



UNIVERSITY OF PRETORIA

FACULTY OF LAW

**GOVERNING ARTIFICIAL INTELLIGENCE UNDER THE
AFRICAN HUMAN RIGHTS SYSTEM: DRAWING
LESSONS FROM INTERNATIONAL BEST PRACTICES**

submitted in partial fulfilment of the requirements of the

**MASTER OF LAWS DEGREE IN HUMAN RIGHTS AND
DEMOCRATISATION IN AFRICA**

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29 October 2021

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Dedication

To all the young black people in Academia!

Acknowledgement

I am forever indebted to Jay and Anthony for their guidance as my supervisors. To Magnus whose diligence and resourcefulness made everything bearable. To my sisters Nahaja and Mellisa whose inspiration, motivation and friendship carried me through this work. Finally to my mom who is always pushing me to do the best I can.

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List of Acronyms

AI	Artificial Intelligence
AU	African Union
COE	Council of Europe
EU	European Union
ML	Machine Learning
STC	Special Technical Committee
UNESCO	United Nations Educational Scientific and Cultural Organisation

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CHAPTER ONE

1.1 Background

Africa is currently experiencing an Artificial Intelligence (AI) boom as states and entrepreneurs pursue economic and political benefits from the emerging technology.¹ Whilst Africa is steadily contesting the speedy development led by the top global economies, the usage of AI and AI-powered technologies is increasingly accelerating with investments, research and development and skills and capacity building in parts of the continent.² Research³ suggests that African governments are beginning to use AI in exercising different public functions including but not limited to identifying and evacuating people stranded due to natural disasters⁴ and for electoral management.⁵ As shown in Table A annexed herewith, the African private sector has exhibited more growth with establishment of AI-powered start ups and development of AI capabilities in existing businesses.⁶

The use of AI is a polarising issue in Africa. On one hand, AI may be used to build economies and help end global pandemics through augmented communications capabilities. On the other. It may also be converted for sinister functions such as mass surveillance and weaponised for the proliferation of autonomous weapons.⁷ Over the next few years, AI will continue to be celebrated but closer scrutiny will be applied due to existing fears arising from its ubiquity.⁸

The ever increasing use of Algorithms especially in replacing human decision making affects multiple points of law and human rights are no exception.⁹The proliferation of AI powered

¹ I Rutenberg 'Regional Analysis: Africa' in H Miller & R Stirling *Government Artificial Intelligence Readiness Index 2019* (2019) <https://www.oxfordinsights.com/ai-readiness> (2019) 10.

² J Maritz '3 lessons from running an AI-powered start-up in Africa' (2019) <https://www.weforum.org/agenda/2019/08/artificial-intelligence-africa-venture-capital-investment/> (accessed 23 July 2021).

³ A Gwagwa *et al* 'Artificial intelligence (AI) deployments in Africa: Benefits, challenges and policy dimensions' (2020) 26 *The African Journal of Information and Communication* 26, 1 <https://journals.co.za/doi/pdf/10.23962/10539/30361> .

⁴ United Nations Institute for Training and Research (UNITAR) 'Using Artificial Intelligence algorithms in rapid mapping activation in Mozambique' (2021) <https://www.unitar.org/about/news-stories/news/using-artificial-intelligence-algorithms-rapid-mapping-activation-mozambique> (accessed 20 May 2021).

⁵ C Chair and K Majama 'Digital ID in Zimbabwe: A case study' in ER Biddle (ed) 'Understanding the lived effects of digital id: A multi-country study' https://digitalid.theengineeroom.org/assets/pdfs/200123_FINAL_TER_Digital_ID_Report+Annexes_English_Interactive.pdf (accessed 26 July 2021) 134.

⁶ Maritz (n2 above); Table A.

⁷ W Barfield & J Barfield 'An introduction to Law and Algorithms' in W Barfield (ed) *The Cambridge handbook of the law of algorithms* (2021) 3.

⁸ I Kula 'Report on the Presidency of Germany COE's online event: "Human Rights in the Era of AI: Europe as International Standard Setter for Artificial Intelligence" ' (2021) <https://itlaw.bilgi.edu.tr/en/news/report-on-the-presidency-of-germany-coes-online-ev-178/> (accessed 31 July 2021) 1.

⁹ W Barfield and J Barfield 'An introduction to Law and Algorithms' in Barfield (n7 above) 3.

technologies threatens democracy, the rule of law and human rights.¹⁰The Council Of Europe (COE) detailed the human rights under threat through various uses of AI and algorithms within the jurisdiction of the European Human Rights System.¹¹ The primary concerns with AI arise from its opacity, bias, and danger to the rights to privacy and the freedom of speech.¹² Due to these inherent technological issues, AI systems have been found to violate and potentially violate fundamental human rights in the following ways:

The right to fair trial

Recidivism assessment Software (RAS) due to its complexity and risk of coded bias may pose a threat to the rights liberty, fair trial and effective remedy. RAS predict recidivism risk using factors like education; income; nationality and place of residence.¹³ This neglects the individuality required to afford the defendant a fair trial in bail and sentencing processes.¹⁴ Should RAS be utilised in Africa, the same concerns would exist as bail and sentencing practices typically consider the same factors such as whether the defendant is gainfully employed, has a permanent abode or has previously be convicted before.

The right to privacy

AI systems may interfere with a person's general privacy, integrity, identity and autonomy through the processing of personal data.¹⁵ In the vast majority of cases this data is accessed and processed unbeknown to the individual, mostly for surveillance and identification purposes.¹⁶ There several examples of AI systems using personal data in a way that invades privacy and violates the right to privacy. There are systems that track people's facial and biometric data. Moreover this data is then used to predict or have influence over how an individual behaves.¹⁷This disproportionately compromises the individuals general privacy, autonomy and their moral and psychological integrity.¹⁸

¹⁰ J Niklas 'Human Rights-Based approach to AI and algorithms' in W Barfield (ed) *The Cambridge handbook of the law of algorithms* (2021) 517.

¹¹ Committee of Experts on Internet Intermediaries, Algorithms and Human Rights 'Study on the Human Rights Dimensions of Automated Data Processing Techniques and Possible Regulatory Implications' (2018) <https://edoc.coe.int/en/internet/7589-algorithms-and-human-rights-study-on-the-human-rights-dimensions-of-automated-data-processing-techniques-and-possible-regulatory-implications.html> (accessed online 9 July 2021) (COE study on human rights and automated data processing).

¹² Niklas 'Human Rights-Based approach to AI and algorithms' in Barfield (n10 above) 517.

¹³ See generally Z Lin *et al* 'The limits of human predictions of recidivism' (2020) 6 *Science Advances*

¹⁴ Lin *et al* (n 13 above).

¹⁵ Ad Hoc Committee on Artificial Intelligence (CAHAI) 'Feasibility study' (2020) <http://www.coe.int/cahai> 9 (CAHAI Feasibility Study).

¹⁶ COE 'Guidance on Article 8 of the European Convention on Human Rights' (2020) https://www.echr.coe.int/Documents/Guide_Art_8_ENG.pdf .

¹⁷ EU Agency for fundamental rights (FRA) 'Study on facial recognition and fundamental rights' (2019) https://fra.europa.eu/sites/default/files/fra_uploads/fra-2019-facial-recognition-technology-focus-paper-1_en.pdf 26-27 (FRA study on Facial Recognition).

¹⁸ C Muller 'The impact of Artificial Intelligence on human rights, democracy and rule of law' (2020) <https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1819&context=facpub> 18.

Freedom of expression

Social media is one platform where the use of AI systems has been far-reaching, to the point of significantly impacting free expression. Online platforms are increasingly relying on AI systems to identify, categorise and remove user content that they perceive to breach their terms of use.¹⁹ Due to coded bias, inaccuracies and lack of contextual range, it may prove hard to filter user content fairly and accurately.²⁰ As a consequence online platforms remove legitimate content that is protected by law.²¹ This is a form of algorithmic censorship that violates the freedom of expression.

The right to access information

The abundance of news and information online and especially on social media has made it possible for AI systems to influence the nature of interaction between news media and users.²² AI systems are being largely used to curate and sort news and information in a manner suited for the user's interests and online footprint.²³ This entails search engines and recommendation algorithms predicting your interests after having processed your personal data or that of your demographic group.²⁴

Freedom of assembly and association

Social media has become an increasingly indispensable component of peaceful assembly and association as it is used to organise.²⁵ The use of AI-powered surveillance is a threat to the right to peaceful assembly and association as individuals have been identified and prevented from taking part in protests.²⁶ This AI powered surveillance also offends freedom of assembly and association by threatening group anonymity which may be a barrier to people taking part in peaceful protests.²⁷

With these threats to human rights in mind, African stakeholders must be pro-active and set up quad-rails in order to mitigate risks and leverage benefits.²⁸ Whilst there have been valid attempts at normative development such as self-regulation programs and principles set by Civil society, academics and international organisations, these will simply not suffice in the

¹⁹ CAHAI Feasibility study (n 15 above) 9.

²⁰ CAHAI Feasibility study (n 15 above) 9.

²¹ CAHAI Feasibility study (n 15 above) 9.

²² CAHAI Feasibility study (n 15 above) 8.

²³ CAHAI Feasibility study (n 15 above) 9.

²⁴ CAHAI Feasibility study (n 15 above) 9.

²⁵ CAHAI Feasibility study (n 15 above) 8.

²⁶ FRA study on Facial Recognition (n17 above) 26-27.

²⁷ CAHAI Feasibility study (n 12 above) 8.

²⁸ L Novitske 'The AI invasion is coming to Africa and its a good thing' (2018) https://ssir.org/articles/entry/the_ai_invasion_is_coming_to_africa_and_its_a_good_thing# (accessed 8 August 2021).

near future.²⁹ Due to the concerns regarding AI use and especially its commercialisation, there is growing consensus on the need for ‘concrete’ laws in order to fill any legal vacuums.³⁰ Moreover there is need for a shift from generic discourses on ‘internet rights’ and data protection to a more precise characterisation of algorithms both legally and politically

A multi-lateral regulatory framework would leverage on the existing human rights system in Africa to deliver the best possible human rights law for the use of AI. Multiple calls have been made for policy at regional and continental level to enable innovators, communities and governments to manage AI beneficially.³¹ The use of a multi-lateral approach to creating systems of public regulation has been lauded as a tool that promotes global co-operation and erodes geopolitic bipolarity.³² Moreover, such a collaborative effort increases the likelihood of harmonisation of the law of AI in Africa.³³

It has been argued that drawing lessons from best practice would be a wise approach for Africa’s algorithmic regulatory approach.³⁴ With the best developed AI governance architecture, Europe has been referred to as the International Human Rights standard setter for AI.³⁵

Fundamentally this research seeks to address the human rights problems associated with the unethical deployment of AI technology. It seeks to draw lessons from best practice, in this case the Council of Europe (COE) and European Union because of their ground-breaking work in the field of AI and human rights.

1.2 Problem statement

The value of an AI system should not only be determined by its technological design but by its intended purpose and the greater social context in which it is deployed.³⁶ In order to ensure this balance, there must be regulation to mitigate and if possible eliminate the human costs arising from the use of AI. Emerging technologies must never develop disproportionately quicker than the law as this creates gaps for the protection of end users and other stakeholders.

²⁹ Stanford University Human-Centred Artificial Intelligence (HAI) ‘Ethical challenges of AI applications’ in ‘The AI Index Report: Measuring Trends in Artificial Intelligence’ <https://aiindex.stanford.edu/wp-content/uploads/2021/03/2021-AI-Index-Report-Chapter-5.pdf> (accessed on 2 August 2021) 3 .

³⁰ Kula (n8 above) 4.

³¹ Gwagwa *et al* (n3 above) 1.

³² Kula (n8 above) 1.

³³ Access Partnership and University of Pretoria ‘Artificial Intelligence for Africa: An opportunity for growth, development and democratisation’ (2019) https://www.up.ac.za/media/shared/7/ZP_Files/ai-for-africa.zp165664.pdf#:~:text=In%20Africa%2C%20AI%20can%20help%20with%20some%20of,productivity-boosting%20technology%20to%20fuel%20the%20growth%20the%20continentneeds. 35.

³⁴ Access Partnership and UP (n33 above) 35.

³⁵ Kula (n8 above) 1.

³⁶ CAHAI Feasibility study (n15 above) 5.

Whilst there is a growing realisation that unethical usage of AI may violate human rights,³⁷ there hasn't been any regulation to guard against this. Under the African human rights system³⁸, there is neither law that regulates AI in general nor algorithms specifically. Currently the Existing African Human Rights Law under the African Union is the African Charter on Human and Peoples' Rights, the African Union Convention on Cyber Security and Personal Data Protection; African Declaration on Internet Rights and Freedoms and the Declaration of Principles on Freedom of Expression and Access to Information in Africa. These laws are under-equipped to address the evolving uses of algorithms in the continent and to protect people's human rights. They are predisposed to focusing on the general issues of internet access rights and data protection but are insufficient to address matters concerning AI systems beyond data-related problems.

The study seeks to bridge this gap by diagnosing the human rights problems and prescribing the appropriate governance framework for the African human rights system. The study seeks to utilise tried and tested solutions from a jurisdiction that is leading the narrative on the regulation of AI systems.

1.3 Research objectives

The main objective of this study is to draw from best practices on governing the regulation of AI in Africa under the African human rights system.

The sub-objectives of the study are to:

- i. Understand to the best possible extent within the confines of the study the nature and functions of AI from a 'socio-technical'³⁹ perspective
- ii. Uncover the nature and extent of AI usage in the private and public sector in Africa
- iii. Assess the ongoing and potential human rights violations arising from AI usage

³⁷ Barfield and Barfield 'An introduction to Law and Algorithms' in Barfield (n7 above) 3; HAI (n29 above) 3.

³⁸ C Heyns and M Killander 'The African Regional Human Rights System' in G Isa and K de Feyer (eds) *International protection of human rights: Achievements and challenges* (2006) 510.

This is the multi-lateral human rights legal framework under the African Charter on Human and Peoples' Rights (the charter). This charter based system is constituted of human rights treaties and soft law as well as treaty bodies and monitoring and implementation institutions. The former include the Protocol to the African Charter on the rights of women; the African Charter on the rights and Welfare of the child and the Protocol to the African Charter on the establishment of the African Court for Human and Peoples rights. The latter includes the African Commission for Human and Peoples Rights the African Court for Human and Peoples Rights and the African Committee on the Rights and Welfare of the Child.

