Kenya ICT Action Network

Policy Brief

Data Protection in Kenya

Acknowledgement

Executive Summary

In the last two decades, Kenya mobile communications and internet connectivity have rapidly increased. With these developments, the country has also developed a data economy. The data economy is the wealth and resources created from collection and processing of data. It is the cornerstone of the fourth industrial revolution which uses digital technologies to carry out processes, be they physical, digital, or biological. A key feature of the revolution is data-driven decision making, creation of new products, services and innovation.

Data-driven decision making has various effects on society. It could result in more efficient distribution of resources such as water, health and emergency services. However, data can also propagate existing inequalities as only those whose data is available are included in planning and decision making. In other instances, data may be used to discriminate against particular groups. This may be deliberate or from automated decision making where on the input given, the system makes erroneous or a rights demoting decisions.

Kenya has a significant data economy. The government through the Integrated Population Register Services (IPRS) has been digitising analogue paper records of the public. It has also centralised databases containing millions of personal records from several registries. These include birth, death, immigration and passports, marriage, elections, tax, drivers, education, National Social Security Fund (NSSF) register, National Hospital Insurance Fund (NHIF) register and the Kenya National Bureau of Statistics (KNBS). This is in addition to the large biometric database containing close to 20 million voters data under the Independent Electoral and Boundaries Commission (IEBC).

The country is in a biometric craze with various private organisations either piloting or implementing voice, fingerprint, face and iris recognition systems. The rationale for the private databases is to curb fraud. Some of these private entities for instance banks and mobile network operators (MNOs) have access to the centralised government database for verification of identity documents. However, the trends seem to be movement from validation of documents to authentication of people. Hence everywhere in Kenya, public and private bodies are seeking to update their databases. It has become common to be asked for a new photo or primary documents even where one already has a record.

This policy brief examines the current state of data protection. There are a few laws that require confidentiality of data. These include the Official Secrets Act; Children's Act;~~,~~ HIV and AIDS Prevention and Control Act; Witness Protection Act; Banking Act, Credit Reference Bureau Regulations and Capital Markets Act; Access to Information Act; and the Public Archives and Documentation Service Act. Others are;~~-~~ Kenya Information and Communications Act (KICA); Private Security Regulation Act; and the Elections (Technology) Regulations, 2017. Together with professional ethics and pronouncements of the courts, these laws regulate aspects of data in specific cases. However, they exclude other instances of data collection in our modern reality. For example, educational institutions collect personal data of their students but they are not primarily under a regime requiring them to protect the data from unauthorised access and use. Similarly, online platforms that people use to access internet services for example Facebook and Twitter are not subject to data protection licence conditions under the KICA.

This has therefore created policy concerns from economic, fairness and political data perspectives. Under economic issues, the critical concern ~~-~~is that the government digitisation project is without a policy or legal framework. The government is therefore collecting massive data in the absence of a policy and legal framework which should detail ~~-~~the purposes for which the data collected may be used. Long term issues such as access to the internet and building Kenya's capacity for the new economy also require policy intervention. While large private companies may already be practising data protection and have the capability to adopt to new standards once a data protection framework is adopted, this may not be the case for micro, small and medium enterprises (MSMEs) or academic institutions.

It is therefore recommended that a policy and legal framework for data protection be developed and that it includes an independent authority to facilitate equitable interventions for these players. An ideal data protection is one centred on the person. Lack of awareness and consent of the data subject, exclusive automated data processing and opaque data management practices can lead to lack of fairness in data processing. Transparency is therefore identified as a best practice that should be included in the policy and legal framework. This would cover data subject's rights including: informed consent; data subject access to data; data subject intervention for example to view the data, request for rectification or object to automated decision making; and notification in case of breach of data.

Noting that Kenya previously drafted data protection bills that were not introduced in Parliament, this Policy Brief paper recommends the development of a simplified framework to provide for data protection principles with an independent authority established to promote data protection and enforce the law. Consequently, the government should develop a privacy and data protection policy that also covers digitisation and that Parliament also urgently enacts a data protection law.

Glossary of terms

Personal Data	Facts that can be used to identify a person
Sensitive personal data	data that reveals sensitive personal traits such as genetics, biometrics, racial or ethnic origin, political opinions, religious or philosophical beliefs, trade-union membership, health status or sex life/ sexual orientation
Anonymous data	Data with sensitive personal data removed so that a person cannot be identified
Data processing	Converting of data into meaningful information. This includes collecting, recording, rationalizing, storage, alteration, retrieval, use, transmission, dissemination, erasure or destruction of data
Data processor	One who processes data, whether for themselves or on behalf of another
Data controller	One who designs how data will be processed and may sometimes give the data processing job to a data processor . Person or entity that procures the services of a data processor e.g. a mall that decides to hire a security company to install CCTV cameras to capture the traffic in and out of the mall
Data subject	The person that data relates to
Genetic data	Data that uniquely identifies a person based on inherited and acquired traits. Typically involves processing of biological samples for physiological and health information
Biometric data	personal data used to identify a specific person using human characteristics such as fingerprints, face recognition, DNA, eye parts, voice and body odour

Introduction

Data is a powerful tool in the development of our society that comes with many risks. Profiles from personal data can be used to exploit people and further discrimination and marginalisation.

