POLICY BRIEF AUTOMATED DECISION-MAKING POLICIES IN AFRICA

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#### **1. INTRODUCTION**

Automated decision-making (ADM) refers to using algorithms or computer programs to make decisions without human intervention.<sup>1</sup> These algorithms are often built on large amounts of data, which are analysed using machine learning and other statistical techniques to make predictions or classify information. The rapid advancement of technology has increased the use of ADM systems in various sectors, including finance, healthcare, and government service delivery. These systems can potentially improve efficiency and decision-making but also raise concerns about bias, accountability, and human rights.<sup>2</sup> Because algorithms are only as unbiased as the data sets they are trained on, ADM systems may perpetuate existing biases and discrimination. Additionally, because these systems can be opaque and difficult to understand, it can be challenging to determine how and why certain decisions were made and to hold individuals or organisations responsible for any negative outcomes. Therefore, it is important to carefully consider the potential risks and benefits of ADM systems and develop appropriate safeguards to ensure that it is used responsibly and ethically.

African governments use ADM to implement fundamental rights such as accessible and adequate housing. For instance, the Kenyan government uses an automated decision-making system to run its affordable housing project through an online portal. The site, which is a component of the Credit and Risk Decision-Making System (CRD System), gathers device metadata, psychometric profile data, data from social networks and email, data from telecoms and utility service providers, and data from credit agencies to construct credit profiles on its own.<sup>3</sup> This system is used to screen applicants for affordable housing by determining their creditworthiness from the collated data. ADM in this case is primarily governed by data protection legislation, but it also involves administrative and constitutional law. The Kenyan affordable housing project is an administrative decision subject to administrative substantive and procedural rules and potentially open to constitutional law scrutiny.<sup>4</sup> As such, the system's algorithms should not discriminate based on gender, race, age, or marital status, as this violates citizens' rights to equality, freedom from discrimination, privacy, and consumer rights.

## In Africa, 33 countries have enacted data protection legislation to govern personal data collection, use, and storage.<sup>5</sup> However, the level of protection and regulation for

4 Ibid

<sup>&#</sup>x27;Automated Decision-Making Impacting Society | Knowledge for Policy' (knowledge4policy.ec.europa.eu7 February 2023) <<u>https://knowledge4policy.ec.europa.eu/foresight/automated-decision-making-impacting-society\_en</u>>.

<sup>2</sup> The impact of rapid technological change on sustainable development | UNCTAD. (n.d.). Unctad.org. Available at < <u>https://unctad.</u> <u>org/webflyer/impact-rapid-technological-change-sustainable-development</u>> accessed 11 June 2023.

<sup>3</sup> Alexander Beyleveld, 'Questions at the Interface between Automated Decision Making, Administrative Law and Socio-Economic Rights: The Example of Access to Affordable Housing in Kenya' (AfricLaw18 March 2022) <<u>https://africlaw.com/2022/03/18/ques-</u> tions-at-the-interface-between-automated-decision-making-administrative-law-and-socio%e2%80%91economic-rights-the-example-of-access-to-affordable-housing-in-kenya/> accessed 11 June 2023.

<sup>5</sup> CIPIT, 'State of Artificial Intelligence in Africa 2023 Report - Centre for Intellectual Property and Information Technology Law' (Centre for Intellectual Property and Information Technology law22 May 2023) <<u>https://cipit.strathmore.edu/state-of-artificial-in-telligence-in-africa-2023-report/</u>> accessed 29 June 2023.

automated decision-making varies greatly across these laws.

This policy brief outlines automated decision-making laws and regulations in Africa, gaps in African laws regarding ADM, and best practices from outside Africa; it also recommends the way forward for policymakers.



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#### **2. RESEARCH OVERVIEW**

This study determined the various definitions of automated decision-making from countries such as South Africa, Nigeria and Kenya. Even though they do not clearly define what ADM entails, these statutory provisions guarantee certain rights for data subjects concerning any form of automated decisions that have legal implications on the data subject. For instance, the South African Protection of Personal Information Act (POPIA) states that a data subject cannot be subject to a decision that has legal consequences or affects them substantially, based solely on the automated processing of personal information for profiling purposes, such as creditworthiness, reliability, location, health, personal preferences, or conduct.<sup>6</sup> The study has also established the principles that guide ADM, such as fairness, transparency, accountability, and non-discrimination.<sup>7</sup> These principles ensure that ADM systems are developed and used ethically and do not harm individuals or groups.