³⁹ CAHAI Feasibility study (n15 above) 5, As per the COE's explanation, this entails that '... the impact of an AI system – whatever its underlying technology – depends not only on the system's design, but also on the way in which the system is developed and used within a broader environment, including the data used, its intended purpose, functionality and accuracy, the scale of deployment, and the broader organisational, societal and legal context in which it is used.'

- iv. Analyse the existing law under the African Human Rights system and its ability to prevent the human rights violations that ensue from the usage of AI in Africa
- v. Analyse the best practices in the European Human Rights System's approach to governing the usage of AI
- vi. Make key recommendations based on all the preceding objectives on possible approaches to govern the usage of AI under the African Human Rights

1.4 Research questions

Main Research question

- i. How can the African Human rights System adequately provide for effective regulation of AI usage in Africa?

Sub-questions

- I. What is the state of public and private usage of AI in Africa in comparative perspective?
- II. What are the human rights issues associated with and the existing laws addressing the growing usage of AI under the African Human Rights System ?
- III. Is there any law in the African Human Rights System that addresses AI usage and is it adequate?
- IV. What are the prevailing international and foreign multi-lateral human rights approaches to regulating AI usage
- V. What lessons can be drawn from good practice for a Human Rights approach to AI regulation in Africa

1.5 Methodology

The research will adopt a qualitative approach informed by desktop review of both primary and secondary data. On primary sources, the writer will review the relevant law of the African human rights system as well as that of the COE and EU extract best practices from. The research will also analyse secondary data in the form of a literature review. The qualitative approach is employed because the study seeks to assess the value of the the existing legal framework as well as to investigate how to strengthen said legal framework. The qualitative approach therefore works best in facilitating this quality assessment exercise. The primary data provides the actual content of the law in review whereas the secondary data provides qualitative commentary of the primary data which all contributes to the research objectives.

A human rights-Based Approach will be utilised in this study. This approach utilises International Human Rights Law as its normative base for the 'creation, formulation, implementation and evaluation' of policy.⁴⁰ Under this broad conceptualisation of HRBA, the

⁴⁰ Niklas 'Human Rights-Based approach to AI and algorithms' in Barfield (n10 above) 528.

study will also utilise the ‘Human Rights-Centred Design, Deliberation and Oversight’ postulated by K Yeung, A Howes and G Pogrebna.⁴¹ It advocates the ‘systematic consideration of human rights concerns at every stage of system design, development, and implementation’.⁴²

The best practices are drawn from the COE because it is the only regional human rights system that has advanced in creating a legal framework for AI. Moreover the COE’s approach to regulating AI is based on the protection of human rights as it is informed by the substance and legal requirements of the European Convention on Human Rights (ECHR).⁴³ The work of the COE in formulating a legal framework for AI has been informed by not only evidence-based research but also a multi-stakeholder consultation.⁴⁴ Lessons will also be drawn from the EU because it is the only multi-lateral body that has put together a binding legal document on AI. The legal framework of the EU under this legislation is based on human rights and adopts a risk and precaution based regulatory approach to AI.⁴⁵

1.6 Literature review

I. *Understanding AI*

The Computer Science department at the University of Pretoria has defined AI as:

‘A constellation of technologies that enable machines to act with higher levels of intelligence and emulate human capabilities to sense, comprehend, and act. These human capabilities are augmented by the ability to learn from experience and adapt over time. In other words, AI enables machines to sense their environment, think, and in some cases learn, to take action in response to the environment and the circumstances underpinning it.’⁴⁶

Algorithms on the other hand are ‘a set of rules or instructions that are followed when performing calculations, or more generally, a set of problem-solving procedures which when followed produce a certain output.’⁴⁷

II. *The usage of AI in Africa*

⁴¹ ‘AI governance by human rights-centred design, deliberation and oversight’ in MD Dubber *et al* (eds) *The Oxford Handbook of ethics of AI* (2020) 86.

⁴² Yeung *et al* ‘AI governance by human rights-centred design, deliberation and oversight’ in MD Dubber *et al* (eds) (n23 above) 86.

⁴³ CAHAI feasibility study (n15 above) 7-10, 27-44.

⁴⁴ CAHAI ‘Analysis of the multi-Stakeholder Consultation’ (2021) <https://rm.coe.int/cahai-2021-07-analysis-msc-23-06-21-2749-8656-4611-v-1/1680a2f228> (accessed 27 September 2021).

⁴⁵ See Chapter 4 of this study.

⁴⁶ Access Partnership and University of Pretoria (n33 above) 5

⁴⁷ Barfield and Barfield ‘An introduction to Law and Algorithms’ in Barfield (n7 above)4

There are many AI applications and AI powered businesses in Africa with most being in the Financial Technology (Fintech), agriculture, healthcare, transportation, retail and services in general.⁴⁸ Table 1⁴⁹ annexed to the chapter provides examples of the most prominent AI applications and Algorithm-powered businesses in Africa. According to the annual study by Oxford, Africa ranks low on their AI readiness index because of impediments that include but are not limited to inadequate and ineffective regulation.⁵⁰ As the region ranking lowest on the index internationally, Africa needs to craft multi-lateral strategies as they have the potential to mitigate AI inequalities not only amongst African states but also amongst the continent and its other counterparts.⁵¹

III. AI and human rights violations

Around the globe, the replacement of humans by algorithmic decision-making tools is on the rise.⁵² As a consequence of such, there is overwhelming research proving the human rights violations arising from the use of algorithms inappropriately.⁵³ In Europe, there has previously been an over-reliance on the algorithms making their own independent calculations and this has had devastating effects.⁵⁴ In the United Kingdom, the Brexit campaign through Cambridge Analytica unlawfully swayed the vote by targeting voters with misinformation and hate speech on social media violating their rights to privacy and free and fair elections.⁵⁵ Biased automated decision making systems have violated people's right to equality and freedom from discrimination where they calculate risk for job applications and loan applications.⁵⁶ Recidivism Assessment AI violates the accused person's right to a fair trial and equality before the courts.⁵⁷ There is research of Face Recognition Technology discriminating against People of Colour and its permutations with automated gender recognition excluding transgender people.⁵⁸ On social networks, algorithms have been deployed to participate in online discourses, this has propagated hate speech and polarized communities into radical extremes.⁵⁹

⁴⁸ A Brandusescu *et al* 'Artificial Intelligence, starting the policy dialogue in Africa' (2017) <https://webfoundation.org/docs/2017/12/Artificial-Intelligence-starting-the-policy-dialogue-in-Africa.pdf> (accessed 13 July 2021) 4.

⁴⁹ Brandusescu *et al* (n48 above); Maritz (n2 above); Access Partnership and University of Pretoria (n33 above) 8-14.

⁵⁰ Rutenburg (n1 above) 11.

⁵¹ Rutenburg (n1 above) 6.

⁵² W Barfield and J Barfield 'An introduction to Law and Algorithms' in W Barfield (n7 above) 3.

⁵³ Yeung *et al* 'AI governance by human rights-centred design, deliberation and oversight' in Dubber *et al* (n41 above) 78.

⁵⁴ Kula (n8 above) 1

⁵⁵ Yeung *et al* 'AI governance by human rights-centred design, deliberation and oversight' in Dubber *et al* (n41 above) 78.

⁵⁶ Kula (n8 above) 6.

⁵⁷ AL Washington 'How to argue with an algorithm: Lessons from the compas-propublica debate' 17 *Colorado Technology Law Journal* (2019) 35.

⁵⁸ Kula (n8 above) 3.

⁵⁹ Kula (n8 above) 3.

IV. *The need for governance for AI in Africa*

In the western world, and especially Europe in particular, there is a developing body of law to regulate AI.⁶⁰ Very few regulatory efforts have been made at the African Union level, however.⁶¹ According to the UP and Access Partnership, the lack of policy has been a hindrance to AI being used for good in Africa.⁶² Moreover, the ethical standards found in various voluntary codes are vague, elastic and mostly unenforceable.⁶³ As a solution, Africa must pro-actively design a policy framework which encourages ethical usage of AI in order to reap its benefits.⁶⁴ Whilst all regions of the world have Human Rights treaties of general application, these are inadequate to protect individuals from violations arising from AI and algorithms.⁶⁵ The need for Human Rights law and policy specifically designed to regulate algorithms is ever so urgent.

V. *Trends in the regulation of AI*

According to the COE, creating the adequate regulatory framework will require a hybrid strategy that thoroughly interrogates the full extent of AI development and its potential.⁶⁶ What this implies is a mix of public and 'semi-private' solutions and the promulgation of hard and soft laws.⁶⁷ Access now argues that the policies designed to regulate algorithms in Africa should focus on the areas of data security and privacy; cybersecurity; Digital strategies and cloud adoption initiatives; intellectual property; procurement policies; and the harmonisation of international standards and rules.⁶⁸ The COE postulates that an effective regulatory strategy should set laws requiring that technology companies be transparent about their AI powered products.⁶⁹ Calls for increased transparency relate to disclosure of both the algorithm itself and the processes of its creation and deployment.⁷⁰ Furthermore that Algorithmic governance structures be made from a digital welfare context which demands respect for the right to privacy, non-discrimination and dignity.⁷¹

⁶⁰ W Barfield and J Barfield 'An introduction to Law and Algorithms' in W Barfield (n7 above) 3.

⁶¹ The only relevant law in sight is the 'Convention on Cyber Security and Personal Data Protection which barely even mentions AI or algorithms.

⁶² (n33 above) 34.

⁶³ Yeung *et al* 'AI governance by human rights-centred design, deliberation and oversight' in Dubber *et al* (n23 above) 80.

⁶⁴ Access Partnership and UP (n33 above) 34.

⁶⁵ Kula (n8 above) 5.

⁶⁶ Kula (n8 above) 5.

⁶⁷ CAHAI Feasibility study (n15 above) 6.

⁶⁸ Access Partnership and UP (n33 above) 35.

⁶⁹ COE Commissioner for Human Rights 'Unboxing Artificial Intelligence: 10 steps to protect Human Rights' (2019) <https://rm.coe.int/unboxing-artificial-intelligence-10-steps-to-protect-human-rights-reco/1680946e64> 9; Kula (n8 above) 2.

⁷⁰ Kula (n8 above) 4.

⁷¹ Kula (n8 above) 1.

VI. *The global standard setting role of the Europe in AI governance*

The Council of Europe has led not only European but International efforts towards crafting laws and policies regarding the use of AI.⁷² This is clearly evidenced in its fast-paced adaptation to the legal demands of the 4th industrial Revolution and specifically regarding AI and Data Protection.⁷³ The speedy adoption of the Convention for Protection of Individuals with regard to Automatic Processing of Personal Data⁷⁴ and its Protocol⁷⁵ as well as the Convention on Cybercrime⁷⁶ demonstrate the European Human Rights System's notable pioneering in reconciling regulation and innovation. The COE has been the primary working group on developing AI regulatory infrastructure and this is at an advanced stage with a lot of research and standard setting having been conducted throughout the last decade.⁷⁷ Over the past 5 years, the COE has developed the European Ethical Charter on the use of Artificial Intelligence in Judicial Systems and their Environment⁷⁸; the human rights comment on 'Safeguarding human rights in the era of Artificial Intelligence'⁷⁹; the Declaration by the Committee of Ministers on the manipulative capabilities of algorithmic processes⁸⁰ and the Guidelines on Artificial Intelligence and Data Protection.⁸¹ There can be no doubt that the European Human Rights System provides imitable examples that its African counterpart can learn from.

1.7 Chapter structure

Chapter 1 is the introductory part and details the background of the research; problem statement; review of the literature; the research questions, the methodology; limitations of the study and a preliminary list of sources.

Chapter 2 provides the theoretical framework of the study. This chapter unpacks the nature and usage of AI and its current usage of AI in Africa and the world over. The chapter also explores the ethical concerns and risks associated with AI and details the research on how AI usage may and has violated human rights.

⁷² CAHAI Feasibility study (n15 above) 2

⁷³ COE Study on human rights and automated data processing (n11 above) 2.

⁷⁴ ETS 108 (1985) <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatyid=108> .

⁷⁵ No. 223 (2018) <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/185?module=treaty-detail&treatyid=223> (The protocol will enter into force on 11 October 2023 if 38 states have become parties to it).

⁷⁶ CETS No.185 (2004) <https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/185?module=treaty-detail&treatyid=185> (Budapest Convention).

⁷⁷ COE Commissioner for Human Rights (n69 above) 6.

⁷⁸ European Commission for the Efficiency of Justice (CEPEJ) (2018) <https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c> (accessed online on 17 July 2021).

⁷⁹ (2018) <https://www.coe.int/en/web/commissioner/-/safeguarding-human-rights-in-the-era-of-artificial-intelligence> (accessed online on 23 July 2021).

⁸⁰ Decl (13/02/2019)1 (2019) https://search.coe.int/cm/pages/result_details.aspx?objectid=090000168092dd4b .

⁸¹ T-PD(2019)01 (2019) .

Chapter 3 investigates the law applicable to AI usage under the African Human Rights System.

Chapter 4 identifies the best practices for a human rights approach to regulating AI through an exploration of the legal framework.

Chapter 5 consolidates the findings of the study and provides recommendations for governing AI under the African human rights system

1.8 Limitations of study

There is very limited research on the subject of Artificial Intelligence usage in Africa. As a consequence, the author will utilise the foreign published literature that focuses on Africa, including important work by African researchers in the diaspora. The limited body of knowledge predominantly focuses on the commercial and business-related aspects of AI usage particularly the use of AI for economic development. There is also a challenge with the understanding of AI in most legal research in that it makes no attempt to understand the technology from a rudimentary scientific perspective in the manner that multi-disciplinary research should. As a consequence, the author will review literature by computer scientists as well as lawyers in order to marry the gaps between the two disciplines. A lot of the available research on AI in Africa is anecdotal and may not serve as credible reference. Finally, whilst the scope of this study appears broad at face value, exploring multi-lateral regulation of AI in its broadest sense provides a platform for future research to look into specific AI capabilities such as Computer Vision, conversational AI, Natural language processing and others.

Table 1

Name	Country	Industry	Service/Product
Sophie Bot	Kenya	Healthcare	A multi-platform chatbot whose algorithm processes and replies questions regarding Sexual Reproductive Health
Numberboost	South Africa	Healthcare	The app helps people locate the nearest mobile cliics in their areas.

