

'AL IN DUE TIME': ADDRESSING THE ETHICAL AND LEGAL GAPS OF AI SYSTEMS IN TANZANIA BEFORE UNLOCKING ITS FULL POTENTIAL

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Abstract

As Artificial Intelligence (AI) continues to gain traction across various parts of the world, its viability has primarily been assessed through lenses of technological advancement, infrastructure and economic potential. Tanzania, a country still adopting to other emerging technologies such as cloud computing, digital infrastructure, 'Jamii Namba' (Unique Digital Identifier) and e- governance, has only recently embraced AI. While it is evident that the use of AI is likely to revolutionize sectors such as healthcare, education, agriculture and public services in Tanzania, its rapid development calls for exercising caution before jumping on the 'AI bandwagon.' By addressing the ethical and legal considerations, Tanzania can adopt a proactive approach to its regulation before AI expands further. The objective of this article, therefore, is to explore the ethical issues presented by the said AI technology, if not properly managed. The analysis includes reviewing the existing frameworks in Tanzania and analyzing potential implications. Ultimately, this paper poses the question: Is the rapid push toward formalizing AI truly what the country needs if there are factors that remain unaddressed? In doing so, the paper argues that the use of AI in Tanzania should not solely be seen as an economic driver but also as a technology requiring comprehensive legal and ethical frameworks. This

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article seeks to contribute to the contemporary discourse by proposing key recommendations on how ethics, legal frameworks and Artificial Intelligence can evolve together in Tanzania to promote a responsible and sustainable integration of AI.

Keywords: Artificial Intelligence, Ethics, Legal Framework, Sustainable Digitalization, Tanzania

1.0. Introduction

Defining Artificial Intelligence (AI) is a complex task, as the concept is subject to various interpretations depending on the context in which it is discussed.¹ According to *Sheikh et al*, the technology of Artificial Intelligence, in its broadest definition, is equated with Algorithms which refers to a specific instruction for solving a problem or performing a calculation.² In its strictest definition, they define AI as the imitation by computers of the intelligence inherent in humans. Nilsson goes further in explaining that AI is a technology that enables machines to imitate various human skills by functioning appropriately with foresight in its environment. This typically entails that AI is able to perform complex tasks normally requiring human intelligence, such as visual perception, speech recognition, decision- making and translation between languages.³ Given the varying definitions of AI and the lack of specifying what ‘complex tasks’ can be performed by human intelligence, it is apparent that users may not fully grasp the purpose and scope of its use as well as the risks it may pose. Mitrou argues that the development of AI is driven by social and economic demands in the absence of understanding what AI is meant to achieve or what human cognitive functions it seeks to imitate. Consequently, such misuse presents risks, including ethical breaches, privacy violations and biased decision- making. Tanzania, like many other developing countries, is no

¹ See Russell Stuart & Peter Norvig, *Artificial Intelligence: A Modern Approach* (3rd edn, Pearson 2010) 1-5.

² Haroon Sheikh, Corien Prins & Erik Schrijvers, *Mission AI: The New System Technology* (Springer 2023) 15-41.

³ Nils John Nilsson, *The Quest for Artificial Intelligence* (Cambridge University Press 2009) 13.

exception to the risks presented by AI as a result of not having proper frameworks and ethical considerations in place that would clearly define the scope and applicability of AI. Despite Artificial Intelligence gradually finding its place in several key sectors and being incorporated into the Tanzania Digital Economy Strategic Framework 2024- 2034 as a critical tool for modernizing the country’s economy, there has been a lack of proactive approaches to ensure its sustainable use. Key areas such as the ethical and legal frameworks, which are vital for guiding the use of AI, remain largely unaddressed and unmonitored. In this regard, defining Ethics would be essential to understand the ethical and legal considerations at stake regarding Artificial Intelligence. In terms of technology development, Ibijola and Okonkwo define Ethics as a set of principles based on public acceptance, religious beliefs, and cultural norms on the best behaviour that can be observed and followed during the development and deployment of innovative and emerging technologies.⁴