Data protection is a relatively new and evolving area of law and policy. It defines how the privacy of individuals is protected whenever data that is collected or disseminated. Privacy is the state of being apart from other people. Ideally, a person should be able to limit how aspects of their personality are seen on the public or private sphere. Protecting privacy is grounded on the notion of human dignity and autonomy on one hand and social order on the other.

The use of digital technologies in data processing has increased both the volume and scale of data activities. Activities that previously required hours in travel and physical presence are increasingly being done online. For example, filing of taxes, application for passports, driver's licenses, trade permits and professional licenses are now done exclusively online.[1] Payment for goods and services using virtual money has also increased as have social connections with friends and relations through mobile phones.[2]

World over, policy makers are deliberating on the effect of digitisation on society, to respond to issues such as data privacy, data and democracy, and autonomy of users in data-driven decisions. Digitalised services create databases with our personal information. Such information can be used to study us and predict future behaviour. For example, the analysis of a person's mobile money transactions can give comprehensive ideas of the person's product preferences and geographical areas where they have interest. With the analysis, marketers can predict products that the person would likely purchase.

The same data can also be used for non commercial purposes such as efficient government service delivery, behaviour change and political manipulation. In the 2013 and 2017 Kenyan elections, data collected from mobile money agent transactions records could have been used to register people into political parties without their knowledge. In 2017, data from government databases was used to mobilise people in certain areas to register as voters. Data was also used to profile voters and micro target them.

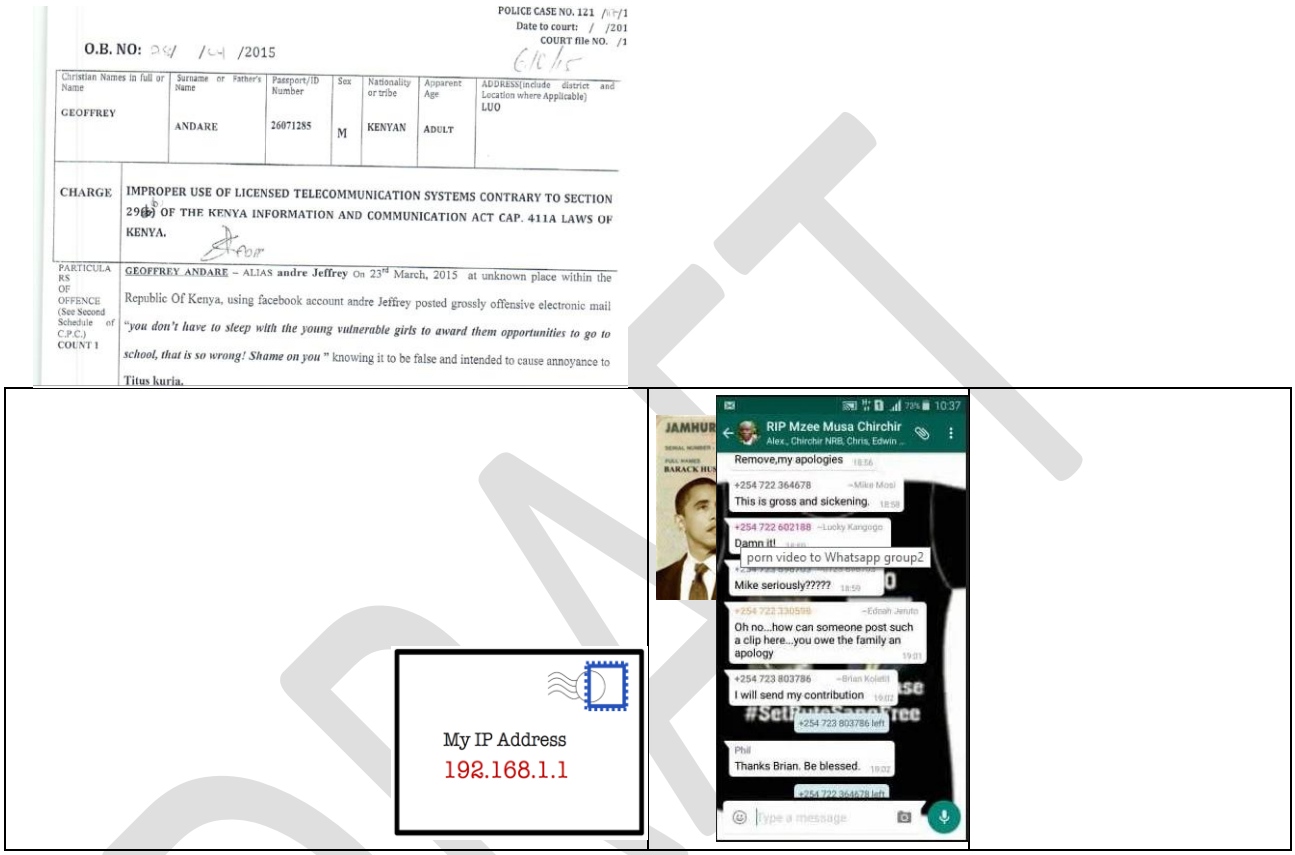
Going forward, more data will be collected and processed by various actors such as the state and private service providers. In the US for instance, automated data processing is being tested and in some cases used in making decisions such as sentencing in criminal cases, medical diagnosis and treatment, management of transport and delivery of utilities such as water and electricity.