Vital Signs	Kenya	Agriculture	The algorithm analyses satellite imagery to predict rain and drought patterns
Arifu	Kenya	Agriculture	The app matches farmers with the best fertiliser for their crop
Farm drive	Kenya	Agriculture	The app processes farmer's agricultural data to match them with ideal credit facilities
Arerobotics	South Africa	Agriculture	Drone images are analysed for information to improve crop yields
Kudi.ai	Nigeria	Fintech	The chatbot uses natural language processing to create peer to peer money transfer options on a wide range of messaging platforms
Tala	Kenya	Fintech	A mobile app that analyses credit risk to disburse loans to customers
RoadPeppers	Nigeria	Transport	The app guides drivers to routes without traffic congestion
Council for Scientific and Industrial Research	South Africa	Natural Language Processing	A speech recognition app for language learning and translation
Zindi	South Africa	Education and capacity building	Zindi teaches machine learning and AI through competitions and crowd-solutions methods.
Xineoh	South Africa	Retail	The algorithm processes consumer data to predict future spending and other consumer behaviour.

CHAPTER 2

2.1 Introduction

The concept of AI has been misconstrued and oversimplified⁸² and this has consequences on how it harms people and whether those harms can be prevented. This chapter seeks to provide an explanation of AI that is easy to understand but does not obscure its complexities and technical details. In order to address the human rights concerns, it is fundamental to first understand the technology and its history of limitations. This is important in informing the nature of approach to be taken. This chapter will set the conceptual foundations with a view of breaking down the technological and human rights aspects of AI usage in Africa, in comparative perspective. Part 1 of this chapter delves into the technological concept of AI. Part 2 illuminates the risks and challenges arising from AI usage both in Africa and the world over. Part 3 makes the case for a multilateral human rights framework under the African Union. Part 4 concludes this chapter

2.2 A technological concept of AI

2.2.1 Artificial Intelligence

There is no single, exhaustive or agreed definition of AI, however there are many working definitions that have originated from industry, academia and government. After a study of definitions emanating from the above-mentioned spheres of influence, the European Commission's Joint Research Centre defined AI as:

"Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions."⁸³

They also proffer a simplified definition which reads:

'AI is a generic term that refers to any machine or algorithm that is capable of observing its environment, learning, and based on the knowledge and experience gained, taking intelligent

⁸² S Samoili *et al* 'Defining Artificial Intelligence. Towards an operational definition and taxonomy of artificial intelligence' (2020)
https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118163/jrc118163_ai_watch_defining_artificial_intelligence_1.pdf 7

⁸³ Samoili *et al* (n82 above) 9

action or proposing decisions. There are many different technologies that fall under this broad AI definition. At the moment, ML4 techniques are the most widely used.⁸⁴

AI is rather an umbrella term than it is a single item and refers broadly to many systems of varying computational abilities.⁸⁵ The EU's draft AI Act identify 3 AI techniques and approaches:

- '(a) Machine learning approaches, including supervised, unsupervised and reinforcement learning, using a wide variety of methods including deep learning;
- (b) Logic- and knowledge-based approaches, including knowledge representation, inductive (logic) programming, knowledge bases, inference and deductive engines, (symbolic) reasoning and expert systems;
- (c) Statistical approaches, Bayesian estimation, search and optimization methods'⁸⁶

The notion of AI ultimately comes down to the humble algorithm, which in the vast majority of cases are Machine learning algorithms.⁸⁷ However, as explored in the AI taxonomy proposed by the European Commission's JCA, there are much more sub-domains of AI which include Natural Language Processing, Computer Vision and Audio Processing.⁸⁸ It is therefore important to explore these other components of the broader scheme of Artificial Intelligence, this discussion follows below.

2.2.2 What is an algorithm

In the case of *Gottschalk v. Benson*, an American court defined an algorithm as 'a procedure for solving a given type of mathematical problem.'⁸⁹ However whilst a court definition is welcome, this is an old judgement and the definition now too narrow.⁹⁰ Algorithms are now most synonymous with computer programs that make AI possible.⁹¹ The Oxford English Dictionary defines an algorithm as 'a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer'⁹². Algorithms are not an entirely novel technology, they have been around for a long time. One such example is the old

⁸⁴ Samoili *et al* (n82 above) 9

⁸⁵ M Carman and B Rosman 'Applying a principle of explicability to AI research in Africa: should we do it?' (2020) 23 *Ethics and Information Technology* 108.

⁸⁶ European Commission 'Annexes to the Proposal for a regulation of the European Parliament and of the Council Laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union legislative acts' (2021) https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_2&format=PDF 1.

⁸⁷ UNESCO 'Preliminary study on the technical and legal aspects relating to the desirability of a standard-setting instrument on the ethics of artificial intelligence' (2019) <https://unesdoc.unesco.org/ark:/48223/pf0000367422/PDF/367422eng.pdf.multi> 4.

⁸⁸ Samoili *et al* (n82 above) 11.

⁸⁹ 409 US 63, 93 S.Ct. 253, 34 L.Ed.2d 273, 175 USPQ 673 (1972).

⁹⁰ Barfield and Barfield (n7 above) 4.

⁹¹ Barfield and Barfield (n7 above) 4.

⁹² Oxford English Dictionary, 'Definition of algorithm' <https://en.oxforddictionaries.com/definition/algorithm> .

electoral algorithm written manually to count votes and calculate election results⁹³ Algorithms vary by complexity. 'Traditional' algorithms are simple human written code (mathematical calculations to compute an equation) used to sort and classify data in a specific criteria in order to identify or implement a pattern.⁹⁴ The most powerful algorithms run on large and versatile datasets known colloquially as "Big Data."⁹⁵ Big data refers to voluminous datasets containing 'vast amounts of quantitative data that can be used to reveal patterns or trends'.⁹⁶ It may consist of words, images or numbers and it may be 'either specific to a purpose and tabular (structured) or general and varied (unstructured).'⁹⁷ This creates an intricate environment where Algorithms aggregate and process big data and the output may be input data for other algorithms to process.⁹⁸

2.2.3 Machine learning

ML refers to the 'science of creating computing systems that are programmed to arrive at logical conclusions about the world through exposure to, and processing of data.'⁹⁹ It uses algorithms to analyse data for relationships or the absence thereof.¹⁰⁰ ML doesn't use ML has been described as the core technology under the umbrella that is AI.¹⁰¹ Its key characteristic is that it establishes patterns in data and predicts particular outcomes.¹⁰² ML enables computer systems to 'learn, decide, predict, adapt and react to changes, improving from experience, without being explicitly programmed.'¹⁰³ The notion of 'learning' here refers to the identification of similarities and differences in the data through repetition of the instruction.¹⁰⁴

ML may be supervised or unsupervised learning. In Supervised learning, the programmer uses a labelled dataset of a thing of interest to train the computer to identify the thing of interest in other datasets that are novel to it.¹⁰⁵ The system has to identify the thing of interest in the novel dataset using its training from the labelled dataset.¹⁰⁶ The quality of the system's

⁹³ L McGregor *et al* 'International human rights law as a framework for algorithmic accountability' (2019) *International and Comparative Law Quarterly* 68 <https://www.cambridge.org/core>. 310.

⁹⁴ T Gillespie, 'The Relevance of Algorithms' in T Gillespie, PJ Boczkowski and KA Foot (eds) *Media Technologies: Essays on Communication, Materiality, and Society* (2014) 167, 192.

⁹⁵ T Marckiewicz & J Zheng 'Getting started with Artificial Intelligence: A practical guide to building enterprise applications' (2021) 8.

⁹⁶ D Leslie *et al* 'Artificial Intelligence, human rights, democracy and the Rule of Law' (2021) https://www.turing.ac.uk/sites/default/files/2021-03/cahai_feasibility_study_primer_final.pdf (accessed 27 October 2021) 7.

⁹⁷ Leslie *et al* (n96 above) 7.

⁹⁸ McGregor *et al* (n93 above) 310

⁹⁹ J Aronson 'Computer vision and machine learning for human rights video analysis: case studies, possibilities, concerns and limitations' (2018) *Law and social inquiry* 6.

¹⁰⁰ Aronson (n99 above) 6.

¹⁰¹ Carman and Rosman (n85 above) 108.

¹⁰² Leslie *et al* (n96 above) 7.

¹⁰³ Samoili *et al* (n82 above) 12.

¹⁰⁴ Leslie *et al* (n96 above) 7.

¹⁰⁵ Aronson (n99 above) 6.

¹⁰⁶ Aronson (n99 above) 6.

learning depends on the quality and diversity of the training data and so a biased training dataset will produce a biased system.¹⁰⁷ Unsupervised learning on the other hand uses an unlabelled dataset and programs the system to identify patterns.¹⁰⁸ The system will make conclusions based on the characteristics of the dataset.¹⁰⁹ One example is if a system is trained to identify women in a dataset with mostly pictures of white woman, the dataset will conclude that whiteness is womanhood. ML whether supervised or unsupervised produce output that classifies other data to make conclusions which may be misinformed.¹¹⁰

2.3 A snap shot of AI risks and threats to human rights: lessons from the global north

The use of AI, especially machine learning and its interconnectedness to big data has increased its range for deployment.¹¹¹ This is particularly true for key decision making processes where AI is replacing traditional human functions.¹¹² Due to the transition from human to algorithmic decision making, it should come as no surprise that human rights have been placed at risk.¹¹³ The prominence in the contexts of algorithmic decision-making expands threats to the less studied human rights concerns.¹¹⁴ Below are a number of the issues associated with the use of AI especially in the context of decision making:

2.3.1 The group-individual conflation

In most decision making contexts, ML algorithms analyse big data and make decisions on the basis of statistical probability and correlation.¹¹⁵ It is believed that algorithms trained on big data register less error rates because larger datasets create larger sample pools.¹¹⁶ However the problem is that this big data driven AI makes decisions on individuals using data about entire communities, this quality and size of this data set is not tailored for that person specific decision making.¹¹⁷ COMPAS and HART are recidivism assessment software used in the USA and UK respectively. Using data like criminal record, socio-economic status and proximity to criminals, they calculate an accused person's likelihood to re-offend on the

¹⁰⁷ Aronson (n99 above) 6.

¹⁰⁸ Aronson (n99 above) 7.

¹⁰⁹ Aronson (n99 above) 7

¹¹⁰ Aronson (n99 above) 7

¹¹¹ Leslie *et al* (n96 above) 7.

¹¹² EU Committee of Ministers 'Recommendation of the committee of Ministers to member states on the human rights impacts of algorithmic systems' (2020)

<https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016809e1154>
5.

¹¹³ EU Committee of Ministers (n112 above) 5.

¹¹⁴ McGregor *et al* (n above) 310.

¹¹⁵ UNESCO 2019 (n87 above) 4.

¹¹⁶ McGregor *et al* (n above) 310.

¹¹⁷ E Benvenisti, 'Upholding Democracy Amid the Challenges of New Technology: What Role for the Law of Global Governance?' (2018) 29(1) *EJIL* 9, 60.

basis of that persons' demography.¹¹⁸ The outcomes are then used to inform decisions on bail, parole and sentencing.¹¹⁹ Due to the conflation of individuals with their communities, the large amount of black people in prison increases the risk score for black people who are subject to COMPAS.¹²⁰ In *State of Wisconsin v Eric L Loomis*, the court cautioned that '...risk assessment compares defendants to a national sample, but no cross-validation study for a Wisconsin population has yet been completed' illustrating practically the nature of the problem explored above.¹²¹

2.3.2 The demise of 'Human-in-the-loop' theory

The typical argument in support of AI usage especially in decision-making is often that any errors or inefficiencies can be mitigated by the human being in the loop. It is argued further that the algorithmic output only informs but ultimately the human decides. This argument does not withstand critique because it is often difficult to ascertain how much in the loop the human is. Due to that uncertainty and based on the general perception of algorithmic neutrality, AI is often granted way too much deference.

2.3.3 Coded bias

Another major problem with the argument of a human in the loop is that it overly assumes human control to be an effective safeguard. The influence of human beings in the design of the algorithm, its given instructions and the training data utilised automatically inherently codes bias into the algorithmic decision-making system. Artificial intelligence systems naturally reflect the values encoded into it by their authors. Evidence therefore suggests that these humans in the loop may also be unfairly discriminatory towards certain groups. Recently it was uncovered that the Twitter algorithm prioritises images of slim white women on the time-line, its user feed.¹²² Research on computer vision AI shows that image search results often under-represented women in occupation themed searches; and excluded transwomen in searches for 'women', including them rather amongst men.¹²³

2.3.4 Biased input data

The very data utilised to train algorithms may be inherently biased and fully affect the way that an AI system works.¹²⁴ A common example is the data utilised in Recidivism

¹¹⁸ J Angwin *et al* 'Machine Bias' (2016) *PROPUBLICA*
<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing> .

¹¹⁹ Angwin *et al* (118 above).

¹²⁰ Angwin *et al* (118 above).

¹²¹ *State of Wisconsin v Eric L. Loomis* 2016 WI 68, 881 N.W.2d para 66.

¹²² W Knight 'Twitter's photo-cropping algorithm favours young, thin females' (2020) *The wire*
<https://www.wired.com/story/twitters-photo-cropping-algorithm-favors-young-thin-females/>

¹²³ VU Prabhu and A Birhane 'Large image datasets: A pyrrhic win for computer vision' (2021) IEEE Winter Conference on Applications of Computer Vision <https://www.semanticscholar.org/paper/Large-image-datasets%3A-A-pyrrhic-win-for-computer-Prabhu-Birhane/23fc584a069c86da5d784da781268cba1c065fc5> 2-3

¹²⁴ McGreggor *et al*(n93 above) 317.

Assessment Software like ART and COMPAS discussed above.¹²⁵ These algorithms utilise data the programmers consider to accurately predict the propensity for future criminal conduct.¹²⁶ A lot of this data such as that on criminal records is incredibly biased against Black, indigenous and People of Colour (BIPOC).¹²⁷ This is due to a now proven history of predatory over-policing in areas with those communities.¹²⁸ As a result of the bias of the training or use data, these algorithms may result in discrimination against certain people and communities.