This paper will discuss in detail the key ethical issues posed by the technology of AI in Tanzania and assess the extent to which the current legal frameworks cover the responsible use of AI. The core argument is that it's not enough to merely regard AI as a tool for economic advancement in Tanzania or weigh the benefits brought by AI technology. Instead, the priority should be ensuring that ethical considerations and protections are solidified before allowing AI to advance further. This article will eventually propose solutions where AI technology and ethics can operate simultaneously, stressing that the expansion of AI in Tanzania should only be contingent upon fulfilment of proper legal and ethical safeguards in place.

2.0. Ethical Issues Posed

2.1. Data Privacy and Protection

⁴ Abejide Ade- Ibijola A & Chinedu Okonkwo, “Artificial Intelligence in Africa: Emerging Challenges” in Damian Okaibedi Eke, Kutoma Wakunuma & Simisola Akintoye (eds), *Responsible AI in Africa: Challenges and Opportunities (Social and Cultural Studies of Robots and AI)* (Palgrave Macmillan 2023) 101-117.

Data protection and privacy, being a basis of ethical technology use, is essential to safeguard individuals' personal information from unauthorized access, misuse and potential breaches. In the online environment, effective data protection ensures that this information which is often collected, shared and stored by various platforms and technologies is managed responsibly so as to respect individuals' privacy rights and maintain security measures to protect against exploitation or misuse.⁵ As Artificial Intelligence continues to advance in Tanzania, it has presented significant ethical concerns regarding personal data protection and privacy. While the Personal Data Protection Act No.11 of 2022 (PDPA) serves as the closest legislative framework for regulating how personal data is handled, it falls short in addressing how AI technologies can be developed in compliance with these laws to promote ethical accountability. The PDPA 2022 establishes 'consent' as a core requirement for processing personal data by mentioning that a person is restricted from processing sensitive personal data without obtaining prior written consent of the data subject and informing the data subject about what data is being collected, how it will be used and with whom it may be shared.⁶ The Act further points out that only necessary data should be collected to reduce risks and protect individuals' privacy.⁷ Moreover, the Act attempts to address ethical considerations by requiring all data controllers to submit ethical guidelines or policies to the Personal Data Protection Commission for the protection of personal data, and where necessary, the Commission shall seek the views of the data subjects.⁸ However, this legislation does not fully address the unique ethical issues AI introduces in handling sensitive data. In particular, the Act does not address two critical issues for regulating AI's role in ethical handling of data; the means to which consent can be obtained in Artificial Intelligence systems, where data processing occurs automatically without the data subject's awareness, as well as the means to which the Commission can monitor and regulate

⁵ Janis Wong & Tristan Henderson, 'The Right to Data portability in practice: Exploring the Implications of the Technologically neutral GDPR' (2019) 9(3) *International Data Privacy Law* 173-191.

⁶ Section 30

⁷ Section 24

⁸ Section 65

AI systems in the absence of ethical policies. In essence, AI chatbots, such as ChatGPT, often collect and process large amounts of data on a daily basis.⁹ This data can include personal information such as names, addresses, financial information and sensitive information such as medical records and social security numbers.¹⁰ With so much data being collected and processed, concerns arise regarding how AI, as a non-human and automated system, uses such data and who it gives access to, particularly when this system may not fall under the protection and regulatory coverage of the PDPA.

Wong *et al* argue that while Data Protection laws and privacy technologies attempt to limit the impact of data breaches and privacy scandals, they rely on individuals having a detailed understanding of the available recourse, resulting in the responsabilization of data protection.¹¹ In other words, data protection is most effective when humans in form of data subjects are identified and humans in form of data processors can be monitored and held accountable. The AI system, on the other hand, lacks this layer of human accountability. Naghiyev argues that the extent of personal data protection in AI remains unclear as it does not appear to be compliant with data privacy.¹² He further argues that there is an apparent lack of transparency in how personal information is collected by AI systems, which makes it difficult for data subjects to exercise their rights, including the right to informed consent. Based on the aforesaid arguments, it is apparent that the PDPA provisions primarily depend on a direct interaction between humans and data as it addresses the requirement of consent being obtained between

⁹ See Kanan Naghiyev, 'ChatGPT From a Data Protection Perspective' (2024) 10(1) Baku State University Law Review 1-34.