This Policy Brief reviews data protection in Kenya as provided for in various statutes and practices. It also considers past efforts for a general data protection regime, pointing out how these could be improved. Noting that issues in data have evolved beyond data privacy to user autonomy, re-purposing of data and political data, the brief explores policy issues on data protection.

1 GoK, "ECitizen | A Portal That Offers Access to Information and Services Provided by the Kenyan Government," eCitizen portal, accessed April 5, 2018, https://www.ecitizen.go.ke/ecitizen-services.html.

2 GSMA, "GSMA Mobile Economy 2018," 2017, https://www.gsma.com/mobileeconomy/.

It is from this background that recommendations for a data policy framework for Kenya are made. These include principles for data protection and creation of an independent regulatory authority. This will ensure real progress for the society as a whole, as the principles to guide how to use data while strictly protecting personal privacy will be defined.



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Date to court: / /201
COURT file NO. /1

O.B. NO: /14 /2015

Christian Names in full or Name	Surname or Father's Name	Passport/ID Number	Sex	Nationality or tribe	Apparent Age	ADDRESS(include district and Location where Applicable)
GEOFFREY	ANDARE	26071285	M	KENYAN	ADULT	LUO

CHARGE: IMPROPER USE OF LICENSED TELECOMMUNICATION SYSTEMS CONTRARY TO SECTION 29(b) OF THE KENYA INFORMATION AND COMMUNICATION ACT CAP. 411A LAWS OF KENYA.

PARTICULARS OF OFFENCE (See Second Schedule of C.P.C.) COUNT 1: GEOFFREY ANDARE – ALIAS **andre Jeffrey** On 23rd March, 2015 at unknown place within the Republic Of Kenya, using facebook account andre Jeffrey posted grossly offensive electronic mail *"you don't have to sleep with the young vulnerable girls to award them opportunities to go to school, that is so wrong! Shame on you"* knowing it to be false and intended to cause annoyance to Titus kuria.

Data Protection in Kenya

Data protections are found in various laws, professional codes and court judgements. This section provides a brief explanation of how data is protected in the current laws, and contrasts that with data collection laws and practices by the government and private actors.

Kenya has entrenched the protection of privacy in ~~.~~Article 31 of the Constitution which defines privacy to include:

> "...the right not to have—
>
> (a) their person, home or property searched;
> (b) their possessions seized;
> (c) information relating to their family or private affairs unnecessarily required or revealed; or
> (d) the privacy of their communications infringed."

Laws such as the Official Secrets Act which classifies government information give some protection to personal data. Other examples are the protection through anonymisation of minor's, patients and witness identities under Children's Act, ~~and~~ HIV and AIDS Prevention and Control Act, and the Witness Protection

Act ~~respectively~~. Personal financial information is protected through confidentiality requirements under the Banking Act, Credit Reference Bureau Regulations and Capital Markets Act. Laws that require publication of data such as the Access to Information Act and the Public Archives and Documentation Service Act also have inbuilt mechanisms for protection of personal information. These include anonymised publication of data, redaction of sensitive information and obscuring of the person in question. Under the Kenya Information and Communications Act, it is an offence to intercept messages. The Private Security Regulation Act protects data collected during entry into buildings from being used for other purposes. The ICT Regulations under the Elections Act~~,~~ provides for the ~~or~~ protection of biometric data collected during elections.

Personal data may also be protected by professional ethics. For example, advocate client privilege and doctor patient confidentiality prevents sharing of personal information with a third party. Similarly, media codes protect~~s~~ information such as sources, victims and minors details from being published while academic research anonymises sensitive data.

Courts have weighed in on different aspects of the right to privacy. Prior to the 2010 Constitution, privacy petitions were grounded i~~o~~n access to information held by the state, the evidentiary value of information collected during illegal search and seizure, evidence in possession of third parties relating to private or privileged communication and disclosure of HIV/AIDS status. Post 2010, privacy has been considered alongside other rights in petitions related to property rights. These petitions have pointed that petitioners claiming rights protection must show how they are affected by the action alleged to be a breach of privacy[3]. In one case, the court declined to order a DNA test in consideration of the respondents privacy rights where the petitioner had not proven their claim[4]. Issues of dissemination of personal pictures[5] and minors photographs[6] have also been considered. More data related cases include commercial appropriation of the likeness of a person[7] and potential privacy breaches with thin SIM card technology[8].