2.3.5 Proxies and the data quality problem

In light of the discussion above, it is clear that for algorithms to work meaningfully in a manner that is not discriminatory, they need good quality data. In the vast majority of cases that is not always accessible. As a consequence, resort is often made to big data. However despite its sheer size, the prospects of lessened error rates are not guaranteed. Moreover, to fill the gaps of the desired input data, programmers and data scientists utilise proxies for that required data.¹²⁹ The problem with proxies is that they are incapable of perfectly substituting the desired data which results in unreliable and inappropriate input from the algorithmic process.¹³⁰ This is perfectly illustrated in credit score applications. The algorithms that calculate credit scores now utilise online shopping history, social media behaviour and financial literacy.¹³¹ This is a departure from the traditional credit repayment history which formed the basis for scores. Whilst it is argued that this data allows for a broader assessment, this data is also insidiously proxy for race, gender and class.¹³² This proxy data is not only an inaccurate assessment of creditworthiness but also results in unfair discrimination.¹³³

2.3.6 The proprietary rights problem

An issue that typically arises in discussions on algorithmic accountability is that of the lack of transparency in how algorithms actually work and whether that's appropriate.¹³⁴ This is

¹²⁵ WD Heaven 'Predictive policing algorithms are racist. They need to be dismantled' (2020) *MIT Technology Review* <https://www.technologyreview.com/2020/07/17/1005396/predictive-policing-algorithms-racist-dismantled-machine-learning-bias-criminal-justice/> .

¹²⁶ A De La Garza 'States' Automated Systems are trapping citizens in bureaucratic nightmares with their lives on the line' (2020) *Time* <https://time.com/5840609/algorithm-unemployment/> .

¹²⁷ C Doyle 'The feature is the bug' (2021) *Inquest* https://inquest.org/the-feature-is-the-bug/?_cf_chl_captcha_tk__=pmd_rS2j_tbu2nKRH8Yw2wJduiK9rjm9NYMuXAK10i9FT.8-1633162412-0-gqNtZGzNAtCjcnBszQbR .

¹²⁸ McGreggor *et al* (n93 above) 317.

¹²⁹ McGreggor *et al* (n93 above) 318.

¹³⁰ C O'Neil 'Weapons of Math Destruction: How Big Data increases inequality and threatens democracy' (2016).

¹³¹ M Hurley and J Adebayo, 'Credit Scoring in the Era of Big Data' (2016) 18(1) *Yale Journal of Law & Technology* 148, 151–2, 163, 166, 174–5

¹³² K Waddell, 'How Algorithms Can Bring Down Minorities' Credit Scores' (2016) *The Atlantic* <https://www.theatlantic.com/technology/archive/2016/12/how-algorithms-canbring-down-minorities-credit-scores/509333/> .

¹³³ US Executive Office of the President 'Big Data: A Report on Algorithmic Systems, Opportunity, and Civil Rights' (2016) 11.

¹³⁴ S Greenstein 'Preserving the rule of law in the era of artificial intelligence' (2021) *Artificial Intelligence and law* 18.

mainly due to legal restrictions imposed by companies on themselves to shield public inquiry into their products.¹³⁵ In the vast majority of cases AI companies have proprietary protection over algorithms which means that there may be no telling as to what happens at the back end of an AI system.¹³⁶ This is especially damaging when someone seeks to contest an algorithmic decision because they have nothing credible to base their challenge on.¹³⁷ This bureaucratic impediment affects the right to access information as well as several aspects of the right to fair trial such as the right to appeal and the right to an independent and impartial tribunal.¹³⁸ In the case of *State of Wisconsin v Eric L Loomis*, the defendant challenged their COMPAS generated recidivism assessment score unsuccessfully due inter alia to the proprietary nature of COMPAS which prevent disclosure of its inner workings.¹³⁹

2.3.7 Complexity

Another impediment to accountability in AI is the uninhibited complexity of algorithmic processes. Applications and systems driven by AI may comprise an incredible amount of algorithms each deployed to perform a particular task.¹⁴⁰ Moreover, the algorithms may also be utilising different input data from different data sources, adding to the complexity of the operation.¹⁴¹ In some instances one algorithm's output data provides input to another.¹⁴² This intricately linked web of complicated processes may prove even more confusing when different tasks are performed by different members of a conglomerate or outsources to a 3rd party.¹⁴³ The result of the complex algorithmic process is public inability to comprehend the operation and as such to challenge it and hold it accountable.¹⁴⁴ This is so much so in the event that legal barriers to accountability had been dismantled. This means that an algorithm may continue to violate human rights with society lacking any means of proving it or even knowing how. This opacity is incredibly pernicious and creates the need for broader transparency.

2.3.8 Knock on effect

A greater challenge to human rights exists when some or all of the problems discussed above are present in same algorithmic process. The resulting prejudice often means that one person's interaction with an algorithm may impact their community.¹⁴⁵ This is referred to as the 'knock-on' effect or 'networked discrimination' which entails decisions on an individual's

¹³⁵ Greenstein (n134 above) 18.

¹³⁶ Greenstein (n134 above) 18.

¹³⁷ Mcgregor *et al* (n93 above) 318.

¹³⁸ Greenstein (n134 above) 19.

¹³⁹ *State of Wisconsin v Eric L. Loomis* (n 121 above) 74.

¹⁴⁰ Mcgregor *et al* (n93 above) 318.

¹⁴¹ Mcgregor *et al* (n93 above) 318.

¹⁴² Mcgregor *et al* (n above) 318.

¹⁴³ Mcgregor *et al* (n above) 318.

¹⁴⁴ R Kitchin, 'Thinking Critically About and Researching Algorithms' (2017) 20(1) *Information, Communication & Society* 14, 18–19.

¹⁴⁵ Mcgregor *et al* (n93 above) 320.

data being applied to other similarly situated people, resulting in elevated discrimination.¹⁴⁶ Research shows that there is a history of whole neighbourhoods or ethnic minority groups being denied loans based on their proximity to blacklisted individuals, in networked discrimination process known as 'redlining'.¹⁴⁷

2.4 The case for a multilateral human rights framework

There are gaps in the contemporary approaches utilised to prevent the harm caused by AI systems especially in public decision making. The most notable gap is the very absence of regulation and governance on the subject of AI in Africa. At national level, research shows that only Mauritius has a National AI Policy whilst Kenya; South Africa; Rwanda; Tunisia and Egypt were in the process of developing theirs at the time of writing.¹⁴⁸ At regional level, no explicit Artificial Intelligence law exists. There exists Ethics documents created by private actors such as companies, NGOs and Intergovernmental organisations

UNESCO notes that as Africa faces accelerating AI usage, a human rights based framework will provide the best means to confront the challenges and opportunities involved.¹⁴⁹ They argue that 'AI should be developed and implemented in accordance with International human rights standards.'¹⁵⁰ Under IHRL states have direct obligations for their actions and omissions, the principle of due diligence also dictates that states protect those in their jurisdiction from 3rd party harm.¹⁵¹ The IHRL framework requires states to prevent violations by enacting and implementing laws; providing oversight; guaranteeing accountability for perpetrators and providing effective remedies for victims.¹⁵² States also have a due diligence obligation to ensure that business enterprises such as corporations dealing with AI do not violate the rights of individual.¹⁵³ IHRL also requires AI businesses to respect human rights and more specifically identify, prevent, mitigate and account for how they intend to address their human rights impacts.¹⁵⁴ McGregor, Murray and Ng argue that International Human Rights Law (IHRL) can significantly mitigate the gaps that they argue exist in contemporary algorithmic

¹⁴⁶ D Boyd *et al* 'The Networked Nature of Algorithmic Discrimination'(2014) Open Technology Institute.

¹⁴⁷ J Angwin *et al* 'Minority Neighbourhoods Pay Higher Car Insurance Premiums Than White Areas with the Same Risk' (2017)*Pro Publica* <https://www.propublica.org/article/minorityneighborhoods-higher-car-insurance-premiums-white-areas-same-risk> .

¹⁴⁸ A Sey 'Sub-Saharan Africa' in E Shearer R Stirling and W Pasquarelli (eds) Government AI readiness Index (2020) <https://static1.squarespace.com/static/58b2e92c1e5b6c828058484e/t/5f7747f29ca3c20ecb598f7c/1601653137399/AI+Readiness+Report.pdf> 83.

¹⁴⁹ (n87 above) 17.

¹⁵⁰ UNESCO (n17 above)19.

¹⁵¹ UN Human Rights Committee, 'General Comment No 31 The Nature of the Legal Obligation Imposed on States Parties to the Covenant' (26 May 2004) Para 3-8.

¹⁵² General Comment No 31 (n151 above) paras 3–8.

¹⁵³ UN Human Rights Council, 'Report of The Special Representative of The Secretary-General on The Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie, on Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework' (21 March 2011) Principles 1–10 (Ruggie principles).

¹⁵⁴ Ruggie principles (n above) 15.

regulation.¹⁵⁵ IHRL can serve as the basis for the design, development, deployment and accountability of algorithms because it provides a guidance for issues to look out for in the drive to prevent violations.

The AU itself notes the potential challenges associated with the emergence of AI and its usage in the continent.¹⁵⁶ The African Commission on Human and Peoples' Rights (The Commission) has discussed in reasonable detail the AI risks that Africa faces inter alia, deepfakes; autonomous weapons, personal data breaches and disinformation.¹⁵⁷ As a panacea, the AU recommended the establishment of harmonised policy, legal and regulatory frameworks, specifically the adoption of 'guidelines at regional and continental levels on regulation'.¹⁵⁸ The African Commission also called on the AU to 'develop a regional regulatory framework that ensures that these technologies respond to the needs of the people on the continent.'¹⁵⁹ This clearly demonstrates that the AU itself is cognisant of the value

AI and its impacts, both good or bad are transnational in character, what this necessarily implies is that states have to find transnational solutions.¹⁶⁰ An African AI governance framework must therefore have a global outlook, building on existing and emerging standards and values.¹⁶¹ As such, following the 'Forum on Artificial Intelligence in Africa' hosted in Morocco in 2018, the 'Benguerir Declaration' was adopted.¹⁶² UNESCO and other stakeholders called on the AU to 'promote a rights-based, open, accessible AI through a multi-stakeholders approach as an instrument for the empowerment of African people and the positive transformation of African societies'.¹⁶³ Similarly it calls for African governments to engage in constructive dialogues to ensure that this is made possible.¹⁶⁴

2.5 Conclusion

This chapter has provides the basis for understanding AI and the damaging nature of its interaction with individuals. It has also laid down the reasons for why there should be a

¹⁵⁵ (n93 above) 311.

¹⁵⁶ 'Resolution on the need to undertake a Study on human and peoples' rights and artificial intelligence (AI), robotics and other new and emerging technologies in Africa ' ACHPR/Res. 473 (EXT.OS/ XXXI) (2021) <https://www.achpr.org/sessions/resolutions?id=504> (Resolution 473).

¹⁵⁷ Resolution 473 (n156 above) .

¹⁵⁸ AU 'The digital transformation strategy for Africa (2020-2030)' (2020) <https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf> 7.

¹⁵⁹ Resolution 473 (156n above) 5.

¹⁶⁰ UNESCO (n87 above) 3.

¹⁶¹ UNESCO (n87 above) 3.

¹⁶² UNESCO 'Outcome statement of the forum on Artificial Intelligence in Africa' (2018) https://en.unesco.org/sites/default/files/ai_outcome-statement_africa-forum_en.pdf .

¹⁶³ Benguerir Declaration (n162 above) 3.

¹⁶⁴ Benguerir Declaration (n162 above) 3.

governance framework for it under the African Human Rights System. The next chapters delves into the law presently in force for AI usage under the African Human Rights System.

CHAPTER 3

3.1 Introduction

The previous chapter explored the technological concept of AI, it also identified the inherent flaws and the challenges that it poses. This chapter proceeds to investigate the law in place to address those challenges. The First part breaks down the notion of an African Human Rights System. The second identifies the laws under the African Human Rights System. The last provides a critique of the laws in question and as such AI governance under the status quo.

3.2 The notion of an African Human Rights System

The African Human rights system refers to the regional human rights framework in Africa constructed under the auspices of the AU.¹⁶⁵ The African human rights system is legal and governance system composed of legal instruments, institutions and processes. The African Charter is the principal law governing the African human rights system.¹⁶⁶ The African Charter was adopted by the Organisation for African Unity (OAU) in Nairobi, Kenya on 27 June 1981 and entered into force on 21 October 1982.¹⁶⁷ There are 54 of the 55 African countries are party to the African Charter with the exception of Morocco.¹⁶⁸ The African Charter established the African Commission which is the treaty supervisory body to 'promote human and peoples' rights and ensure their protection in Africa.'¹⁶⁹

There are multiple other Human Rights treaties and monitoring bodies under the African human rights system. These include the African Charter on the Rights and Welfare of the Child;¹⁷⁰ the OAU Convention Governing the Specific Aspects of Refugee Problems in Africa;¹⁷¹ the OAU Convention on the Prevention and Combating of Terrorism;¹⁷² the African Charter on Democracy, Elections and Governance;¹⁷³ and AU Convention for Protection and Assistance of Internally Displaced Persons.¹⁷⁴ Several other treaties also exist under the

¹⁶⁵ Heyns and Killander (n38 above)510.

¹⁶⁶ M Mutua 'The African human rights system: A critical evaluation' (2000) *United Nations Development Program Human Development Report 1*.

¹⁶⁷ AU treaty database <https://treaties.au.int/>.

¹⁶⁸ AU 'List of countries which have signed, ratified/acceded to the African Charter on Human and Peoples' Rights' (2017) https://au.int/sites/default/files/treaties/36390-sl-african_charter_on_human_and_peoples_rights_2.pdf.

¹⁶⁹ African Charter (n168 above) Art 30.

¹⁷⁰ AU (n167 above) Adopted in Addis Ababa, Ethiopia on 11 June 1990 and entered into force on 29 November 1999.

¹⁷¹ AU (n167 above) Adopted in Addis Ababa, Ethiopia on 10 September 1969 and entered into force on 20 June 1974.

¹⁷² AU (n167 above) Adopted in Algiers Algeria on 14 July 1999 and entered into force on 6 December 2002.

¹⁷³ AU (n167 above) Adopted in Addis Ababa, Ethiopia on 30 January 2007 and entered into force on 15 February 2012.

