

## Datafication in Africa: The Risks of Digital ID in Kenya and Ghana

- ❖ A number of African governments are embarking on digital identity (ID) programmes. It is important to learn from good practice within these projects and to avoid possible pitfalls.
- ❖ Digital ID programmes now centralise disparate identity databases, such as civil registration, social services and existing state-issued ID, into a single, comprehensive source of data on an individual.
- ❖ Technical projects in Africa have typically been carried out by foreign firms, denying local opportunities to acquire new knowledge and to develop home-grown solutions.
- ❖ The collection of biometric, demographic and cultural data is not always undertaken with due respect for personal dignity and individual privacy.
- ❖ Digital ID can intersect with societal inclusion and exclusion, ethnic cleavages, and statelessness in harmful ways - but also help integrate the marginalised in society.
- ❖ Digital ID databases must be secured and protected to prevent unwarranted access by the state, corporations, hackers, fraudsters, and other unauthorised actors.
- ❖ Making digital ID a precondition for receiving social grants and accessing government services, is problematic, and serves to deny access by marginalised groups, such as the poor, the elderly, displaced persons and those in remote rural areas, to such services.
- ❖ Poor levels of e-skills and internet access are barriers to universal and fair digital ID rollout.
- ❖ Despite mass registration drives that take digital ID enrolment to the people, public buy-in to digital ID programmes is lacking and is exacerbated by lack of information about how data is used, as well as a general lack of trust in government services.
- ❖ Lack of transparency regarding contractors, technology, standards and design of digital ID systems further deepens public mistrust and promotes the spread of misinformation.
- ❖ Privacy, cyber-security and the protection of personal information are key challenges for the development of digital ID programmes.
- ❖ Issues of human rights and social inclusion have not received sufficient attention in the design and implementation of digital ID programmes.

## Introduction

Digital ID can also be used by governments to exercise unwarranted social and political control over their citizens.

Providing a legal identity for all is a key Sustainable Development Goal and a basis to exercise social and economic rights. Digital ID transposes that right into modern, digitised format.

A “legal identity for all” is one of the ‘Sustainable Development Goals’ (SDGs) under the United Nations clarion call to “leave no one behind.”<sup>1</sup> SDG target 16.9 calls for legal ID for all, including free birth registration, by 2030. This is in line with Article 6 of the Universal Declaration of Human Rights, which guarantees the right to recognition everywhere as a person before the law.<sup>2</sup>

It is a goal that presents challenges for most countries in Sub-Saharan African (SSA) – low- and middle-income economies facing a myriad of problems, including poverty, inequality, climate change, environmental degradation, fragile peace, limited justice and under-developed legal systems. Securing a legal ID is key in modern economies, providing the ability to identify and authenticate persons, a basis for them to transact, acquire property and access government services.

In pre-colonial societies, people were easily identified by their clan and family names. With the growth, movement and urbanisation of populations, identifying people by their clan affiliation is no longer practical. Governments therefore issue official identity documents for people to identify themselves in accessing services such as voting, education, healthcare and finance. IDs are also used by service providers to verify that the persons seeking services are indeed who they claim to be. Having an ID, therefore, facilitates the achievement and exercise of a wide range of economic, social and civil rights.

For many governments, though, ID also has a national security function. The constitutions of both Kenya and Ghana, the focus countries of this case study, define national security functions as those related to safeguarding the internal and external interests of the state.<sup>3</sup> In practice, identity has been linked to social control interventions, and in Kenya, to counter-terrorism efforts. Hence, many African governments see the digitisation of ID as a panacea to security problems, a means to exercise social and political control.<sup>4</sup> It has also been noted that sophisticated technologies including artificial intelligence are often implemented after security incidents.<sup>5</sup>

The digitisation of identity, therefore, goes beyond the functions of identification and verification.<sup>6</sup> Attributes of individuals become data, when their biometric (biological and physical) information, as well as and other personal attributes, are collected and stored electronically. Artificial intelligence (AI) techniques can then be used to process and analyse this data. Digital technologies, therefore, open up possibilities for the state and private actors to ‘read’ and utilise this data for unwarranted purposes - to track, profile and, consequently, control individuals or groups. For example, in a controversial bilateral agreement, Zimbabwe has exported its national ID database to a Chinese company for use in training facial recognition software.<sup>7</sup>

<sup>1</sup> UN, ‘Sustainable Development Goals’, United Nations, New York, 2012, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

<sup>2</sup> UN, ‘Universal Declaration on Human Rights’, United Nations, New York, 1948, <https://www.un.org/en/universal-declaration-human-rights/>.

<sup>3</sup> Ghana, ‘Constitution of Ghana’, Article 84 & Kenya, ‘Constitution of Kenya’, Article 238.

