Kenya's Identity Ecosystem

Caribou Digital

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INTRODUCTION

Executive summary

This report's analysis of Kenya's identification ecosystem provides an overview of the main identification systems used to manage development, and an in-depth exploration of three that are vital to Kenyans' participation in political and economic life[1]. It builds on existing work such as the World Bank's Diagnostic Report (2016) and investigations by international and domestic civil society organisations. However, it goes further by exploring how Kenya's identification systems are connected through the interests of influential actors and institutions, and by assessing the risks and vulnerabilities faced by their users.

Development increasingly requires nuanced understandings of the overlapping, complementary and competing interests of the actors and institutions that maintain, govern and use identification systems. They include state officials, politicians, civil society organisations and companies, and stakeholders such as security services and international organisations. Each shape the accessibility, transparency and accountability of countries' identification ecosystems. And each can be engaged to support reforms or design new systems that increase their inclusivity and potential.

To aid such understandings, the report's sections are designed to be read alongside an online map of Kenya's identification ecosystem. It allows users to see how different elements within it, such as registries, credentials, regulatory authorities and companies, are connected. Clicking on any element will open a profile card that provides more information, including links to references and further reading. For ease of use, the report also contains hyperlinks to discussed sections of Kenya's identification ecosystem map. It can be accessed here.

The report's narrative draws upon research in Kenya between April and June 2019. Interviews were held with stakeholders from state, private and civil society organisations, and focus groups conducted with women and girls that have sought access to identification systems[2]. They contribute to emerging evidence of how such exclusions can add to gender inequalities. The report also draws upon risks and vulnerabilities analyses constructed from the literature on identification for development, privacy and rights, and from Caribou Digital's ongoing work on digital identification.[3] The questions are contained in the annexes for interested readers.

The findings and recommendations are intended to support civil society and development organisations engaging decision makers that are developing, managing and governing Kenya's identification systems. It will also be useful to those that wish to see the politics that underpin its wider identity ecosystems centred in current debates. Because of the diversity of potential users, the report is written in accessible language and without technical jargon.

Findings

Stakeholders' within Kenya's fragmented identification ecosystem view identity systems as tools for development and control. Some champion identification to better provide government services and expand the digital economy; others to monopolise opportunities and address security threats. These sometimes stand in tension.

Ongoing exclusions prevent some marginalised ethnic groups from accessing identity systems that are vital for participating in political and economic life. Women and girls also face unique challenges to accessing identity systems, including application processes that do not account for their needs and exploitative officials.

Kenya's identification dependent private sector companies are intimately connected to the state and a small number of political families. These companies have benefited from a low regulatory environment that puts experimentation and profits ahead of customers' privacy and protections. However,

Kenyans are increasingly discussing and questioning their reliance on identity systems.

Private sector service providers that rely on state issued identities create registers through their customers' data and analytics. Yet, many Kenyans do not fully understand what happens to their data, nor how it may be used to limit their access to future opportunities.

Recent efforts to introduce a new state identification system, known as the Huduma Namba, have been met with confusion and worry, and a civil society back-lash. However, as a result, there have been indications that the state is rethinking its approach and may allow greater public participation in decision making.

Recommendations

The role of the Kenyan security services in identity systems should be challenged by the international community, and specifically development donors. Continued support to state systems should be made dependent on instituting clear and explicit rules of operation in law, increased transparency and legislative safeguards of citizens' rights.

Development organisations could use their political and economic leverage to advocate for an independent authority with powers to conduct periodic audits, offer recommendations, and to sanction state and private sector identification systems. It should also be mandated to enforce data protection and privacy laws that are currently being debated by the government.

To support public trust in Kenya's digital economy, there is an urgent need for legislation which enshrines users' protection and privacy. Development organisations should support Kenyan civil society organisations currently working on strengthening and passing existing stalled draft bills.

Civil society should advocate for Kenya's gender specific policies to include targets for women and girls' access to key state and private sector identity systems. Reforms to realise them should be based on further research into women and girls' experiences with key identification systems.

Civil society organisations should be encouraged to build their technical expertise to have a stake in identification systems design and reform together with state and private sector decision makers. This could be achieved through active government support, partnerships with foreign technology specialists and domestic private sector stakeholders.

More broadly, a renewed international dialogue is needed to establish best practice to avoid the pitfalls of supporting identification systems in countries that have multiple overlaps between the state and private sector actors, opaque security sectors, and histories of human rights abuses.

Glossary

Identity is an indicator of one's relations to others and to institutions. It is something people create, have or can be given. However, identities can always be contested by other people and systems. For this reason, identities must be proven and, in some cases, deemed legitimate to have a purpose beyond the individual.

Identification (ID) is the process through which an identity is proven or legitimated. It allows individuals to gain access to others and institutions, and to claim their rights within wider systems such as associations, markets or states.

Validation is the process through which a credential, such as an ID card, unique identification number or certificate, is proven to exist on a register or database. Often this involves checking that information on the credential matches that on the register.

Authentication is a process for determining that an individual presenting a credential is the person it was issued to, usually by asking them to provide something they know (a secret pin number), something they have (a one-time code received on their phone) or something they are (their fingerprints, iris scans or voice).

Systems are interconnected sets of elements that are coherently organised in a way that achieves something. An identity system may consist of a complete chain from the owner of an identity register, such as a government or company, and the credential(s) they provide, such as cards or numbers, to the laws or practices that govern its use, the authorities that manage it and its users.

Identification ecosystems (IE) consist of the totality of ID systems within a single state. This includes everything from foundational ID systems such as birth and death registers to functional national ID systems such as citizenship cards, social protection and voter enrolment registers. It also includes private sector ID systems such as financial services and credit ratings agencies that provide users with digital IDs. An IE's ID systems may be interconnected, drawing upon one another's data, using the same infrastructure, and subject to the same laws and authorities.

ID risks arise when people cannot or do not access ID systems that are central to obtaining state services, operating in markets, participating in politics and realising their rights. They are often the result of a lack of awareness, poor coverage or infrastructure, mismanagement, corruption and unused potential. Accordingly, ID risks can be a barrier to development.

ID vulnerabilities can be defined as the degree of exposure to risk and uncertainty, and the ability of an individual or community to respond to that, often through consumer choice or by accessing accountability mechanisms within civil society, or among service providers and governance institutions. Vulnerabilities can lead to and entrench risks.

Acronyms

BAKE - Bloggers Association of Kenya

CBA - Commercial Bank of Africa

CBK - Central Bank of Kenya

CSO - Civil society organisation

CIPIT - Centre for Intellectual Property and Information Technology Law

DFID - Department for International Development (UK)

FIPs - OECD Privacy principles within the Protection of Privacy and Transborder Flows of Personal Data

FGD - Focus Group Discussion

GDPR - General Data Protection Regulation

HSNP - Hunger Saftey Net Programme

ID - Identification

ID4D - Identification for Development

IE - Identity Ecosystem

CRVS - Civil registration and vital statistics

IPRS - Integrated Population Registration System

KSh - Kenyan Shillings

KICTANet - Kenya ICT Action Network

KHRC - Kenya Human Rights Commission

KNCHR - Kenya National Commission on Human Rights

KTCIP - Kenya Transparency Communications Infrastructure Project

KYC - Know Your Customer

NEMIS - National Education Information Management System

NHIF- National Hospital Insurance Fund

NGEC - National Gender and Equality Commission

NIIMS - National Integrated Identity Management System

NIS - National Intelligence Service

NSNP - National Safety Net Programme

NSSF - National Social Security Fund

MoI - Ministry of Interior and Coordination of National Government

MoICT - Ministry of Information Communication and Technology

KENYA'S IDENTITY ECOSYSTEM

Kenya's Identity Ecosystem

Figure 1: Kenya's IE

How to read the IE map

The larger an individual map element, the more importance, understood in terms of number of users, budget and influence, the report attributes to it within Kenya's IE. For example, the Ministry of Interior is the largest ministry because it governs departments that issue the most carried state credentials. Whilst Mobile Operators are the largest private sector service due to high SIM card subscription rates.

These are, for the most part, necessarily subjective judgements as accurate data on the number of credential holders or service users, and the budgets of state departments is not available. Moreover, the relationships between all stakeholders cannot be quantitatively measured. The report's narrative delves further into how the decisions were made.

We hope that others will suggest edits, updates and corrections to the map, making it a 'living' and evolving tool[4]. For the full interactive version, visit: bit.ly/kenya-IE-map.

Map legend

- Ministries
- State Departments with Registers
- State Services
- Consolidated State Registers
- Regulatory Authority
- Private Services
- Credentials
- Civil Society Organisations
- International Non-Governmental Organisation
- Political Party

—— Issues credential
—— Validates users' IDs
—— Validates users' IDs & provides information to
—— Provides information to
---- Governs
---- Research & advocacy
---- Supports

Kenya's contemporary IE is split between efforts to use its individual ID systems for development and control. ID systems were first used for the latter by Britain's colonial government. It required black Kenyans above the age of 15 to wear identity documents – called a Kipande – around their necks, with the aim of restricting the movement of labour.

Yet, since independence in 1963, the purposes of Kenya's IE have greatly expanded. Now the state and its international backers argue that ID systems are needed to better deliver services and to support the growing economy. Furthermore, Kenya, as an advocate for the Sustainable Development Goals, has committed itself to target 16.9: the universal provision of a legal identity by 2030.

Kenya's turn towards developmental ID systems is framed by the 2010 Constitution. It was overwhelmingly approved by voters in a referendum that many hoped would address rising levels of inter-communal and terrorist violence and rebalance the country's uneven development. This includes the economic marginalisation of the northern regions and the exclusion of smaller ethnic groups from public politics. Debate around these issues was facilitated by a 'Committee of Experts' that consulted Kenyan civil society during the Constitution's drafting and by political will for change amongst elites. The resulting document committed to vast ranging reforms, including the right to citizenship by descent and naturalisation, transparent governance and the devolution of responsibilities and powers to 47 newly created county governments.

Since 2008, successive governments have broadly subscribed to Kenya's guiding Vision 2030. It seeks to make Kenya a 'newly industrializing, middle-income country providing a high quality of life to all its citizens'. To realise this, they have sought to attract investment and stimulate innovation by providing digital communications infrastructure, tax breaks for key industries and a low regulatory environment. This plan has largely worked, with Kenya enjoying one of the fastest growing economies in Sub-Saharan Africa over the last five years, reaching 5.7 percent in 2018. Furthermore, it has led to almost 93 percent of adult Kenyans adopting mobile banking and 35 percent to borrow money digitally. It has also enabled the state to pursue e-goverment.

These developments have contributed to a proliferation of state and private sector ID systems, many of which issue their own credentials and some that collect biometric data (Figure 1). For Kenyans, especially those in urban areas, it is now common to carry over six credentials to conduct business, interact with the state and participate in politics. Many can be applied for online through state department and company websites, or the e-Citizen platform that aggregates access to a range of government services. Nonetheless, Kenyans in rural and urban areas must still often make long trips to registration centres or take advantage of mobile registration drives, such as those conducted in the run up to the 2017 elections.

Young Kenyans increasingly require birth certificates for school and higher education. Yet, with 88 percent coverage, the national ID card is Kenya's main foundational credential. It is also obligatory for Kenyans over the age of 18 and routinely asked for by state officials and to carry out some private-sector transactions. SIM cards are the next most used form of ID, both as they enable mobile phones and as they are a requirement for accessing Kenya's booming financial technologies sector. In recent years, poor Kenyans, especially those in the arid northern counties, have also been issued with bank account linked ID cards that allow them to receive social pro-tection in the form of cash transfers. Table 1 describes some of the main ID systems Kenyans seek to access.

Table 1: Kenya's major ID systems

Credential / Service	Issuing and Governing Authorities	Coverage	Uses	Connections
National ID Card	National Registration Bureau (NRB) governed by the Ministry of Interior.	88% of Kenyans above 18 years of age.	Foundational credential, required for access to most state services, the right to vote and a SIM card. Also routinely requested by police and security services.	The NRB validates card renewals with the Integrated Population Registration System (IPRS) and provides it with unknown card holders' data.
Birth Certificate	Department of Civil Registration (CRD) governed by the Ministry of Interior.	67% M, 66% F registration rate for children under five.	Foundational credential, required for a passport, inheritance, social protection and, increasingly, education. Also often asked for when applying for a national ID card.	The CRD validates applicants' credentials with the IPRS and provides it with unknown data.
Mobile Operator issued SIM card	The Ministry of Information, Communications and Technology.	106% SIM adoption rate.	SIM cards are required for mobile phones, internet data, access to mobile banking and some digital credit providers.	Mobile operators validate applicants' credentials with the IPRS.
Digital Credit profile	Issued by providers. Governed by The Central Bank of Kenya and the Communications Authority of Kenya.	By 2017, 34.8% of Kenyan adults had borrowed digitally.	Digital, mobile, or application-based micro-credit allows users to borrow small amounts of money, often almost instantly following an automated eligibility vetting and scoring process.	Credit providers validate applicants' credentials with the IPRS and provide credit reference bureaus with defaulters' data.
National Safety Nets Programme Card	Ministry of East African Community, Labour and Social Protection and Ministry of Devolution and ASALs.	Up to 250,000 households.	Access to Kenya's four main cash transfer based social protection programmes and the World Food Programme's planned Sustainable Food Systems Programme.	Beneficiaries' credentials are validated with the IPRS and the programmes share their data with the Kenyan Single Registry System.
National Hospital Insurance Fund Health (NHIF) Card	The Ministry of Health and the National Treasury.	25 million Kenyans are covered.	Required to claim state subsidised healthcare.	The NHIF validates applicants' credentials with the IPRS.
Independent Electoral and Boundaries Commission (IEBC)	Governed by the Professional Secretariat.	19.6 million Kenyans registered to vote in 2017 (47% women).	Registration is required to vote.	The IEBC validates applicants' credentials with the IPRS.
Kenyan Revenue Authority (KRA) Personal Identification Number	Issued by the KRA and governed by The National Treasury.	In 2017, 3.2 million Kenyans filed tax returns.	Required to file income and business tax returns.	The KRA validates tax-payers' credentials with the IPRS.

Since 2009, there have been efforts to link Kenya's multiple ID systems via the Integrated Population Registration System (IPRS) which the government once described as "the common reference and single source of truth for data"[5]. It collates individuals' records via a 14-digit number and it has a limited ability to cross pollinate missing data fields. Ten years later, however, only five of the major ID systems in Kenya's IE share information with the IPRS. Nine other ID systems validate applicants,

Box 1: Women and girls in Kenya's IE

When women and girls are unable to access or use ID systems, it can add to the gender discrimination they face in their everyday lives. For example, women without IDs may struggle to claim state services or they may be prevented from participating in politics. In some contexts, a lack of an ID can increase the risk of early or forced marriage and sex trafficking, and it can hinder women following major life events, such as births, marriages, divorces, illnesses and deaths (Knowles and Koolwal, 2016). Women are often also the primary caregivers for children, meaning that their vulnerabilities can cascade down to dependents (Jeong et al., 2018).

The National Gender and Equality Commission (NGEC) was established by the 2010 Constitution. It is mandated to promote gender equality and freedom from discrimination in accordance with Article 27 of the Constitution. This includes investigating any violations of the principle of equality and freedom from discrimination, and to make recommendations to the concerned institutions. Its current strategic plan aligns with Kenya's Vision 2030 and the President Kenyatta's Big Four development agenda (NGEC, 2019). Yet, there are no targets and ID systems are not mentioned as necessary to achieve these aims.

Under the Ministry of Public Service, Youth and Gender Affairs, there is a Gender Mainstreaming Directorate charged with supporting Kenyan ministries, departments, agencies, counties and the private sector. It has the overall aim of achieving gender equity and equality, with a focus on access to economic opportunities and empowerment in decision-making at the household, community and national level. This is to be done through building state officials' capacities to respond to women's issues, trainings on gender responsive budgeting, and by engendering government programmes. However, information on initiatives related to ID systems could not be found.

