the Cameroon Network of Human Rights Organizations (CNHRO).

previous NIIMS case. Lawyers for Human Rights in South Africa were also representing over 100 people whose ID cards were deactivated by the South African Department of Home Affairs. 129 By suing the government, Mahmoud jokingly suggested, civil society organizations were also inviting the state to the table, to a shared conversation.

The AGM is a dissonant space: Though it enables African states to exert their collective interests and stake a claim to digital sovereignty, it is also deeply shaped by geopolitical inequalities made in the aftermath of empire. Mahmoud's comments (as well the broader discussion he moderated) were aimed not only at government officials in room; he was also speaking to the diverse global actors (often glossed as the "international community") who come to ID4Africa because they are funding and influencing digital identity infrastructures on the continent. These include UN officials, World Bank delegates, and marketing representatives of major ID suppliers and biometric vendors. In Kenya, both the UNDP and Gates Foundation have advised on the Maisha Namba system. The Kenyan state has also received the equivalent of millions of US dollars in donor funding (of undisclosed origin) to pursue the project. ¹³⁰ For the donor organizations and UN agencies invested in "inclusive" digital identity systems, criticism from civil society groups is an ideological thorn in their side. And for civil society groups in Kenya, forums like ID4Africa have become a platform to internationalize their campaigns.

¹²⁹ For more on this case, see Tania Broughton, "Home Affairs in court for 'blocking' identity documents," *Mail & Guardian*, 18 September 2023, https://mg.co.za/news/2023-09-18-home-affairs-in-court-for-blocking-identity-documents.

¹³⁰ As Zollman, Sambuli, and Wanjala in their report on Maisha Namba and Digital Public Infrastructure: "The 2024-25 budget projects KES 2.7 billion in donor assistance to the [State Department of Immigration and Citizen Services], contributing, for example, KES 655 million for card printing, KES 100 million for 'IPRS upgrading,' and 270 million for the Unique Personal Identifier Project, or 82 percent of the overall budget for that line. In a break from precedent, this new budget does not identify which donors are funding these activities." *Citizen Experiences with DPI*, 35. There is reason to speculate that the World Bank is the unnamed funder. For more on the World Bank's funding of digital ID projects, see Digital Welfare State and Human Rights Project, *Paving a Digital Road to Hell? A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID* (Center for Human Rights and Global Justice, NYU School of Law, June 2022).

Many of the leading figures behind ID4Africa—including its artful mastermind Dr.

Joseph Atick—have also begun to carefully engage with civil society. In Addis Ababa, Atick mentioned Kenya's struggles with double registration on stage before a packed conference hall. With all his genius for performing spectacle, capturing zeitgeist, and convening diverse audiences, Atick, with that single gesture to Haki na Sheria's work, signaled the organization's willingness to listen to civil society representatives, who have been present at the last two AGMs. There are also clear indications that what transpired in Kenya (which proved a PR headache for the UNHCR), served as a cautionary tale in the roll-out of Ethiopia's World Bankfunded Fayda digital identity scheme. When registering refugees for the Fayda system, the UNHCR and Ethiopia's Refugees and Returnees Service (RSS) had established a joint committee to de-criminalize the issue of double registration and resolve people's legal status, thus preempting the problems that had plagued Kenya. These are modest signs of civil society's ability to shape the direction of digitization projects. Equally, they are evidence of capitalism's seemingly capacious capacity to absorb its critics.

Civil society's increasingly internationalized campaigns around digital ID have also taken on new valence in light of wider political protests and discontent in Kenya. In June 2024, the country erupted in a largely youth-led protest movement over Ruto's Finance Bill. The 2024 Finance Bill, dictated in large part by the fiscal austerity policies of the International Monetary Fund (IMF), threatened to introduce an array of direct and indirect taxes on Kenyans amidst an escalating cost-of-living crisis in order to service the country's mounting debt obligations. The

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¹³¹ This was discussed during a panel with Robert Karanja, Senior Director for Africa of Co-Develop; Yussuf Bashir, Executive Director of the Haki na Sheria Initiative; Maarouf Issaka-Toure, Senior Coordinator for Data, Identity Management & Analysis (DIMA) in the UNHCR Regional Bureau for the East, Horn and Great Lakes; and Ato Tesfa Belissa, Team Lead in Ethiopia's Registration & Documentation, Refugees and Returnees Service (RRS). Panel T2- P4: Legal Identity: Interoperability in Migration and Mobility (Part 4/4), ID4Africa Annual General Meeting, Addis Ababa, 22 May 2023.