<sup>4</sup> Freedom House, ‘Kenya’s Antiterrorism Strategy Should Prioritize Human Rights, Rule of Law’, Washington DC, Freedom House, 2018, [https://freedomhouse.org/sites/default/files/Final\\_PolicyBriefKenya\\_11\\_14\\_18.pdf](https://freedomhouse.org/sites/default/files/Final_PolicyBriefKenya_11_14_18.pdf).

<sup>5</sup> Alamin, Mazrui, Kimani Njogu, & Paul Goldsmith, P (eds) *Countering Violent Extremism in Kenya: Between the Rule of Law and the Quest for Security*, Nairobi, Twaweza Communications, 2018, <https://preventviolentextremism.org/>.

<sup>6</sup> Supreme Court of Jamaica, *Robinson versus Attorney General of Jamaica* (Supreme Court of Jamaica- Full Court 12 April 2019).

<sup>7</sup> Lynsey Chutel, ‘China Is Exporting Facial Recognition Software to Africa, Expanding Its Vast Database’, 25 May 2018, *Quartz Africa*, <https://qz.com/africa/1287675/>.

In addition, where data processing is contracted to foreign firms, there is little transfer of knowledge investment, wealth, skills and technology to local actors.<sup>8</sup>

Private actors such as mobile network operators and online platforms also provide forms of digital identity. An individual's mobile phone number, for example, to identify and authenticate them<sup>9</sup>. This has revolutionised access to financial services, with mobile money services booming. With the addition of AI, a person's phone data can be analysed to determine their creditworthiness.<sup>10</sup>

Governments are increasingly linking legal ID provision with private digital ID through frameworks such as the controversial imposition of mandatory SIM card registration.<sup>11</sup> Deeper linkage between government and private ID systems is expected through mobile digital ID, which is trending worldwide.<sup>12</sup>

While a number of African countries state that they are implementing digital ID to provide government services more efficiently, most have not yet articulated the use cases for the massive data collected through digital ID programmes. Inferring from experiences with private digital ID systems, it is expected that this will include the application of artificial intelligence and big data analytics for purposes of commodification.<sup>13</sup> Plausible applications for artificial intelligence in government service delivery include: managing resource allocation; analysis of large datasets; automated question-and-answer (Q&A) services to optimise scarce expertise; prediction using historical data; carrying out of procedural tasks; and aggregation of diverse data.<sup>14</sup>

This brief explores some policy issues and questions affecting digital ID programmes through an analysis of interventions in Ghana and Kenya, as a basis for voicing concerns and making recommendations.

## National ID in Ghana and Kenya

The two countries are both viewed as digital hubs in their respective regions, having given priority to ICT policy interventions over the past two decades. There are also key, illustrative differences between the two countries.

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<sup>8</sup> Linnet Taylor and Ralph Schroeder, 'Is Bigger Better? The Emergence of Big Data as a Tool for International Development Policy', *Geojournal*, 2014, 1-16.

<sup>9</sup> An individual's Facebook ID or Google account can similarly be used to access a range of services.

<sup>10</sup> World Wide Web Foundation, *Artificial Intelligence: The Road Ahead for Low and Middle Income Countries*, June 2017, [http://webfoundation.org/docs/2017/07/AI\\_Report\\_WF.pdf](http://webfoundation.org/docs/2017/07/AI_Report_WF.pdf).

<sup>11</sup> GSMA, 'Access to Mobile Services and Proof-of-Identity: Global policy trends, dependencies and risks', London, GSM Association, 2018, <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2018/02/Access-to-Mobile-Services-and-Proof-of-Identity.pdf>.

<sup>12</sup> Chris Burt, 'Governments Digital Identity Credentials to Reach 5 Billion by 2024 Backed by Mobile Biometrics', *Biometric Update*, 9 July 2019, <https://www.biometricupdate.com/201907/governments-digital-identity-credentials-to-reach-5-billion-by-2024-backed-by-mobile-biometrics>.

<sup>13</sup> Linnet Taylor and Dennis Broeders, 'In the Name of Development: Power, Profit and the Datafication of the Global South', *Geoforum* 64 (2015): 229-37.

<sup>14</sup> Hila Mehr, 'Artificial Intelligence for Citizen Services and Government', Harvard Ash Center, August 2017, [https://ash.harvard.edu/files/ash/files/artificial\\_intelligence\\_for\\_citizen\\_services.pdf](https://ash.harvard.edu/files/ash/files/artificial_intelligence_for_citizen_services.pdf).

While Ghana has never had comprehensive ID, the government of Kenya has been issuing ID documents since 1915. Ghana is therefore developing its first legal identity registry as a digital ID, while Kenya is updating its long-standing existing system to a digital one.<sup>15</sup>

Furthermore, Ghana has a comprehensive data protection framework, something which Kenya currently lacks. In Ghana existing legal identity functions are carried out by a dedicated body, the National Identification Authority; in Kenya, this is done by a department in the Ministry of Interior and Coordination of National Government, the National Registration Bureau.