FGDs with women and girls of low socio-economic status uncovered a sense that Kenya's IE is in flux. For example, some were anxious that birth certificates were increasingly asked for when enrolling in schools, whilst others were confused about the purpose of the recent drive to register for the Huduma Namba.

Many also argued that the registration processes for vital state issued IDs, such as national ID cards or passports, are not considerate of women's needs. This includes making them wait in long lines to be seen, requiring birth certificates that some don't have, and the rude and exploitative attitude of officials.

"The agents aren't professional. Because I am younger, I can talk back at them when they are rude but for an elderly woman it wouldn't be good at all. Sometimes, agents can also be pushy and because they can't ask for money, they ask for sexual favours. It hasn't happened to me, but I know of others." Esther, 30.

Some also suggested that there was gender bias in obtaining IDs, with men facing an easier process than women, especially unmarried and single mothers.

"As a single mum, I need to get an affidavit to confirm that I am divorced every time I want to do a procedure. This was the case for my son's birth certificate. And you need to pay for the affidavit every time. You need to pay for a father who isn't even there." Zuria, 23.

There was also a general mistrust of procedures, with some providing stories that suggested they could speed up application processes or obtain IDs for those that should be ineligible as long as they are willing to pay. *"It's always been hard for me, for all my credentials – every time they ask me for an affidavit, and I had to go to court to get a death certificate of my dad. Eventually, I have to rely on my contacts – I pay them, and they do the process because it is too complicated."* Tina, 23.

Combined with the lack of concrete policies among state stakeholders, these findings are suggestive of an IE that is beginning to discuss gender equity but has a long way to go.

Fred Mukinda. President Kenyatta launches Integrated Population Registration System. Daily Nation, 11 March, 2015.

users and customers' credentials – usually national ID cards – by querying the IPRS's database, but none can currently authenticate them. Three ID systems have no connection with it at all, meaning their registers are effectively siloed.

For the most part, the state has sought to govern Kenya's IE through the Ministry of Interior and Co-ordination of National Government (MoI), with support from the Ministry of Information Communication and Technology (MoICT). The former is arguably the most powerful ministry in Kenya, with a large annual budget, stewardship of the IPRS and responsibility for realising President Kenyatta's 'Big Four' – manufacturing, affordable housing, universal health coverage and food security – development agenda. The latter spearheaded the construction of an undersea fibre optic cable linking Kenya to the rest of the world in 2007 and is currently leading Kenya's planning to support its digital economy.

The state has also mandated several independent bodies, such as the Communications Authority of Kenya and Information and Communication Technology (ICT) Authority to monitor and regulate its parts of Kenya's IE. The proliferation of authorities can create confusion, with ministries and departments often appearing to have overlapping areas of interest or to be vying for control of ID systems.

In early 2019, the state began registering people for a new consolidated register called the National Integrated Identity Management System (NIIMS) or, in Swahili, the Huduma Namba. It is to be governed by the MoI with support from the MoICT. However, as discussed later, the system's functionality and aims are currently unclear and have been the source of much controversy.

The expansion of Kenya's IE has also compounded old, and given rise to new, issue areas for civil society. For example, the increased usages of the national ID have added to the importance of efforts to ensure that marginalised groups, such as Somalis, Nubians and those of Arab descent, can obtain this vital credential. Many civil society organisations (CSOs) use a mixture of state monitoring, insider advocacy targeted at ID authorities and paralegal

work amongst applicants. Some have also begun to campaign against legislative changes they deem to be exclusionary or ill-thought through, even forming coalitions to take the state to court. These efforts have been supported by a lively media discourse around the purposes of existing and planned ID systems.

Despite this activity, there are recent cases of corruption and political interference in Kenya's IE. They include procurement scandals for ID equipment, the unwarranted disclosure and use of data for political purposes, and the hacking (or alleged hacking) of important systems such as the voter register. Cambridge Analytica, the notorious British consulting firm, was also reported to have shaped the 2017 elections through controversial targeted advertisements that played upon tribal identities.

Such episodes have contributed to current public debates over data privacy and identification. However, knowledge gaps about where the practices, relationships and interests of bureaucrats and politicians presiding over ID systems overlap or collide are common. Less publicly discussed and arguably harder to unpack are the relationships between ID systems, the government and major corporate players in the digital economy. Yet, perhaps most importantly, very little is known about the reach, power and accountability of Kenya's security services.

Although some stakeholders within Kenya's IE are turning its ID systems towards developmental ends, others aim to use them to control populations and political and economic opportunities. Unnuanced views of identification as an unproblematic good must, therefore, be tempered. Foremost, they run up against a fragmented IE that few observers understand in its entirety. Its systems have been manipulated in recent history for personal and political gain, and some population groups remain prone to exclusions and discriminations. Lastly, for all the progress made in 2010, Kenya is still a state with low rule of law indicators and prone to bouts of fragility that could threaten the integrity of its IE or the ID systems within it. The remainder of this report uses Kenya's IE map to delve further into these issues.
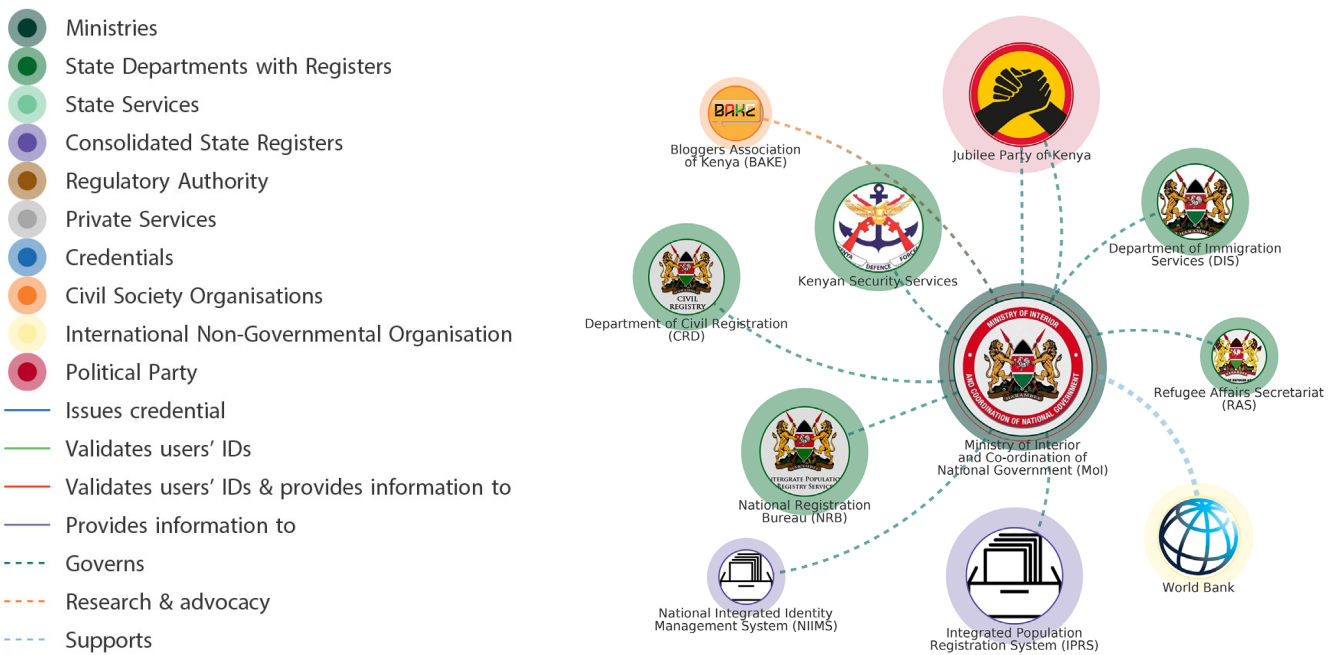
03

THE STATE

The State

Through the MoI the state plays the pivotal role in Kenya's fragmented IE. Its mandate is wide ranging, from growth, national cohesion and security, to the maintenance of a population register and the coordination of government functions. Through four of its departments – the National Registration Bureau (NRB), Department of Civil Registration (CRD), Department of Immigration Services (DIS) and the Refugee Affairs Secretariat (RAS) – the MoI issues nine credentials. It also governs the IPRS and the police. Together, they make the state the largest data controller in Kenya.[6]

Figure 2: The MoI

- Ministries
- State Departments with Registers
- State Services
- Consolidated State Registers
- Regulatory Authority
- Private Services
- Credentials
- Civil Society Organisations
- International Non-Governmental Organisation
- Political Party
- —— Issues credential
- —— Validates users' IDs
- —— Validates users' IDs & provides information to
- —— Provides information to
- - - - Governs
- - - - Research & advocacy
- - - - Supports

For the full interactive version, visit: bit.ly/kenya-IE-MOI

The NRB issues the national ID card discussed later and it processes refugees' and foreign nationals' applications for identity cards. The CRD issues birth, death and marriage certificates, and shares data with the Kenyan National Bureau of Statistics (KNBS) for its periodic reports. RAS works alongside the United Nations High Commissioner for Refugees (UNHCR) to conduct refugee status determination investigations, and to provide them with travel documents and work permits. Whilst DIS issues passports, including the new regional East African Community Passport.

DIS also works with RAS to issue 'alien cards' to refugees and asylum seekers. They are needed for leave to remain, legal identity, dealing with police, accessing essential services and charities, obtaining resettlement permits and registering births. In recent years, however, the issuing of alien cards has become a politically sensitive issue connected to Kenya's rising ethnic Somalian population and its supposed infiltration by Islamic terrorists. This is perhaps why the current Director of DIS was formerly the Director of Counter Terrorism Coordination in Kenya's National Intelligence Service (NIS). It may also explain why, as of October 2017, RAS has not issued or renewed alien cards.

Dr. Fred O. Matiangi took charge of the MoI in July 2017. He has built a tough reputation, directing the police to clash with demonstrators and shutting of television broadcasts during the 2017 elections. In 2018, he also outlawed the National Resistance Movement (NRM), an arm of the opposition, placing it alongside terrorist groups like Al-Shabaab and Al-Qaeda. Matiangi oversees many of Kenya's

6   Although it is impossible to robustly compare ID systems with the available data, the main Kenyan telecom company, Safaricom, is likely to be close behind.

development programmes, including President Kenyatta's legacy Big Four Agenda. Matiangi's previous roles were at the MoICT and Ministry of Education, as a liaison between the Kenyan parliament and foreign donor organisations, and within civil society organisations working on advocacy and governance programmes.

The MoICT is the next most important ministry in Kenya's IE. It develops and manages information, broadcasting and communication policies. In 2018 it released 'The Digital Economy Blueprint' which provides a framework to improve Kenya's and Africa's ability to leapfrog old economic growth models through five pillars: Digital Government, Digital Business, Infrastructure, Innovation-Driven Entrepreneurship, and Digital Skills and Values (MoICT, 2019). Digital identification, including the Huduma Namba discussed later, is one of the Blueprint's cross cutting themes. According to

the authors, it will increase trust in the government, whilst bolstering holders' privacy and security. The Blueprint also points to India, Estonia and Singapore as countries with good models of centralised digital identity and governance.

Some commentators have pointed out that past MoICT documents, such as the 2012 Broadband Strategy, the 2006 ICT Policy and the 2014-2017 ICT Masterplan, have contained similar ideas to the Blueprint that have not been realised. They argue that this is partly because the sharing of physical and digital infrastructure across ministries, departments and counties threatens rent-seeking opportunities for bureaucrats and politicians used to administering development projects, awarding large contracts and overseeing license reviews.[7] And it is partly because the ambitions may outweigh the state's capacities. Others argue that The Blueprint is not clear on how its proposed Digital Economy Secretariat will

Box 2: Kenya's politics

President Kenyatta has been in office since 2013. He is the leader of the Jubilee Party of Kenya, a coalition of parties formed in 2016 to compete in 2017's elections. Raila Odinga, a former Prime Minister, is the leader of the opposition party, the National Super Alliance (NASA), formed in 2017.

Media and academic commentators have long suggested that Kenyan politics and, by extension, development operates along ethnic lines (Ajulu, 2002; Yieke Felicia, 2010). Kenya is home to more than 40 tribes and many small nomadic or stateless groups. According to 2009's census, the five largest – the Kikuyu, Luhya, Kalenjin, Luo and Kamba – make up nearly 70 percent of the population. Kenyatta is from the Kikuyu, the largest of the groups. Whilst Odinga comes from the Luo, Kenya's fourth-largest group. Accordingly, he made up for his numerical inferiority in 2017 with running mates from the Luhya and Kamba groups.

Politicians from both major parties have been accused of interfering with the management of Kenya's elections. For example, voter registration data collected by the IEBC for the 2017 elections was used by them to target political messaging (CIPIT, 2018). An IEBC commissioner also fled Kenya after alleged threats against herself, including from her fellow commissioners. Many of the electronic voting machines purchased by the IEBC failed on the day of the vote and the NASA accused the firm that supplied them, IDEMIA (then known as OT Morpho), of manipulating the votes.

In March 2018, a photographed 'handshake' between Kenyatta and Odinga reportedly signalled that they had put aside old rivalries to cooperate in the national interest. This has led to public endorsements of several development initiatives, including the Huduma Namba, with leaders of both parties speaking in favour of the ID system. However, civil society groups have argued that it has also closed the space for oppositional politics and, partly, legitimised the state's crackdown on vocal groups and the media in the run-up to the 2017 elections.

Nonetheless, 2018 saw the Jubilee party rocked by several high-profile corruption scandals. Amounting to billions of missing KSh, they include those over the National Youth Service, the National Cereals and Produce Board, the Kenya Pipeline Company, and Kenya Railways. Close to 150 civil servants including principal secretaries and heads of parastatals have been arrested and many prosecutions are ongoing. Kenyan media has closely followed these stories increasing the pressure on the administration to be seen to be doing something.

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7   John Walubengo. Digital Economy Blueprint – can we walk the talk? Daily Nation. 4 June, 2019.

coordinate the country's digital future or overcome these problems.

The Central Bank of Kenya (CBK) is the main regulator of finance related private sector ID systems. Operated as a state-owned company, it is mandated to issue currencies and formulate monetary policy to achieve and maintain price stability. It also provides oversight of payment, clearing and settlement systems. This CBK's stewardship of a relaxed regulatory environment, specifically adopting a 'test and learn' approach to mobile banking innovations, has been credited as a factor behind Kenya's embrace of fin-tech. It is in the process of replacing Kenya's currency with new banknotes designed to curb illicit financial flows, money laundering and terrorism financing.

In recent years, the CBK has also concentrated on regulating the digital sector. For example, in 2017 it published a Guidance Note on identifying and mitigating cybersecurity risks.[8] It directs institutions licensed by the Bank to develop and implement a comprehensive set of strategies to mitigate them. The CBK has also drafted regulations that would require banks and other loan providers to notify defaulting customers if they are about to be reported to credit reference bureaus (CRBs) for blacklisting.

Little is known about Kenya's security services' interests in, and access to, ID systems. However, in response to increasing attacks by Islamic groups, securing Kenya's borders and identifying threats are a priority. This has manifested itself in requirements that all Kenyans carry the national ID, persistent efforts to dissuade refugees from settling and periodic round-ups of those deemed to be potential terrorists. It is also known that the security services have access to the Automated Fingerprint Identification System (AFIS) maintained by NRB and are involved in investigating some applications

for national IDs that are flagged as suspicious. As discussed further later, they also take part in some extra vetting processes for those from ethnic groups considered to be sympathetic to terrorists.

In recent years, domestic and international human rights groups have highlighted the role of the police's General Services Unit (GSU), the Anti-Terrorism Police Unit (ATPU) and Recce Company in human rights abuses and disappearances. The majority of alleged cases have not been investigated and those that expose them face significant personal threat. Privacy International (2017) has also documented the NIS's interception of digital communications, with the service said to have operatives inside Safaricom's offices with direct access to identification information (even without a High Court warrant). There are fears that the proposed data protection laws will not stop such practices and, instead, will contain clauses allowing the security services to override any new rights citizens are granted with minimal oversight.