Kenya attempted to regulate data protection through two draft bills in 2009[9] and 2012[10]. The 2009 draft was not envisaged to apply to private sector data, while both bills covered only automated processing of data. The 2009 Bill created a data protection commission while the 2012 one proposed to give that role to the existing government ombudsman. Both bills did not adequately address rights of data subjects and issues of consent, data portability and cross border transfer. The penultimate section of this paper discusses what an ideal data protection framework for Kenya and identifies two key issues for improvement of the draft bills. These are inclusion of data protection principles and establishment of an independent data protection authority (DPA).

Data Collection by Government

Conversely, privacy of personal data is also limited through laws and practice. The Prevention of Terrorism and National Intelligence Service Acts limit the right of privacy for persons suspected of terrorism and offences under national security respectively. Collection of personal data is also sanctioned under the Private Security Regulation Act that ratified the common practice of producing an identity card for registration of personal data before accessing public and private buildings. Mandatory SIM card registration requires telecommunication operators to maintain a register of all subscribers on their network. This links

3 Standard Newspapers Limited & another v Attorney General & 4 others (High Court at Nairobi October 17, 2013).

4 S.W.M v G.M.K (High Court at Nairobi October 5, 2012).

5 Roshanara Ebrahim v Ashleys Kenya Limited & 3 others (High Court at Nairobi December 7, 2016).

6 Charles Muturi Macharia v Standard Group & 4 others (February 2, 2017).

7 Rukia Idris Barri v Mada Hotels Ltd (High Court at Nairobi August 22, 2013).

8 Bernard Murage v Fineserve Africa Limited & 3 others (High Court at Nairobi May 29, 2015).

9 Republic of Kenya, "Data Protection Bill" (2009), https://www.ifex.org/kenya/2011/11/09/kenya_article19_data_protection_bill_final.pdf.

10 Republic of Kenya, "Data Protection Bill" (2012), http://icta.go.ke/data-protection-bill-2012/.

automatically collected data from mobile phones on their network to identifiable persons. A prerequisite for use of mobile money services is registration of personal data such as phone number and national identity card number for almost every transaction. There are Regulations that allow the use of drones subject to thorough scrutiny from the Ministry of Defence and the Kenya Civil Aviation Authority creating potential for indiscriminate collection of personal data.

The government has ICT based surveillance systems that collect a wide range of data. These include internet traffic monitoring equipment (NEWS), National Surveillance Communication Command and Control System (NSCCCS) that has street based ccTV surveillance, the Device Monitoring System (DMS) , biometric immigration services and among others.

In 2015, President Kenyatta launched the Integrated Population Registration System (IPRS) which centralises identity data from state databases. This consists of birth, death, marriage, elections, tax, drivers, education, National Social Security Fund (NSSF) register, National Hospital Insurance Fund (NHIF) register and the Kenya National Bureau of Statistics (KNBS). The objective of the system is to uniquely identify each and every person in Kenya using one identifier from birth to death. The system also serves to validate and verify identity documents by giving access to third parties such as banks and mobile network operators who are required to register and authenticate their customers.

The now defunct Commission for Implementation of the Constitution (CIC) had drafted a Registration and Identification of Persons Bill that made provision for registration of Kenyan citizens at birth. The Bill meant to cure the problems associated with lack of official identification among a section of Kenyan citizens. A version of the Bill was introduced in the last Parliament but not concluded[11]. The IPRS project is therefore being undertaken in the absence of a policy and legal framework thatto defines the objectives, actors and policy balancing between provision of security by the government and protection of privacy and other rights of citizens.

Some of the projects implemented under the IPRS framework include the e-citizen portal, transport integrated management system (TIMS),the ongoing pupils registration, and the National Education Management Information System (NEMIS). The systems are developed by private contractors who collect, process and keep data. In the case of e-citizen, ongoing litigation reveals that the system was operated and managed by a private company[12], creating concerns about retention of personal data by the contractors.

Counties such as Nairobi, Mombasa, Kiambu and Murang'a have developed automated revenue collection systems through which residents make payments such as licence fees, land rates and parking fees. Many of the systems incorporate mobile money for ease of payment and they collect personal information such as ID card details, phone number and residential address. Some of the information is retained by service providers contracted to run or maintain the systems.

Data Collection by Private Entities

Autonomous state agencies and private actors have also been adopting biometric identification systems. Kenya Commercial Bank (KCB) in December 2017[13] invited bids from technical experts for deployment of

11 "Registration and Identification of Persons Bill" (2014), parliament.go.ke/the-senate/house-business/senate-bills/item/988-the-registration-and-identification-of-persons-bill-2014.

12 Franklin Sunday, "Treasury: Millions Paid for Ecitizen Services Ended in Private Accounts," *The Standard*, January 16, 2018, https://www.standardmedia.co.ke/business/article/2001266099/unmasking-the-legal-fight-behind-ecitizen-deal-worth-billions.

13 KCB, "Implementation of Biometric Authentication," December 2017, https://ke.kcbgroup.com/about/tenders/item/35.

biometric authentication technology for their customers. Equity Bank[14] and the Standard Chartered Bank Kenya[15] have already implemented fingerprint authentication. Safaricom's *Jitambulishe*[16] is a voice biometric service used for authentication. The University of Nairobi[17] records student registration and attendance via biometrics. The Law Society of Kenya[18] has also procured a biometric member's service system. Many private businesses use biometrics to monitor entry into their premises and manage human resources.