Ghana's Ghana Card Ghana Card is planned as a polycarbonate, biometric smartcard with adequate capacity for up to 14 applets.<sup>16</sup> It is expected that in future, public service providers, such as the transport authority, will offer services through the applets on the card. The system brings together information from other databases (eg voter's roll, register of births and deaths, national health insurance, driver's licence, disability grants, taxation information and social security registers). During enrolment, cultural and demographic information - such as languages spoken, eye and hair colour, employment status, marital status, level of education, occupation, email address and digital address code - will be captured. This is in addition to biometric data, such as facial photograph and fingerprints. Ghana Card will be the primary and mandatory ID in transactions listed in the law.<sup>17</sup> It is also envisaged to be a valid travel document within the Economic Community of West Africa (ECOWAS) region.

Ghana Card and Kenya's Huduma Namba offer excellent case studies into the implementation of Digital ID in different country contexts

### Kenya's 'Huduma Namba'

Kenya's new *Huduma Namba*<sup>18</sup> digital ID system will create a central electronic register, containing unique digitised identifiers for each recipient - including fingerprints, hand and earlobe geometry, retina and iris patterns, toe impression, voice waves, blood typing, photograph, and other unspecified biometric biological attributes.<sup>19</sup> Rumours abound, but provisions for the collection of DNA records and location-tracking GPS data were struck down the High Court, following litigation by the Kenya Human Rights Commission.<sup>20</sup> A draft Huduma Bill, released in July 2019, sets out the new digital ID regime, with three components- a centralised database, unique identifier for each person and a card to be carried by the user for mandatory use in accessing services.<sup>21</sup>

Huduma Namba was envisaged as mandatory precondition for access to government services but this too has been set aside halted by the High Court.<sup>22</sup> At same time there is an existing government

<sup>15</sup> Veronica Boateng, 'The Key for a Successful EGovernment Implementation' (26 April 2017), [http://www.id4africa.com/2017\\_event/Presentations/2-F8-4\\_NITA\\_Veronica\\_Boateng.pdf](http://www.id4africa.com/2017_event/Presentations/2-F8-4_NITA_Veronica_Boateng.pdf).

<sup>16</sup> Frank Oye, 'Status of Ghana Card', 26 June 2019. An 'applet' is a small software application with specific but limited functionality.

<sup>17</sup> Republic of Ghana, 'National Identity Register Regulations', Regulation 7, 2012.

<sup>18</sup> The kiSwahili phrase "*Huduma Namba*" means 'service number' in Swahili. The legal name for the system is the National Integrated Identity Management System (NIIMS).

<sup>19</sup> Republic of Kenya, 'Statute Law Misc. Amendment Act' (2019).

<sup>20</sup> PesaCheck, 'FALSE: Huduma Namba registration does not involve insertion of a microchip under the skin', 5 April 2019, <https://pesacheck.org/false-huduma-namba-registration-does-not-involve-insertion-of-a-microchip-under-the-skin-d84f4a5b41f2>.

<sup>21</sup> Kenya, 'Draft Huduma Bill', 2019, <http://www.hudumanamba.go.ke/wp-content/uploads/2019/07/12-07-2019-The-Huduma-Bill-2019-2-1.pdf>.

<sup>22</sup> High Court of Kenya, Nubian Rights Forum & 2 others v Attorney-General & 6 others; Child Welfare Society & 8 others (Interested Parties), 2019.

digital ID register, the Integrated Population Registry Services (IPRS), which is used by private actors needing to verify identity documents.<sup>23</sup>

## Caveats for digital ID

Legal identity documents are used as proof of citizenship and residency. They are normally issued by the government to facilitate the exercise of individual and citizen rights. For example, on acquiring the age of majority (18), in both Ghana<sup>24</sup> and Kenya one requires an ID document in order to vote, acquire property, pursue higher education and seek employment. It is therefore desirable, from a human rights perspective, to ensure that identity documents are accessible to every person on attainment of the age of majority or when required.

Adding a digital technology platform to the legal identity framework comes with risks, not only to privacy and data protection, but also to human dignity and the organisation of society. Governments now hold very sensitive personal data in easily duplicated and readily circulated digitised format. Placed in centralised databases, it is vulnerable to data leaks and hacking, a potential honey pot for malicious actors who may want to access personal data for criminal ends. Government agencies can also use the data to exercise unwarranted tracking and control over citizens. Safeguards are therefore essential - such as robust and cyber-secure system design, as well as privacy and data protection frameworks to promote and protect the right to privacy.

Digital ID involves the deployment of advanced technological capabilities. In the past, such technical projects have involved the importation of technical skills and technology from the global north, resulting in minimal transfer of knowledge to local firms and personnel. Without deliberate efforts to develop local software and to transfer skills locally, digital ID programmes could simply perpetuate external dependencies on international technology vendors.

## Identifying digital ID best practices

The digital ID projects in Ghana and Kenya are not without their strengths: a number of international good practice measures have been adopted.