¹³² Mark Fisher, *Capitalist Realism: Is there no alternative?* (Zero Books: 2009).

country has since been wracked by growing public opposition, ongoing protests calling for Ruto to step down, and violent crackdowns by the police and military. Amidst this political climate, many Kenyans have come to see Maisha Namba as emblematic of the Ruto regime's illegitimacy. It has been described as yet another expensive, wasteful government digitization project, a means "to extract procurement-related rents made possible by donor funding," a tool to rig upcoming national elections, and evidence of the malign, neocolonial influence of Western financial institutions and donors. In December 2024, MPs reversed planned government hikes to identity card fees, widely decried on social media as yet another means to tax the poor. Much like the current controversy surrounding ECitizen, Maisha Namba has become a metonym for state corruption, extractivism, and neocolonial ties of dependency on institutions like the World Bank.

This fiscal and public pressure facing the Ruto regime may ultimately doom Maisha Namba, despite its significant donor backing. But even if the government's latest digital identity scheme fails, the push to develop digital and biometric infrastructures is unlikely to wither away. Over the last decade, Safaricom, a multi-national company with significant ties to the Kenyan state, has been developing its own digital platforms, including a lucrative and proprietary credit scoring system that utilizes customer data and the IPRS. In recent years, as Grace Mutung'u notes, Safaricom has been integrating facial recognition technologies into its platforms to

¹³³ Citizen Experiences with DPI, 32.

¹³⁴ Barack Oduor, "Nubians want Ruto's promise on elimination of ID applicants vetting implemented," *The Eastleigh Voice*, 2 September 2024, https://eastleighvoice.co.ke/maisha%20namba/72958/nubians-want-ruto-s-promise-on-elimination-of-id-applicants-vetting-implemented.

¹³⁵ Thabo Motshweni, "New colonialism: The digital ID dilemma in Kenya," *Mail & Guardian*, 8 April 2025, https://mg.co.za/thought-leader/2025-04-08-new-colonialism-the-digital-id-dilemma-in-kenya/.

¹³⁶ David Mwere, "MPs to reverse regulations on hiking Identity Card charges," *Daily Nation*, 4 December 2024, https://nation.africa/kenya/news/mps-to-reverse-regulations-on-hiking-identity-card-charges--4846068.

improve fraud prevention and KYC processes.¹³⁷ If state-led biometric projects collapse, the development of a comprehensive digital identity system may be left instead to the private sector, where it will be driven by the financial interests of banks, fintechs, and telecommunications companies. In such a scenario, inclusion will be predicted not on citizenship status per se but on one's digital footprints and financial records. This, in turn, will likely exacerbate existing hierarchies, dividing people further into the digitally legible versus the digitally excluded, the credit-worthy versus the delinquent.¹³⁸

As this chapter has shown, there is little democratic accountability behind schemes like Maisha Namba, which are driven by a host of national and international interests. Yet, in a very literal sense, they are "public works"—infrastructures where everyday publics are made and "communities of the affected" materialize. 139 The alternative—a digital identity system driven entirely by private-sector interests in credit and insurance markets—is likely to be even less accountable than a notoriously venal state and peremptory donor community. Government-led digital identity systems have enabled civil society groups to politicize issues previously understood within the rubric of securitization, and connect minority and minoritized concerns with an emergent politics of digital rights. Within the litigious arena of the Kenya High Court and the stratified halls of ID4Africa, civil society groups have carved out spaces for negotiation, redress, and claims-making. How far, however, will these tactics hold purchase on an uncertain future?

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¹³⁷ Grace Mutung'u, "Checking the Power of Technology Business in Public Roles through Strategic Litigation: Case Examples from Kenya," *Javnost-The Public* 30:2 (2023): 236-252.

¹³⁸ Keith Breckenridge, "Documentary government and mathematical identification: On the theoretical significance of African biometric government," in *Identification and Citizenship in Africa*, eds. Séverine Awenengo Dalberto and Richard Banégas (Routledge, 2021), 59.

¹³⁹ Noortje Marres, Material participation: Technology, the environment and everyday publics (Springer, 2016).

Conclusion: A new politics of digital access?

Infrastructures, as a Paul N. Edwards reminds us, "create both opportunities and limits; they promote some interests at the expense of others" and "both enable and constrain us." ¹⁴⁰ In Kenya (as chapters four, five, and six detail), digitized identification infrastructures (and their socio-legislative effects) have produced frictions and openings for the undocumented and underdocumented. On one hand, the legacies of heightened securitization that accompanied the Somali civil war, the "Global War on Terror," and Kenya's 2011 invasion of Somalia, which exacerbated discriminatory registration practices, are still very much intact. IDs also remain a highly politicized electoral issue. At the same time, recent technical, political, and legislative changes, including the more politically progressive 2010 constitution and 2021 Refugees Act, have bolstered the ideological project of providing a "legal identity for all." This has given long-marginalized populations new tools with which to pressure authorities to live up to their rhetorical promises of financial and political inclusion.