In cases, such as the Law Society and University of Nairobi, biometric registration is a mandatory prerequisite to access services from the entities. The systems are implemented and maintained by private service providers who gain access to customers personal data in the course of installing and maintaining the systems. Most of the customers do not understand the purposes for which their data is collected or whether it is stored securely.

Kenya is among Africa's most connected countries with a penetration rate of 88%.[19] Mobile Network Operators (MNOs) collect varied data from subscribers including location and call history. This data is identifiable as SIM card regulations require mandatory registration of SIM cards before they are activated. MNOs also collect data on mobile money transactions. Where customers use an agent to access mobile money services, the agent collects data such as identification document details and transaction amount.

In addition, Kenyans who use online services such as Uber, Google, Facebook have identifiable data about them collected. This may include their internet protocol (IP) Address, the unique number through which a device access the internet, social networks, financial and local information.

Risks

Without a general data protection framework, it is up to entities that collect personal data to employ internal strategies to protect this data. This exposes data to breach, which comes with risks such as identity theft, misuse of personal information, unauthorised distribution and sale of data, financial loss and erosion of privacy.[20]

The data may therefore be repurposed and used for purposes other than what it was collected for. In Kenya, mobile phone customers have for example complained about receiving direct advertising in services they did not subscribe to. In some cases, these are premium charge services that have a cost implication. Apart from commercial purposes, data is also a source of surveillance. During the 2017 election period, a Supreme Court judge protested when his mobile phone call logs were shared online.[21] An investigation by Privacy International had linked use of phone data to extra-judicial killings. Beyond individual harm, personal data collections increase the risk of injury to groups. For example, automated decision making can lead to

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14 George Ngigi, "Equity Bank Bets on Biometrics to Curb Fraud," Business Daily, November 24, 2014, https://www.businessdailyafrica.com/markets/Equity-bets-on-biometric-IDs-to-curb-fraud/539552-2533664-yfmato/index.html.

15 Victor Juma, "StanChart Launches Fingerprint Banking Technology in Kenya - Business Daily," *Business Daily*, December 7, 2016, https://www.businessdailyafrica.com/corporate/StanChart-launches-fingerprint-banking-technology-in-Kenya/539550-3478696-131ss2j/index.html

16 Safaricom Ltd, "Safaricom Introduces Voice Biometrics to Enhance Customer Experience," December 11, 2017, https://www.safaricom.co.ke/about/media-center/publications/press-release/release/408

17 UoN, "Students to Start Using Biometric Cards," accessed April 11, 2018, http://www.uonbi.ac.ke/content/students-start-using-biometric-cards

18 LSK, "Upgrade of LSK Systems and Processes," 2017, http://lsk.or.ke/Downloads/Upgrade%20of%20LSK%20Systems%20and%20Processes_1.pdf

19 CA, "Kenya's Mobile Penetration Hits 88 per Cent," 2016, http://www.ca.go.ke/index.php/what-we-do/94-news/366-kenya-s-mobile-penetration-hits-88-per-cent

20 CIPIT, "Biometrics in Kenya", 2018 http://blog.cipit.org/wp-content/uploads/2017/12/Biometrics_defined.png

21 Kamau Muthoni, "Justice Lenaola Protests to Safaricom over Call Logs," The Standard, accessed April 8, 2018, https://www.standardmedia.co.ke/article/2001255316/justice-lenaola-protests-to-safaricom-over-call-logs

discrimination and marginalisation of groups.

Data Protection in Other Jurisdictions

In the spectrum of data protection, the knob moves from giving individuals as much autonomy as possible over their data on one end to non-acknowledgement of information privacy on the other. The European Union (EU) has the highest protection for personal data, requiring accountability from processing personal data of EU citizens. EU citizens are entitled to consent and fair notice, the right to be forgotten and object against their data being used for marketing purposes as well as the right to transfer their data. China's cybersecurity law creates data protection obligations on network operators and restricts exportation of personal data.

Closer home, the African Union Convention on Cyber Security and Personal Data Protection calls for each state party to establish a legal framework for protection of data and punishment for violation of privacy principles[22]. It envisions protection for genetic information and health research; information on offences, convictions or security measures; national identification numbers; biometric data; personal data in public interest in historical, statistical or scientific purposes. Close to 20 African countries have enacted data protection legislation. These include South Africa[23] and Ghana[24], both of which adopt the principles of data protection and have an independent oversight authority.

Policy Concerns

The fourth industrial revolution is often characterised as the convergence of physical, digital and biological spheres. Previous industrial revolutions created new forms of property ownership such as trade secrets, copyright, geographical indications, patent, trademarks and brand equity. In the digital age, data is also emerging as a new form of property with contestation as to its ownership. One school of thought views the data subject as the owner of the data while another views the data as trade property of the data processor or controller. Whichever doctrine is applied, advances in data processing have rekindled debate on how to value of the data subject or person.