¹⁰ The Economic Times 'AI and Privacy: The Privacy concerns surrounding AI, its potential Impact on Personal Data' (The Economic Times, 25 April 2023) https://m.economictimes.com/news/how-to/ai-and-privacy-the-privacy-concerns-surrounding-ai-its-potential-impact-on-personal-data/amp_articles/99738234.cms (last accessed 03rd November 2024).

¹¹ Janis Wong, Tristan Henderson & Kirstie Ball, 'Data Protection for the Common Good: Developing a Framework for a Data Protection- focused data commons' (2022) 4 Data and Policy 31.

¹² *Ibid* 7

the data processor and the data subject. Lynskey presents a differing view, arguing that Data protection laws across various jurisdictions have proven to be adaptable by evolving over time and, like any other laws, are subject to continuous amendments.¹³ Simitis supplements this view by contending that Data protection and privacy is an unending learning process that can accommodate the deployment of evolving technologies such as generative AI, if a critical review of the regulatory approach is adopted.¹⁴ While these perspectives highlight the Data Protection laws' potential for growth across various jurisdictions, they overlook the urgency brought by AI's rapid expansion. They fail to clarify how Data Protection legislations could provide timely, practical and enforceable standards over users' personal information to align with ethical and legal standards in the context of AI. The PDPA 2022, for instance, offers traditional models of obtaining consent but lacks specific guidelines on how AI systems, which collect data passively, enable individuals to know when and how their data is used. The PDPA 2022 also lacks how AI systems, which lack human intent and ethical judgment, can independently submit codes of ethics or be held accountable in the same way humans can. In agreement with Wong and Naghiyev's perspectives, current Data Protection laws, particularly within the Tanzanian context, appear more suited for scenarios involving human actors. As AI adoption grows in Tanzania, it is critical to apply Data Protection laws to more actors in order to achieve better protective outcomes.¹⁵ Addressing this gap in the PDPA 2022 will, therefore, require more than simply targeting humans as the responsible parties for ethical compliance, including obtaining user consent and submitting codes of ethics. It will demand new frameworks that incorporate procedures on how AI programs should obtain consent from individuals and how AI automated systems can be accurately monitored to align with codes of ethics or policy. This approach would account for

¹³ Orla Lynskey, 'Complete and Effective Data Protection' (2023) 76(1) *Current Legal Problems* 297-344.

¹⁴ Spiros Simitis, 'Legal and Political Context of the Protection of Personal Data and Privacy' (Speech in Montreal, September 1997) Council of Europe Archives (T-PD (97) 17- on file with the author), 7.

¹⁵ See Katherine Nolan, "The Individual in EU Data Protection Law", (PhD Thesis, LSE Law School 2023).

the responsible growth of Artificial Intelligence while ensuring that the technology operates within ethical boundaries.

2.2. Transparency and Accountability

Transparency and Accountability are critical ethical concerns in Artificial Intelligence, particularly as the AI system uses algorithms to make important automated decisions without human input. Algorithms, being a set of defined instructions or rules that guide the AI system in making decisions based on data inputs, form the foundation of AI's automated decision-making processes, enabling it to analyse vast amounts of information, identify patterns and reach conclusions.¹⁶ Commonly, algorithms are becoming crucial in decision-making across financial institutions and in healthcare where loan eligibility and diagnostics are assessed respectively.¹⁷ In such critical domains where AI system is used to process large volumes of data, it eventually creates a "black box" effect, which prevents individuals from tracing how a decision was made, questioning it or identifying errors.¹⁸ As a result, it becomes difficult to hold any party accountable should the decision have a negative impact. In Tanzania, the concerns surrounding algorithmic transparency are particularly relevant as institutions increasingly rely on data for decision-making.¹⁹ The closest provision addressing individual protections in the context of automated decision-making by AI is found in Section 36 of the PDPA 2022 which provides data subjects with some rights concerning decisions based solely on automated processing. Under this provision, data controllers must avoid basing decisions that affect individuals solely on automated processing. When such automated processing does occur, data controllers are