7 Teresa Rodríguez, 'Guiding Principles for Automated Decision-Making in the EU ELI Innovation Paper' (2022) <<u>https://www.europeanlawinstitute.eu/fileadmin/user\_upload/p\_eli/Publications/ELI\_Innovation\_Paper\_on\_Guiding\_Principles\_for\_ADM\_in\_the\_EU.pdf</u>>.



<sup>6</sup> Protection of Personal Information Act (POPIA), section 71 (1)

#### **3. CURRENT POLICIES ON ADM IN AFRICA**



Many African data protection laws emphasise the need for transparency and accountability in ADM systems by requiring organisations to provide individuals with clear and understandable information about the use of their data for automated decision making. For example, POPIA states that a data subject cannot be subject to a decision that has legal consequences or affects them substantially, based solely on the automated processing of personal information for profiling purposes, such as creditworthiness, reliability, location, health, personal preferences, or conduct.<sup>8</sup> The Act further provides that organisations must, when making decisions that affect individuals' rights or interests, be able to provide them with sufficient information about how the decision was made and the logic behind it to enable the data subjects to make necessary representations in the process, and contest decisions that they deem unfair.<sup>9</sup>

Additionally, the Nigeria Data Protection Regulation (NDPR) of 2019 requires the Controller to provide individuals with clear and understandable information about how their personal data will be used, including any automated decision-making

<sup>8</sup> Protection of Personal Information Act (POPIA), section 71 (1)

<sup>9</sup> Protection of Personal Information Act (POPIA), section 71

processes and the consequences the data processing might have on the data subject.<sup>10</sup> The Act also grants data subjects extensive rights where an organisation processes an individual's personal data based on their consent or a contract. Where data processing is done through automated means, the individual has the right to obtain their data in a format that machines can easily read and use and transfer it to another organisation without any obstacles from the previous data controller.<sup>11</sup>

In Ghana, the Data Protection Act of 2012 provides that data subjects can at any time request information from the data controller to confirm that the data controller ensures any decision that significantly affects the data subject is not solely based on automated processing of their personal data. The law also states that where a decision is based solely on automated decision-making, the data controller must notify the data subject that their data was processed in that manner to enable the data subject to deny such processing after notification.<sup>12</sup> After this request by the data subject, the data controller must inform the subject of the steps they intend to take to prevent automated decision-making.<sup>13</sup> This only applies in cases where the data subject is not involved in a contract that requires automated decision-making or where the law does not require it.

Section 35 of the Kenya Data Protection Act of 2019 also allows that every individual has the right not to be subjected to automated decision-making that has legal effects on the data subject unless this process is necessary for the performance of a contract or for legally mandated reasons.<sup>14</sup> Data controllers and processors are also required to inform data subjects that they are making automated decisions that affect the data subjects to enable the data subject to submit a request for a new decision that is not solely based on automated data processing.<sup>15</sup> Thus, a common trend in the data protection legislation in the continent is an emphasis on the rights of data subjects as it pertains to automated data processing and decision-making to ensure that data controllers and processors are transparent in this processing and enable data subjects to object to this form of processing where they deem it necessary.

<sup>10</sup> The Nigeria Data Protection Regulation (NDPR), section 3.1(7)(I)

<sup>11</sup> The Nigeria Data Protection Regulation (NDPR), section 3.1(14)

<sup>12</sup> The Ghana Data Protection Act of 2012, section 41

<sup>13</sup> Ibid

<sup>14</sup> The Kenya Data Protection Act of 2019, section 35 (2)

<sup>15</sup> The Kenya Data Protection Act of 2019, section 35 (3)

### 4. PRACTICAL APPLICATION OF ADM LAWS IN AFRICA

Research indicates that data protection laws have limited implementation regarding data profiling and automated decision-making.<sup>16</sup> Further, no substantive case law was found regarding automated decision-making, pointing to this limited implementation and understanding of the laws. For instance, a third of South African respondents to a survey did not respond when asked how they process user information and their adherence to the data protection laws.<sup>17</sup> This lack of transparency and understanding of basic legal provisions regarding ADM was evident in South Africa when an inquiry found racial bias in a South African medical aid reimbursement scheme.<sup>18</sup> Lack of algorithmic transparency was the major challenge in this situation since even the proprietors or insurers of the ADM system did not understand its functionality.<sup>19</sup>

The Kenyan government has also applied ADM in its Affordable Housing Program by using a credit and risk decision-making system (CRD System) to autonomously develop credit profiles for housing applicants.<sup>20</sup> The operation of the CRD System is an administrative decision subject to administrative law procedural rules and is potentially open to constitutional law scrutiny.<sup>21</sup> However, there is no recorded scrutiny of the ADM system related to the guidelines on ADM contained in the Kenyan data protection regime. As per best practices, the system's algorithms should not discriminate based on gender, race, age, or marital status, as this violates citizens' rights to equality, freedom from discrimination, privacy, and consumer rights.<sup>22</sup>

Research indicates that many ADM systems in fraud detection, child welfare, and law enforcement have been cancelled due to bias and discrimination.<sup>23</sup> As such, the conversation on AI ethics must include preventing harm and increasing transparency, accountability, and community participation when using these systems.