¹⁷⁴ AU (n167 above) Adopted in Kampala, Uganda on 23 October 2009 and entered into force on 6 December 2012.

system governing multiple issues including corruption, environmental conservation, prevention of mercenaryism among others, many of them are yet to enter into force.¹⁷⁵

To implement these treaties, there are supervisory and monitoring bodies with varying roles and powers.¹⁷⁶ The Commission was the first of these, being established by the Charter in 1981. The Commission adopted rules of procedure in 1995 which were updated in 2010 and in 2020.¹⁷⁷ The Commission comprises 11 members,¹⁷⁸ nominated by state parties to the Charter and appointed by the AU Assembly of Heads of States,¹⁷⁹ serving in their personal capacity for renewable 6 year term.¹⁸⁰ In addition to performing any task that may be entrusted to it by the AU Assembly of Heads of States,¹⁸¹ the Commission's mandate is to promote human and peoples' rights,¹⁸² protect human and peoples' rights¹⁸³ as well as to interpret the Charter.¹⁸⁴ The Commission's most prominent role is that of the complaints procedure¹⁸⁵ where it considers communications of violations of the Charter from both states¹⁸⁶ and individuals.¹⁸⁷ Under the Individual complaints procedure, the Commission will consider communications from individuals and Non-Governmental Organisations if they satisfy the admissibility criteria.¹⁸⁸ The most controversial requirement is that of satisfying local remedies, the Commission has however established extensive jurisprudence interpreting that rule.¹⁸⁹

To complement and reinforce the Commission, state parties to the Charter established the African Court on Human and Peoples' Rights (African Court). The Court was established by the Protocol to the African Charter on the establishment of the African Court of Human and Peoples' Rights (Court Protocol).¹⁹⁰ The Court has Contentious jurisdiction to hear matters alleging violations of any relevant human rights¹⁹¹ instrument ratified by a state party that has ratified the Court Protocol and accepted the competence of individuals and NGOs to submit cases.¹⁹² The Court also has Advisory jurisdiction over requests submitted by the AU; AU

¹⁷⁵ AU (n167 above).

¹⁷⁶ Heyns and Killander (n38 above) 522.

¹⁷⁷ Rules of Procedure of the African Commission on Human and Peoples' Rights (2020) Adopted in Banjul, Gambia on 19 February 2020 <https://www.achpr.org/rulesofprocedure> .

¹⁷⁸ African Charter (n168 above) Art 31(1).

¹⁷⁹ African Charter (n168 above) Art 33.

¹⁸⁰ African Charter(n168 above) Art 31(2).

¹⁸¹ African Charter (n168 above) Art 45(4).

¹⁸² African Charter (n168 above) Art 45 (1).

¹⁸³ African Charter (n168 above) Art 45 (2).

¹⁸⁴ African Charter (n168 above) Art 45 (3) .

¹⁸⁵ Rules of the Commission (n177 above) Chapter III.

¹⁸⁶ African Charter (n168 above) Art 47-54; See generally *Democratic Republic of Congo v Burundi, Rwanda and Uganda* (2004) AHRLR 19 (ACHPR 2003).

¹⁸⁷ African Charter(n168 above) Article 55; Rules of the Commission (n177 above) 115.

¹⁸⁸ African Charter (n168 above) Article 56;

¹⁸⁹ See generally *Jawara v The Gambia* (2000) AHRLR 107 (ACHPR 2000) 22-43.

¹⁹⁰ AU (n167 above) adopted on 9 June 1998 and entered into force on 25 January 2004 Art 1.

¹⁹¹ Court Protocol (n190 above) Art 3(1).

¹⁹² Court Protocol (n190 above) Article 5 (3) as read with 34 (6).

member states; AU organs and African Organisations with observer status at the AU.¹⁹³ The admissibility criteria of the Court is similar to that of the Commission in that it is governed by Article 55 of the Charter, however, cases where the complainants are not eligible to access the court in terms of Article 5(3) as read with 34(6) of the Court protocol will be inadmissible *ab initio*.

3.3 The legal framework for AI governance under the African human rights system

3.3.1 The African Charter on Human and Peoples' Rights

Whilst the Charter does not specifically make direct reference to AI, it does apply to it as it is an all encompassing human rights treaty. Like any IHRL instrument, the Charter operates by imposing international (law) obligations on state parties. Those human rights obligations do and should cover the usage of AI. IHRL generally obliges states to respect, fulfil, promote and protect human rights. The Charter specifically imposes a key obligation on state parties in Article 1. It reads:

The Member States of the Organization of African Unity parties to the present Charter shall recognize the rights, duties and freedoms enshrined in this Chapter and shall undertake to adopt legislative or other measures to give effect to them.¹⁹⁴

Two principal duties arise from the provision, firstly to 'recognise' the rights, freedoms and duties and secondly to adopt legislative or other measures to give effect to them. The African Court has described Article 1 as 'the obligation to take appropriate measures to give effect to the rights enshrined in the Charter.'¹⁹⁵ Legislative measures may include constitutional provisions for the rights protected in the charter as well as other national laws compliant with and giving effect to the rights in the Charter.¹⁹⁶ Measures other than legislative measures imply the conducting of due diligence by the state to ensure that the rights in the Charter are given effect.¹⁹⁷

The Charter also imposes direct and indirect obligations on state parties for the protection of the rights enshrined.¹⁹⁸ Under the Charter, state parties are legally responsible for human rights violations arising from actions and omissions of public authorities imputable to it under

¹⁹³ Court Protocol (n190 above) Art 4 (1); 001/2013 Request for advisory opinion by the Socio-Economic Rights Accountability Project (SERAP) .

¹⁹⁴ African Charter (n168 above) Art 1.

¹⁹⁵ *Beneficiaries of late Norbert Zongo, Abdoulaye Nikiema alias Ablassé, Ernest Zongo, Baise Ilboudo and Mouvement Burkinabe des Droits de l'Homme et des Peuples v Burkina Faso* (merits)(2014) AfCLR 220.

¹⁹⁶ *Beneficiaries of late Norbert Zongo* (merits) (n195 above) 197.

¹⁹⁷ *Beneficiaries of late Norbert Zongo* (merits) (n195 above) 199

¹⁹⁸ *Commission Nationale des Droits de l'Homme et des Libertés v Chad* (2000) AHRLR 66 (ACHPR 1995) 20

international law.¹⁹⁹ Moreover the Charter requires states to prevent and sanction human rights violations committed by private individuals.²⁰⁰ The state parties would therefore be responsible for failure to conduct their due diligence to prevent violations of the rights in the Charter.²⁰¹

The Charter recognises most of the international human rights with a handful of unique parts.²⁰² Although without formal distinction in the wording of the document, the Charter includes both Civil and Political Rights and Socio-Economic Rights. The former include the right to: non-discrimination;²⁰³ equality;²⁰⁴ life and integrity of person;²⁰⁵ dignity and prohibition of torture and inhuman treatment;²⁰⁶ liberty and security;²⁰⁷ fair trial;²⁰⁸ freedom of conscience;²⁰⁹ access to information and freedom of expression;²¹⁰ freedom of association;²¹¹ freedom of assembly;²¹² freedom of movement;²¹³ political participation;²¹⁴ property;²¹⁵ and independence of the courts.²¹⁶ The Socio-Economic rights enshrined in the Charter are: work;²¹⁷ health²¹⁸ and education.²¹⁹ In addition the Charter includes Peoples' rights to equality;²²⁰ self determination;²²¹ free disposal of wealth and natural resources;²²² economic, social and cultural development;²²³ peace and security;²²⁴ as well as a satisfactory environment.²²⁵

The Charter therefore requires state parties to use or deploy AI in a manner that recognises the rights enshrined in the Charter.²²⁶ It also requires that state parties adopt legislative measures to prevent the violation of human rights in the use of AI. In addition to legislation, states must adopt other measures to give effect to the Charter rights. State parties must not

¹⁹⁹ *Zimbabwe Human Rights NGO Forum v Zimbabwe* (2005) AHRLR 128 (ACHPR 2005) 142.

²⁰⁰ *Zimbabwe Human Rights NGO Forum v Zimbabwe* (n199 above) 143

²⁰¹ *Zimbabwe Human Rights NGO Forum v Zimbabwe* (n199 above) 144 quoting *Velasquez Rodriguez v Honduras* IACHR (26 September 1986) SerL/Doc 8 Rev 1

²⁰² Heyns and Killander (n38 above) 514

²⁰³ (n168 above) Art 2.

²⁰⁴ (n168 above) Art 3.

²⁰⁵ (n168 above) Art 4.

²⁰⁶ (n168 above) Art 5..

²⁰⁷ (n168 above) Art 6.

²⁰⁸ (n168 above) Art 7.

²⁰⁹ (n168 above) Art 8.

²¹⁰ (n168 above) Art 9.

²¹¹ (n168 above) Art 10.

²¹² (n168 above) Art 11.

²¹³ (n168 above) Art 12.

²¹⁴ (n168 above) Art 13.

²¹⁵ (n168 above) Art 14.

²¹⁶ (n168 above) Art 26.

²¹⁷ (n168 above) Art 15.

²¹⁸ (n168 above) Art 16.

²¹⁹ (n168 above) Art 17.

²²⁰ (n168 above) Art 19.

²²¹ (n168 above) Art 20.

²²² (n168 above) Art 21.

²²³ (n168 above) Art 22.

²²⁴ (n168 above) Art 23.

²²⁵ (n168 above) Art 24.

²²⁶ (n168 above) Art 1.

utilise AI systems and technologies in a manner that violates the human rights of those in their jurisdiction. Furthermore, states have a positive duty to prevent the violation of human rights through the usage of AI by private actors. In the event that AI deployments by both state or private actors violate Charter rights, an effective remedy should be provided to the victims.

3.3.2 The African Union Convention on Cyber Security and Personal Data Protection

This Convention was adopted on 27 June 2014 at Malabo, Equatorial Guinea, however it has not come into effect as it is still yet to garner the required 15 ratifications.²²⁷ This Convention is therefore not yet legally binding. It must be noted once again that this treaty does not once mention the term AI or even algorithm but rather governs data and Cyber security. Should it come into effect, the Convention will however be relevant to the usage of AI as AI algorithms run on data. The Convention makes a lot of ambitious and important provisions regarding its subject matter which are relevant for the usage of AI. Firstly, it provides legal definitions for key terms such as 'child pornography; consent of data subject; damage; direct marketing; personal data processing of personal data; sensitive data and third party among others.²²⁸ In Chapter 1 which regulates 'Electronic Transactions' the convention importantly requires that electronic advertisements identify the product and service provider²²⁹ and that direct online advertising be done with the prior consent of the end receiver.²³⁰ Chapter II of the convention deals specifically with the protection of Personal Data. Article 8 requires state parties to set up Personal data protection legal frameworks premised on respect for fundamental rights²³¹ and , criminalise the invasion of privacy.²³² To enforce those legal frameworks, state parties are to set up 'National Data Protection Authorities'.²³³ Finally, the convention sets out some principles incumbent to the effective protection of personal data by the relevant authorities, these include: consent; lawfulness and fairness of processing; transparency and confidentiality.²³⁴ Calls continue for member states of the AU to ratify the treaty so it enters into legal effect.

3.3.3 Sharm el sheikh declaration

The Special Technical Committee (STC) on Communication and Information & Technologies (CICT), (STC-CICT) was established by Article 14 of the AU Constitutive Act as well as the

²²⁷ AU (n167 above)(Malabo Convention).

²²⁸ Malabo Convention (n227 above) Art 1.

²²⁹ Malabo Convention (n227 above) Art 4(1).

²³⁰ Malabo Convention (n227 above) Art 4 (2).

²³¹ Malabo Convention (n227 above) Art 8(1).

²³² Malabo Convention (n227 above) Art 8 (2).

²³³ Malabo Convention (n227 above) Art 11.

²³⁴ Malabo Convention (n227 above) Art 13.

Decision of the Assembly of Heads of States in 2009.²³⁵ The mandate of the STC-CICT is to prepare and co-ordinate programs within its sphere of specialisation for the implementation of the Constitutive Act.²³⁶ In line with its mandate, the STC-CICT met from 22 to 26 October 2019 in Sharm El Sheikh, Egypt and concluded a declaration. In the declaration, the STC requested member states to:

15. ESTABLISH a working group on Artificial Intelligence (AI) based on existing initiatives and in collaboration with African Institutions to study:
 - a. The creation of a common African stance on AI
 - b. The development of an Africa wide capacity building framework
 - c. Establishment of an AI think tank to assess and recommend projects to collaborate on in line of Agenda 2063 and SDGs.²³⁷

3.3.4 Declaration of principles on freedom of expression and access to information in Africa

The declaration was adopted by the Commission at its 65th session which occurred in Banjul, The Gambia from 21 October to 10 November 2019.²³⁸ The declaration was prepared in line with the Commission's mandate to promote the human and Peoples' rights in the Charter as well as to formulate and lay down principles to that effect.²³⁹ The declaration postulates principles for the protection of the right to freedom of expression and access to information under the Charter.²⁴⁰ The declaration therefore undoubtedly applies to the usage of AI based on its subject matter and research of proven intrusions to free expression and access to information. The declaration is not legally binding but is a soft law instrument on the interpretation of Article 9. In a far reaching principle that's relevant for AI usage, the declaration provides that freedom of expression and access to information should be protected both offline and online.²⁴¹ Part IV which wholly focuses on freedom of expression and access to information on the internet provides more substantive provisions. Under this part of the declaration, states are to desist from interfering with the imparting or seeking of information through content removal, blocking or filtering unless such interference is justified by IHRL.²⁴² Regarding internet intermediaries, states are to ensure that they do not discriminate against internet access on the basis of form, origin or means of transmission.²⁴³ States may by order of court request internet intermediaries to remove content online,²⁴⁴ this

²³⁵ 'Decision on The Specialised Technical Committees' DOC. EX.CL/496(XIV) [https://portal.africa-union.org/DVD/Documents/DOC-AU-DEC/Assembly%20AU%20DEC%20227%20\(XII\)%20_E.pdf](https://portal.africa-union.org/DVD/Documents/DOC-AU-DEC/Assembly%20AU%20DEC%20227%20(XII)%20_E.pdf)

²³⁶ Constitutive Act (n167 above) Art 15.

²³⁷ *Sharm el sheikh* declaration (n235 above) para 15.

²³⁸ Declaration on Freedom of expression (2019) Introduction.

²³⁹ Declaration on Freedom of expression (n238 above) introduction.

²⁴⁰ Declaration on Freedom of expression (n238 above) introduction.

²⁴¹ Declaration on Freedom of expression (n238 above) Principle 5.

²⁴² Declaration on Freedom of expression (n238 above) Principle 38(3).