¹⁶ Kirsten Martin, 'Ethical Implications and Accountability of Algorithms' (2019) 160 *Journal of Business Ethics* 835-850.

¹⁷ Cao Xuenan & Yousefzadeh Roozbeh, 'Extrapolation and AI transparency: Why Machine Learning Models should reveal when they make Decisions beyond their Training' (2023) 10(1) *Big Data & Society* 1-5.

¹⁸ Jenna Burrell, 'How the Machine 'thinks': Understanding Opacity in Machine Learning Algorithms' (2016) 3(1) *Big Data & Society* 1-12.

¹⁹ Carol. Azungi Dralega, 'AI and the Algorithmic- Turn in Journalism Practice in Eastern Africa: Perceptions, Practice and Challenges' (2023) *Digitisation, AI and Algorithms in African Journalism and Media Contexts* 33-52.

required to notify the affected data subject, who then has the right to request reconsideration of the decision. Looking at the provision's attempt to regulate automated processing, one can observe that it falls short in addressing the core issue- namely, the mechanisms and internal workings of the automated decision- making process itself. The current approach holds the data controller accountable for decisions produced by automated means, but fails to provide mechanisms to scrutinize or audit the algorithm system. This setup raises concerns because the data controller typically determines the purposes for which personal data is processed rather than controlling the decision- making of the automated system itself.²⁰ Therefore, the option to simply require the data controller to 'reconsider' the decision may not change the outcome if the algorithm is inherently biased or lacks transparency.

In analysing the possible harmful outcomes posed by the use of algorithm, Brand argues that the automated decision- making in AI systems undoubtedly introduces ethical concerns about transparency and accountability.²¹ Brand further contrasts how Transparency and Accountability, being a well- established principle in constitutional and administrative law, is rarely seen in the algorithmic processes that drive AI decision-making. In Constitutional and administrative law, he states that citizens want to see and understand the decisions of public officials in order to keep the officials and the Government accountable – an element which is lacking in the automated decision- making processes. Similar discussions are presented by Ananny and Crawford who conclude that transparency is of very limited help to explain and understand complex systems such as algorithms due to its continuous invisibility and its adaptive system which changes over time.²² Wachter *et al* highlight that a number of legal frameworks pertaining to data

²⁰ Larry. A. DiMatteo, Cristina Poncibò, & Michel Cannarsa, *The Cambridge Handbook of Artificial Intelligence: Global Perspectives on Law and Ethics* (Cambridge University Press 2022) 132-145.

²¹ Dirk Brand, 'Algorithmic Decision- making and the Law' (2020) 12(1) *Journal of e-Democracy and Open Government* 114-131.

²² Mike Ananny & Kate Crawford, 'Seeing without Knowing: Limitations of the Transparency Ideal and its Application to Algorithmic Accountability' (2016) *New Media and Society* 1-12.