From one vantage point, these struggles are the continuation of a century of political and social contestation. Challenging the mythos of technological rupture and digital disruption, historians and anthropologists have rightly argued that digital identity systems are layered atop longstanding bureaucratic procedures and bottlenecks, reproducing the ethno-racialized and extractive logics of colonial and postcolonial rule. These patterns have played out in wideranging geographies, from Haiti and the Dominican Republic to Mauritania. Such historical

¹⁴⁰ Paul N. Edwards. "Infrastructure and Modernity: Force, Time, and Social Organization in the History of Sociotechnical Systems," in *Modernity and Technology*, eds. Thomas J Misa, Philip Brey and Andrew Feenberg (MIT Press, 2003), 191.

¹⁴¹ Eve Hayes De Kalaf, *Legal Identity, Race and Belonging in the Dominican Republic* (Anthem Press, 2021); and Zekeria Ould Ahmed Salem, "'Hands off my citizenship!' Biometrics and its politics in Mauritania," in *Identification and citizenship in Africa: Biometrics, the documentary state and bureaucratic writings of the self,* eds. Séverine Awenengo Dalberto and Richard Banégas, 203-220 (Routledge, 2021).

continuities raise troubling questions for the global digital identity project: Can ostensibly universal digital identity systems be easily divorced from longstanding material and historical struggles over racial hierarchies, electoral contests, and citizenship? Can states that have long excluded certain populations from systems of identification be responsible for implementing SDG 16.9, which aspires towards a legal identity for all?

Attention to these historical backends, however, should not obscure the profound technopolitical changes that digitization attends. Biometric systems and their computational, calculative logics are remaking the relationship between the state and its citizen-residents.

Auditable, de-duplicable databases—which enable rapid, automated, hit/no-hit determinations—are beginning to ossify citizen and refugee determination processes and create enduring, permanent records of individuals' legal status. These developments may expand access and strengthen legal entitlements; but they could just as easily generate new threats of exclusion, including the blocking and deactivation of ID cards, or exacerbate marginality, making "stateless persons where previously there were only undocumented ones." Biometric infrastructures not only enable people to be rapidly profiled and authenticated as citizens; they also create consumers and beneficiaries. The same systems that underpin welfare and cash transfer programs in remote, underserved regions 143 can also be used to create risk profiles of the unbanked 144 and facilitate access to "insurance, banking, and credit," accelerating the spread of mundane forms of data-driven financialization. 146 Citizenship rights, entitlements, and even consumption are

¹⁴² Bronwen Manby as quoted in Laura van Waas, "The right to a legal identity or the right to a legal ID?" *European Network on Statelessness* (blog), 1 May 2015, https://www.statelessness.eu/updates/blog/right-legal-identity-or-right-legal-id.

¹⁴³ Kevin P. Donovan, "Infrastructuring aid: materializing humanitarianism in northern Kenya," *Environment and Planning D: Society and Space* 33:4 (2015): 732-748.

¹⁴⁴ Rob Aitken, "All data is credit data': Constituting the unbanked," *Competition & change* 21:4 (2017): 274-300.

¹⁴⁵ Alan Gelb and Caroline Decker, "Cash at your fingertips: Biometric technology for transfers in developing countries," *Review of Policy Research* 29:1 (2012): 93

¹⁴⁶ See also Deborah James, Clawing Back: Redistribution in Precarious Times (Stanford University Press, 2025).

increasing mediated through information systems, securitized access points, and interpolation within a database that is now a metonym for the nation itself.

With Huduma Namba and Maisha Namba, the Kenyan government has aspired to create a "single source of truth." But the controversies these digital infrastructures have generated have instead revealed multiple, incommensurable kinds of truth and truth claims. National inclusion can now be understood as a constitutionally protected "right;" a heavily policed entitlement limited to "genuine" citizens; a right to legal personhood, anchored in UN conventions; or a datafied, transactional effect of digital platforms. Interpolated through these various logics, Kenyan civil society groups are using data practices and digital infrastructures to create new "rights in the making" and, in the process, are reshaping the techno-political terrain.

¹⁴⁷ Henri Lefebvre, *Writings on Cities: Henri Lefebvre*. Selected, translated and introduced by Eleonore Kofman and Elizabeth Lebas (Blackwell Publishers, 1996), 179; and Jennifer Gabrys, "Data Citizens: How to reinvent rights," in *Data politics: Worlds, Subjects, Rights*, eds. Didier Bigo, Engin Isin, and Evelyn Ruppert (Routledge, 2019), 263.