Advocates for identity and social inclusion in both Ghana and Kenya have long called for ID documents to be issued to all and for the barriers that hinder acquisition of these documents to be removed. Adopting the principle of universal registration for all, and embarking on mass registration drives, are, therefore, commendable moves towards ensuring widespread and inclusive service delivery.

### Universal registration for all

Both countries have embraced the principle of a digital ID for all. Both programmes envisage the registration of all persons, including children. Registration for all enables better government planning for future needs and more efficient service delivery. It is expected that registration of children will facilitate the later acquisition of key documents such as voter's cards, passports and

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<sup>23</sup> Republic of Kenya, 'Kenya Citizens and Foreign Nationals Management Service (Charges for Use of Information from the Register) Regulations' (2016).

<sup>24</sup> Republic of Ghana, 'Constitution of Ghana', Article 28(5).

health insurance cards. This will further enable access to financial, employment and other opportunities, and the exercise of economic and social rights.<sup>25</sup>

### Mass registration drives

Both countries have embarked of successful mass registration drives. In Ghana, a year-long mass enrolment project launched in April 2019 and had enrolled 2 million people within its first month.<sup>26</sup> Kenya had a 45-day mass registration drive from March to May 2019. Mass registration drives are particularly important for informal workers, the homeless and other vulnerable persons, as they bring registration services closer to them, where the state and government services often do not reach.

### System design

In both cases, there is little public information on the design and features of the system. Nonetheless, good design features include incorporation of public key infrastructure (PKI)<sup>27</sup> in the system architecture in Ghana, as well as capacity for up to 14 service delivery applets on the Ghana Card.<sup>28</sup>

### Privacy and data protection

Ghana has a comprehensive data protection law<sup>29</sup> as well as a statute on digital ID.<sup>30</sup> Both laws spell out principles for data protection and the rights of users. The laws are implemented by dedicated authorities,<sup>31</sup> providing opportunity for focused policy-making on digital ID. That said, there is a need to strengthen the authorities, currently dominated by government representatives, and to make them functionally independent. The status of data protection in Kenya is, as noted above, controversial and the subject of litigation.

### Local content

The Ghana Card system is implemented through a 15-year public-private partnership with a Ghanaian firm which produces the cards locally.<sup>32</sup> The firm has created local employment and contributes to skills development for the digital economy by hiring and training locals.

## Pitfalls of digital ID

The main concerns arising from the digital ID projects in the two countries relate to issues of social exclusion and failure to ensure a rights-centred system design. In Kenya in particular foundational

Digital ID programmes need to ensure that they are inclusive of all and do not perpetuate existing social cleavages and patterns of exclusion.

<sup>25</sup> Rose Ogola, 'UNHCR - Birth Certificates Signal Brighter Future for Stateless Children in Kenya', UN Human Rights Commission, 2 August 2019, <https://www.unhcr.org/news/stories/2019/8/5d443ad74/birth-certificates-signal-brighter-future-stateless-children-kenya.html>.

<sup>26</sup> Frank Oye, 'Status of Ghana Card'.

<sup>27</sup> The Ghana Ministry of ICT envisages PKI as the set of roles, policies, hardware, software and procedures for the creation and management of digital certificates required creating, managing, distribute, use, store and revoke digital certificates used in secure communications. See <https://www.moc.gov.gh/deployment-public-key-infrastructure-pki-system>.

<sup>28</sup> Victor Kwawukume, 'Margins Deploys Modern Equipment to Produce Secure Identification System', *Daily Graphic*, 7 March 2017, <ghana.um.dk/~media/Ghana/Documents/Margins%20Group.pdf>.

<sup>29</sup> Republic of Ghana, 'Data Protection Act', No 483 of 2012.

<sup>30</sup> Republic of Ghana, 'National Identity Register Act', 750 of 2008.

<sup>31</sup> National Identification Authority and Data Protection Commission.

<sup>32</sup> Frank Oye, 'Status of Ghana Card'.

problems related to citizenship and the issuance of legal identity have not been addressed,<sup>33</sup> heightening the risk of exclusion for historically-marginalised communities.<sup>34</sup> The system is not centred around individual rights and needs, but rather driven by government's agenda of datafication.<sup>35</sup> As a result, enacting legislation to guide digitisation and provide safeguards for privacy and other rights has been ignored.<sup>36</sup>

## Exclusion

Digital ID can perpetuate existing bias and discrimination, particularly when built on existing systems. In Kenya, the first ID registries were set up to compel entry into the labour market and to control the movement of African men. One's ethnicity, clan and patrilineal lineage are still recorded during the issuance of an official ID,<sup>37</sup> entrenching patriarchy and unequal treatment of men and women. Ethnicity has also been politicised,<sup>38</sup> making exercises such as the national census heavily contested.<sup>39</sup> Complexities of ethnic categorisation are also present in Ghana, where, although some communities are matriarchal, access to opportunities has generally been skewed in favour of men.<sup>40</sup>

Intermarriage between people of different ethnicities has compounded contestation along the lines of ethnic identity, by, for example, creating barriers to accessing public office for women with multiple ethnicities. Further, the contribution of women and other minorities risks being erased, since the data represents women as appendages of their male relatives. While cultural identity is important, the Kenyan experience calls for caution before digitising data on ethnicity. The datafication of ethnicity is likely simply to buttress ethnic divisions,<sup>41</sup> such as those witnessed in recent post-election violence.<sup>42</sup> As African countries adopt digital ID, they should consider whether ethnicity and similar cultural data serves any purpose in the identity database. Countries should adopt the principle of minimal but optimal data collection when designing digital ID systems.