The Kenyan state and politicians preside over a highly connected and increasingly digitally literate population. It also retains significant control over Kenya's IE through the provision of legal identity, and through defining which credentials are required in order to access private sector services, such as SIM cards and financial technology services. However, Kenya's IE arguably remains held back by the overlapping mandates of its governing authorities and powerful incentives for bureaucrats and politicians to compete over projects and to keep data in silos. It is also subject to the needs of untransparent security services faced with a growing threat that some wish to address through technology, intrusions into Kenya's IE and laws that override citizens' rights.

8   Jadzia Pierce. Central Bank of Kenya Issues Guidance Note on Cybersecurity, Covington, 22 August, 2017.
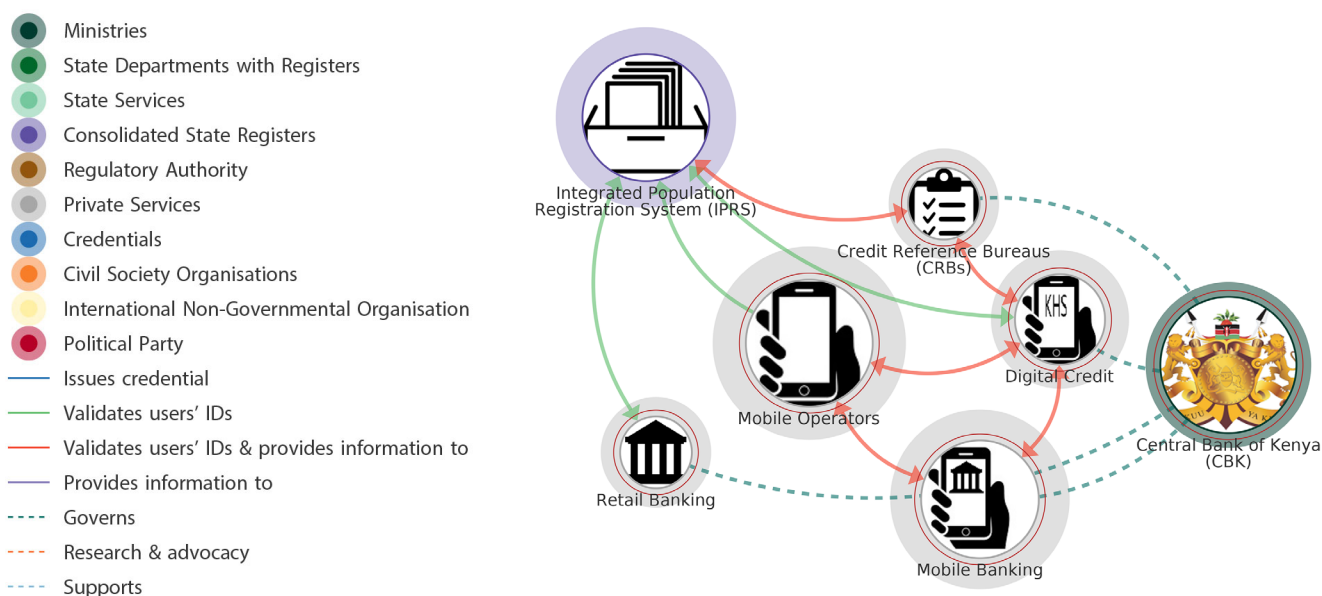
THE PRIVATE SECTOR

The Private Sector

Kenya's private sector and state ID systems have an increasingly symbiotic relationship. The private sector relies on the state for core business functions, such as verifying national IDs to accord with Know Your Customer (KYC) and Anti-Money Laundering (AML) best practices. Whilst the latter sets regulations that govern who can provide which services, creates an enabling environment for innovation and profits, and mitigates risks. The private sector is dependent on the state to both determine which services require verification against state issued credentials, and to verify those credentials. This gives the state great power over the private sector, and through determining credential requirements, who can be brought from the informal to the formal economy.

Figure 3: Identity dependent products

Legend:
- ● Ministries
- ● State Departments with Registers
- ● State Services
- ● Consolidated State Registers
- ● Regulatory Authority
- ● Private Services
- ● Credentials
- ● Civil Society Organisations
- ● International Non-Governmental Organisation
- ● Political Party
- —— Issues credential
- —— Validates users' IDs
- —— Validates users' IDs & provides information to
- —— Provides information to
- ---- Governs
- ---- Research & advocacy
- ---- Supports

Diagram nodes: Integrated Population Registration System (IPRS), Credit Reference Bureaus (CRBs), KHS Digital Credit, Central Bank of Kenya (CBK), Mobile Operators, Retail Banking, Mobile Banking

For the full interactive version, visit: bit.ly/kenya-IE-IDP.

Kenya's embrace of mobile phones is emblematic of this state-private sector dependence. There were 49.5 million mobile phone subscriptions in Kenya by the end of 2018, translating to a SIM card adoption rate of 106.2 percent, with an estimated 30 percent of subscribers owning more than one card.[9] Accordingly, SIM cards have come to serve as a de facto digital identity for other services as registering for one requires providing a state issued identification and proof of address. They are also increasingly used for KYC and anti-money laundering checks.

Yet, it is mobile banking, specifically M-Pesa, that has been credited with decreasing poverty and helping to bring women into the economy. Owned by Safaricom, it enables 21 million Kenyans to pay bills, access credit and send remittances. The idea for M-Pesa came through observations of people sending pre-paid airtime as a form of money transfer. By 2019, it was reported that M-Pesa accounts for 6.5 percent of Kenya's GDP.[10] Research has also claimed that it has improved the economic lives of poor women and of members of female-headed households by facilitating the 'more efficient allocation of labor, savings, and risk' [sic] (Tavneet and Jack, 2016).

Alongside the relaxed regulatory environment set by the CBK, M-Pesa is said to have succeeded because of three main factors: (i) by creating awareness and building trust through branding; (ii) building an

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9   Fredrick Obura. Multiple sim cards fuel number of mobile phone subscribers in Kenya. Standard Digital. 1 0 July, 2019.

10   Miriam Wangui. Safaricom contributes 6.5% to Kenya's GDP - Kenyan Wall Street, 6 May, 2019.

extensive channel of retail agents offering cash in / cash out services; and (iii) a pricing and agent commission structure that focuses on key drivers of customers' willingness to pay and incentivised early adoption (Mas and Ng'weno, 2010). Together, they have enabled Safaricom to attract Kenyans away from traditional physical money transfer services (hawala) and onto digital platforms that require identification.

To deliver M-Pesa and related products, Safaricom partners with the Commercial Bank of Africa (CBA) and with KCB Bank Kenya. The CBA is owned by a consortium that includes President Kenyatta, his brother Muhoho and former First Lady Mama Ngina Kenyatta. Together they control 24.91 percent of CBA. In 2019, it was reported that CBA and NIC Bank Kenya Plc would merge, resulting in a Kenyatta ownership of 8.5 billion KSh, or 13.2 percent of the new company.[11] This means that the state, as a shareholder, and some of Kenya's wealthiest families both benefit from Safaricom's profits and are incentivised to enable its continued dominance (accounting for 92.02 percent of all mobile money transactions in the last quarter of 2018).

Supposedly developmental services such as M-Pesa have not been without critics (Van Hove and Dubus, 2019; Bateman et al., 2019; Meagher, 2018). They have argued that mobile money platforms effectively cannibalise predatory informal labour markets, are not as inclusive of the undocumented and women as hoped, do not promote saving and ignore the social cost of Kenya's rise in personal indebtedness. At the same time, partly foreign ownership of companies such as Safaricom – the UK's Vodafone has a 40 percent shareholding and the Kenyan state

35 percent – have been described as a new form of post-colonial resource extraction that allows outsiders to 'digitally mine' a percentage of Kenyan's online payments.

In recent years, Kenya has seen a rise in the provision of digital credit by both established mobile money providers and a host of new entrants. There are now more than 20 companies providing digital credit to Kenya's banked and unbanked population, often within a few clicks. They include new lenders such as Tala, Branch and OKash who use machine learning to provide credit based on risk profiles created through assessments of digital behaviours. In addition, some also collect borrowers' social media activity data and contact lists to enrich their models.

A survey from mid-2017 found that 34.8 percent of Kenyan adults had borrowed digitally (Gubbins and Totolo, 2017). Despite the newer lenders, however, three-quarters obtained loans through Safaricom's M-Shwari service. It approves credit up to 100,000 KSh based on the company's own mobile banking and phone data which its smaller competitors do not have access to. It also provides incrementally greater amounts to customers that also verify their national IDs against the state's IPRS and submit physical copies to Safaricom centres.

M-Shwari has been described as monopoly power 'because Safaricom can control its risk exposure by relying on the data it owns about users' purchases of airtime and their relationships with other users' (Breckenridge, 2019). Furthermore, M-Shwari avoids the 4 percent cap on interest which the CBK imposes on formal lenders by arguing that its

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11   Victor Juma. The top shareholders in NIC, CBA banks merger. Business Daily, 12 February, 2019.

7.5 percent monthly fee is an administrative charge. Safaricom, the CBA and Kenya's next newest ID system, NIIMS, have also been recently linked by an unconfirmed plan to create and monopolise a new digital credit market for small and medium enterprises.[12] Should it come to pass, both the state and Kenyatta family would once again benefit.

The rise in digital credit provision has been criticised for 'saddling borrowers with high interest rates and leaving regulators scrambling to keep up'.[13] A survey from 2017 found that 74.5 percent of Kenyan mobile credit borrowers have between 2-6 mobile loans at any given time, and that almost half had defaulted on a loan repayment (Gubbins and Totolo, 2017). By law unpaid loans must be reported Kenya's CRBs after 120 days, with defaulters joining the IPRS' blacklist. As a result, more than 2.7 million Kenyans are currently listed, with 14 percent for amounts of less than 200 KSh, barring them from borrowing elsewhere and rendering them vulnerable to aggressive debt collectors.

In May 2018, the Finance Ministry published a draft bill for review and comment which proposed licensing digital lenders and capping rates under a new Financial Markets Conduct Authority. These moves have been partly motivated by fears around the handling of data and privacy risks, particularly by smaller credit providers such as Tala, Branch and OKash who have deep access to individuals' personal data records. Attesting to the dangers, there are reports that some of these digital credit providers call borrowers' mobile phone contacts to pressure them for repayments.[14]

International companies have supplied the hardware, software and technical know-how behind many of Kenya's ID systems. For example, a Ukrainian company, EDAPS, set up the IPRS in 2012, and the French firm IDEMIA (previously Safran Morpho) maintains the national IDs register and supplied the biometric equipment used by the IEBC. A report by the Office of the Auditor General (2014) provides a critical assessment of the procurement process for the latter. It was opaque from the start and lacked a clear decision making framework (Gelb and Diofasi, 2016). As a result, IDEMIA was recently "banned" from operating in Kenya by Parliament. Prior to this ruling, however, it was awarded the rumoured 6 billion KSh tender for the Huduma Namba registration. It is therefore likely that IDEMIA will maintain a presence in Kenya despite the ban.

Robust, reliable ID systems are important for Kenya's private sector to build innovative services and products. Indeed, they have undoubtedly powered Kenya's rise to become Africa's 'Silicon Savannah'. At times, however, the pursuit of growth has meant the digital sector has leaned a little too much towards Silicon Valley's ethos of 'moving fast and breaking things' – particularly around privacy and data protection. Such mis-steps occur against the backdrop of vested interests and a limited regulatory framework that threatens to undermine trust in the developmental role of Kenya's private sector. Nonetheless, the sector remains dependent on state issued ID credentials for both service provision and regulation, which also determines who the private sector can offer services to.

12   David Ndii. Crony Capitalism and State Capture 2: Documents Reveal the Kenyatta Family's Plans to Take. Elephant. 2 April, 2019.

13   Maggie Fick. Kenya's Central Bank Governor Calls for Regulation of Fintech Lenders. Reuters, 29 May, 2018.

14   Frankline Sunday and Macharia Kamau. How Kenyans give up privacy for costly mobile loans, The Standard, 22 January, 2019.

05

THE LEGAL ENVIRONMENT

The Legal Environment

The Constitution of Kenya 2010 is the supreme law of the land, and ultimately defines the legal framework for Kenya's IE. Under the Constitution, citizenship by birth is granted through descent and can be passed to children via the mother or father. Citizenship can also be acquired through marriage and through prolonged residency.[15] Dual citizenship is allowed. Citizens are entitled to state-issued ID such as passports and other forms of identification.

A first subordinate tier of laws provides for foundational IDs: the Registration of Persons Act (1949), the Births and Deaths Registration Act (1928), the Kenya Citizenship and Immigration Act (2011), and, specifically for refugees, the Refugees Act (2006). These laws are largely implemented by the MoI, as supported by the MoICT, meaning that the cabinet secretaries for these two ministries have disproportionately large influence in legal matters concerning identity.

A further subordinate tier of laws governs specific services and obligations, such as the National Hospital Insurance Fund Act (1998), the National Social Security Fund Act (2013), the Kenya Revenue Authority Act (1995), and the Independent Electoral and Boundaries Commission Act (2011). Credentials are issued by the various entities implementing these acts and the programmes that they create.

A final tier of laws provides systems for aggregating ID systems. Specifically, the Kenya Citizens and Foreign Nationals Management Service Act (2011) enables the IPRS, and section 9A of the Registration of Persons Act (1949) established NIIMS (also known as the Huduma Namba). Both the IPRS and NIIMS are intended to aggregate information from various sources and to allow, among other things, for verification of identity documents. Although the scope of data was reduced by the courts, the latter collects biometric data (fingerprints and facial recognition data), suggesting it may also aim to authenticate credentials.

Kenya's identity related legal instruments are currently under unusually high levels of scrutiny due to the ongoing and contentious implementation of NIIMS (discussed later), as well as the global debate on ID systems. Civil society is split, with some organisations pushing strongly for ID systems that will fairly, accurately, and apolitically count all people living in the country, while other organisations are calling for a halt to the implementation of ID systems that violate human rights such as privacy. Still other organisations are critical of the allocation of resources for systems that are duplicative of existing structures or are likely to result in "white elephant" systems.

CSOs and research organisations working on issues relevant to ID legislation from within Kenya's IE include the Kenya ICT Action Network (KICTANet), Amnesty International, Privacy International, and the Centre for Intellectual Property and Information Technology Law (CIPIT). Some, such as the Kenya Human Rights Commission (KHRC) in the area of identity and the Katiba Institute in other general areas of constitutional law, are very active in "legislation watching", tracking the implementation of laws (see Table 2 for examples of their work) and public litigation. Several CSOs, including the Kenya National Commission on Human Rights (KNCHR) and Bloggers Association of Kenya (BAKE) have also used public litigation as an effective weapon against hastility passed identity and privacy related legislation. As a result, a Public Participation Bill was introduced in Parliament in 2018, with the goal of standardising the public participation requirements in the lawmaking process.

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15   The Citizenship and Immigration Act was amended in 2017 such that a prerequisite for obtaining citizenship by marriage is to acquire residence status. This requirement goes well beyond Art. 15(1) of the Constitution of Kenya 2010, which makes no mention of a residency requirement.