Most recently, the European Union (EU) developed the highest protection for personal data by today's standards. The framework, known as the General Data Protection Regulation (GDPR) enhances the data subject's right to control data about them through rights of access to the data, correction, erasure, protection from decisions made solely through automated processes, erasure and portability of data across platforms. Policy concerns can be considered from three prongs: economic issues, fairness in data processing and political data.

Economic Issues

With the digitisation that is taking place in Kenya, the country has a growing data economy. Activities in the emerging economy have mostly focussed on data production as is the case with the government digital identification programme and collection that is undertaken by private parties such as MNOs, professional and education institutions among others. In the next phase, more processing activities such as analysing and applying the data in decision making is expected. Economic issues arising from the increasing data production include defining value of data, government readiness for the data economy, digital divides and equity for micro, small and medium enterprises (MSMEs).

A foundational issue in crafting a modern data protection law is that of property of the data. When one uses a mobile phone for instance, at a minimum, they generate data about their device, location and those they connect with. This data has economic value because when collected over time, it creates a profile of the person, their habits and networks. Such a profile can be used to target services to the person creating an increasing demand for data. Examples of targeted services include marketing information, emergency

[22] "African Union Convention on Cyber Security and Personal Data Protection" (2014), https://au.int/sites/default/files/treaties/29560-treaty-0048_-_african_union_convention_on_cyber_security_and_personal_data_protection_e.pdf.

[23] See http://www.justice.gov.za/legislation/acts/2013-004.pdf

[24] See https://www.dataprotection.org.gh/

response, and political propaganda. When data is a market commodity produced by the data subject, the question of an economic exchange between the data subject and processor arises. It may be argued that in exchange, data subjects enjoy conveniences such as easier access to credit and insurance and personalization of products and advertisements. A people-centric data economy such as the European Union has taken a paradigm shift, by expanding the data subject's autonomy to control their data. Future looking data protection regimes may also have to accommodate other models of data ownership such as cooperatives where data subjects are also data controllers.

The government of Kenya identifies ICT as a pillar for economic prosperity in its Vision 2030 and ICT Policy. In its second term, the Uhuruto administration aspires to leverage on distributed ledgers and internet of things to create a new digital economy. Data impacts a spectrum of fields from city planning and design, law enforcement, warfare and security, education and research, health, marketing and consumption, journalism, actuarial science, the employee rating in employment, credit rating, identity verification and so forth. The data economy will likely benefit from sharing of data held in different databases. For example, Kenya does not have an official addressing system, but private services such as MNOs and Google have most of the data required for such a system. A partnership with the national government would therefore create primary digital infrastructure. Once the system is in place, data on use of roads would be useful in county government functions such as planning transport routes and emergency service delivery.

Data creates new economic activities such as digital advertising, business process outsourcing, data mining, brokerage and analytics. Young people are already engaging in small data processing jobs. In the 2017elections, political party ODM used a locally developed mobile applications for party recruitment.[25] There is therefore potential for meaningful work for small and medium enterprises if the digitisation policy includes mechanisms for an equitable economy. Examples of such mechanisms are access to large databases by researchers and small enterprises, and procurement of services from MSMEs. To get more MSMEs in the data economy would require a balancing act between access to data and protection of privacy. This can be achieved through having a dedicated authority that would facilitate capacity building among MSMEs and promote innovative means of protecting data in their custody. Other mechanisms that could promote MSMEs are graduated sanctions for data violations[26].

As the debate on digitisation continues, there are still many places in Kenya that do not have access to the internet. At the last election, the Communication Commission released an access gaps study[27] that provided the context for about 11,000 polling stations that had no access to the internet. These are predominantly in rural and underserved areas. Even where there is access, there are many who are not literate and require assistance to access digital services. In current government digitisation projects, it has become mandatory to access services such as driver's licences, motor vehicle registration, passport application and land registration online. These realities in the digital divide exposes data subjects to higher risk of theft of personal data as well as inaccuracies that may result in delay or denial of services. There is therefore need for concerted effort to sensitize people as they digitalise. Good practices have been noted from consumer education by MNOs and banks for example the *PIN yako ni siri yako* slogan.

Fairness in data processing

Data processing is still in its early stages particularly in African countries which only begun digitisation about two decades ago. As technology advances, there is a rush to acquire and accumulate huge datasets for

[25] James Mbaka, "ODM Targets 8m Members, Has Listed 4m," *The Star, Kenya*, March 3, 2017, http://www.the-star.co.ke/news/2017/03/03/video-odm-targets-8m-members-has-listed-4m_c1517283 .

[26] See Tunisia national authority for the protection of personal data. Article 211 discussed in Access Now, "Lessons from the EU General Data Protection Regulation" (AccessNow, January 2018), https://www.accessnow.org/cms/assets/uploads/2018/01/Data-Protection-Guilde-for-Lawmakers-Access-Now.pdf.

[27] Intelecon, "ICT Access Gaps Final Study" (Communications Authority of Kenya, March 11, 2016), http://ca.go.ke/images/downloads/RESEARCH/ICT%20Access%20Gaps%20Report-April%202016%20.pdf.

future processing. The data economy however commodifies the person by making them merely a source of data for production of the data subject's profile. Some issues here include awareness and consent, automated data processing, opaque data management practices and sensitive data.