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<sup>33</sup> KHRC, 'Report of the Digital Identification Document and Citizenship Consultative Meeting', Kenya Human Rights Commission, Nakuru, 2018, <https://www.khrc.or.ke/publications/198-report-of-digital-identification-citizenship-workshop-naivasha/file.html>.

<sup>34</sup> Open Society Justice Initiative, 'Nubian Community in Kenya v. Kenya', 2010, <https://www.justiceinitiative.org/uploads/66fcd2c5-e02a-4485-963b-ef5b71c23b52/ali-communication-20100517.pdf>.

<sup>35</sup> NIA, 'FAQs on Ghana Card', <https://www.nia.gov.gh/faq.html>.

<sup>36</sup> Mustafa Yousif, 'Why Huduma Namba Bill Raises Tough Queries', *Business Daily*, 29 July 2019, <https://www.businessdailyafrica.com/analysis/ideas/Why-Huduma-Namba-Bill-raises-tough-queries/4259414-5215104-10kxss/index.html>.

<sup>37</sup> William T Morgan, 'The Ethnic Geography of Kenya on the Eve of Independence: The 1962 Census', *Erdkunde* 54.

<sup>38</sup> KHRC, 'Ethnicity and Politicisation in Kenya', Nairobi, Kenya Human Rights Commission, 2018, <https://www.khrc.or.ke/publications/183-ethnicity-and-politicization-in-kenya/file.html>.

<sup>39</sup> 'David Ndii, 'A New Despotism in the Era of Surveillance Capitalism: A Reflection on Census 2019', *The Elephant*, 11 September 2019, <https://www.theelephant.info/op-eds/2019/09/11/a-new-despotism-in-the-era-of-surveillance-capitalism-a-reflection-on-census-2019/>.

<sup>40</sup> Carola Lentz, 'They Must Be Dagaba First and Any Other Thing Second ...', *African Studies* 53, no 2.

<sup>41</sup> KHRC, 'Ethnicity and Politicisation in Kenya'.

<sup>42</sup> Waki Commission, 'Report of the Commission of Inquiry into the Post Election Violence (CIPEV)', Nairobi, 2008, [http://www.kas.de/wf/doc/kas\\_16094-1522-2-30.pdf](http://www.kas.de/wf/doc/kas_16094-1522-2-30.pdf).

## Lack of primary registration documents

In both countries, there is a shortage of the primary documents that are required for digital ID, particularly among rural communities and low income households.<sup>43</sup> The problem is compounded by government directives requiring children to produce birth certificates in order to access school.<sup>44</sup> This has strained administrative resources, as very high numbers of parents apply for critical documents.<sup>45</sup>

## Historical marginalization

Poorly planned digital ID systems can intersect with societal exclusion and historical marginalisation in harmful ways. If governments equate digital ID to determination of citizenship, this puts at risk populations who for historical reasons lack primary identification documents. For example, the Nubians,<sup>46</sup> Shona and Makonde of Kenya - along with other communities historically living in areas divided by colonial country borders - are subjected to long vetting processes before they can acquire identity documents.<sup>47</sup> Making digital ID the exclusive means of access to certain services - as envisaged in Ghana and Kenya - may further exclude historically-marginalised communities from service delivery.

Unfortunately, mass registration drives in both countries have not prioritised the marginalised, but instead aimed to enrol those already having primary identification documents. Marginalised communities are at risk of “legal erasure,”<sup>48</sup> or not being counted, and subsequently not being accounted for during economic planning.

## Datafication puts persons at risk

While the United Nations SDGs define legal ID as a means of accounting and providing for every person, digital ID programmes too often conceptualise digital ID narrowly as a national security issue.<sup>49</sup> Hence, for many SSA countries the preferred model is centralisation of digital identity data, with the aim of having a single source of truth about every person and utilising the data to exercise social and economic control over their citizens. There is also a trend to collect as much identifying data as possible, with governments seeming to value the data above individuals’ rights to privacy and dignity.

<sup>43</sup> Emelia Allan, ‘An Identity for Every Child: Birth Registration and Equity in Ghana’, *FXB Center for Health & Human Rights* | *Harvard University* (blog), 18 March 2015, <https://fxb.harvard.edu/2015/03/18/an-identity-for-every-child-birth-registration-and-equity-in-ghana/>.