Table 2: The implementation of identification legislation

Legislation Title	Key Provisions	Implementation
Registration of Persons Act (1949)	This Act creates the office of the Principal Registrar, and directs the Principal Registrar to create and maintain a registry of all citizens of Kenya who have attained the age of eighteen years. The Act states that all Kenyan citizens are entitled to obtain a national ID, and the national ID is by far the most widely used form of government identification in the country.	As discussed in detail later, some ethnic groups have experienced systematic difficulties in obtaining the national ID. Furthermore, in a survey of Kenyan households, applications for or making alterations to a national ID card was cited as the leading service for which bribes were demanded (RTD, 2017).
Births and Deaths Registration Act (1928)	Creates the Principal Registrar of Births and Deaths. Provides the requirement and the procedures for registering births and deaths. The Principal Registrar may appoint additional registrars in any area. Requires the registrar(s) to keep records of births and deaths.	67% of male and 66% of female children under five are registered for birth certificates (KNBS, 2014). Although this figure is 79% for urban and 61% rural children. However, this rate may have gone down, as recent newspaper reports say less than half of newborn children are registered. From 2012, under the MOVE-IT project, community health workers piloted reporting geo-coded births to chiefs using phones. More recently, state officials have conducted mobile registrations with Plan International.
Kenya Citizenship and Immigration Act (2011)	Provides the requirements for citizenship by birth, by marriage, and by lawful residence. It also provides provisions for stateless persons, migrants, and their descendants, and guidelines on issuing passports, visas and permanent residency.	There has been a backlash against the rules surrounding a 'recommender' as a necessary part of the application process for passports, particularly the stipulation that they should be either a lawyer, a religious leader, a doctor, a banker, or a civil servant. Kenyans have been given until some point in 2020 to replace their old passports with e-passports. The new passports bear the words 'East African Community' alongside 'Kenya' to support drives for regional integration.
Refugees Act (2006)	Defines a 'refugee' and the rights duties for refugees. Creates the Commissioner for Refugee Affairs and the Refugee Appeal Board.	As of October 2017, it does not appear that RAS has issued or renewed 'alien cards', but instead has been issuing waiting documents to refugees who are eligible for the cards. A report suggests that the issuing of alien cards to refugees is frequently put on hold without justification and that there is little information on how to renew cards that expire after five years (IHRC, 2017).

The intense scrutiny over identification, and particularly the data that is captured by ID systems, is occurring in the context of repeated efforts by CSOs and politicians to normalise Kenya's data protection framework. After numerous failed attempts at passing data protection legislation, a new data protection bill was once again introduced for Parliamentary debate in 2018. The bill was in the parliamentary process when a second, separate, draft data protection bill was created by a separate government entity. The two bills have been reconciled and the combined bill – the Data Protection Bill 2019 – is continuing through the lawmaking process.

The cautiously praised data protection bill clearly borrows from European Union's General Data Protection Regulations.[16] However, based on historical patterns and the current security situation, as well as the fact that the government is one of the largest controllers of personal data in Kenya, there is speculation that the government is not actually interested in passing data protection legislation. Similarly, there is a likelihood that any Act ultimately passed will contain substantial carve-outs exempting state agencies (particularly security agencies) from its provisions.[17]

The lack of a working data protection framework is notable, and has been cited by many CSOs as a fundamental challenge to the implementation of any new ID system or overhaul of any existing system. Without a data protection authority of any kind, individuals suffering from a data protection issue (e.g. data theft or misuse, etc.) are not sure how to seek redress. A Data Commissioner is part of the Data Protection Bill 2019 although the independence and power of that position is questionable. It has been suggested that Kenya should follow the model of some West African countries, which place substantial oversight authority into an independent data protection authority. For example, in Senegal, proposed government projects that may have a substantial data protection issue are required to seek regulatory review and approval by the data protection authority prior to implementation.[18]

The various threats posed by unsecure and overreaching ID systems are not currently taken seriously by many Kenyan lawmakers. Instead, most support the quick implementation of new ID systems in part because of the data they provide – data that can be used to improve security, surveillance and revenue collection. A proper legal environment, with stringent protection and privacy laws, appears to be of less interest and, perhaps, is purposefully avoided. CSOs are working on these issues, but they rarely speak with one voice. Ultimately, however, these goals will not be realised until the general population takes more of an interest in ID systems and the legislation that governs them.

Box 3: Privacy and personal information

Women participating in the FGDs appeared to trust the national ID system's request for data the most. However, there was much scepticism about the data asked for by the newly established Huduma Namba. For most, this was due to the government's lack of transparency regarding the objective of the credential and its repeated threats to cut services for those that do not register.

"There is a lack of clarity on exactly what they are doing with the data they collect for the Huduma. I don't think it is a good idea. Imagine, you have all your data in one place, your birth certificate, your NID but also your driving licence, your bank statements, everything. If you are hacked, it's the end!" Agnes, 24.

"I registered myself but haven't registered my children. I am waiting to see what this is all about." Roselyn, 45.

Other respondents were less concerned about the data requests of systems such as the Huduma and thought it would benefit Kenya's security:

'"The Huduma Namba is to track thieves and terrorists. I don't mind them having information about me and my children." Gloria, 38.

Overall, none of the women brought up legislative issues or discussed their concerns in terms of their rights.

16   Alice Munyua. Kenya Considers Protection of Privacy and Personal Data. Moz://a. 2 January, 2019.

17   Mercy Muendo. Kenya plans to place public security above data privacy. That's a bad idea. The Conversation. 1 2 February, 2019.

18   https://iclg.com/practice-areas/data-protection-laws-and-regulations/senegal
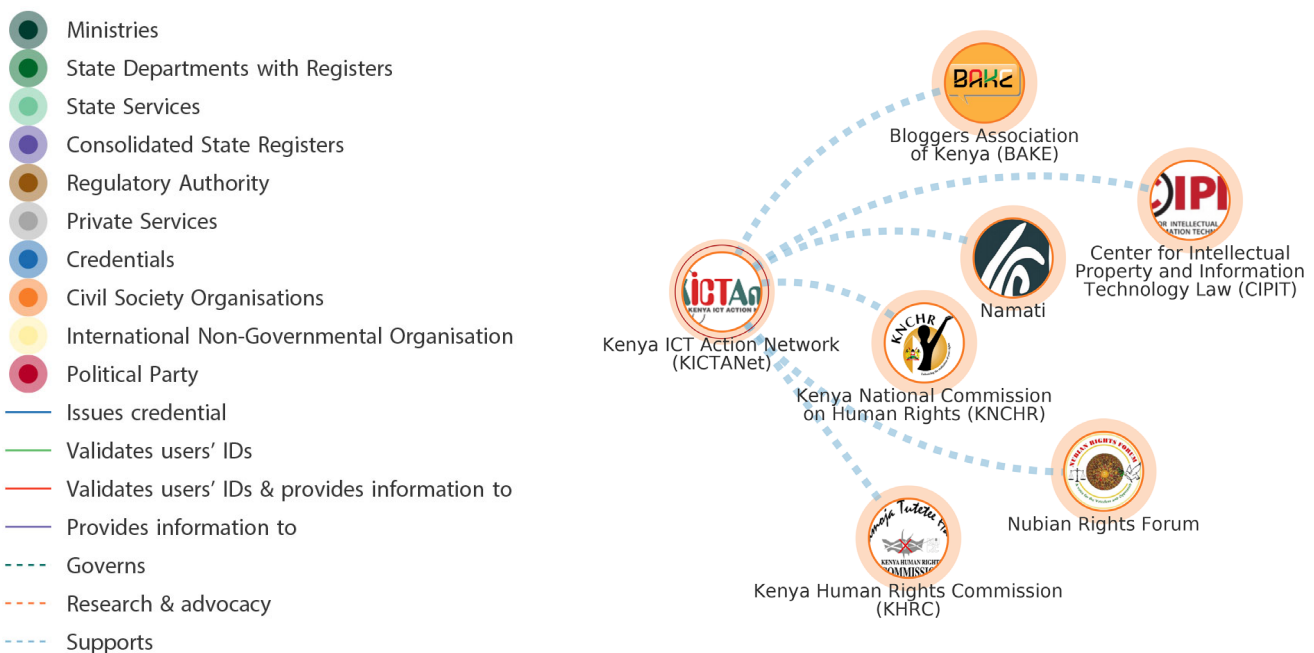
06

CIVIL SOCIETY

Civil Society

Kenyan civil society's history is one of advances, struggles to maintain its freedoms and the closing of space. For example, it played a leading public role in the run-up to the 2010 Constitution, often shaping debates and providing opinions to consultative bodies. Furthermore, it has also recently embraced digital activism as a way of discussing pressing issues

and organising mobilisations offline (Nyabola, 2018). However, those looking into recent human rights abuses have been harassed and some activists found dead. Whilst in the run up to the 2017 elections some media outlets were shut down by the state and journalists were arrested.

Figure 4: Kenyan CSOs[19]

- Ministries
- State Departments with Registers
- State Services
- Consolidated State Registers
- Regulatory Authority
- Private Services
- Credentials
- Civil Society Organisations
- International Non-Governmental Organisation
- Political Party
- —— Issues credential
- —— Validates users' IDs
- —— Validates users' IDs & provides information to
- —— Provides information to
- ---- Governs
- ---- Research & advocacy
- ---- Supports

For the full interactive version, visit: bit.ly/kenya-IE-CSO.

In the 2000s, some civil society organisations began working on issues directly related to ID. For example, the KNHCR conducted investigations into the issuing of national ID cards. As discussed in detail later, it found discriminatory practices towards some ethnic groups, corruption among identity authorities and the duplication of roles across government departments. They were later joined by organisations such as Namati and the Nubian Rights Forum that have used a mixture of civic education and paralegals to help marginalised communities negotiate difficult ID application processes. The KHRC has continued this research tradition with recent investigations into the proposed Huduma Namba.

Domestic and international CSOs interested in identity issues formed the Coalition on Nationality, Citizenship and Statelessness Empowerment (CONCISE) network in 2016. It meets to discuss developments in Kenya's IE and strategise advocacy efforts. For example, it has presented its recommendations on the Registration of Persons Bill to the government, and held worKShops on citizenship, rights and empowerment. Similarly, the KICTANet has operated as a listserv for 10 years that has seen 30,500 messages exchanged in 8,000 different discussion threads related to ICT issues, including privacy and identity. Platforms such as these have been important for the recent decision of three CSOs to jointly take the state to court for its poor

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19   There are some CSOs left out of the map and the analysis for reasons of importance, space and aesthetics.

roll-out of the Huduma Namba registration.

Kenya's media has also awoken to identity issues. Following reporting on IEBC's poor handling of data collection and vote processing in the run up to 2017's elections, it has focussed on NIIMS.[20] Criticism of the pilot registration phase was wide, with outlets highlighting the government's mixed messaging and the plight of rural communities, particularly northern nomadics, unaware of the new ID. As discussed later, the tendering process for the system's technology was also been declared un-transparent and rumoured links to Mastercard debated. Even church leaders' claim that the Namba is the mark of the devil elicited a government response after the media picked it up.

Yet, remarks from those interviewed for this report suggest that CSOs often feel they have few direct channels with state officials in charge of ID systems. Instead, they argue that the private sector's lobbyists enjoy access to the corridors of power. An ex-state official suggested that part of the problem is Kenyan civil society's reactive nature and its lack of technical knowledge. This means that representatives often don't turn up to consultations until something goes wrong and, when they do, they merely criticise rather than offering ministers solutions. In this regard, it is perhaps encouraging that there are increasingly fruitful collaborations between established CSOs and more specialist organisations, such as CIPIT at Strathmore University and Privacy International, that touch upon identity issues.

Kenyan civil society's ability to monitor, and contribute to, issues related to Kenya's IE are largely shaped by its relationship with the state. This has often meant that it has had to seize critical junctures and then shift to a more defensive posture to safeguard its gains. Many contemporary organisations also operate with the very real threat of closure or violence, especially when the issues they focus on overlap with security concerns. Nonetheless, there are strong indications that they and the media are alert to the importance of identity, especially as seen through the lens of privacy and corruption. Their ongoing challenge is to proactively contribute to debates, to form relationships with power holders and to stay abreast of the technologies shaping Kenya's IE.

Box 4: The international community

Several large international development organisations influence and work upon Kenya's IE. For example, through the Kenya Transparency Communications Infrastructure (KTCIP) project the World Bank has worked since 2007 on improving the IPRS and e-government services. In May 2019, the Bank also approved a $750 million loan to Kenya to support its Big Four Agenda. It will help with upgrading and further digitisatising the national ID. However, it is not known whether this includes the new Huduma Namba. Through the National Safety Net Programme (NSNP), the Bank also supports several cash transfer programmes with their own beneficiary registers that have ambitions to further integrate themselves with Kenya's main state ID systems.

The Bank's global ID4D programme produces research on, and offers advice to, countries aiming to use identification systems to support development. In its 2017 Diagnostic Report for Kenya it recommended using proposals in the Draft National Registration and Identification Bill 2012 to create a central provider of identity services such as the Registro Nacional de Identificación y Estado Civil in Peru or National Database and Registration Authority in Pakistan (WB, 2017). It also offered comments on the draft Data Protection Bill 2012 and the draft National Registration and Identification Bill 2012.

As a former British colony, the United Kingdom has had a long presence in Kenya. In the early 2000s, the UK's Department for International Development (DFID) provided money for a prototype mobile banking service that would become M-Pesa. It also brokered the relationships that saw Vodafone roll it out in Kenya. Since 2013, DFID has contributed to three phases of the Hunger Saftey Net Programme (HSNP) and is currently committed to spend £74,450,000 on it between 2019 and 2024. In the run-up to the elections it also helped the IEBC's registration drives.

More recently, through the 'Partnerships for Development', a DFID employee has been seconded to the KNBS to offer technical support. Others have begun working with the Kenyan Revenue Authority (KRA) to build its capacity to collect taxes and identify corruption. DFID also continues to fund Namati's work with paralegals. Nonetheless, unlike the World Bank, DFID does not see itself as engaged in advocacy around the shape Kenya's IE should take.

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20   George Njuguna and Shem Ochuodho. Mradi Bora or Bora Mradi? A professional view on NIIMS. The Star. 3 April, 2019.

DEVELOPMENTAL ID SYSTEMS

Developmental ID Systems

The report now explores three Kenyan ID systems in greater depth: the national ID, the planned Huduma Namba and digital credit. The first is a state controlled system that provides the foundational credential for access to most state and identity dependent private sector services. The second is a planned state ID system that has been touted by politicians as key to the state's future ability to improve service delivery and to support Kenya's growing digital economy. The last is a private sector product that is increasingly used by Kenyans to manage their daily financial lives, whilst also creating new digital profiles. Accordingly, they are important yardsticks for those wishing to understand how Kenya's IE is interconnected, and for how the risks and vulnerabilities in its IE manifest themselves at the level of ID systems' users.
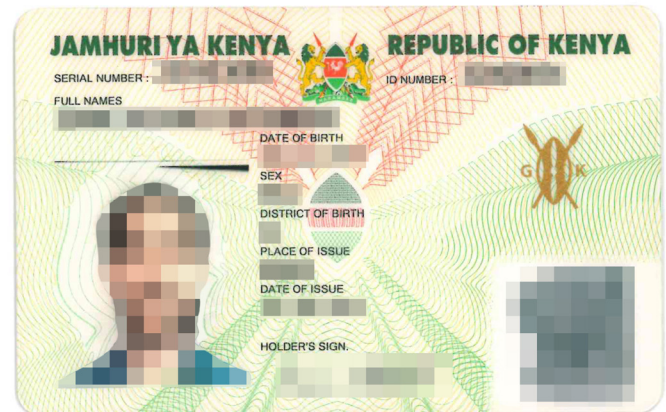
The National ID

Since independence, Kenya has issued three generations of national ID cards. The first in 1980 was a paper card that coincided with new laws requiring women to register for identification. The second, in 1995, was a smaller, laminated credit card sized version of the first. A large number of second-generation ID cards are still in use. The third is the still issued and widely used plastic national ID card.

The national ID serves as the foundational credential for most state and private sector services that require users to verify their Kenyan citizenship. This includes applying for higher education, social safety net programmes, passports, a SIM card, banking services, the voting roll, and buying or registering land. The card is also routinely requested by the security services, required to travel in some areas of the country and to enter government buildings. The World Bank's (2017) calculations estimate the card has a national coverage in the range of 88 percent.