protection, such as the EU General Data Protection Regulation (GDPR), lack precise language and well- defined rights or safeguards against automated decision- making, and therefore runs the risk of being toothless.²³ The arguments brought forward by the afore- mentioned scholars imply that individuals affected by algorithmic decisions rarely understand how these outcomes are derived due to the fact that one can only see the outcome, but not the underlying criteria or reasons that led to that decision. Some scholars argue, however, that the level of transparency and accountability required should depend on the stakes associated with the algorithmic decision.²⁴ As Coyle and Weller assert, there is a necessity to explain machine learning systems' decisions and actions to human users, particularly when used in contexts where decisions have substantial implications for those affected and where there is a requirement for accountability or legal compliance.²⁵ Kempt *et al* argue that decisions with high consequences, such as credit lending, hiring, university admission, healthcare diagnostics, social security payments and sentencing should prioritize transparency.²⁶ Vredenburg goes even further and argues that low- stakes decisions should not require the same degree of scrutiny or explanation.²⁷ Von Eschenbach states that the use of AI for low- risk decisions carries little moral hazard and should, therefore, not require an interpretable or explainable model.²⁸ Robbins contends that it is unreasonable that the decisions resulting from AI in situations of low to no risk should be

²³ Sandra Wachter, Brent Mittelstadt & Luciano Floridi, 'Why a Right to Explanation of Automated Decision- Making Does not Exist in the General Data Protection Regulation' (2017) *International Data Privacy Law* 47.

²⁴ Lauritz. A. Munch, Jens. C. Bjerring, & Jakob. T. Mainz, 'Algorithmic Decision – Making: The Right to Explanation and the Significance of Stakes' (2024) 11(1) *Big Data & Society*.

²⁵ Diane Coyle & Adrian Weller, "'Explaining" Machine Learning Reveals Policy Challenges' 368(6498) *Science* 1433-1434.

²⁶ Hendrik Kempt, Nils Freyer, & Saskia. K. Nagel, 'Justice and the Normative Standards of Explainability in Healthcare' (2022) 4 *Philosophy & Technology* 35-100.

²⁷ Kate Vredenburg, 'The Right to Explanation' (2022) 30(2) *Journal of Political Philosophy* 209-229.

²⁸ Warren. J. Von Eschenbach, 'Transparency and the Black Box Problem: Why we do not trust AI' 34(4) *Philosophy & Technology* 1607-1622.

required to provide explanations.²⁹ It is apparent that the arguments presented by the dissenting scholars share a common assumption: that AI data-driven decisions can be categorized as high or low risk, implying a subjective approach as to what information qualifies for transparency. Nonetheless, this categorization is problematic on a number of reasons; firstly, they fail to define what ‘low-risk’ decision means, leaving ambiguity or a subjective interpretation around what qualifies as low risk. Secondly, this omission overlooks the potential long-term effects of ‘low-stake’ decisions. Such repeated algorithmic decisions, based on small pieces of personal data, have the potential to accumulate over time, resulting in significant effects on an individual’s creditworthiness, job opportunities or access to resources in a way that, cumulatively, is far from what is considered as a ‘low-stake’ decision. Therefore, Brand *et al*’s viewpoint in recognizing that transparency is vital for all data involved in algorithmic decision-making appears justified. This approach is equally relevant, if applied in the Tanzanian context, by considering all stake decisions when addressing automated systems. As AI is becoming more integrated into critical sectors within Tanzania, the need for transparency and explainability of how decisions are made and the factors influencing such decisions becomes inevitable. Only through transparency will individuals have confidence to trust and embrace this emerging technology.

2.3. Inclusion and Fairness

The growing use of AI systems in Tanzania introduces the risk of amplifying bias, which can undermine efforts toward inclusion. According to Ferrara, bias is defined as a systematic error in decision-making processes that results in unfair outcomes.³⁰ In the context of AI, bias can arise when the data used to train machine learning models are unrepresentative, collected from biased sources or when the data are incomplete, missing important information, or contain errors that would

²⁹ Scott Robbins, ‘A Misdirected principle with a Catch: Explicability for AI’ (2019) 29(4) *Minds and Machines* 495-514.