<sup>44</sup> UNICEF, ‘Every Child’s Birth Right: Inequalities and Trends in Birth Registration’, New York, United Nations Children’s Fund, 2013, [https://www.un.org/ruleoflaw/files/Embargoed\\_11\\_Dec\\_Birth\\_Registration\\_report\\_low\\_res.pdf](https://www.un.org/ruleoflaw/files/Embargoed_11_Dec_Birth_Registration_report_low_res.pdf).

<sup>45</sup> Vincent Mwasi, ‘80,000 Birth Certificates yet to Be Printed Due to Lack of Paper’, 4 April 2018, <https://citizentv.co.ke/news/80000-applications-for-birth-certificates-awaiting-printing-in-kisii-195765/>.

<sup>46</sup> ‘Nubian Community in Kenya v. Kenya’.

<sup>47</sup> KNCHR, ‘An Identity Crisis? A Study on the Issuance of National Identity Cards In Kenya’, 2007, <http://www.knchr.org/Portals/0/EcosocReports/KNCHR%20Final%20IDs%20Report.pdf>.

<sup>48</sup> Christine Mungai, ‘Kenya’s Huduma: Data Commodification and Government Tyranny’, *Al Jazeera*, 6 August 2019, <https://www.aljazeera.com/indepth/opinion/kenya-huduma-data-commodification-government-tyranny-190806134307370.html>.

<sup>49</sup> Keith Breckenridge, ‘The Failure of the “Single Source of Truth about Kenyans”’, *African Studies*, Vol 78, No 1, 2018.



## Risks of centralization

Both Ghana and Kenya are building centralised identity databases that merge social welfare services with national security functions.<sup>50</sup> Governments are also collecting very sensitive data and personally-identifiable information such as biometrics.<sup>51</sup> In the event of a data breach, centralised data exposes the users to a high risk of having their privacy and dignity infringed. Centralisation also diminishes the role of decentralised institutions, such as social service providers and local governments, in issuing identity documents - yet both countries have vast rural and underserved regions, where local community actors are better suited to provide services.

## Biometric hullabaloo

The adoption of biometric identity tags for functions that require high public trust (such as voter identification) or entail national security functions (such as immigration and refugee services) is growing. Increasingly, biometric ID is also being extended to social welfare services, such as cash transfer programmes for vulnerable persons.<sup>52</sup> Such services are utilised by already vulnerable groups, who are often not provided with sufficient information on the privacy risks associated with giving out their biometric data. Even where such information is given, groups such as the old, the poor or refugees, do not have alternative means of accessing the services they require nor the power to pursue their data protection rights.<sup>53</sup> Security experts caution against placing too much premium on biometrics, as no technology is fool proof.<sup>54</sup> Indeed, some governments (such as the USA) are now reducing their reliance on biometric identity.<sup>55</sup> Increasingly, US local governments and states are also banning<sup>56</sup> facial recognition software in policing due to human rights concerns.<sup>57</sup>

Interfaces between digital ID programmes and other forms of ID – such as mandatory SIM card registration - need careful safeguards to protect the rights of individuals.

## e-Governance

Kenya and Ghana are both increasingly moving services such as applications for passport, drivers licences and business permits onto online platforms.<sup>58</sup> This creates barriers for those without Internet access, or without sufficient digital literacy, seeking to make use of government services.<sup>59</sup> It has led to the growth of intermediaries who process government services for users at a fee. Such

<sup>50</sup> URSB & NIRA, 'Transfer of Births, Deaths and Adoption Order Registration from URSB to NIRA Effective January 01, 2016', 29 December 2015, <https://www.nira.go.ug/wp-content/uploads/Publish/Transfer-of-Births-and-Deaths-to-NIRA-from-URSB-Effective-1st-January-2016.pdf>.

<sup>51</sup> KELIN, "Everyone Said No" - Biometrics, HIV and Human Rights: A Kenya Case Study', Nairobi, 2018, <https://www.kelinkeny.org/wp-content/uploads/2018/07/%E2%80%9CEveryone-said-no%E2%80%9D.pdf>.

<sup>52</sup> Capital Reporter, 'Cash Transfers to Be Sent Directly to Beneficiaries' Accounts', *Capital News*, 29 November 2018, <https://www.capitalfm.co.ke/news/2018/11/cash-transfers-to-be-sent-directly-to-beneficiaries-accounts/>.

<sup>53</sup> Magdalena Sepúlveda Carmona, 'Is Biometric Technology in Social Protection Programmes Illegal or Arbitrary? An Analysis of Privacy and Data Protection', Geneva, International Labour Organisation, 2018, [https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---soc\\_sec/documents/publication/wcms\\_631504.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_631504.pdf).

<sup>54</sup> Duncan Muchangi, 'AI Driven Identity as a Foundation for Financial Inclusion', *CIO East Africa*, 14 July 2019,.