Before such collection takes place, the data subject needs not only to know that data about them is being collected but also consent to this data being collected. In order to give informed consent, the data subject needs to know the purpose for which the data is being collected. They also need to have access to the data about them that has been collected so that they can amend or delete it as necessary. In addition, data subjects should not have their data retained for longer than necessary.

Automated data collection occurs without active input of the the data subject. In the example of using a mobile phone, one only needs to switch on the phone for data such as location and phone number to be automatically collected by mobile network operators (MNOs). The same happens when browsing a website. Data about one's machine and location is automatically collected by any number of collectors- from the operating system provider, the browser company and application service provider.

Technology allows for automated decision making from collected data. Take the example of mobile money loan application apps. The apps calculate loan amounts based on data collected from the subscribers financial transactions without human intervention. Technology may not always process data fairly and data subjects should be shielded from decisions that are made solely on automation. For example, credit rating or employment appraisal algorithms may arrive at negative decisions. In such cases the data subject may miss out on opportunities yet all parties may not be aware of the logic behind the automated decision.

The cornerstone of fairness in data processing is transparency and accountability on the part of the data processor or controller. This requires letting the data subject know about data collection and the data subject's rights with regards to that data. One of the best practices in data processing is notifying the data subject in case of a breach of their personal data.

Above protecting data subjects rights, some regimes also prohibit trade in certain classes of data. For example, France has special procedures for access to health data and does not allow trade in health data.[28] Following use of social media data for political purposes in Britain, United States, Kenya and other countries, policy makers are deliberating restrictions to trade in data for political purposes.

Political data

Political data is particularly sensitive. The last –elections in Britain, United States of America and Kenya reveal use of personal data to invasively profile voters and manipulatively persuade or dissuade them from voting. While opinion is divided on the effect of manipulation campaigns, it is clear that this kind of propaganda has resulted in polarisation of societies.

Ghana's Data Protection Act binds the state and perceives state departments that process personal data as data controllers under the law. Each state data controller is required to appoint a data supervisor[29]. The GDPR has given special protection to political data. It requires special safeguards where personal data is processed by political parties. Some of the safeguards that have been put include, prohibition from repurposing personal data made public on the Internet for the purposes of political communication; requirement for informed consent before aggregation of personal data of voters for profiling; and guidelines for use of analytic companies in political campaigns. [30]

In Kenya's case, the government IPRS databases contain personal data collected for purposes of

[28] DLA Piper, "France: New Rules for Processing Patient Health Data," JD Supra, September 7, 2016, http://www.jdsupra.com/legalnews/france-new-rules-for-processing-patient-38984/.

[29] s. 91, Ghana Data Protection Act

[30] European Data Protection Supervisor, "EDPS Opinion on Online Manipulation and Personal Data," March 19, 2018.

identification and other government service delivery. This data should not be profiled for political purposes. Rather, the government should state the purposes for which data in its custody is being used and also update citizens when the data is repurposed. Since political parties form government, there should be an independent data authority to oversee data protection.

What should Kenya's data protection legal framework address?

With the country's digital advancement, there has been convergence of services and data processing is increasingly being carried out in many public and private entities. This makes a case for a general data protection law that would provide for lawful data processing. It would therefore achieve two objectives: Kenyans would be protected from harms that may accrue from risky or malevolent data handling; and ~~by~~ having a reputable data protection framework would open up the data economy to more data related work.

Kenya's data protection law should therefore be forward looking. Based on the country's national values and principles that envisage a plural society where every individual is facilitated to achieve their destiny, the law should provide the highest protection for the person. It should also create a framework that gives a high standard for privacy so as to make the country attractive for the data economy. This framework should include principles for data protection, relationships between the various actors as well as enforcement mechanisms.

Principles for data protection

Through international standards, eight principles for data protection have been developed. These are now widely applied in regional instruments and national laws.

Fairness and lawfulness	Personal data should be processed for a lawful purpose and those whose data is being collected should be informed of why their data is being collected and how it will be stored and used
Stated purpose	Those who collect data should use it for the stated purpose and data should not be further processed in a manner incompatible with the purpose for which it was collected
Adequacy	Those who collect data should only collect what is adequate and the minimum needed for the stated purpose
Accuracy	Personal data should be accurate. Data subjects have a right to have their data updated, corrected and erased.
Retention	Personal data should not be kept for longer than necessary
Rights of data subjects	These include right of access, damage or distress, prevention of direct marketing, automated decision making, correcting inaccurate personal data
Security of data	Personal data shall be stored and processed in secure manner to prevent
Cross border transfer	Personal data should not be exported to countries without adequate data protection laws

Enforcement and Remedies

Most data protection laws are enforced through a data protection authority. Authorities have both preemptive mechanisms such as requirement of registration and assessment of data processors and reactive powers including enforcement notices and administrative fines. Criminal law may also be used to protect privacy where cybercrimes such as interception of private messages exist.