Upon reaching the age of 18, it is compulsory for Kenyans to obtain national IDs through the NRB's network of more than 600 registration centres or in offices located in countries with large diasporas. Most must submit copies of their parents' national ID cards,

Figure 5: National ID card

a birth certificate, their school leaving certificate (if available), and signed letters/forms from their Assistant Chief and their District Officer. The information given by an individual seeking a national ID card may be vetted if the authenticity of such information is in doubt.[21] Birth certificates and finger-prints are then checked against records in the IPRS.

The card displays the holder's name, sex, date and place of birth, date and place of issue, signature, a photo and a single fingerprint image. It also includes a sequential 8-digit national ID number as well as a 9-digit serial number. The information on the card's front is machine readable on the back. The application form has a field for a tribal identity, but this is not displayed on the card itself. There are some reports of forgeries which can be checked against the IPRS and of cards obtained through the payment of bribes. However, the bigger problem is thought to be the use of cards of deceased people to fraudulently obtain access to services.

The Constitution of Kenya 2010, Chapter 3 Article 12, provides the national ID's legal framework, stating that every Kenyan citizen is entitled to 'a passport and any document of registration or identification issued by the State to citizens.' Whilst the Registration of Persons Act (Cap 107), revised 2018, states that 'the registration officer shall within a period of thirty days from the date of registration issue an identity card in the prescribed form to that person.'

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21   The Registration of Persons Act 1949 states that "A registration officer may require any person who has given any information… to furnish such documentary or other evidence of the truth of that information as it is within the power of that person to furnish."

Despite these provisions, the state's history of using ID systems for control has created barriers for some groups. Notably, the continuing colonial practice of recognising 42 tribes as indigenous to Kenya over other ethnic groups has made it difficult for some to apply for national IDs, including Somalis, Nubians, Shona, Maasais, Tesos and Arabs. Their difficulties were added to by the introduction of an non-standardised and unlegislated vetting process in the 1990s (around the time of the introduction of the 2nd generation of ID cards) for those living close to borders and amendments to the Registration of Persons Act in the wake of the 2013 Westgate Mall terrorist attack that somewhat formalised this practice elsewhere. [22]

The KNCHR (2007) has investigated complaints of institutionalised discrimination by their national ID issuing NRB. They found that ethnically Somali and Nubian applicants were being subjected to long issuing delays and vetting processes that authorities had no legal basis for. They were often carried out in two stages: first, chiefs, elders and the District Officers would identify locals they knew. Second, those that were unknown would be further questioned by other district officials, the police and intelligence officers. These committees sometimes requested additional documentation, such as land titles, screening cards and grandparents' IDs, that are difficult to produce.

Box 5: The wrong tribe

Muslim women (e.g. Nubians, Kenyan Somali, Muslim Indians) participating in the FGDs felt strongly discriminated against when applying for the national ID.

"I have been in the application process for two years now, it is a lot of back and forth. Sometimes I have wanted to give up, but the Nubian Rights Forum supports us. They tell us 'the ID is for you, not for them'. I went a first time and they told me to come back with mother. I managed to get my mum to come to Nairobi to verify her own birth. When we went, they said they couldn't verify one birth at a time, they had to wait for enough people to be verifying their births to send all the requests in one go. Eventually, a lady called Ann told me to come back when the verification was done, and I am still waiting. It's hard in the meantime, you can't work, and you need to find ways to keep busy. I can't get a birth certificate for my baby in the meantime as I don't have a national ID card. Her father won't help as his parents don't want anything to do with me." Hadija, 20, Nubian living in Kibera.

"Though I've converted to Islam, the Nubian Rights Forum advised me to keep my Christian name for the NID application. I told you my official name, Evalyna, but my Muslim name is Shammin. My friend, she changed her name to a Christian name to make it easier for her – and it did, it only took her two months to get the ID. Her name is Iclas but on her national ID card it is Heclas." Shammin, 24.

There was also agreement that tribal differences play a significant role in the ease of the process.

"If you are from the wrong tribe and in the wrong place, you will have trouble. In my area, there are mostly Kikuyu, but I am Luo. I have no history of my father as he passed and they gave me some trouble using only my mother's ID. Eventually, I gave money to the agent for him to process that application. Otherwise I may still be waiting." Priska, 22

The KNCHR also found instances of authorities taking bribes and highlighted the under-resourcing of registration centres.

Civil society organisations have recently shown how similar problems also affect communities in other areas of the country. For example, the KHRC has highlighted the plight of Shona, Pemba and Barundi communities that are frustrated by vetting processes when applying for the national ID.[23] And Namati and the Nubian Rights Forum provides paralegals for

those from marginalised groups living in cities such as Nairobi and Mombasa, and in refugee camps. They help them to navigate the national ID's application process and represent them at hearings. The organisations have also found that some Kenyans that were, unbeknownst to them, falsely registered by their parents as Somalian refugees to access humanitarian aid in the past are now unable to obtain the national ID.

Tabea Scharrer (2018) has described groups

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22   Cedric Barnes. The Crackdown on Somalis Will Probably Backfire. International Crisis Group. 16 April, 2014.

23   Medika Medi. A Call to Action to End Statelessness in Kenya. KHRC. 24 January, 2019.

affected by these problems as 'ambiguous citizens', one moment persecuted by the state and the next used in nation-building rhetoric. For Kenyan Somalis this began during the 'shifta' conflict of 1963 to 1967 during which some communities in the northeast attempted to secede, and it re-emerged in the 1990s when large numbers of Somali refugees arrived in Kenya as their country descended into war and famine. In response to both episodes the state enacted emergency legislation that required Somalis to register with authorities to prove their 'belonging' and be marked out as 'indigenous' through unique ID credentials. More recently, Kenyan Somalis have been simultaneously portrayed as culturally and religiously alien, and, thereby, treated as potential terrorists by the security forces, whilst also being publicly praised for their contributions to the economy and politics (Lochery, 2012).

To address such dynamics, civil society organisations have engaged in insider and outsider advocacy campaigns. They have also brought politicians and members of marginalised communities together to discuss issues and raise awareness. In 2011, these efforts received support from the African Committee of Experts on the Rights and Welfare of the Child that found Kenya's treatment of a Nubian child to be in violation of the 1990 African Charter on the Rights and Welfare of the Child that grants nationality based on birth within a country's borders if the child has no other nationality. Nonetheless, anecdotal evidence suggests that political representation may be the most effective instrument, with some claiming Kenyan Somalis have found it considerably easier to obtain national IDs since three of their community members were included in the Jubilee Coalition Government cabinet that took power in 2013.

In summary, the national ID's vulnerabilities are embedded in the social norms and politics that surround notions of Kenyan identity and citizenship. The issues raised here are, therefore, unlikely to be addressed by new technologies alone. Rather, they require members of currently marginalised groups to be viewed as contributors to Kenya's future and as fully enfranchised Kenyan citizens. The progress made towards these goals in recent years may be reversed if contemporary debates, especially around security and nationalism, lead to new laws or informal practices that exclude those deemed to be culturally 'other'.

Box 6: Birth registration

Household surveys found that 67 percent of male and 66 percent of female children under five are registered (KNBS, 2014). However, this may have gone down, as recent newspaper reports say less than half of children are being registered. Moreover, a recent World Bank (2017) report suggests that Kenya's rate of registration conceals wide regional variations, with as little as 20 percent of children being registered in some rural areas and as much as 90 percent in more urban areas. This is a significant issue given that estimates suggest just under three-quarters of Kenyans reside in rural locations.

The constitution and the relevant legislation don't require birth registration for citizenship. However, in practice, birth certificates are a necessary but not sufficient condition of obtaining a national ID which most state and private sector institutions regard as proof of citizenship.[24] The certificate is also needed for a passport, access to education, inheritance and obtaining some social assistance.

A study found that Kenyans with both birth certificates and national ID cards have the highest secondary and post-secondary education completion rates, whilst those without either have the lowest (Oppenheim and Marea Powell, 2015). It also showed that levels of political participation, from contacting representatives to voting, rise as individuals record having more than one of the credentials. Put another way, being 'fully documented' in Kenya is associated with being educated and participating in public life.

Although the FGDs did not focus on birth certificates, women often brought them up as important credentials. Notably, many argued it as increasingly required for school enrolments and the National Education Information Management System (NEMIS). Some also saw it as likely to become more important as it is required for Huduma Namba registration. It also often featured in stories of difficulties obtaining the national ID, with women having to navigate difficult processes to obtain requested birth certificates or to pay to avoid this stipulation.

24   A registration officer may, under the Registration of Persons Act, ask for alternatives such an age assessment certificate issued by a government medical officer of health or baptismal certificate issued by a minister. But normal practice is to request a birth certificate.

Huduma Namba

NIIMS, referred to as 'Huduma Namba', is a new state ID system to link various existing state systems via a single number for life. According to the government's website, this: 'will facilitate the harmonization and standardization of this information, support accurate planning, foster efficient resource allocation and enhance service delivery in the country. NIIMS will also play a key role in national security and curbing crime'.[25]

It will also eventually eliminate the need for multiple biometric enrolments across government departments and, according to recently released draft legislation, it is intended to replace the existing national ID card. The system is intended for all nationals and foreigners in the country that have reached the age of six. NIIMS' initial pilot registration period was carried out over April and May 2019, and the collected data is currently undergoing verification.

Figure 6: Huduma Namba logo

For citizens above 18 a national ID card is required to register, and those below 18 may use a birth certificate. Registration involves completing a paper form with fields including a name, a home location, family relations, work status, educational history, and farming activities, among other information. Applicants may optionally take as many state credentials as they have with them, such as their KRA PINs, driving licences, National Health Insurance Fund (NHIF) cards and National Social Security Fund (NSSF) cards. In some cases, these are photographed at the registration station but in most cases the information is simply taken from each credential.

Some individuals reported that such information was automatically populated in the registration device based on their national ID number. Whilst others reported that all data had to be entered manually by government officials, indicating that the registration process was not completely uniform. Applicants' photos and full fingerprints are also taken. Government agents under the supervision of local Assistant Chiefs have overseen the supposedly free registration process, although there have been reports of charges for the paper-based form and registering of people at unofficial sites.[26]

The implementing organisation for NIIMS is the MoI, with technical assistance provided by the MoICT. Yet, many other aspects of NIIMS are unknown, and have been the subject of much speculation. For example, the recently banned French company IDEMIA provided over 30,000 registration kits, but it is not known whether any other private sector entities are assisting with project in some way. Details about the database's ingesting and storing of the data have not been released, nor have details (i.e. format and significance) of the number that will eventually be given to registered individuals. At this stage, it is only an assumption that NIIMS will be able to authenticate those with the number.

According to draft legislation, a physical card, called a 'Huduma Card', is intended to be issued for NIIMS. Early rumors of the card caused controversy due to an (apparently erroneous) association with Master-Card, echoing similar controversies over the Nigerian ID card in 2014.[24] There, the fear was that a bank account linked ID card would collect vast amounts of data, from users' shopping habits to spending on government services and tax positions, without robust technical safeguards or privacy legislation. Both the government and MasterCard have made public statements that the latter is not involved in Kenya's NIIMS.[28][29] However, the confusion merely added to the proliferation of rumours about NIIMS and contributed to its negative reception.

Among them, some believe that NIIMS' real aim is to create a register of asset ownership and family ties for tax collection purposes. As mentioned in the discussion of digital credit, the Kenyan economist

25   Frequently Asked Questions (FAQs). Huduma Namba. Accessed 14 July, 2019.

26   Huduma Namba Registration Agents Charging up to KSh 500 for Registration. Kenya Today, 24 April, 2019.

27   Siobhán O'grady. Nigeria's Orwellian Biometric ID Is Brought to You by MasterCard. Foreign Policy. 2 Septmeber, 2014.

28   Posted on Twitter by @HudumaKenya, 19 February 2019.

29   State House says Huduma Namba card not linked to MasterCard. Citizen Digital. 24 April, 2019.

Box 7: Ambiguous purposes

None of the women in the FGDs clearly understood the objective of the Huduma Namba. Many argued that they registered due to threats and not their own will.

"They say that it is to put all the documents into one number to not have to carry all the documents with us. But in practice what does that mean? Do I have to throw out my national ID? Is my child ever getting a national ID? I just have to wait and see." Estelle, 28.

"80 percent of Kenyans don't know what this Huduma is about. We are doing it because the government threatens to switch off our [mobile] phone lines, to burn our SIMs." Gigi, 37.

The mass registration period (March-May 2019) was very cumbersome for working women and some reported that its rules could be flouted.

"My registration took 3 tries. I tried twice in Nairobi, but the queues were so long they closed by the time I was in the front. Both times I waited 4 hours. I had to go back to the village anyways, so I decided to register my son and I there. The only issue was taking time off from my two houses. In the end, I had to compensate and work double with one of the houses." Gloria, 38, domestic worker.

"I registered my 11-month-old baby, with her birth certificate. Initially I thought it was only for 6 years and above, so I was surprised." Vivian, 31.

Rumors also caused some to worry over what the data they handed over was for and what may happen next.

"This number, we know it's for the government, they need to pay their deficit and have found this way, so we pay for them. I wouldn't tell them if I worked." Grace, 23.

"I don't have any national ID or another document except my church card. I don't know if now, not having the Huduma Namba will make things more complicated." Maximilla, 22.

David Ndii has also linked the Huduma Namba to a proposed money lending platform called Wezesha (Enable) to be managed by the CBA partially owned by the Kenyatta family.[30] He has declared NIIMS 'a social security cum surveillance system with commercial interests lurking in the background'. Taking a somewhat harder-to-prove angle, some church leaders have even claimed the number is the mark of the devil.[31]

Yet, it is the passage of the law authorising NIIMS that has arguably caused the most controversy. Section 9A of the Registration of Persons Act, which provides for NIIMS, was added to the law via a Miscellaneous Amendment Act. The miscellaneous amendment process involves minimal public participation and is sometimes seen as a way to introduce unpopular legislation without scrutiny. In this case, the same miscellaneous amendment act also made modifications to more than 50 other acts, including some substantial changes to the structure of government.

Demonstrating Kenya's active civil society presence, this resulted in an ongoing lawsuit (consolidated from lawsuits filed by three civil society organisations – the Nubian Rights Forum, the KHRC, and the KNCHR – and now involving nearly 20 parties and interested parties) that has affected the implementation process. The suit's primary objections are the risks to privacy, the overreach by government in collecting sensitive information (e.g. biometric data such as DNA samples), the unlawful manner in which the amendment to the Registration of Persons Act was passed through Parliament, and the likely failure of the system to resolve the issues of marginalised groups in Kenya currently lacking identification and receiving discriminatory treatment.

In an interim holding by a three-judge panel for the High Court, the government's original plans for NIIMS were significantly altered. For example, registration was made to be voluntary and open-ended. Furthermore, the court ordered that future access to government services cannot be tied to registration,

30   See note 7.

31   Solomon Magawi. No, Huduma Namba is not Mark of the Beast, here's why. The Star. 5t h April, 2019.

and that the government is not allowed to collect DNA or GPS data as part of the registration exercise. Despite this, the government made several statements during the registration period that were widely seen as threats that NIIMS registration shall be required to access various government and private services, and that non-registration will have consequences.

As this report was being written, and after the closure of the initial registration period, the MoI released a draft version of a new Huduma Bill 2019 and scheduled opportunities for public consultation. The contents of the draft bill indicate that NIIMS is intended to make wide-ranging changes to Kenya's IE. First and foremost, it will replace the current national ID, and the Huduma Namba will be used as both foundational ID and functional ID. Numerous activities, including accessing any government services, accessing financial markets, opening bank accounts, registering to vote, and registering for SIMs, will thereafter require a Huduma Namba.

Accordingly, the draft bill seeks to, once again, make registration mandatory for all citizens and residents. All major government services will be linked to the Huduma Namba, and some services (such as NHIF) will abandon their current numbering system in favour of using Huduma Namba directly. Verification of a user will be based on biometric data (initially, fingerprints and facial images, although other data may be captured). The draft bill also contains provisions for a physical card.