20 Alexander Beyleveld, 'Questions at the Interface between Automated Decision Making, Administrative Law and Socio-Economic Rights: The Example of Access to Affordable Housing in Kenya' (AfricLaw18 March 2022) <<u>https://africlaw.com/2022/03/18/ques-tions-at-the-interface-between-automated-decision-making-administrative-law-and-socio%e2%80%91economic-rights-the-example-of-access-to-affordable-housing-in-kenya/</u>> accessed 11 June 2023.

<sup>16</sup> Tara Davis and Murray Hunter, 'Testing the Transparency Gap in AI and Data Protection • ALT Insights' (ALT Advisory | Public Interest Advisory Services20 September 2022) <<u>https://altadvisory.africa/2022/09/20/testing-the-transparency-gap-in-ai-and-data-protection/</u>> accessed 30 June 2023.

<sup>17</sup> Ibid

<sup>18</sup> Ibid

<sup>19</sup> Ibid

<sup>21</sup> Ibid

<sup>22</sup> Ibid

<sup>23</sup> Automating Public Services: Learning from Cancelled Systems. Available at <u>https://www.carnegieuktrust.org.uk/publications/</u> automating-public-services-learning-from-cancelled-systems/

#### **5. GAPS IN EXISTING AFRICAN LEGISLATIONS**

Some African data protection laws lack the requirement for a Data Protection Impact Assessment (DPIA) in cases where data subjects' rights are in jeopardy. Best practices regarding DPIA indicate that they are necessary to protect data subjects from bias and discrimination when using ADM systems.<sup>24</sup> For instance, the Kenyan Act necessitates DPIA, where data processing might lead to high risk to the data subjects' rights and freedoms.<sup>25</sup> Although the Act does not clearly define which processing activities are considered high risk, the General Regulations created by the Taskforce for the Development of the Data Protection General Regulations indicate that highrisk activities include, among others, those involving automated decision-making with legal or other significant effects on the data subject.<sup>26</sup> Similarly, the newly enacted Data Protection Act of Nigeria indicates that DPIA are necessary where the data processing in question might risk the data subjects' rights, either through the processing, context or scope.<sup>27</sup> In contrast, data protection impact assessments are not mentioned in the Ghana Data Protection Act. Therefore, policymakers on the continent should include the requirement for DPIA to provide an extra layer of protection for data subjects when using ADM systems.

The current state of AI governance in African countries is such that no country has specific AI legislation except for Mauritius, which has partial AI legislation. Only four countries have a national AI strategy, even though 30 countries have data protection legislation that addresses automated decision-making.<sup>28</sup> The increased adoption of AI in Africa indicates increasing ADM processes, necessitating appropriate regulation and adoption of Responsible AI principles. So far, regional regulation of AI on the continent is catching up with growing adoption, such that the ICT-related ministries of the African Union (AU) formed a working group in 2019 to create an AI think tank and a framework for capacity building.<sup>29</sup> The AU Executive Council asked the AU Commission to create a continental AI policy in 2022, indicating the will to create a widely applicable AI strategy in Africa. In 2023, the AU High-Level Panel on Emerging Technologies emphasised the necessity for a continental artificial intelligence strategy, adding that such a plan would help African nations improve their policy-making and implementation processes and stakeholder engagement on AI potential and problems.<sup>30</sup> It would also encourage and offer guidance for more African states to implement national AI strategies, providing regulatory measures for ADM.

27 Nigeria Data Protection Act, s 28

<sup>24 &#</sup>x27;What Is a DPIA?' (ico.org.uk19 May 2023) <<u>https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/accountabili-ty-and-governance/data-protection-impact-assessments-dpias/what-is-a-dpia/#:~:text=External%20link-</u>> accessed 30 June 2023. 25 Kenya Data Protection Act, s 31

<sup>26 &#</sup>x27;Kenya - Data Protection Overview' (DataGuidance8 March 2023) <<u>https://www.dataguidance.com/notes/kenya-data-protec-</u> <u>tion-overview</u>>.