<sup>55</sup> NIST, 'Digital Identity Guidelines', nd, <https://pages.nist.gov/800-63-3/sp800-63-3.html>.

<sup>56</sup> Charlotte Jee, 'A Facial Recognition Ban Is Coming to the US, Says an AI Policy Advisor - MIT Technology Review', MIT, 18 September 2019, <https://www.technologyreview.com/s/614362/a-facial-recognition-ban-is-coming-to-the-us-says-ai-policy-advisor/>.

<sup>57</sup> Luke Stark, 'Facial Recognition Is the Plutonium of AI', *XRDS*, n.d.

<sup>58</sup> Republic of Ghana, 'National Identity Register Regulations', Regulation 7.

<sup>59</sup> GSMA, 'Are African Governments Providing Understandable and Accessible Content for the "Mobile First" Continent?', London, GSM Association, 7 December 2016, <https://www.gsma.com/mobilefordevelopment/uncategorized/are-african-governments-providing-understandable-and-accessible-content-for-the-mobile-first-continent/>.

intermediaries have not been trained in privacy and data protection, yet they collect personal data of the users of government services, putting the privacy of their customers at risk.<sup>60</sup>

### **Convergence of digital ID with private identity systems**

Mandatory mobile phone SIM card registration creates a problematic degree of overlap with digital ID systems. In Kenya for example, mandatory SIM card registration has evolved from collection of copies of identity documents to real time online verification. This is after government provided access to digital ID databases to private actors such as mobile network operators.<sup>61</sup>

Further, with real-time verification, data about a person is collected as they carry out their transactions, not only by parties to the transaction but also by government. Such data can be used to profile the person. In addition, insurance companies, banks and other entities are increasingly undertaking customer interface procedures using digital ID verification. Private entities have also enhanced their data collection with technologies such as facial scanning and voice recognition.<sup>62</sup>

With this increasing convergence of government-issued and private digital ID, large amounts of personal data are collected on an ongoing basis. Yet many countries, rather than provide safeguards against continuous surveillance of individuals, are enacting laws to legitimise access to data by law enforcement, tax and other government agencies.<sup>63</sup>

### **(Mis)information**

Governments are less than forthcoming about the design, features and use cases of their digital ID systems. They have not provided sufficient information on the design, contractors, and technology being employed, or where data is stored.<sup>64</sup> This has contributed to the spread of rumours, misinformation and disinformation about digital ID.<sup>65</sup> In both countries, people enrol for digital ID for fear of missing out on essential services.<sup>66</sup>

### **Security, data protection, and data custodianship**

Citizens in both countries have expressed misgivings about the custodianship of their personal data, fearing that it is exported to other countries. Both Kenya and Ghana claim to have put in place information security measures - although this has yet to be demonstrated, for example, by publishing the relevant data security policies or releasing the outcomes of penetration tests.

Even in Ghana, where there is a Data Protection Commission, ordinary people suspect that their data is accessed by third parties. For example, in July 2019, it was reported that voter data had been sold

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<sup>60</sup> Grace Mutung'u, 'The Influence Industry: Data and Digital Election Campaigning in Kenya', Nairobi, Tactical Technology Co-operative, 2018, <https://ourdataourselves.tacticaltech.org/media/ttc-influence-industry-kenya.pdf>.

<sup>61</sup> Republic of Kenya, 'Kenya Citizens and Foreign Nationals Management Service (Charges for use of Information from the Register) Regulations'.

<sup>62</sup> Mugambi Mutegi, 'Safaricom Goes for Photo IDs to Block M-Pesa Fraud', *Business Daily*, 10 July 2017..

<sup>63</sup> Buhle Lindwa, 'High Court Rules Rica as Unlawful and Invalid in South Africa', *The South African*, 16 September 2019, <https://www.thesouthafrican.com/news/high-court-judges-rica-as-unlawful-and-invalid-in-south-africa/>.

<sup>64</sup> Keith Breckenridge, 'The Failure of the "Single Source of Truth about Kenyans"', *African Studies*, Vol 78, No 1, 2018.

<sup>65</sup> Japheth Ogila, 'Is Huduma Namba, the Biblical 666', *The Standard*, 3 April 2019, <https://www.standardmedia.co.ke/article/2001319344/is-huduma-namba-the-biblical-666>.

<sup>66</sup> Joseph Muraya, 'Fear Drives Kenyans, Foreigners to Register for Huduma Namba', *Capital FM*, 17 May 2019, <https://www.capitalfm.co.ke/news/2019/05/fear-drives-kenyans-foreigners-to-register-for-huduma-namba-24-hrs-to-deadline/>.

to third parties.<sup>67</sup> Data protection laws, where they exist, need to be enforced, along with ensuring that government agents are aware of the importance of data protection. The public also needs to appreciate their rights under data protection so that they can keep the agents accountable.