The draft bill suggests that the data collected by NIIMS will be stored in Kenya and it will be protected by an appointed data protection officer. It further implies

users will be able to access their data to see how it is being used. The draft bill indicates that users' permission must be sought for NIIMS data to be shared, although the practicality of this requirement is not detailed. It is also noteworthy that the draft bill includes severe penalties (including large fines and long jail terms) for violations, including carrying out transactions without using the Huduma Namba. Anticipating that the process of passing data protection legislation may not be completed before enactment of the Huduma Bill, the draft bill also includes several provisions on data protection.

In summary, transparency and due process were not originally priorities for the authorities championing and governing NIIMS. To most observers, implementation of NIIMS has so far been hasty, heavy-handed and not well thought through. Nonetheless, the draft bill's release suggests that the government may have learnt something from the reaction to NIIMS. One the one hand, it signals their intentions for the NIIMS and provides an open space for feedback. On the other, it seeks to legitimise some of the Namba's more draconian measures and risky measures. Whether this will prove to be the Huduma Namba's making or undoing remains to be seen.

Digital Credit

Digital credit, in the form of small loans provided through mobile phones, is seen by many as an enabler of economic inclusion and development (Lauer and Lyman, 2015; Bharadwaj et al., 2019). Kenya's largest provider, Safaricom, has issued 230 billion KSh of credit since 2012 through its M-Shwari platform. It represents a collaboration between Safaricom, that provides the platform, and the CBA, that provides a linked bank account. Users receive a loan within

seconds. The amount they can borrow is determined by a credit rating generated by an algorithm that uses data from the customer's SIM, including airtime purchasing, and their M-Pesa usage histories.

To identify its customers, M-Shwari uses information already collected during their registration for a Safaricom SIM card. That process requires a national ID card, service card or other official identification documents in the case of minors. By the time customers apply for an M-Shwari loan, therefore, Safaricom will already have verified their national IDs against the IPRS. Since the ICT Authority of Kenya recently directed all mobile operators to suspend unregistered SIM cards in 2018, this method of identification has recently been strengthened.

As M-Shwari's linked bank account is issued by the CBA, it is subject to all the standard regulatory requirements of a bank account in Kenya. The CBA is, therefore, responsible for maintaining the

management of its information system, reporting defaulters to the credit reference bureaus and providing capital to fund M-Shwari's loan portfolio. It is also the CBA that carries the risk and absorbs losses from non-performing loans. As explained earlier, this means that the Kenyatta family has a stake in M-Shwari's success.

Yet, digital credit can also be understood as a form of identification in its own right – sometimes called 'de facto' identification[32]. Providers such as M-Shwari categorise individuals according to credit ratings. These ratings are generated by accessing multiple data points from state-verified credentials to mobile phone and social media usage behaviours. They are combined with customers' own borrowing and repayment histories to arrive at estimates of the risk providers face lending to them. Credit ratings can be kept by the companies that create them or shared with third parties, sometimes for a charge.

Box 8: Digital credit and blacklisting

Digital credit was not something many of the women participants from low socio-economic backgrounds in the FGDs had accessed. Nonetheless, many knew of, yet were not overly concerned by, the risk of being blacklisted should they default on loans.

"I am blacklisted on CRB, I owe m-Shwari 2,500 KSh, but what can I do, I am waiting to have the money. I get a message every day, so I am keeping quiet until I find the money. Once I pay back, I will have to wait a little before I can get a loan. It's not too bad." Sarah, 31.

"I use Branch, Ocash, Opesa. They only have my ID and phone number, I don't think they can really touch me because what these apps are doing is illegal. They aren't going through the Central Bank of Kenya. The only thing they can do is threaten to take you to CRB." Grace, 23.

Credit ratings are increasingly a requirement for a range of economic transactions, from opening business bank accounts to taking out mortgages. This de-facto identification is a growing topic of discussion in the Kenyan media, with advice given on how to improve one's rating and the difference between companies' assessments.[33] This growth also raises concerns around privacy, data protection, and the inclusion and exclusion of vulnerable populations such as those prone to defaulting.

Kenya's three CRBs - Transunion, Metropol and CreditInfo - are a critical part of this defacto identification, providing lenders with their own credit scores and a blacklist of defaulted borrowers. To do this, they require a significant amount of information, including national ID cards details, employment details and credit performance details, such as bounced cheques, fraud, bankruptcy or misused borrowings. This is collected from financial institutions, including banks and lenders, regulated by the CBA. They also have to be sure that they can

32   See Good ID Glossary 'De Facto Identification'; Omidyar Network, Point of View, October 2017

33   Anthony Owino. CRB Clearance: How to Check Status Online. Kenyans.co.ke. 18 February, 2019.

34   Gayatri Murthy and David Medine. Data Protection and Financial Inclusion: Why Consent Is Not Enough. CGAP. 20 December, 2018.

link problematic behaviours to the 'right' person.

A survey from 2017 found that 74.5 percent of Kenyan mobile credit borrowers have between two to six mobile loans at any given time. Furthermore, almost half had defaulted on a loan repayment (Gubbins and Totolo, 2017). At the same time, there is increasing concern that consumers do not read the terms and conditions attached to digital credit.[34] This includes how their data is used to assess them, where it may be shared and what this may mean for their futures.

Nonetheless, the regulatory environment is changing. In 2018, a draft Financial Markets Conduct Bill was presented to regulate the making of non-cash payments and to introduce a Financial Markets Conduct Authority, Financial Sector Ombudsman and Financial Sector Tribunal.[35] It was supported by companies and is intended to provide 'effective financial consumer protection, make credit more accessible and, at the same time, support financial innovation and competition'. However, the Bill has also been perceived as a threat to the CBK's authority as it includes repeals of provisions under the Banking Act for the approval of fees and charges, and for powers the CBK currently uses to curb reck-less lending. In other words, it seeks to reduce

constraints on the financial services sector by limiting the power of the older authority.

The dominance of Safaricom has also generated controversy and rumours about the future of the digital credit sector. A leaked report commissioned by the ICT Authority recommended that the government break it up by spinning off M-Pesa, though this was subsequently retracted.[36] Other rumours, such as the aforementioned Wezesha offering suggest the sector will remain a political topic in the coming years as providers look for new ways to onboard new customers and create new markets.

In short, despite enthusiasm over enabling financial inclusion and serving the unbanked, there is a growing concern about the impact of digital credit. Recent reports from financial service experts call for a slow-down in its provision as 'transparency and responsible lending issues are contributing to high late-payment and default'.[37] Instead, it is argued a greater focus on consumer protections through stronger regulatory frameworks that put borrowers interests first is required. In Kenya, where political and economic incentives are aligned behind less not more regulation, there is an urgent need to develop awareness around the economic and privacy risks inherent to services that require vast amounts of data.

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34   Gayatri Murthy and David Medine. Data Protection and Financial Inclusion: Why Consent Is Not Enough. CGAP. 20 December, 2018.

35   Nelly K. Financial Markets Conduct Bill 2018 a threat to CBK – Governor Njoroge. The Kenyan Wall Street. 30 May, 2018.

36   Abdi Latif Dahir. Kenya won't force a spin-off of the world's leading mobile money service after all. Quartz. 22 February, 2018.

37   Juan Carlos Izaguirre, Michelle Kaffenberger and Rafe Mazer. It's Time to Slow Digital Credit's Growth in East Africa. CGAP. 25 September, 2018.

08

RECOMMENDATIONS

Recommendations

It is increasingly argued that the design of new, and the reform of older, ID systems must involve considerations that go beyond technological choices and potentials for state security or economic growth. For example, Omidyar Network have proposed five important 'consequential decisions' for decision makers: 1. What is the purpose of the ID system? 2. Where does the ID system reside? 3. What data does the ID system collect? 4. Does the government have meaningful choice? 5. Is the process transparent? Whilst the Center for Global Development has proposed principles for ID systems that it hopes will promote inclusive development.

Development and civil society organisations are well placed to help countries such as Kenya to fully answer these questions and to live up to such principles by adopting IE frameworks. They encourage nuanced understandings of the histories, interests, inter-relationships, and dependencies that animate IEs and the individual ID systems within them. This includes recognising that governments and institutions cannot be understood as monoliths, and that they contain their own cleavages, fissures and coalitions. IE frameworks can also help decision makers to be mindful of how new ID systems and reforms will add to the risks and vulnerabilities of those who seek to participate in development.

ID systems are set to be critical architecture for Kenya's future development. The resources and authority given to the MoI and documents such as MoICT's Digital Economy Blueprint position them as drivers of both its ambitious Vision 2030 and Kenyatta's 'Big Four' agenda. While the recent pilot of the Huduma Namba, the championing of its benefits to security and the apparent political consensus over its worth also suggest that Kenya's elite agree that a consolidated digital state register is needed. At the same time, international organisations are increasingly willing to provide funds and technical support, with some pointing to the developmental role such systems are playing in elsewhere.

Kenya's private sector increasingly relies upon state ID systems for its core business functions and, partly as a side effect, creates its own ID systems through its customer databases. The digital economy is at the forefront of these trends, with Kenyans embracing

the ease of mobile banking and digital credit, both of which rely upon the collection and analysis of data for profitability. This has been made possible by the rapid spread of digital infrastructure across Kenya and the uptake of mobile phones. And it has been supported by a low regulatory environment that has encouraged experimentation and innovation, sometimes with seeding from international development organisations and companies keen to create new markets.

As Kenya's IE continues to digitise and ID systems within it become increasingly interdependent, it will be important not to forget the problems and issues that have plagued its journey so far. First amongst them is the use of ID systems for control. In the past this was achieved overtly, through restrictions on who could move where and do what. More recently, it has been subtle, with access to ID systems used to mark out who is and is not a full citizen, and who is and is not considered a potential security risk. The consequences for those affected are debilitating, with many unable to fully participate in the political and economic spheres, and a greater number simply worried about their status as Kenyans.

There is a danger that such issues are replicated by new, more technically sophisticated and centralised ID systems. Indeed, the report points to how legislative gaps have been a consistent characteristic of Kenya's IE. They leave citizens with few protections and, in some respects, contravene the spirit of the 2010 Constitution. Identity theft is also rapidly becoming an issue, and the centralisation of data and linking of foundational and functional ID without appropriate legislation will only compound the problem.

Yet, these gaps have undoubtedly benefited powerful politically connected interests. It has allowed a small number to implement costly state projects and to reap huge dividends when their companies have created new markets. Furthermore, when their plans have been threatened, the state has often used legislative amendments to ensure they proceed without public scrutiny. In the background, Kenya's security services play an unclear role, determining who can fully participate with the country's IE.

Kenyan civil society has not been silent. Although they face an IE with few robust accountability

mechanisms – inside or outside of the state – they have begun to act collectively. The poor handling of the Huduma Namba's pilot registration drive and the rumours about its purpose have been galvanising, starting a national conversation about the role of ID systems and seeing the state restrained (at least temporarily) in court. Encouragingly, it may also have caused the state to rethink its entire approach and open the system up to consultation. At the same time, Kenyan civil society has been working at the coal face of ID systems, helping those from marginalised groups to access them and quietly lobbying authorities to reform discriminatory or corrupt processes.

This work is far from complete. Accordingly, this section's recommendations for development and civil society organisations were developed from the preceding mapping and analysis of Kenya's IE. They are wide ranging and top level, and they are not overtly focussed on the technologies or processes underpinning any individual ID systems. Nonetheless, they highlight potential entry points and avenues of action for those looking to support Kenya's wider IE and address its existing risks and vulnerabilities.

Development organisations

Reforms to existing Kenyan state ID systems must clearly define procedures for those subjected to vetting processes by the security services. Indeed, the desire of some state actors to use ID systems for control is unlikely to disappear. Development organisations should, therefore, use their political capital to advocate for transparency around how this is done and to minimise the risks associated with such activities. This may include supporting security sector reform initiatives that aim to help Kenya to protect itself whilst safeguarding citizens' rights. The withholding of ID related donor funding could be a powerful incentive.

Reforms to Kenya's state ID systems must be supported by accessible accountability mechanisms at every level: registrars, issuing departments and overseeing ministries. This is especially important to account for the specific needs of women and girls that struggle with long application processes and that are vulnerable to exploitative or predatory officials. Development organisations looking to support such mechanisms could learn from efforts such as the Open Government Partnership in Kenya

and other programmes that have sought to support citizen-state social accountability mechanisms in service-providing sectors.

To further support accountability, there is a need for an independent authority with the power to conduct periodic audits, offer recommendations and sanction underperforming state and private sector ID systems. To avoid the further proliferation of authorities with overlapping mandates, such an authority could be located within the Auditor General's office. International organisations could help build its capacity through training and learning opportunities with accountability officials from other countries. In this regard, it is notable that the existing Data Protection Bill 2019 requires, at minimum, strengthening of the independence of the data commissioner, and ensuring that exemptions are closely controlled to prevent abuses of human rights.

Development organisations could bring key Kenyan political, private sector and civil society stakeholders together to advocate for the adoption of a Kenyan Governance Framework focussed on achieving the goals of interoperability and trusted transactions between both state and private sector ID systems. Building a trust framework and common understanding between key stakeholders from each will lead to greater acceptance among them of one another's ID credentials. This is also one of the challenges the Huduma Numba attempts to solve. This approach is successfully being pursued in Canada where the federal and provincial governments have worked with the private sector to create a Pan Canadian Trust Framework. A Kenyan Trust Framework could incorporate open standards for decentralised identification emerging from the W3C Credentials Community Group to create a "credential issuing language" that would enable any institution to issue a signed digital credential to any person or other institution.

As demonstrated by the plans for the Huduma Namba, the state appears keen on continuing and expanding its use of biometrics. Development organisations supporting Kenya's ID systems should ensure the use of biometrics adheres to the latest best practice guidelines. The collection and use of biometrics in all systems should be evaluated based on the latest best practices guidelines such as the US's National Institute of Standards and Technology guidelines NIST 800-63-3 and the Digital ID & Authentication Council of Canada

(DIACC) Verified Login Conformance Profile. These guidelines recommend a very limited use of biometrics for authentication of digital IDs. In Kenya, the collection and use of biometrics should also be proactively prescribed and outlined in law. Uses outside of these scopes should be banned with audits conducted to ensure compliance and increase trust in Kenya's ID systems.

More broadly, a renewed dialogue is needed on the benefits and potential pitfalls of supporting ID systems in countries that have multiple overlaps between the state and private sector actors, opaque security sectors, and histories of human rights abuses. There is a need for a minimum set of legislative, procedural and political benchmarks that can help those providing funds and technical know-how to be sure that technologies will be turned to developmental ends. Efforts such as the World Bank's Principles for Digital Identification and the Omidyar Network supported Good ID initiative are important steps towards codifying these benchmarks, but there is more work to be done to establish how states and their partners can be held accountable to them. Development organisations could begin by bringing technology experts, civil society representatives and academics together to focus on how IE mapping must inform new ID systems and reforms that hope to meet agreed upon minimum standards of compliance.

Civil society organisations

Kenyan civil society has scored a number of notable successes in recent years, both in researching ID related risks and vulnerabilities, and in holding the state to account through the courts. However, it must move beyond an adversarial role and begin to form working relationships with key state and private sector actors. One of the main obstacles to Kenyan civil society's participation in state-level and private sector conversations around ID systems is a lack of technical know-how. To address this, CSOs should further network with those abreast of technological developments and how they may support inclusive, transparent and safe ID systems. Such connections may also help them to monitor ID systems and to identify weaknesses in government or private sector plans. It could also enable them to propose potential solutions to identified risks and vulnerabilities before they are enshrined in policy or legislation.

Kenyan CSOs and most of the private sector have a common interest in a level playing field for those that rely on ID systems for core business functions. They may, therefore, form coalitions with business associations that are working to influence data privacy and ID related legislation. For example, they could work together on legislation that puts all digital credit providers under the same regulations and oversight, or they may act collectively to ensure companies are prevented from sharing customers' data to third parties without first seeking permission. There may be value in learning from industry led initiatives such as the US Better Identity Coalition that advocates for better identification policy. Such collaborations could be supported by the emerging specialist Kenyan CSOs that already have a track record of commenting on and supporting the development of draft bills.