The United Kingdom[31] and Ghana, for example have requisite registration for data controllers and processors. They are also required to notify the data protection authority in case of violation of privacy of data in their custody.

In the event of a data privacy violation, the data processor may be suspended or stopped from further data processing or fined. Data subjects may be compensated for loss accruing from the violation. In many jurisdictions, the subjects may also sue in court for judicial remedies. Issues that are considered in designing sanctions include damage caused, economic value of data which is measured by business turnover, other regulation mechanisms and available criminal sanctions.

In Ghana, the data protection commission may on its own motion or in response to complaints issue an enforcement notice to a data controller who is in contravention of the data protection principles. The notice may specify steps to be taken or refrain use of a manner of processing. It may also require a controller to "rectify, block, erase or destroy other data held by the data controller and which contains an expression of opinion which appears to the Commission to be based on the inaccurate data".[32] Where a controller fails to comply with an enforcement notice, they may be fined a maximum of one hundred and fifty penalty units or to a term of imprisonment of not more than one year or to both.[33]

Monetary fines for violations of data privacy are increasingly being adopted. The GDPR sets the maximum fine that can be imposed for serious infringements at €20 million or four percent of an undertaking worldwide turnover for the preceding financial year [34]. Tunisia is considering a graduated approach where first time breaches of data, particularly among small processors receive less severe sanctions compared to repeat offenders[35].

Relationships in data protection

In the data economy, actors are: the data subject who provides the data; the data processor who analyses that data and the independent authority who regulates the economy.

The following figures illustrate relationships, rights and obligations between data subjects and processors .

(to be illustrated)

31 See registration categories at https://ico.org.uk/for-organisations/register/

32 s. 75, Ghana Data Protection Act, 2012

33 s. 80, Ghana Data Protection Act, 2012

34 Rec.150; Art.83(5)-(6) GDPR

35 See Tunisia national authority for the protection of personal data. Article 211 discussed in Access Now, "Lessons from the EU General Data Protection Regulation."

Data subject
Should **know**: ● when data about them is being collected ● why data about them is being collected ● that data about them is being retained ● when data about them is breached ● whether data about them has been collected by data processors including third parties
Should **consent** ● before data about them is collected ● before data about them is retained ● before data about them is used for other purposes
Should be able to access data about them
Should be able to request rectification of data about them
Should have an option to object to data processing decisions such as automated decision making
Should be able to erase their data when they leave a service
Should be able to carry their data across services

Data Processor
Should practice **transparency** in relationship with data subject and data authority
Always promote rights of data subject: - letting data subjects know the purpose for data collection in the simplest terms - Collect only sufficient and minimal data - Correct inaccurate data - Delete obsolete data
Assure data integrity and security
Have a complaint mechanism and expeditiously resolve issues raised by data subjects

Data Protection Authority
Promote and protect data subject rights
Educate the public on the data economy and data subjects rights
Advise private and public entities on emerging issues in data protection
Promote facilitative environment for data processing business including SMEs
Promote adoption of data protection standards among data controllers and processors
Enforce the data protection law
Dispute resolution

Recommendations

a) To achieve a people centred digital economy, Parliament of Kenya should urgently enact a data protection law that engenders the data protection principles to afford the highest protection for privacy for Kenyans.

b) Having noted that the government is also a data processor and controller, the framework should also provide independent oversight of data protection through a data authority.

c) There is an existing data economy in Kenya that includes big players, research institutions as well as MSMEs. Development of the data protection framework should involve all stakeholders.

d) There is no policy framework for the IPRS government identification project. This should be cured through the government immediately providing information on the objectives of the project and purposes for which collected data will be used. In addition, the Registration and Identification of Persons Bill should be introduced in Parliament and subjected to public participation.

e) There are many private entities with large collections of personal data. Some may be able to ratify the collection and processing of such data and make it lawful through acquiring consent of the data subjects and educating them on the purposes for such collection. A mechanism to audit personal data in the custody of private entities should be developed. This would help assess whether such data is required lawfully, how long it should be kept.

Other illustrations/ boxes to be placed in the document- NEMIS and TIMS

TIMS

NTSA is set to issue smart drivers licenses according to the NTSA Strategic Plan 2014 – 2018. The Authority set up the Transport Integrated Management Systems (TIMS) with the following modules:-

I. Motor Vehicle Registration
II. Driver Testing and Licensing
III. RSL/PSV Management
IV. Motor Vehicle Inspection and Testing
V. Enforcement Management
VI. Citizen Self Service Portal
VII. TIMS Web Interface
VIII. Reporting & BI TIMS is being implemented in several phases.

Phase 1 of the project involved drivers' licenses being renewed online, Phase 2 involved getting all information on vehicles and drivers, Phase 3 which is on going involves bringing the smart drivers' license while Phase 4 will be connecting the smart driver's license to a digital financial wallet. The second module which is on Driver Testing and Licensing started out with online renewal of Drivers' Licenses. The new generation licenses that the Authority intends to roll out soon will collect data that will stored in TIMS.

This data will be available for use by interested third parties like insurance firms who may use it to calculate insurance premiums or a potential employer who wants to hire.