²⁴³ Declaration on Freedom of expression (n238 above) Principle 39(1).

²⁴⁴ Declaration on Freedom of expression (n238 above) Principle 39 (4).

includes by law enforcement authorities where said content poses danger and risk of death or harm to children.²⁴⁵

In the first of its kind, the declaration makes express reference to the terms ‘artificial intelligence’ and ‘algorithm’.²⁴⁶ Under this provision, states are to ensure that internet intermediaries develop, use and apply AI in a manner that is compatible with IHRL and specifically the right to freedom of expression and access to information.²⁴⁷ Principle 41 requires states to only communication surveillance where it is provided for by law that conforms to IHRL and where a legitimate aim such as the prevention of a crime is pursued.²⁴⁸ In order to protect personal information, states are to adopt legal frameworks that govern among other things, the processing of personal information, in accordance with IHRL.²⁴⁹

3.3.5 Resolution on the need to undertake a Study on human and peoples’ rights and artificial intelligence (AI), robotics and other new and emerging technologies in Africa²⁵⁰

In the exercise of their protection and promotion mandate as spelt out in article 45 of the African Charter, the commission met from 19 to 25 February 2021 and made Resolution 473. In the preamble, the Commission notes: the human rights challenges posed by the emergence of AI in the continent; the dangers of deepfakes; the need for comprehensive research on the implications of AI usage; the negative impacts of the lack of a comprehensive legal framework governing AI and the need for AI to be developed in a human rights friendly fashion.²⁵¹ In the substantive paragraphs, the Commission calls upon state parties to see to it that AI is used in a human rights friendly manner that respects human dignity; privacy; equality and non-discrimination.²⁵² The resolution further requires that state parties ensure that Algorithmic decision-making is transparent and understandable.²⁵³ Lastly, state parties should ensure the maintenance of meaningful human control over all AI technologies.²⁵⁴ Whilst the resolution is not legally binding, it does provide incredible guidance on the interpretation of the charter.

²⁴⁵ Declaration on Freedom of expression (n238 above) Principle 39 (5).

²⁴⁶ Declaration on Freedom of expression (n238 above) Principle 39 (6).

²⁴⁷ Declaration on Freedom of expression (n238 above) Principle 39 (6).

²⁴⁸ Declaration on Freedom of expression (n238 above) Principle 41.

²⁴⁹ Declaration on Freedom of expression (n238 above) Principle 42.

²⁵⁰ Resolution 473 (n156 above).

²⁵¹ Resolution 473 (n156 above) Preamble.

²⁵² Resolution 473 (n156 above) para 1.

²⁵³ Resolution 473 (n156 above) para 3.

²⁵⁴ Resolution 473 (n156 above) para 6.

3.4 Critique

The first thing to note is the alarming and blatant under-exploration of AI under the African human rights system. This is noted in the fact that only 2 legal instruments (The Declaration on Freedom of Expression and access to information and Resolution 473) make a direct reference to 'Artificial intelligence', is very telling of that. This demonstrates a lack knowledge on the subject matter which is indicative of a dearth of research by the AU. However it must be noted that the AU through the STC-CICT and the Commission have made commitments to conduct research on the subject. Notably, in 2019 the STC-CICT called on the AU member states to establish a working group of AI,²⁵⁵ at the time of writing this has not taken place. In February of 2021, the Commission committed to study AI with a view of developing guidelines to ensure compliance with human rights.²⁵⁶

The legal framework pertinent to AI usage is also weak on legal force. Of all the sources identified above, only one, the African Charter, is a treaty and is also the only one that is legally binding. The Malabo Convention has not entered into legal force having garnered only 8 of the required 15 ratifications.²⁵⁷ All the rest are soft law and do not create legal obligations for which states can be held to account.

The Charter whilst being having legal force is still very much generic. It sets out the rights that AI usage could possibly violate, it however does not envision the kind of ways in which this could happen. This is however quite understandable given that the Charter was drafted in the early 1970s and the issues under discussion in this study had not emerged. The Charter also does not have an explicit right to Privacy, this leaves its realisation to a strenuous process of interpretation from secondary sources. This is especially problematic because as pointed out in Chapter 2, privacy violations are among the most pressing concerns with AI usage.

All of the sources discussed above are out of touch with the nature and capabilities of AI. This is evident in the language utilised in all of them. These documents lack specificity and barely provide regulatory guidance for the algorithmic technologies. They repeatedly refer to compliance with IHRL without stating how .

The laws under the African human rights system are general human rights protections. They are sparse in their coverage of AI regulation. Moreover they are very much outdated and

²⁵⁵ *Sharm el sheikh declaration* (n235 above) para 15.

²⁵⁶ Resolution 473 (n156 above) para 7.

²⁵⁷ AU 'List of countries which have signed, ratified/acceded to the African Union Convention On Cyber Security And Personal Data Protection' (2020) <https://au.int/sites/default/files/treaties/29560-sl-AFRICAN%20UNION%20CONVENTION%20ON%20CYBER%20SECURITY%20AND%20PERSONAL%20DATA%20PROTECTION.pdf>

exhibit a very clear lack of knowledge and understanding of AI systems and technology. In so far as inspiring national law is concerned, the laws under the African human rights system provide little to no guidance for states on how to effectively regulate AI.

3.5 Conclusion

This chapter sought to identify the legal framework applicable to AI under the African human rights system. It found that this corpus comprises the African Charter, Malabo Convention, Declaration on Freedom of expression and access to information, resolution 473 and the Sheikh El sharm declaration. An analysis of the laws mentioned demonstrates that they are generic, obsolete, under-equipped and lack legal force. It can be concluded that the laws under the African human rights system might be unfit to govern AI.

CHAPTER 4

4.1 Introduction

The previous chapter identified and assessed the laws governing AI under the African Human Rights System. The main conclusion in that chapter was that the legal framework was inadequate and required reform in order to effectively prevent AI-induced rights violations. As discussed at length in the final section of part 6 in chapter 1 of the study, the EU is the global standard setter on AI regulation globally. There are two efforts at governing AI in Europe, one under the auspices of the Council of Europe and the other under the EU. Both of them are explored in the study. As a consequence, this chapter identifies the best practices from the European strategy on AI. Part 1 provides an overview of the European EU strategy on AI. Part 2 discusses the regulatory approach under the COE. Part 3 identifies good practice in both frameworks. Part 4 concludes the chapter.

4.2 An overview of the European Union strategy on AI

The European Commission shared that the pursuit of a strategy for AI in Europe and particularly the EU was motivated by AI's 'enormous impact on the way people live and work in the coming decades.'²⁵⁸The need to 'harness the many opportunities and address challenges of AI in a future-proof manner' fostered the creation of the European strategy on AI.²⁵⁹ The strategy was launched in April 2018, its policy was based on developing AI that is trustworthy and human-centric as well as becoming a 'world-class hub for AI'.²⁶⁰

This process was followed by the establishment of a High Level Expert Group on AI and the European AI Alliance.²⁶¹ In 2018 they conducted public consultation on the development of ethics guidelines for trustworthy AI in Europe²⁶² and drafted the first 'Coordinated plan on AI'²⁶³ which initiated cooperation and called for development of national AI policies in the EU.²⁶⁴ In 2019, the European Commission presented a communication to the European

²⁵⁸ European Commission 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Fostering a European approach to Artificial Intelligence' (2021) <https://digital-strategy.ec.europa.eu/en/library/communication-fostering-european-approach-artificial-intelligence> 6 (European Commission Communication 2021).

²⁵⁹ European Commission Communication 2021 (n258 above) 1.

²⁶⁰ European Commission 'Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions on Artificial Intelligence' (2018) <https://digital-strategy.ec.europa.eu/en/library/communication-artificial-intelligence-europe> (Coordinated plan on AI 2018).

²⁶¹ European Commission 'Commission appoints expert group on AI and launches the European Alliance' (2018) <https://digital-strategy.ec.europa.eu/en/news/commission-appoints-expert-group-ai-and-launches-european-ai-alliance> .

²⁶² European Commission 'Over 500 comments received on the draft Ethical Guidelines for Trustworthy Artificial Intelligence' (2018) <https://digital-strategy.ec.europa.eu/en/news/over-500-comments-received-draft-ethical-guidelines-trustworthy-artificial-intelligence> .

²⁶³ Coordinated Plan on AI 2018 (n260 above) 1.

²⁶⁴ Coordinated Plan on AI 2018 (n260 above).

Parliament, Council, Economic and Social Committee and Committee of the Regions submitting ethical standards to build human centric AI.²⁶⁵ On the same year, the High Level Expert Group on AI participated at the first AI Assembly where they launched the publication of the Ethics Guidelines for Trustworthy Artificial Intelligence²⁶⁶ and presented the 'Policy and Investment Recommendations on AI.'²⁶⁷ In 2020 the High Level Expert Group on AI published a 'White paper on Artificial Intelligence',²⁶⁸ and consulted with the public on its contents²⁶⁹. The White paper called for new legislation 'to make the EU legal framework fit for the current and anticipated technological and commercial developments.'²⁷⁰ This proposal and a draft of regulatory issues were supported by the majority in the public consultations²⁷¹ and developed at the second European AI Alliance Assembly²⁷².

The 3 years of a complex and rigorous policy making process culminated in the publication of the 'AI package' in April 2021.²⁷³ The package comprises the 'Coordinated plan on Artificial Intelligence 2021 review'²⁷⁴ and the 'Proposal for a regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence act) and amending certain Union legislative acts.'²⁷⁵ The Coordinated plan lays out the policy steps to be followed to establish the EU's global leadership in AI. The document proposes key actions to accelerate investment in AI; act on existing and proposed AI strategies and align the AI policy amongst EU member states.²⁷⁶ The Artificial Intelligence Act is a set of 'complementary, proportionate and flexible'²⁷⁷ rules that address the specific risks arising from different uses of AI.²⁷⁸

²⁶⁵ 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Building trust in human-centric Artificial Intelligence' (2019) <https://digital-strategy.ec.europa.eu/en/library/communication-building-trust-human-centric-artificial-intelligence> (European Commission Communication 2019).

²⁶⁶ <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai> .

²⁶⁷ <https://digital-strategy.ec.europa.eu/en/library/policy-and-investment-recommendations-trustworthy-artificial-intelligence> .

²⁶⁸ European Commission 'White paper on Artificial intelligence- A European approach to Excellence and trust' (2020) https://ec.europa.eu/info/sites/default/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf.

²⁶⁹ 'Public consultation on the AI White paper: Final Report' (2020) <https://digital-strategy.ec.europa.eu/en/white-paper-artificial-intelligence-public-consultation-towards-european-approach-excellence-and> .

²⁷⁰ White paper on AI (n268 above) 16.

²⁷¹ Public consultation on the AI White paper: Final Report (n269 above) 7.

²⁷² European Commission 'Second European AI Alliance Assembly' (2020) <https://futurium.ec.europa.eu/en/european-ai-alliance/document/2nd-european-ai-alliance-assembly-event-report-20-39>.

²⁷³ European Commission 'A European approach to artificial Intelligence' (2021) <https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence> (European Commission Strategy on AI)

²⁷⁴ European Commission (2021) <https://digital-strategy.ec.europa.eu/en/library/coordinated-plan-artificial-intelligence-2021-review> (Coordinated plan on AI).

²⁷⁵ Artificial Intelligence act (n86 above).

²⁷⁶ Coordinated plan on AI 2021 (n274 above) 2.

²⁷⁷ European Commission strategy on AI (n273 above) .

²⁷⁸ European Commission strategy on AI (n273 above) .

4.2.1 The 'AI package': A framework for excellence and trustworthiness in AI

The European Commission in its white paper referred to the two-pronged policy as envisioning 'an ecosystem of excellence'²⁷⁹ and an ecosystem of trust for AI.²⁸⁰ For the purposes of this study and this particular discussion, the primary focus will be on the policy of creating trust in AI. The EU strategy here seeks to cultivate trust in AI through addressing its risks as well as encouraging the risk averse development of AI.²⁸¹ This is motivated by the urgency to address the adverse characteristics of AI especially algorithmic opacity which pose a high risk to fundamental human rights.²⁸² The policy is therefore designed to make AI technologies and systems comply with effective standards for the protection of human rights.²⁸³

The approach is practically captured in the co-ordinated plan and the AI act.²⁸⁴ The co-ordinated plan is concerned with the EU's geopolitical ambitions for global leadership of the AI sector.²⁸⁵ The study will therefore primarily reference the AI act as it lays out the proposed legal framework to create trust in AI.²⁸⁶

4.2.2 The Artificial Intelligence Act

Title 1: Subject matter, scope and definitions of the act

The AI act regulates market access for AI systems; prohibits certain AI systems; specific requirements for AI systems; transparency for AI systems that potentially manipulate humans; and market surveillance and monitoring.²⁸⁷ It applies to AI system providers within or outside the EU; AI system users within the EU and AI system providers located in third parties but with their systems used in the EU.²⁸⁸ The regulation does not apply to military AI systems and international organisations and foreign governments in international agreements with EU member states.²⁸⁹ This section also defines AI as discussed in chapter 2.²⁹⁰

Title II lays out the prohibited AI practices

The regulation employs a risk based approach which differentiates I usage into 3 namely (I) unacceptable risk, (ii) high risk and (iii) low or minimal risk.²⁹¹ The usages listed in Title II are prohibited as they are deemed to bare an unacceptable risk as they contravene EU values

²⁷⁹ White paper on AI (n268 above) 5-8.

²⁸⁰ White paper on AI (n268 above) 9-25.

²⁸¹ European Commission Communication 2021 (n258 above) 6.

²⁸² European Commission Communication 2021(n258 above) 3.

²⁸³ European Commission Communication 2021(n258 above) 4.

²⁸⁴ European Commission Communication 2021(n258 above) 4.

²⁸⁵ Coordinated plan on AI 2021 (n274 above) 2, 16-24.

²⁸⁶ Artificial Intelligence act (n86 above) Explanatory memorandum 1.1.

²⁸⁷ Artificial Intelligence act (n86 above) Art 1.

²⁸⁸ Artificial Intelligence act (n86 above) Art 2(1).

²⁸⁹ Artificial Intelligence act (n86 above) Art 2(3-4).

²⁹⁰ Artificial Intelligence act (n86 above) Art 3.