Kenyan women and girls remain at risk of exclusion from vital ID systems. However, CSOs have tended to concentrate on marginalised ethnic groups, such as Somalis and Nubians. Further research is needed on gender specific vulnerabilities and risks, with a focus on the social norms that support them. This should include a focus on women's experiences of accessing and using Kenya's increasingly digital IE, their levels of digital literacy, and their knowledge of their rights and entitlements. Existing CSOs with links to communities are well placed to do this, and to network with key state authorities charged with ensuring gender equality in Kenya such as the NGEC. As part of this, CSOs could work with authorities to devise targets for women and girls' access to, and use of, key state and private sector ID systems. They could then develop advocacy campaigns to have them included in the NGEC and Gender Mainstreaming Directorate's policy goals.

Whilst Kenyan CSOs have long worked on helping citizens to navigate application processes, less has been done to make them aware of how the data they hand over to state and private sector organisations may be used. This is important as some registers' algorithmic categorisations are de facto IDs, able to lock people out of access to further opportunities or mark them out in other ways. Furthermore, the state is increasingly suggesting that future access to services will be dependent on obtaining state IDs. Awareness of these issues could be spread by promoting the idea that individuals' data remains behind, long after they have used or accessed the service they originally provided it for. More could also be done to stimulate conversations around the state's planned ID systems among hard-to-reach communities.

09

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Annex 1: Risks and vulnerable analyses

Red / Amber / Green legend

The answers to the risk and vulnerabilities question are shaded according to a traffic light system. The colours represent the degree to which we think the answer suggests a risk or vulnerability within Kenya's IE:

- Red means that there was clear evidence.
- Amber means that the evidence relates to a section of the population or it was not considered completely reliable.
- Green means we could not find evidence to suggest a risk or vulnerability.

Identity ecosystem

Exclusions and Access	Privacy	Costs	Politics
Does the IE have a legal framework that guarantees uniform critical ID related rights and policy guidance?	Does the state have existing or planned national privacy laws that conform to international standards? [38]	Is the coverage of primary identity infrastructure (e.g. electricity, mobile phone and internet services) uniform or limited?	Is there an active and free civil society that debates identity systems and holds the government to account?
Yes. See * at the table's end for a full breakdown of this answer by questions on the constitution, birth registration and the national ID.	A draft Data Protection Bill modelled on the GDPR is in Parliament, and another (separate) draft Data Protection Bill is ready to be introduced. The former gives citizens rights over their data's collection and handling, and avenues for accountability. It will also bolster sections of the Constitution relating to information and privacy.	In urban areas and mostly in rural areas but not completely uniformly. According to the Kenya National Electrification Strategy, the country will be fully electrified by 2022. It is also estimated that about 90% of the population of Kenya live within range of a mobile tower.	Recently, civil society has succeeded in having the Computer Misuse and Cybercrimes Act temporarily suspended and was heavily involved in the public participation process for the Data Protection Bill 2019. Also, core aspects of NIIMS were suspended following a court case brought by civil society.
Do state or non-state organisations routinely discriminate against citizens seeking to access ID systems?	Are there security-related laws that water down existing protections or make them irrelevant?	How siloed, federated or centralised are the IE's individual identity systems?	Is there evidence of the state mis-using identity systems for political gain?
Nubians, Somali, those of Arab descent and some other groups have been discriminated against, especially when applying for the national ID card. Recently, however, the stateless Boni people received ID's.	Kenya's National Intelligence Service (NIS) Act (2012), the the Prevention of Terrorism Act (2012) and the the Security Laws (Amendment) Act (2014) all give the security services powers to override existing protections. The state argues they are responses to terrorism.	Kenya's IE is fragmented. Currently, five ID systems share information with the IPRS. Nine other ID systems validate IDs by querying the IPRS but do not share data with it. Whilst three are completely siloed.	There have been reports that there was probable use of the voter registration system to send targeted political messages and of politicians helping supporters to register.

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38   The European Unions' General Data Protection Regulation (GDPR) applies to all individuals within the European Union and the European Economic Area, and also addresses the export of personal data outside the EU and EEA areas. The OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (FIPs) form the basis of many national privacy laws and can be a good starting point for assessments of legal frameworks. See note 6, Chapter 5 of Gelb and Metz (2017).

Identity ecosystem (cont)

Do ID authorities routinely discriminate against non-citizens seeking to access ID systems?	Do low rule of law indicators suggest that relevant legislation is poorly implemented?	Is there evidence of widespread corruption related to identity systems?	Is the state fragile in ways that suggest systems and data could be rapidly compromised or misused?
Non-citizens may access an alien card or refugee card as appropriate. There are some indications that the alien card involves some discrimination or bribery.	Kenya was ranked in the 38th percentile in the 2017 Worldwide Governance Indicators for Rule of Law.	Idemia (previously Safran Morpho) was recently "banned" from operating in Kenya by Parliament, based on reports of corruption. Also, there are reports showing that the voter register was (illegally) sold for political uses.	The Fund for Peace's rankings consider Kenya very fragile (25th most of 178 states). Research also suggests that state ID systems and data could be rapidly compromised and misused.
Does the state actively make citizens aware of their entitlements and rights related to identification?	**Are external actors (e.g. foreign governments or companies) known to be interested in compromising state data repositories?**	**Does a single register link all foundational and functional identities for the duration of a person's life?**	**Is there an autonomous agency that coordinates all citizen data activities and acts as a 'guardian' of the citizen database?**
Current government media efforts focus on compelling citizens to comply with ID requirement. Efforts to educate citizens about ID rights have also been made.	There are reports of hacked state systems but little is known about who may be behind the attempts.	The Huduma Namba seeks to link major government processes of health insurance, social security, identification and general service provision for everyone over 6 years old.	ID data is largely siloed and managed by the agencies that collect it. To the extent that there is data sharing and coordination, it is by the MoI's IPRS. Private sector actors generally have their own unconnected databases.

Constitutions

Does the constitution contain a definition of citizenship?	Does it provide a right to a name and nationality?	Does it provide rights to register with foundational ID systems?
Chapter 3 provides a definition of citizenship.	Article 53 provides for this.	Article 12 provides that every citizen is entitled to a Kenyan passport and any document of registration or identification issued by the state to citizens.
Does it guarantee free compulsory education?	**Does it have provisions for gender equality?**	**Does it contain rights to privacy?**
Article 53 provides for this.	Not explicitly, but Article 27 states that every person is equal before the law and has the right to equal protection and equal benefit of the law. Article 59 lists that the functions of the Kenya National Human Rights and Equality Commission are to promote gender equality and equity generally and to coordinate and facilitate gender mainstreaming in national development.	Article 31 provides for this.

Birth registrations

What is the relevant legal instrument?	Which parents can register?	Are the parents' national IDs required for registration?	Do parents have more than 30 days to register without penalty?
The Births and Deaths Registration Act of 1928.	The mother is required. The father is optional.	Yes	The time limit is 6 months.

Is there a fee for late registrations?	Are birth witnesses required by law?	Are birth witnesses required in practice?	Are the services that are accessible with a birth certificate listed in the legal instrument?
Yes, the fee triples to 150 KSh after 6 months.	No	Yes. A birth certificate is typically obtained with a birth notification prepared by the hospital and other parties if born outside an institution.	No

National IDs

What is the relevant legal instrument?	Is there a prescribed period within which to apply for a national ID after reaching the prescribed age?	If yes, is there a late registration fee?	Are witnesses required by law when applying?
The Registration of Persons Act, Cap 107.	90 days from reaching the age of 18.	No fees are mentioned in the Act or the Rules for late registration. However, it is an offense (attracting a fine up to 200,000 KSh) for failure to register according to the time period.	Signed letters/forms from Assistant Chief and District Officer.

Are witnesses required in practice?	Is a birth certificate required when applying for the national ID?	Are there alternatives to a birth certificate when applying for the national ID?	Is a national ID required to access state services?
Yes	Yes	Yes. Alternative documents may be asked for. There is also a vetting process involving local authorities, such as assistant chiefs and district officials, for those without birth certificates or their parents' national ID numbers.	Yes, it is the foundational ID for most state services.

Women and girls

Exclusions and Access	Privacy	Inclusions and Rights	Politics
Are there social norms that make it difficult for women to interact in the public sphere or with authorities?	Are women uncomfortable sharing data that is routinely asked for to obtain the national ID? If yes, what kind of data and why?	Do women need a foundational credential to open a financial account: bank or mobile?	Are there legal stipulations that restrict women from acting as the sole referees for their children's access to IDs?
There is some evidence that social norms can make it difficult for women and girls from marginalised ethnic groups such as Somalis, Nubians, those from fishing and hunter gather, and those living in peripheral areas, to access state services.	The application form for the current national ID requests tribe or clan, and a family name. It also asks for a husband's name and home location. Such information can be sensitive given Kenya's tribal politics. Moreover, many younger Kenyans do not affiliate with a tribe or clan. The Huduma Namba registration form asks about marital status and spousal details (including space for up to 5 spouses).	Banks and mobile providers ask for a national ID or a passport.	A national ID one requires both parents' birth certificates. In the instance where the mother is acting as referee but does not have an ID, the child cannot get a birth certificate and therefore a national ID.
Are there social norms that prevent women from using the technology underpinning ID systems (e.g. women are prevented from having mobiles or not taught to use computers)?	Are women uncomfortable sharing data that is routinely asked for to obtain a marriage certificate? If yes, what kind of data and why?	Are birth certificates required for girls trying to prove they have been forced into an underage marriage?	Are there domestic civil society organisations focussed on women's identity issues?
Women are 50% less likely than men to be online, and 30-50% less likely to use the internet for economic and political empowerment. Most foundational ID systems can be applied for on- and offline. However, many functional IDs require online access.	The state requires copies of brides' national ID as proof of age and passport-sized photos, along with a small fee. No other information is required.	Although Kenyans must be 18 to marry and forced marriage is illegal, in order to prove one is a child and yet to come of age, identification through a birth certificate or passport is required.	Not specifically but Namati and the Open Society Foundation have investigated women's access to birth registration.
Are groups of women routinely excluded from accessing foundational ID systems (the poor, migrants, unmarried, widowed, particular ethnicities etc)?	Are women uncomfortable sharing data that is routinely asked for to obtain a birth certificate? If yes, what kind of data and why?	Are there outreach efforts to ensure women can access state IDs (e.g. mobile national ID registration vans or health workers able to conduct birth registration)	Is there a difference in women and men's abilities to access ID systems' accountability mechanisms?
"Non-indigenous people", such as Kenyans of Somali, Arab, Nubian, Asian, Duruma and Digo descent, are vetted when applying for national IDs. Vetting is a non-codified process by which certain individuals are brought before a committee charged with determining whether the person is Kenyan or not. It opens these minority communities to discrimination based on their race in this sphere.	Requires the parents' national ID cards. The information on such documents is not generally considered sensitive.	There have been mass mobile voter registration drives and efforts to equip community health workers with birth registration smart phone applications.	Aside from the aforementioned social norms preventing women operating in the public sphere, there is no specific evidence of this.

Women and girls (cont.)

What ID credentials are required to access state welfare or benefits programmes (e.g. cash transfers for the poor)?	Are national IDs required to travel around a country?	What ID credentials are required to access public education?	Are there national gender policies in place that may promote women's inclusion in the IE?
One form of ID is required to access state programmes. With the example of welfare, a national ID or passport is required for submission on registration but a birth certificate is a necessity for dependents.	Not officially, but without an ID, one risks arrest for being illegally in the country.	For primary education, Section 33 of the Basic Education Act suggests a birth certificate is necessary. For secondary education, again, age must be determined so a birth certificate (or national ID) is required. For tertiary education, the law is silent on the requirements for admission. However, in practice, a birth certificate, national ID, and proof of final examination results is required for public universities.	See ** at the bottom of this table for breakdown of answer.
What ID credentials are required to access state health programmes (e.g. free health care)?	**Are there examples of ID systems' data breaches used to blackmail, harass or shame women?**	**Is it possible to register for a SIM card using other credentials than the national ID?**	**Are there foreign civil society organisations focussed on women's identity issues?**
Application for NHIF requests information from the national ID as well as employment information, a mobile number, spousal information, and child dependent information. The NHIF card (along with a national ID is typically all that is required to access state health care.	No	Only the national identity card, service card, passport or alien card number can be used to register for a mobile sim in Kenya.	No

National Gender Policies

Is there a national gender Policy?	Does the government set targets for women's inclusion across different sectors?
There is a National Gender Policy from 2011. However, there is no evidence whether this policy was adopted or merely prepared in draft form.	There are no targets provided in either the National Gender Policy or the National Gender and Equality Commission Status of Equality and Inclusion in Kenya report.
Are there dedicated resources (funds and staff) to gender mainstreaming?	**Is there an oversight committee or authority that ensures progress towards these goals?**
Under the Ministry of Public Service, Youth and Gender Affairs, the State Department for Gender Affairs, there is the Gender Mainstreaming Directorate charged with spearheading gender mainstreaming in Ministries, Departments, Agencies, Counties and the Private Sector. It has the overall aim of achieving gender equity and equality across all the sectors. This is done through capacity building of duty bearers, training on gender responsive budgeting, and engendering of all programmes.	No

National ID risks and vulnerabilities

Exclusions	Privacy	Costs	Politics
Are there physical registration points within reach of poor, rural or peripheral communities? Or are there alternative methods?	Is the system managed by foreign vendors?	For National ID systems: Was the start-up cost above or below the $3-6 per person benchmark for low-income countries? [39]	Was the system introduced through normal legislative channels?
The NRB has a network of more than 600 field registration centres throughout Kenya. Applications are submitted online (e-Citizen) followed by an in-person visit at a Huduma Centre (which are spread well across the country).	Yes, for the last 20 years, the system has been maintained by the French firm IDEMIA.	No data	Yes
Are there records of difficulties in acquiring any feeder documents required for registration?'	Do commentators or users say the collected data is beyond that required for the task?	For National ID systems: Is the annual maintenance cost above or below the benchmark of 0.1 of GDP or $1.50 per person for low-income countries? [40]	Does the system reveal trends or patterns that could be acted upon but have not (e.g. tax avoiders, ghost staff or benefit payments, voting irregularities etc.)?
Some marginalised groups have struggled to obtain the ID for lack of proper feeder documentation.	The registration form asks for "tribe," "clan," and "family," which risk discrimination. The form also asks for "Husband's ID No." and "Husband's Name" (without also asking for information about a wife), showing a gender bias.	No data	No
Does registration rely on social accreditation (e.g. community leaders vouching for the applicant/user)?	Does the system rely on a unique number that reveals personal information to lay people?	Is the system part of a locked-in (e.g. the state or company cannot exit the agreement) contract with a private vendor?	Are there any reports of political interference over the system?
The application form requires a chief, assistant chief, district officer, or district commissioner to certify that they know the applicant and that the applicant's details are correct. Vetting can require further accreditations.	The National ID number is sequential, so the value indicates how recently it was issued.	Possibly. Maintenance of the system involves a foreign vendor. It is unknown whether that contract can be transferred.	In the run-up to 2017 elections, there were reports of politicians incentivising voters to register for the national ID in order to secure their support.

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39   See Atick (2014).

40   See Gelb and Metz (2018:142-145) for details of benchmarks.

National ID risks and vulnerabilities (cont.)