<sup>28</sup>https://app.powerbi.com/view?r=eyJrljoiMGVjMzY0ZTAtNDQwZS00YzM4LWFjMGltYTVhYTViYTA5MjlyliwidCl6ljdhNTNiMjZhL-TlYTUtNGNiYS05NGM4LTM4ZWFIMWY3MzVjYSJ9

<sup>29</sup> Ibid

<sup>30</sup> Ibid

#### 6. BEST PRACTICES ON ADM REGULATION

The European Union (EU) General Data Protection Regulation (GDPR), which includes provisions on automated decision-making, is an exemplary reference for accountable and responsible ADM principles.<sup>31</sup> Though created for the EU, the GDPR has had an extra-territorial effect by guiding data protection legislation in other countries. The GDPR has established ADM guiding principles, such as the use of legally compliant ADM, non-discrimination against ADM, disclosure of decision-making that is automated, traceability of decisions, human oversight over ADM, human review of these decisions and responsible ADM.<sup>32</sup> These principles can be cited as best practices for African states in creating their own principles under data protection legislation. For instance, individuals have the right under the GDPR to request human intervention, an explanation for automated decisions, and DPIAs for automated decision-making systems that pose high risk to data subjects.<sup>33</sup> Similar provisions have been adopted in existing African data protection laws, such as the Ghana Data Protection Act, which directs that individuals must be notified when data controllers make automated decisions affecting the individual.<sup>34</sup>

The OECD Principles on AI, which outline the importance of transparency, explainability, and accountability in ADM systems,<sup>35</sup> and the Institute of Electrical and Electronics Engineers (IEEE) Global Initiative on Ethical Considerations in AI and Autonomous Systems, which offers a set of recommendations for ensuring that AI is developed and used ethically, are other best practices for ADM principles.<sup>36</sup> While the OECD Principles were formulated for OECD member states, they can serve as a valuable reference for AI policy and regulation development in African states. The principles advocate for inclusive growth, human-centred AI and accountability to ensure that any form of automated decisions that affect individuals are accounted for. The IEEE Global Initiative is a program under the IEEE, which has created projects that encourage technology stakeholders to prioritise ethical considerations when creating AI and autonomous systems.<sup>37</sup> The IEEE Global Initiative is committed to AI ethics and has articulated ethical concerns when dealing with autonomous systems and AI, such as prioritising the highest level of human rights and mitigating risks to humans and the natural environment.<sup>38</sup>

<sup>31</sup> Rodríguez, see n 7

<sup>32</sup> Ibid

<sup>33</sup> United Nations Conference on Trade and Development. (2021). Data Protection and Privacy Legislation Worldwide | UNCTAD. <u>https://unctad.org/page/data-protection-and-privacy-legislation-worldwide</u>

<sup>34</sup> Ghana Data Protection Act, s 41

<sup>35</sup> The OECD Principles on AI. Available at <<u>https://www.oecd.org/digital/artificial-intelligence/#:~:text=How%20govern-</u> ments%20and%20other%20actors,human%20rights%20and%20democratic%20values.

<sup>36</sup> IEEE Global Initiative on Ethical Considerations in AI and Autonomous Systems. Available at <u>https://standards.ieee.org/indus-</u> try-connections/ec/autonomoussystems/#:~:text=The%20IEEE%20Global%20Initiative's%20mission,for%20the%20benefit%20 of%20humanity.%E2%80%9D

<sup>37</sup> IEEE, 'Executive Summary the IEEE Global Initiative for Ethical Considerations in Artificial Intelligence and Autonomous Systems' <<u>https://standards.ieee.org/wp-content/uploads/import/documents/other/ead\_executive\_summary.pdf</u>> accessed 30 June 2023.

In November 2021, UNESCO released the "Recommendation on the Ethics of Artificial Intelligence," the first-ever global guideline on AI ethics, which all the 193 Member States endorsed.<sup>39</sup> The recommendations provide direction on some issues arising from the broad use of AI and automation, such as the rise in gender and ethical bias, serious threats to privacy, dignity, and agency, and the risk of mass monitoring.<sup>40</sup> While providing member states the duty to implement the recommendations at their national levels, the recommendations establish the first global normative framework for AI.<sup>41</sup> They represent ideals like diversity and inclusivity, taking a participative approach, respecting and promoting the dignity of human rights, and recognising, promoting, and protecting the environment.