²⁹¹ Artificial Intelligence act (n86 above) Explanatory memorandum.

and fundamental rights.²⁹²The prohibited uses include practices that potentially manipulate people through subliminal techniques unbeknown to them.²⁹³ They also include systems that distort the behaviour of persons where this manipulation could result in harm them or others.²⁹⁴ Another prohibited use is social scoring by public authorities.²⁹⁵ Real time biometric identification by law enforcement in public spaces is prohibited with limited exceptions applicable.²⁹⁶

Title III: High-Risk Systems

AI systems falling under this category pose a high risk to human health, safety or human rights based on their function, intended purpose for usage and modalities²⁹⁷. These applications are allowed into the market if they comply with the compulsory requirements as well as an ex-ante conformity assessment.²⁹⁸ This part also provides the legal requirements for this risk category which include data processing and governance,²⁹⁹ maintenance of human oversight;³⁰⁰ keeping of documents and records³⁰¹ and transparency to users.³⁰² There are also horizontal obligations imposed on providers³⁰³ and proportionate obligations applying to importers,³⁰⁴ distributors³⁰⁵ and other value chain members.

Title IV: Transparency obligations for certain AI systems

This section provides additional transparency rules to AI systems that have a high risk of manipulation. The obligations apply to systems that:

- (i) interact with humans,
- (ii) are used to detect emotions or determine association with (social) categories based on biometric data, or
- (iii) generate or manipulate content ('deep fakes').³⁰⁶

This section amongst other things requires that humans be informed if they are interacting with such an AI system.

²⁹² Artificial Intelligence act (n86 above) Art 5.

²⁹³ Artificial Intelligence act (n86 above) Art 5(1)(a).

²⁹⁴ Artificial Intelligence act (n86 above) Art 5(1)(b).

²⁹⁵ Artificial Intelligence act (n86 above) Art 5(1)(c).

²⁹⁶ Artificial Intelligence act (n86 above) Art 5(1)(d).

²⁹⁷ Artificial Intelligence act (n86 above) Art 6 & 7.

²⁹⁸ Artificial Intelligence act (n86 above) Art 9.

²⁹⁹ Artificial Intelligence act (n86 above) Art 10.

³⁰⁰ Artificial Intelligence act (n86 above) Art 14.

³⁰¹ Artificial Intelligence act (n86 above) Art 11 & 12.

³⁰² Artificial Intelligence act (n86 above) Art 13.

³⁰³ Artificial Intelligence act (n86 above) Art 16.

³⁰⁴ Artificial Intelligence act (n86 above) Art 26.

³⁰⁵ Artificial Intelligence act (n86 above) Art 27.

³⁰⁶ Artificial Intelligence act (n86 above) Art 52.

Title V: Measures in support of innovation

This section creates a legal framework for to safeguard innovation and disruption. This is done through encouraging states to adopt regulatory sandboxes with sufficient rules for governance and liability.³⁰⁷Title V also includes steps to be taken to protect SMEs and start ups from the burden of over-regulation.³⁰⁸ Far from stifling innovation, the EU approach only intervenes where it is absolutely required with minimal burden for innovators.³⁰⁹

Title VI, VII and VIII: Governance and implementation

Title VI establishes governing institutions at national and Union level. At Union level, the act sets up the European AI Board comprising representatives from member states and the commission to facilitate the harmonised implementation of the regulations.³¹⁰ At national level, member states are to set up supervisory authorities to implement the regulations domestically.³¹¹Title VII sets up an EU-wide database to monitor stand-alone high-risk AI systems that affect human rights.³¹²The providers of these systems have to supply the European Commission with data on their systems as well as register them before they enter the market.³¹³Title VIII sets out post-market regulatory controls such as market surveillance, mandatory reporting and investigation of malfunctions and incidents.³¹⁴

Title IX: Code of conduct

Under this section, low risk AI systems may adopt codes of conduct to voluntarily apply the mandatory regulations applicable to high risk AI.³¹⁵ This would enable low-risk AI providers to create their own codes of conducts and abide by the rules set out in Title III.³¹⁶ This section also facilitates such measures as Low-risk AI suppliers practising inclusion, sustainability and accessibility in the design of their products.³¹⁷

Title X, XI and XII: Final provisions

Title X sets out rules on the confidential usage of the information and data arising from implementation of the regulations.³¹⁸ It also provides penalties for enforcement of the AI act.³¹⁹Title XI provides the Commission with the powers to delegate as well as adopt necessary measures for the uniform implementation of the regulations.³²⁰This includes the

³⁰⁷ Artificial Intelligence act (n86 above)Art 53.

³⁰⁸ Artificial Intelligence act (n86 above)Art 55.

³⁰⁹ European Commission Communication 2021 (n258 above) 6.

³¹⁰ Artificial Intelligence act (n86 above)Art 56-58.

³¹¹ Artificial Intelligence act (n86 above)Art 59.

³¹² Artificial Intelligence act (n86 above)Art 60.

³¹³ Artificial Intelligence act (n86 above)Art 60(3-4).

³¹⁴ Artificial Intelligence act (n86 above)Art 61-68.

³¹⁵ Artificial Intelligence act (n86 above)Art 69 (1).

³¹⁶ Artificial Intelligence act (n86 above)Art 69 (3).

³¹⁷ Artificial Intelligence act (n86 above)Art 69(2).

³¹⁸ Artificial Intelligence act (n86 above)Art 70.

³¹⁹ Artificial Intelligence act (n86 above)Art 71.

³²⁰ Artificial Intelligence act (n86 above)Art 73.

power to update the lists in the annexes to the act. Title XII provides for the European Commission to regularly update annex 3 on the definition of AI. It also includes the obligation for the European Commission to report on the review and evaluation of the AI act.

4.3 The Council of Europe legal framework on AI

4.3.1 Over view of AI and human rights under the Council of Europe

The use of AI in and by member states of the COE is currently governed by general international, regional and national law applicable as well as ethical guidelines. The international and regional law comprises the key human rights treaties particularly the ECHR and the EU Charter of Fundamental Rights. There is no human rights treaty that specifically addresses the challenge of AI. There are however some legal instruments that border on aspects of AI indirectly. This includes the Protocol amending the original Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data (Convention 108+), which was already mentioned above. These instruments protect rights more generally or protect specific rights anticipated to come into conflict with the use of certain AI systems in particular application contexts. The COE uses multiple non-binding legal instruments to regulate the use of AI.³²¹ These are declarations, guidelines and principles compiled by the Committee of ministers and special ad hoc composites established by them.³²²

4.3.2 The CAHAI and the creation of a legal framework

The Ad hoc Committee on Artificial Intelligence (CAHAI) was created by the COE's Committee of Ministers in September 2019.³²³ The mandate of the CAHAI is to utilise a multi-stakeholder consultation in examining the feasibility and potential elements for a legal framework on AI.³²⁴ The terms of reference require the CAHAI to formulate a legal framework covering the development, design and deployment of AI systems.³²⁵ The legal framework should be based on COE standards and safeguard not only human rights but also democracy and Rule of Law.³²⁶

³²¹ European Ethical Charter on the use of artificial intelligence (AI) in judicial systems and their environment - CEPEJ(2018)14; Guidelines on Artificial Intelligence and Data Protection - T-PD(2019)01; Declaration of the Committee of Ministers on the manipulative capabilities of algorithmic processes - Decl(13/02/2019); Recommendation of the Committee of Ministers to member States on the human rights impacts of algorithmic systems - CM/Rec(2020)1; Declaration by the Committee of Ministers on the risks of computer-assisted or artificial-intelligence-enabled decision making in the field of the social safety net - Decl(17/03/2021)2.

³²² These can be found here <https://www.coe.int/en/web/artificial-intelligence/work-in-progress#01EN>

³²³ <https://www.coe.int/en/web/artificial-intelligence/cahai> .

³²⁴ 'Terms of Reference of the Legal Frameworks Group (CAHAI- LFG)' (2019) <https://rm.coe.int/terms-of-reference-cahai-lfg/1680a189b3> .

³²⁵ CAHAI Terms Of Reference (n324 above).

³²⁶ CAHAI Terms of Reference (n324 above).

To begin its mandate, the CAHAI conducted a study setting out the feasibility of a legal framework and the possible elements it would comprise.³²⁷The feasibility study was presented to the Committee of Ministers and published in 2020. The CAHAI made recommendations on the legal framework which are discussed at length in the succeeding section. The recommendations made by the CAHAI were put to the public for a multi-stakeholder consultation.³²⁸ The findings of the consultation will be published in a report that will inform the final legal framework. At the time of writing, the CAHAI had wrapped up its consultation exercise. All though the COE does not have a new legal framework on AI yet, it does have a sense of what it will look like when the process is complete. The succeeding section discusses the findings of the CAHAI on the potential elements of the ideal legal framework for AI.

4.3.3 A legal framework for the development, design and application of AI

A risk-based and precautionary approach

The CAHAI recommended that the COE's legal framework on AI take a risk-based regulatory approach which addresses a specific application context.³²⁹This implies the regular and systematic assessment and review of the risk posed by AI systems and creating tailor-made measures to mitigate those risks.³³⁰ The CAHAI used the European Commission risk-based approach as a model that may be emulated.³³¹

The CAHAI also recommended that where necessary and in addition to addressing risk, the COE may adopt a precautionary approach.³³²Under this approach, the CAHAI recommends the consideration of strict prohibitions for high risk AI systems.³³³ These are AI systems and specific use contexts that pose high risks with potentially irreversible harms.³³⁴

In the absence of appropriate mitigatory measures exist under law, the CAHAI recommends the creation of an international agreement setting out red lines for AI usage.³³⁵ The CAHAI's examples of the systems that might be red lined are similar to the European Commission and include social scoring systems' mass surveillance applications and remote biometric recognition systems.³³⁶ The legal framework may provide for these AI systems to be used in

³²⁷ CAHAI Feasibility study (n15 above) 2.

³²⁸ <https://www.coe.int/en/web/artificial-intelligence/cahai-multi-stakeholder-consultation>

³²⁹ CAHAI Feasibility study (n15 above)12.

³³⁰ CAHAI Feasibility study (n15 above)13.

³³¹ CAHAI Feasibility study (n15 above)12 .

³³² CAHAI Feasibility study (n15 above)13.

³³³ CAHAI Feasibility study (n15 above)13.

³³⁴ CAHAI Feasibility study (n15 above)13.

³³⁵ CAHAI Feasibility study (n15 above)13.

³³⁶ CAHAI Feasibility study (n15 above)13.

exceptional circumstances provided by law.³³⁷ The use must pursue a legitimate aim; be necessary in a democratic society and proportionate to the legitimate aim³³⁸. In these cases the system must be used in a controlled environment.³³⁹ AI systems that do not pose any risk to human rights are to be exempted from the additional regulation.

Generating legal obligations from human rights standards

In order to preserve the fundamental rights provided for in the ECHR, the CAHAI recommended that the legal framework should be underpinned by human dignity; autonomy; prevention of harm; equality and non-discrimination; transparency; data protection; accountability; democracy and rule of law.³⁴⁰ The study creates obligations incumbent on developers and deployers drawing from the core values of those rights and principles³⁴¹ These principles apply horizontally to design, development and deployment. The CAHAI also suggests the imposition of sector-specific rules to deal with situations where the more general would not be as effective.³⁴²

The CAHAI also noted the roles and responsibilities of member states in ensuring that AI systems comply with the rights and principles discussed above. They revisited states' obligation to ensure that private actors respect human rights.³⁴³ They also reiterated that businesses themselves have to respect human rights.³⁴⁴ Finally the CAHAI noted that states ought to conduct evidence-based assessments of their legislation to ensure its compliance with the human rights they identified to be under threat from AI systems.³⁴⁵

Identifying the most suitable legal instrument

As part of their feasibility study, the CAHAI conducted a mapping study of the law regulating AI under status quo. Their study involved International law, national law as well as ethics documents.³⁴⁶ Their main findings were that the existing international and regional human rights law came before the advent of most of the modern AI challenges and risks and therefore was inadequate to deal with them.³⁴⁷ These also articulate their rights in broad fashion making them difficult to apply to the specific AI usage situations.³⁴⁸ The CAHAI found that whilst ethic documents were useful in pointing out the major ethical concerns with most modern AI systems, they were non-binding and also dependent on self-regulation both of

³³⁷ CAHAI Feasibility study (n15 above)13.

³³⁸ CAHAI Feasibility study (n15 above)13.

³³⁹ CAHAI Feasibility study (n15 above)13.

³⁴⁰ CAHAI Feasibility study (n15 above)28.

³⁴¹ CAHAI Feasibility study (n15 above)28-43.

³⁴² CAHAI Feasibility study (n15 above)28.

³⁴³ CAHAI Feasibility study (n15 above) 42.

³⁴⁴ CAHAI Feasibility study (n15 above) 42.

³⁴⁵ CAHAI Feasibility study (n15 above) 43.

³⁴⁶ CAHAI Feasibility study (n15 above) 18-21.

³⁴⁷ CAHAI Feasibility study (n15 above) 22.

³⁴⁸ CAHAI Feasibility study (n15 above) 22.

which could never deliver plausible outcomes.³⁴⁹ Given these flaws in the existing regulation, the big question for the CAHAI was what form the legal framework would take.

The committee therefore evaluated the options which were: modernising the existing legal frameworks; creating a new binding legal framework; creating a new non-binding legal instrument and creating a best practices and impact assessment guide.³⁵⁰ The CAHAI found that adopting a new protocol on AI would be the best way to modernise the existing framework. Whilst this would provide the most robust and comprehensive legal framework, the scope of the instrument could be limited as protocols to the ECHR on bind the ratifying states.³⁵¹ On the option of a new binding instrument, the CAHAI noted that a new treaty would be best safeguard the human rights under threat because of AI systems.³⁵² Further that a legally binding agreement is best as it created legally enforceable obligations under international law.³⁵³ The CAHAI was concerned however on this step being too premature and resulting in a rigid law that would also stifle innovation.³⁵⁴ They also worried about the politics of treaty-making, particularly that there was no telling whether and when the treaty would enter legal force.³⁵⁵

As to non-binding instruments, the CAHAI found that these could be in the form of recommendations or a declaration that combines the core principles on AI and human rights.³⁵⁶ Without giving further commentary, they stated that these would require constant updating and fleshing out.³⁵⁷ Finally the CAHAI considered the identification of best practices. Here they identified the establishment of a benchmarking institute to work with a standard setting authority.³⁵⁸ They mentioned that this would be ideal for creating harmony in the implementation of AI policy in COE member states.³⁵⁹ Although the CAHAI did not recommend a single option, in the conclusion of their report, they did endorse the creation of a legal framework with a combination of binding and non-binding instruments. This means a convention alongside a declaration or recommendations.