Is the cost of registration considered too high by commentators or users?	Can users change the data stored by the system when desired?	Is the system adequately funded to support its maintenance (including any expansion plans)?	Does the system officially or unofficially share data with the state security services?
No	Yes, but with difficulty. The process involves lodging an application for a new ID card and listing the old ID number on the application.	The system is adequately funded to continue operation but is not funded to undertake a "cleaning" of the registry for duplicates or dead cards.	The register is administrated by the NRB within the MoI which the parent ministry of the Kenya's security services. Data is shared.
Are there routinely unofficial bribes for registration?	**Can users access records of how their data is used and what additional data the system may aggregate from elsewhere?**	**Does the system have a de-duplication process that draws on data from other systems?**	**Has any kind of public risk analysis been carried out for the system by the authorities in charge?**
Yes, for some marginalised groups and women. FGDs also revealed rumours of authorities requesting sexual favours.	No	No	No
Are there complex registration processes that require literacy, digital literacy or a specific language?	**Can users remove themselves from the system?**	**Have there been any cases of corruption during the establishment of the system or its use?**	**Was and is civil society consulted on the system's use?**
The online portion of the registration process requires digital literacy and access. The registration form is available in both English and Kiswahili. Offline application is possible, but not widely discussed and seems to be discouraged.	No	No	No
Does the registration process involve the collection of biometric data that some cannot easily provide?	**If the ID enables access to multiple services, does it ensure users cannot be tracked via a single number or identifier across them?**	**Is money the system collects for registration, credentials or verification accounted for transparently?**	**Are any accountability mechanisms accessible to the public in place for the system?**
Registration requires fingerprints, and for the elderly and manual workers, the quality or availability of such fingerprints may be compromised.	No	No	In principle, the NRB is accountable to the Attorney General that the public may lodge a complaint with.
Does the registration process force particular identities upon users?		**Is it a 'one-shot' use system (e.g. an electoral roll) or can it be updated?**	**Is there an independent state authority that the system is accountable to?**
It is gender binary. Tribe is also a field on the application form, but there is not a list of tribes from which to select.		It can be updated.	No
If the system is 'voluntary', will non subscription lock people out of particular vital state or non-state services?		**Do the system's operators undergo standardised training?**	

Huduma Namba

Exclusions	Privacy	Costs	Politics
Are there physical registration points within reach of poor, rural or peripheral communities? Or are there alternative methods?	**Is the system managed by foreign vendors?**	**For National ID systems: Was the start-up cost above or below the $3-6 per person benchmark for low-income countries?**	**Was the system introduced through normal legislative channels?**
31,500 biometric registration kits given to 5 people in 8,500 sub-locations. Although some diaspora have been frustrated by the process.	NIIMS registration systems are provided by IDEMIA. There is no information on who manages the database.	7.7 billion KSh been budgeted for the NIIMS mass registration exercise. Equating to roughly $1.50 per person.	NIIMS was launched pursuant to a non-scrutinised 2018 Amendment of Registration of Persons Act, which added section 9A.
Are there records of difficulties in acquiring any feeder documents required for registration?	**Do commentators or users say the collected data is beyond that required for the task?**	**For National ID systems: Is the annual maintenance cost above or below the benchmark of 0.1 of GDP or $1.50 per person for low-income countries?**	**Does the system reveal trends or patterns that could be acted upon but have not (e.g. tax avoiders, ghost staff or benefit payments, voting irregularities etc.)?**
Kenyans must produce a birth certificate or a national ID card. Marginalised groups that struggle to obtain these credentials will find it difficult to register.	Speculation remains over why the application form collects details of land ownership, employment and marital status. Before a court ruling there was also a plan to collect GPS coordinates.	No data	No data yet. Potentially in the future.
Does registration rely on social accreditation (e.g. community leaders vouching for the applicant/ user)?	**Does the system rely on a unique number that reveals personal information to lay people?**	**Is the system part of a locked-in (e.g. the state or company cannot exit the agreement) contract with a private vendor?**	**Are there any reports of political interference over the system?**
Not directly but obtaining the required feeder documents can involve social accreditation.	No data	No data	Not directly, however, NIIMS has cross party backing and the government has made statements that registration will be necessary for future access to services against court rulings.
Is the cost of registration considered too high by commentators or users?	**Can users change the data stored by the system when desired?**	**Is the system adequately funded to support its maintenance (including any expansion plans)?**	**Does the system officially or unofficially share data with the state security services?**
There are no official registration fees.	Users shall be able to apply for the information to be changed, although the mechanisms for doing so have not yet been described.	No data	Official statements suggest it has a security function. Unofficial statements indicate that NIIMS will share with other agencies within the MoI, including state security agencies.

Huduma Namba (cont.)

Are there routinely unofficial bribes for registration?	Can users access records of how their data is used and what additional data the system may aggregate from elsewhere?	Does the system have a de-duplication process that draws on data from other systems?	Has any kind of public risk analysis been carried out for the system by the authorities in charge?
Some have been reported.	No data	The government has stated that, after the initial registration period, the collected data will be verified (and presumably de-duplicated) before unique numbers are generated.	No
Are there complex registration processes that require literacy, digital literacy or a specific language?	**Can users remove themselves from the system?**	**Have there been any cases of corruption during the establishment of the system or its use?**	**Was and is civil society consulted on the system's use?**
Application forms are currently only available in English (online at least).	No. According to the Registration of Persons Act, only changes can be made on an individual's request or the authority's initiative.	No, but the foreign contractor IDEMIA has been banned from operating in the country by Parliament.	No
Does the registration process involve the collection of biometric data that some cannot easily provide?	**If the ID enables access to multiple services, does it ensure users cannot be tracked via a single number or identifier across them?**	**Is money the system collects for registration, credentials or verification accounted for transparently?**	**Are any accountability mechanisms accessible to the public in place for the system?**
The registration form currently specifies the collection of photos and fingerprints. Before a court ruling there was a plan to collect DNA.	No	N/A	No
Does the registration process force particular identities upon users?		**Is it a 'one-shot' use system (e.g. an electoral roll) or can it be updated?**	**Is there an independent state authority that the system is accountable to?**
Gender.		It can be updated. After the close of the official registration period Assistant Chiefs will remain with the kits for purpose of updating births and deaths etc.	No.
If the system is 'voluntary', will non subscription lock people out of particular vital state or non-state services?		**Do the system's operators undergo standardised training?**	
Not at this time. Although this was the initial position until the High Court ruled that registration can continue but cannot be mandatory or lock people out of future access to services.		Yes.	

M-Shwari

Exclusions	Privacy	Costs	Politics
Are there physical registration points within reach of poor, rural or peripheral communities? Or are there alternative registration methods?	**Is the system managed by foreign vendors?**	**For National ID systems: Was the start-up cost above or below the $3-6 per person benchmark for low-income countries?**	**Was the system introduced through normal legislative channels or under special measures?**
Registration for a SIM can be done at any Safaricom shop and other authorized locations. Safaricom shops are well distributed throughout the country.	The system is managed by Safaricom, a local telecom provider majority owned by Vodaphone Group.	N/A	No legislation was required to launch M-Shwari as it is a service provided by a private company.
Are there records of difficulties in acquiring any feeder documents required for registration?	**Do commentators or users say the collected data is beyond that required for the task?**	**For National ID systems: Is the annual maintenance cost above or below the benchmark of 0.1 of GDP or $1.50 per person for low-income countries?**	**Does the system reveal trends or patterns that could be acted upon but have not (e.g. tax avoiders, ghost staff, voting irregularities etc)?**
The national ID is needed to register for a SIM, potentially excluding those that already find it difficult to obtain.	No additional data is required to register, if the customer already has an Safaricom SIM.	N/A	No
Does registration rely on social accreditation (e.g. community leaders vouching for the applicant/user)?		**Is the system part of a locked-in (e.g. the state or company cannot exit the agreement or seek help form a third party without significant cost) contract with a particular private vendor?**	**Are there any cases / reports of political interference over the system?**
The national ID is needed to register for a SIM, potentially excluding those that already find it difficult to obtain.		No, although it is reported that Safaricom is attempting to purchase the IP rights to the system.	No, although the close relationship between the ruling Kenyatta family owned CBK and Safaricom in provision of M-Shwari has prompted speculation that personal interests may have incentivised public policy, such as regulation over the digital credit market.
Is the cost of registration considered too high by commentators or users?	**Does the system rely on a unique number that reveals personal information to lay people?**	**Is the system adequately funded to support its maintenance (including any expansion plans)?**	**Does the system officially or unofficially share data with the state security services?**
No	The system relies on the mobile number of the individual which can indicate the individual's mobile carrier.	Yes	No, although the system does share data with CRBs.
Are there routinely unofficial bribes for registration?	**Can users change the data stored by the system when desired?**	**Does the system have a de-duplication process that draws on data from other systems?**	**Has any kind of public risk analysis been carried out for the system by the authorities in charge?**
No	Yes, by changing the details for their mobile account.	No	No

M-Shwari (cont.)

Are there complex registration processes that require (digital) literacy or a specific language?	Can users access records of how their data is used and what additional data the system may aggregate from elsewhere?	Have there been any cases of corruption during the establishment of the system or its use?	Was and is civil society consulted on the system's use?
Some – the process requires a mobile user to understand the mobile registration process.	No	No	No
Does the registration process involve the collection of biometric data that some cannot easily provide?	**Can users remove themselves from the system?**	**Is money the system collects for registration, credentials or verification accounted for transparently?**	**Are any accountability mechanisms accessible to the public in place for the system?**
No	Yes, although it is not clear whether the user's data history is removed when a user de-registers from the system.	Since Safaricom is a publicly traded company, some audit details are available.	Not beyond normal systems in place for accountability of publicly traded companies.
Does the registration process force particular identities (e.g. a limited list of religions, ethnicities or from a simple gender binary) upon users?	**If the ID enables access to multiple services, does it ensure users cannot be tracked via a single number or identifier across them?**	**Is it a 'one-shot' use system (e.g. an electoral roll) or can it be updated?**	**Is there an independent state authority that the system is accountable to?**
No	N/A	No – it can be updated.	The regulatory authorities for telecoms, though there was debate over whether the CBK should regulate the system, and the industry is trying to amend regulations, such as removing interest rate caps.
If the system is 'voluntary', will non subscription lock people out of particular vital state or private sector services (e.g. banking or mobile)?		**Do the system's operators undergo standardised training?**	
Yes. Individuals who do not sign up for the service cannot use the service. However, it may not qualify as a vital service.		Yes	

Annex 2: Focus group discussions methodology

At the end of May 2019, 47 women, between 19 to 56 years old, living in the outskirts of Nairobi (Kibera, Kawangware, Wanyori and Gadanga) were part of 6 FGDs and 3 interviews. They all earned either no income as housewives or very low incomes as smallholder farmers or cleaners or doing small odd jobs. They were purposefully selected with help from the Nubian Rights Forum to include different religious (Christian, Muslim and Hindu) and ethnic/tribal (Luo, Kikuyu, Lhuya, Nubian, Coastal Waswahili) backgrounds. Another FGD was conducted with young law students from Strathmore University in Nairobi, providing insights into a group with higher incomes.

The findings reflect the women's experiences accessing ID systems in Kenya, with a focus on the National ID card, the National Hospital Insurance Fund, M-Shwari and Huduma Namba. The interviews were free roaming, whilst the FGDs followed the below guide:

ID ownership
What are the different ID documents you have?
Of all these documents, what is the first document you remember keeping with you? In addition, why this one?
Do you have any memory you can share about getting that first ID document?
Which of these documents you have mentioned is the most important to you?
In addition, why? Which services do you access through it?
Which of these documents do you use the most?
How do you use it? Please share.

Specifically about the national ID
If not already mentioned, do you have a national ID?
When did you obtain it? Did you obtain by yourself or did someone help you?
Was it an easy process?
Why is the national ID important to you? When do you use it? Please share.

Specifically about Hospital Insurance Fund Card
If not already mentioned, do you have a Hospital Insurance Fund Card?
When did you obtain it? Did you obtain by yourself or did someone help you?
Was it an easy process?
Why is it important to you? When do you use it? Please share.

Specifically about Huduma Namba
Have you been able to register for the Huduma Namba yet?
When did you obtain it? Did you obtain by yourself or did someone help you?
Was it an easy process?
Why is it important to you? When do you use it? Please share.

Specifically about M-Shwari
If not already mentioned, do you have a SIM card?
Is it under your name? Is it under someone else's name? If so, who's?
Do you have a mobile money account? How do you use it/what type of transactions do you use your MM account/M-PESA for?
Do you have any savings account on your mobile? How is it helpful?
Was it easy to obtain an M-Shwari bank account?
How long have you had it for?

Why is it important to you?

Do you think it is important for women to have an M-Shwari account? Why?

What do you like the most about it?

How often do you use it? Please share your experience.

ID exclusion

Do you have any experience of challenges in obtaining an ID? In addition, if not you, do you have any friends who did?

What were the challenges? (Probe: Dealing with government? Logistics of going to office to apply, costs.)

Do you think there are specific challenges for women? Why?

Do you have any examples that make you think that it is harder for women than for men to access ID documents? Please share.

What do you think are the risks/limitations of not having an ID? In particular for women?

Do you have experience of not having an ID and facing problems without it? Alternatively, a friend? Alternatively, your child?

Specifically about the national ID

Probe on the risks of not having a national ID. Specifically for women?

Are there services you cannot access without the national ID?

If applicable to respondent: Why don't you have a national ID?

Specifically about National Hospital Insurance Fund Card

Probe on the risks of not having a Hospital Card. Specifically for women?

Are there services you cannot access without a Hospital Card?

If applicable to respondent: Why don't you have a Hospital Card?

Specifically about Huduma Namba

Probe on the risks of not having a Huduma Namba. Specifically for women?

Are there services you cannot access without a Huduma Namba?

If applicable to respondent: Why don't you have a Huduma Namba?

Specifically about M-Shwari

What are the limitations that you face without an M-Shwari account? Specifically for women?

If applicable to respondent: Why don't you have an M-Shwari account?

Do you have access to the internet?

Do you have your own mobile SIM (if not answered before)?

Do you need help in browsing the internet? Or accessing mobile money?

Are you allowed to browse the internet or to do transactions on MPESA by yourself?

Privacy

For those who have social media, what do you use it for? Do any of you use social media to buy items, clothes or other?

Do you ever worry about the information you put on your Facebook or WhatsApp? Or other? If so, why?

How would you feel if the information on Facebook was used for identification purposes? For example: the "about you" section was recorded for your ID registration? Or if your bank started knowing about the transactions, you do on your WhatsApp?

Do you ever ask yourself why the government needs your data?

Do you think there are any risks with giving your information to the government? Why?

Do you think women in particular are at risk when giving their information? Why?

Are they more at risk when giving information to the government or on their social media? Is it the same? Why?

Have you ever made a complaint about an ID issuer - either state or private? How did you go about it and what was the outcome?

Do you have any concerns about the data collected about your child/yourself when applying for ID documents?
Would you feel more comfortable sharing your information if it was used for the national ID system or for the Hospital card? Is it the same? Why/why not?
Would you feel more comfortable sharing your information if it was used for the government or for social media - like Facebook? Is it the same? Why/why not?

Specifically about M-Shwari
Do you know how Safaricom decides on whether to give you a loan or not?
Please share your story

Specifically about Huduma Namba
Do you know how the Huduma Namba is different from national ID?
Do you worry about these new requests for unique ID number or you see the benefits?

Politics (gender)
Some of the ownership and exclusion questions will give insights into the gender differences – these are broader gender norms questions to understand if some ID systems are more prejudiced against female than male users.

Access
Overall, do you think it is easier for men to access ID documents? If so, why?
Do men usually do the procedures for ID documents? Why?
Are there specific ID documents you think are easier for men to access? Which ones and why?
Specifically, we spoke about the national ID, the Hospital Card, the Huduma and MShwari. Are any of these documents easier to access for men?

Use
Do you think certain ID documents we discussed are easier to use when men rather than women?
Have you ever had issues accessing a service, even if you had the relevant ID document? Why do you think that happens?
Have you – or a friend – ever felt discriminated against when wanting to access a service, compared to men: for instance, in front of state officials?

Consent forms are available on request.

Kenya's
Identity
Ecosystem

Caribou
Digital