### Laws before data

Both Ghana and Kenya undertook data collection prior to enacting data protection laws. Kenya has been digitising existing identity registries and creating new ones for some time.<sup>68</sup> It was only in 2019 that a new law was passed in respect of the controversial Huduma Namba digital ID database discussed above. While Ghana has data privacy laws, many users are not aware of their rights or of avenues for redress under digital ID systems. Both countries are yet to put in place mechanisms for meaningful access to digital ID databases by the data subjects, the individual users.

## Conclusion

Ghana and Kenya are digital hubs in their respective regions, whose digital ID programmes are likely to influence development of similar programmes in other African countries.

Like many of their peers in the continent, they are creating massive databases of personal data in a quest for a 'single source of truth' about every individual under their jurisdiction. To drive adoption of digital ID systems, they are making digital ID a precondition for access to government services, seemingly oblivious to the low levels of digital literacy and lack of Internet access among their most vulnerable populations. Digital ID is being implemented as a matter of urgency, without sufficiently educating the public on the full import of the programmes. Further, both Ghana and Kenya have failed to analyse the implications of digital ID on key human rights, such as the right to equality and non-discrimination in access to basic services and social welfare, the right to participate in civic life, the right to privacy. The programmes also leave out those without basic identification documents, and perpetuate harmful power structures such as patriarchy and ethnic discrimination.

Emerging technologies, such as artificial intelligence, will be applied to the digital ID data in the near future.

As Africa surges on with its digital agenda, foundational aspects such as digital ID should be grounded on the right footing. Human rights provides the best framework for ensuring that digital ID is technology that serves the people and facilitates them to improve their welfare.

## Recommendations

Digital ID, as currently being implemented in Ghana and Kenya, needs to have far more of a human rights focus. This means including all people in registration, as well as including other points of view on the design of the systems. The systems also need to be based on human rights, so that digital ID enhances access to rights, as opposed to stifling them. Some specific recommendations include:

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<sup>67</sup> Victoria Soglo, 'Alleged Sale of Ghanaian Voters Data: DPC Demands Information from EC', *In Him Is Life Radio*, 4 July 2019, <http://home.inhimislife.com/2019/07/04/alleged-sale-of-ghanaian-voters-data-%ef%bb%bfdpc-demands-information-from-ec/>.

<sup>68</sup> For example, through projects such as the Integrated Population Registration System (IPRS) which was launched 2015. Other databases include the National Education Management System (NEMIS) and Transport Integration System (TIMS). Ghana is similarly digitising its system for the issuance of drivers' licences.

Digital ID programmes need to have prior legal frameworks to ensure proper cyber-security and protection of individuals' data.

## Inclusion

Digital ID programmes need to promote social inclusion and protect human rights.

- ❖ Countries that have legacy ID systems designed for the control of local populations should use digital ID as an opportunity to create new systems. Such new digital ID systems need to facilitate individuals to flourish, as opposed to buttressing historical power structures and sources of conflict, such as patriarchy and politicised ethnicity.
- ❖ Governments should hold national dialogues on digital ID. They should publish, and openly discuss, the rationale, use cases, risks of data collection and safeguards that will be applied to mitigate the risks. They should be open to other points of view on issues such as the centralisation of data.
- ❖ Governments should prioritise provision of primary registration documents to persons who have been historically denied them, including stateless persons and those in border districts.
- ❖ Government should involve local government structures and non-state actors, including CSOs working on identity and inclusion, who have better reach into under-served areas and persons.
- ❖ Civil society and other public interest parties should undertake policy research to highlight particular problems with the conceptualisation and implementation of digital ID programmes in the various African countries. CSOs should contribute to norm-setting at regional and continental level on rights-based digital ID.

## Rights-based ID

- ❖ African governments should decentralise ID services to avoid putting individuals and their data at risk or unwarranted exposure and access.
- ❖ Digital ID projects should be done in terms of a legal framework that protects and promotes privacy and data protection, while upholding good governance. Governments should provide redress mechanisms for grievances related to digital ID.
- ❖ Governments should ensure that the implementation of digital ID that promotes human dignity and equality of access in the provision of government services.
- ❖ Governments should delink social welfare services from national security functions in digital ID programmes, to enable vulnerable groups to access and enjoy services such as education, health and protection without fear of law enforcement.
- ❖ Governments and their partners should publish information on contractors, technology, standards and design of digital ID systems.
- ❖ Governments and partners must prioritise universal Internet access and service, and undertake digital skills capacity building so that people can meaningfully access government services online.
- ❖ Governments and other partners should provide adequate information on the present and anticipated use cases of personal data and personally identifiable information in digital ID programmes.
- ❖ Overall, governments should remember that they exist to provide services to all persons. Lack of Internet connectivity or digital ID should never be a reason for denial of services by a government agency.

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*This is policy brief was based on independent research and funded by Microsoft. The views and recommendations in this paper do not necessarily present the views of Microsoft on AI.*