39 UNESCO, 'Ethics of Artificial Intelligence | UNESCO' (www.unesco.org2022) <<u>https://www.unesco.org/en/artificial-intelligence/</u> recommendation-ethics>.

40 Ibid

41 CIPIT, n 5

### **7 POLICY RECOMMENDATIONS**

This study makes the following recommendations for harmonising and strengthening Africa's legal framework for automated decision-making:

*i.* African countries should increase the pace in adopting AI governance policies and best practices such as the OECD Principles on Artificial Intelligence, AI principles under the General Data Protection Regulation (GDPR) and the UNESCO Recommendation on the Ethics of Artificial Intelligence.

The potential of ADM systems to solve problems in Africa is increasing, with some countries already using ADM to target the poorest areas for social funds and reduce election misinformation. However, ADM has risks, such as the possibility of entrenched biases and human rights violations. African states should therefore adopt relevant AI governance policies and best practices such as the OECD Principles on Artificial Intelligence, AI principles under the General Data Protection Regulation (GDPR) and the UNESCO Recommendation on the Ethics of Artificial Intelligence, to promote the responsible and accountable use of ADM. While not legally binding for African states, these principles and guidelines are an influential tool to help governments design national legislation.<sup>42</sup>

*ii.* More African countries should enact and enforce data protection laws with regard to Data Protection Impact Assessments (DPIA) when using ADM.

Data Protection Impact Assessments (DPIA) are required when conducting high-risk data processing, such as using ADM systems. African countries such as Ghana must include this requirement in the data protection laws to add a layer of protection for data subjects regarding ADM systems.

*iii.* More African countries should create National AI Policies to govern ADM.

There is no regional AI strategy or many national AI policies in Africa. Hence, ADM systems and other autonomous actions of machines are not well regulated, leaving room for human rights violations. Hence, more African countries should create National AI Policies to govern ADM.

<sup>42 &#</sup>x27;Forty-Two Countries Adopt New OECD Principles on Artificial Intelligence - OECD' (www.oecd.org) <<u>https://www.oecd.org/</u> science/forty-two-countries-adopt-new-oecd-principles-on-artificial-intelligence.htm>.

#### 8. CONCLUSION

The rapid advancement of technology has increased the use of ADM systems in various sectors, including finance, healthcare, and government service delivery. These systems can potentially improve efficiency and decision-making but also raise concerns about bias, accountability, and human rights. The study found world best practices concerning the regulation of ADM, such as the GDPR ADM principles, the OECD Principles on AI, IEEE Global Initiative on Ethical Considerations in AI and Autonomous Systems, and UNESCO Recommendations on the Ethics of Artificial Intelligence. African countries can adapt these principles and guidelines, as they provide direction on threats to privacy, dignity, and agency, and the risk of mass monitoring, by advocating for principles of diversity and inclusivity, a participative approach, respecting and promoting human rights, and recognising, promoting, and protecting the environment.

The current state of ADM regulation in Africa mainly relies on existing data protection laws, which emphasise the need for transparency and accountability by requiring data controllers and processors to provide individuals with information about the use of their data in ADM. Some laws also necessitate DPIAs in cases of high risk data processing such as ADM, to protect data subjects from automated decisions with a legal impact on the subject. These laws include the South African POPIA, which states that a data subject cannot be subject to a decision that has legal consequences or affects them substantially, based solely on the automated processing of personal information for profiling purposes, such as creditworthiness, reliability, location, health, personal preferences, or conduct. The Nigeria Data Protection Regulation (NDPR) of 2019 and the Ghana Data Protection Act of 2012 also provides certain rights of data subjects, requiring that data subjects receive information on how their data is used, especially when their data is to be used in ADM. In addition to its Data Protection Act, Kenya has established the General Regulations, which requires DPIAs in cases of high risk data processing such as ADM. There still remain gaps in these laws, where some such as the Ghana Act lacks provisions for DPIAs. There is also need for a regional AI strategy in Africa, to further provide a framework for national AIs policies. As such, it is recommended that African countries increase the pace in adopting AI governance policies and best practices such as the OECD Principles on Artificial Intelligence, the General Data Protection Regulation (GDPR) ADM principles, and the UNESCO Recommendation on the Ethics of Artificial Intelligence, to create their own national AI Policies to govern ADM. They should also enact and enforce data protection laws with regard to Data Protection Impact Assessments (DPIA) when using ADM to cater for the risk associated with ADM, such as bias and discrimination.

# This study was made possible by a grant provided by the **Hewlett Foundation**.

We thank the organization for their continued support.





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