Follow-up mechanisms to ensure compliance

The CAHAI also noted the importance of practical follow-up mechanisms to ensure compliance with the legal framework.³⁶⁰ The CAHAI pointed out that these follow up

³⁴⁹ CAHAI Feasibility study (n15 above) 22.

³⁵⁰ CAHAI Feasibility study (n15 above) 45.

³⁵¹ CAHAI Feasibility study (n15 above) 46.

³⁵² CAHAI Feasibility study (n15 above) 47.

³⁵³ CAHAI Feasibility study (n15 above) 47.

³⁵⁴ CAHAI Feasibility study (n15 above) 47.

³⁵⁵ CAHAI Feasibility study (n15 above) 47.

³⁵⁶ CAHAI Feasibility study (n15 above) 49.

³⁵⁷ CAHAI Feasibility study (n15 above) 49.

³⁵⁸ CAHAI Feasibility study (n15 above) 50.

³⁵⁹ CAHAI Feasibility study (n15 above) 50.

³⁶⁰ CAHAI Feasibility study (n15 above) 55.

mechanisms were crucial for building transparency and trust in AI systems.³⁶¹The mechanisms suggested by the CAHAI are: Human rights due diligence (Human rights impact assessments); Certification and quality labelling; audits; regulatory sandboxes as well as continuous, automated monitoring.³⁶²

4.4 What good practice can be identified from AI regulation in Europe?

4.4.1 The AI Act

The definition

The proposed definition under the AI act is wide and all encompassing, allowing it to flexibly apply to all AI-based technologies.³⁶³The definition is not only ‘technology-neutral’ but it also spans a broad range of techniques and approaches to developing AI.³⁶⁴Moreover, it also covers technologies, techniques and approaches which are not yet in existence.³⁶⁵ This practically entails that the regulation covers all the bases and no AI system may fall through the cracks and operate with unabated free reign.

Scope

The AI act applies not just to market access but also to ‘putting into service.’³⁶⁶ The regulation of market access is important as it ensures that harmful AI systems are not dealt with reactively. Regulating exclusively reactively only arises after the damage is done and is only effective in situations where the harmful AI is identified in the first place. This means that the regulations will control whether or not you can use an AI system in the first place, even if its not for sale or commercial usage. This feature governs the utilisation of problematic AI systems in private or public by providers without putting them into market. The provision entails that AI providers may no longer create and use systems at will with no oversight simply based on the fact that they aren’t selling it.

Outright prohibition

The outright prohibition of the AI systems and practices in Article 5 is incredibly important. These particular practices put human beings in tremendous danger and are damaging physically and psychologically. Subliminal techniques may be used to exploit people’s productive labour and overwork them without their meaningful consent and with no commensurate compensation. The outright ban of these systems and techniques protects

³⁶¹ CAHAI Feasibility study (n15 above) 55.

³⁶² CAHAI Feasibility study (n15 above) 55.

³⁶³ European Commission Communication 2021 (n258 above) 6.

³⁶⁴ European Commission 2021 (Communication) (n258 above) 6.

³⁶⁵ European Commission 2021 (Communication) (n258 above) 6.

³⁶⁶ Artificial Intelligence act (n86 above) Art 2(a).

the human rights affected by the usage of AI in this manner. Moreover it deters the future development of those systems or the growth of those practices. The use of prohibition is a welcome departure from the loose and weak language conventionally used in the instruments governing AI thus far. It shows the adoption of bold stances on preventing the use of dangerous AI.

Future-proofing high-risk AI systems

The list of high-risk AI systems as set out in Annex III includes risks that are likely to materialise in the future. The regulation allows the European Commission to add AI systems to the high-risk list if they meet the criteria and risk assessment methodology. This ensures that the regulation is not rigid to emerging technologies not covered at the time of writing the law. The flexibility of the AI Act to regulate future risk protects human rights by mitigating the disproportionate development over the law.

The legal requirements for high-risk AI

These rules are designed to protect humans, cultivate trust as well as protect human rights in human-AI interactions. Each rule is therefore tailored to address a specific problem noted in varying studies on challenges posed by AI. In so doing, the rules also serve to prevent violations of specific contentious rights such as non-discrimination and privacy. The requirements for good quality data ensure that bias in training data is minimised hence preventing discrimination of certain groups. These also protect people's right to privacy as illegitimately acquired data cannot be utilised in the jurisdiction. The provision for a documentation trail as well as transparency rules are a panacea to the opacity that violated the right to access to information and in judicial instances, the right to fair trial.

4.4.2 The COE

Whilst the COE does not have a legal framework in force yet, the steps it is taking to get there are noteworthy. The commissioning of a feasibility study on the potential elements is important in mapping out the multi-lateral legal landscape, profiling existing legal standards on AI, identifying the human rights at risk and setting out the ideal legal response. The feasibility study itself ensures that the process of creating a legal framework is not a random exercise but one based on thorough legal and empirical research. Using an evidence-based approach to drawing a regulatory framework ensures that the outcomes are specifically tailored to address the specific problem, which saves time and other resources. A study of the human rights risks associated with AI usage particularly demonstrated how damaging AI systems had become and pointed out the need to act to protect people. The study on

existing frameworks demonstrated the inadequacy of current laws and showed the necessity of configuring a new legal approach to the threat of AI systems. The evaluation of the possible legal options for the new framework provided direction on the legal instrument that would best protect human rights. Whichever option the COE will go with, one can rest assured that they do so with solid legal research and not just intuition or political dictates.

This regulatory strategy also supports the use of a risk-based approach coupled with precautionary measures such as prohibition of high risk AI. The focus on application contexts helps locate risk in AI systems and allows for effective assessment and review. The approach mitigates the particular risk in some AI systems and categorically proscribes others where necessary. Bans are also a great option given that there are situations where no appropriate mitigatory approach exists under law.

The COE approach is based on human rights and for human rights. Not only did the CAHAI conduct a study on the ways in which AI systems violate human rights but they also conducted research on how human rights can be protected in a legal framework. The outcomes of which were a chapter demonstrating how human rights standards may be converted into legal obligations. The generation of legal obligations from the content and requirements of human rights are a perfect means of creating an effective human-rights friendly legal framework.

4.5 Conclusion

This study has identified the two prominent legal frameworks for AI in Europe. The European Commission's proposed legislation under the EU is an example of what a Human-rights based legal instrument regulating AI could look like. The COE's current efforts in preparation for a legal framework is an imitable process and by all means the fundamental pre-requisite to drawing up an ideal instrument. What can be concluded from this chapter is that research and consultation are fundamental prior to drafting a legal instrument on AI. Secondly that a risk-based and precautionary approach grounded on human rights standards is the best strategy for regulating AI systems.

CHAPTER 5

5.1 Introduction

This chapter consolidates the findings of the study and provides recommendations for the governance of AI usage under the African Human Rights System. Part 1 presents the findings of the study by research question. Part 2 provides recommendations from the lessons learnt on how to govern AI under the African human rights system. Part 3 sets out the gaps for further research and part 5 concludes the study.

5.2 The findings of the study

The study set out to answer the questions in chapter 1. To address those the study found that:

AI is used widely in the continent especially in the agriculture, healthcare and Financial technology sectors. Most of the AI development in the continent currently takes place in Kenya, Nigeria and South Africa. The study found that despite having the potential to improve lives if used wisely, AI has multiple risks associated with it. AI is opaque, biased, complex and may be influenced by human input. The study found that these characteristics violate human rights, inter alia, the right to equality and freedom from discrimination, privacy and fair trial. The study found further that to address these violations, there are laws under the African human rights system that are applicable to AI. These laws include the African Charter, the Malabo Convention, Resolution 473 and the Sharm El Sheikh declaration. Of all these laws, only two make direct reference to AI and the rest apply either as general human rights protections or as data governance laws. These laws are obsolete, generic and as such inadequate to address how AI violates human rights. To address these problems, the African human rights system may adopt the practices of the COE and the European Commission.

5.3 Recommendations

While there is already some legal framework under the continental system to protect fundamental human rights,³⁶⁷ regulate data processing³⁶⁸ and govern the internet,³⁶⁹ this is simply not enough.³⁷⁰ The rules as seen in Chapter 3 are old and frankly unfit to regulate AI as we know it under status quo. The evolving nature of AI technologies make the effective implementation and enforcement of these protections incredibly hard. What is required is a

³⁶⁷ African Charter (n168 above) Art 1-26.

³⁶⁸ Malabo Convention(n227 above); Declaration on freedom of expression and access to information (n above)

³⁶⁹ African Declaration on Internet Rights <https://africaninternetrights.org/> .

³⁷⁰ European Commission Communication 2021 (n258 above) 6 .

needs-based, science-informed, human rights-centred and human-oriented ‘tailored’ regulatory approach.³⁷¹

To address these concerns, two broad recommendations are made here. The first on the preliminary steps to be followed in conceiving the governance framework. The second, on the suggested contents of the legal instrument(s) that will govern the AI in the African human rights system.

5.3.1 Preparation phase

The Specialized Technical Committee on ICTs agreed to set up a working group to study a common framework, develop continent-wide capacity and establish a think tank for AI.³⁷² Similarly, in Resolution 473, the Commission undertook to study AI with a view to developing guidelines and norms for technologies.³⁷³ To those ends, the Commission committed to creating an African working group to work with it in conducting said research.³⁷⁴

As has been seen in both the case of the COE and the European Commission, research is a fundamental stage in process of setting up a legal framework for AI. The research process is key in mapping out the current capabilities of the African Human Rights System both in terms of legal instrument and the institutional and human resources. Before going about the research, there must be a harmonisation scheme within the African human rights system to determine which members of the AU are participating in the creation of a legal framework for AI. Currently as evidenced in the two Commission’s resolution 473 and the STC CICT’s declaration, there are separate efforts being led. Having one united front would not only save resources but support a more unified process.

Given that both the Commission and the STC CICT have committed to establishing working groups, they may do so together. The two entities can create a joint working group. The STC on Justice and Legal Affairs (STC JLA) can also be part of the work as they also work support the AU’s capacity in legal interpretation and advise. The STC JLA’s mandate includes:

‘considering AU draft treaties and other legal instruments or documents; surveying international law with a view to selecting topics for codification within AU legal

³⁷¹ European Commission Communication 2021 (n258 above) 6.

³⁷² *Sharm El Sheikh declaration* (n235 above) para 15.

³⁷³ Resolution 473 (n156 above) para7.

³⁷⁴ Resolution 473 (n156 above) para7.

frameworks; following up on issues concerning the signature, ratification/accession, domestication and implementation of OAU/AU treaties.³⁷⁵

Given that the all other STCs, the AUCIL and the AU bodies already submit their draft legal instruments to the STC JLA for review, it is only fitting that the STC JLA also participate in the conception of the legal framework.

The AU Commission of International Law (AUCIL) is an independent advisory organ of the AU established in 2009 by the Constitutive Act.³⁷⁶ Among others, the role of the AUCIL is to contribute to the progressive development, codification and dissemination of AU international law.³⁷⁷ The AUCIL can contribute to the process as it already works to identify 'areas in which new treaties are required'.³⁷⁸

In addition to these AU bodies and personnel, the working group should be a multi-disciplinary group of experts in AI from different fields including but not limited to computer science, data science, law, education, engineering and ethics. These individuals should be picked for their skill, experience and mastery of their subject and for the contribution they are likely to make in the creation of the legal framework.

The working group should have a very clear and structured research mandate. The scope of their work should cover not just the substantive part of the legal framework but also the legal due diligence. This is the approach adopted by both the COE and the European Commission. In borrowing from these jurisdictions, the group should:

- a) Study AI and understand how it works and what fuels it;
- b) Investigate how AI is currently used in Africa and whether this presents opportunities, risks or both;
- c) Study the impact that using AI systems has on human rights;
- d) Critically evaluate the laws and regulations applicable to AI in the African human rights system;
- e) Evaluate their options for a legal instrument to regulate AI usage in Africa

³⁷⁵ <https://au.int/en/stc> .

³⁷⁶ (n167 above) Art 5(2).

³⁷⁷ AU Executive Council 'Statute of the African Union Commission on International Law' (2009) EX.CL/478 (XIV) a https://au.int/sites/default/files/treaties/36388-treaty-0036_-_statute_of_the_african_union_commission_on_international_law_aucil_e.pdf Art 4 (AUCIL statute).

³⁷⁸ AUCIL Statute (n377 above) Art 4(d).

The working group will benefit highly from the example already set by the CAHAI under the COE. The CAHAI as discussed at length in Chapter 4 used an evidence-based study covering all the research areas mentioned above to inform the COE's way forward. The working group proposed here may also follow a similar course of action.

After the research is completed and depending on the outcomes, the working group may present their findings to the Assembly of Heads of States, the STC-JLA, the STC CICT, the AUCIL and Commission. These findings should be the subject of a multi-stakeholder consultation before a definitive decision is made on the final outcome.

5.3.2 The legal framework for AI in the African human rights system

The African human rights system needs a standard setting document that sets rules for the design, development and use of AI. The document must regulate the entire life cycle of an algorithm.

The African human rights system must take leaf from the European book and adopt a risk-based approach to governing AI. As such this entails the categorisation of AI systems by risk. The approach should also classify the AI systems into the categories of Unacceptable risk, high risk and little to no risk. In addition to this, there should be a precautionary scheme such as the use of explicit prohibitions. AI systems classified as unacceptable should be wholly banned whilst high risk AI systems may be used with caution and under regulation.

State must create professional ethics for computer scientists, programmers, developers and any other person in the business of providing AI systems. In instances where individuals are taught how to develop AI systems in academic or professional institutions, their scientific and technical training should include ethics and introductory law courses.

5.4 Opportunities for further research

The study has focused on the governance of AI under the Africa human rights system. It raises multiple questions that can be explored in future research. Subsequent studies can focus on the exact international legal instrument to be adopted at the African system. There may also be future studies on the effectiveness of these regional obligations and/or standards in influencing domestic law of member states. A subsequent study may explore the direct regulation of AI systems providers. It would also be vital for studies to be conducted

on more tailored regulation for specific types of AI in various application contexts. These include the use of computer vision and Natural language processing.

[19 238 Words]

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