³⁰ Emilio Ferrara, ‘Fairness and Bias in Artificial Intelligence: A Brief Survey of Sources, Impacts, and Mitigation Strategies’ (2023) 6(1) *Sci* 2024 3.

affect inclusivity for underrepresented groups.³¹ Presently, the principle of equality and inclusion is legally recognized in Tanzania, as reflected in the Constitution of the United Republic of Tanzania, 1977 which guarantees equality and non-discrimination for 'all' persons, providing a foundation for inclusion in various aspects of the society.³² Furthermore, the law specifically addresses inclusion in the workplace by prohibiting biasness and discrimination based on gender, disability or other statuses.³³ Additionally, Section 6 of the Persons with Disabilities Act No. 10 of 2010 mandates equal opportunities and accessibility for disabled individuals, while the Law of Child Act, 2009 ensures that children are protected from discriminatory practices.³⁴

The Judiciary in Tanzania also places significant emphasis on non-bias and impartiality. In the case of *Registered Trustees of Social Action Trust Fund & Another v Happy Sausages Ltd and Others*, one notable principle involving the test for bias was applied.³⁵ The legal position of the Court of Appeal on the application of the reasonable suspicion/apprehension of bias test, held that the likelihood of bias is not assessed by looking at the mind of who sits in a judicial capacity, or if there was a real likelihood that he would, favour one side at the expense of the other, but rather the impression that would be given to a reasonable observer.³⁶ Such legal provisions and judicial principles demonstrate how the legal system prioritizes inclusivity for all individuals, reflecting the country's commitment to upholding these values across all levels of governance. However, these commitments to inclusion and non-biasness are not yet mirrored in the development and application of AI technologies in Tanzania. Researchers have documented biases in AI systems against various demographics, particularly in Africa and developing countries, with regards to ethnicity, social groups, cultural

³¹ *Ibid* 30

³² Article 13 of the Constitution of the United Republic of Tanzania, 1977 as amended from time to time.

³³ Section 7 of the Employment and Labour Relations Act [Cap 366, R.E. 2019]

³⁴ Section 5 of the Law of Child Act [Cap 13 R.E. 2019]

³⁵ [2004] TLR 264

³⁶ *Metropolitan Properties Co. (FGC) Ltd v Lannon* (1966) 1 QB

backgrounds, age and gender.³⁷ Ntoutsi *et al* assert that the risk of biases in Africa is heightened by the limited availability of representative datasets in terms of language, culture, gender and socio-economic factors.³⁸ Other researchers like Hellström *et al* suggest that the bias is not deliberate or conscious and that achieving a completely unbiased AI system is unattainable due to the imperfections in data and design processes.³⁹ Instead, it stems from the data these systems learn from and the algorithms that drive them. They further indicate that if the data used is not representative, the resulting AI systems inevitably perpetuate unfairness.

One notable observation, however, about scholars discussing AI bias in Africa is their tendency to generalize AI bias issues across Africa without addressing country-specific factors causing these biases. While African nations may face similar AI-related biases, the root causes vary. These differences stem from the extent to which each country has incorporated laws to address biases or even recognized AI within their legal frameworks.

In Tanzania, for instance, bias in AI is even more pronounced due to two root causes; absence of legislations addressing AI- related biases and structural challenges of limited access to technology. AI adoption in the country is concentrated in urban centres where internet access is relatively widespread. Rural areas, where the majority of the population resides, are largely excluded, creating a digital divide. As a result, AI systems reflect and cater to urban demographics, side-lining the unique needs of rural communities. This is exemplified when banks use AI to determine loan eligibility, where they would often rely on urban-centric data, further marginalizing rural populations who may not fit the criteria

³⁷ Ninareh Mehrabi *et al*, 'A Survey on Bias and Fairness in Machine Learning' (2021) 54 ACM Comput. Surv.1-35.

³⁸ Eirini Ntoutsi *et al*, 'Bias in Data- driven Artificial Intelligence Systems – An Introductory Survey' (2020) 10 Wiley Interdisc. Rev. Data Mining Knowl. Discov 1-4.

³⁹ Thomas Hellström, Virginia Dignum & Suna Bensch 'Bias in Machine Learning – What is it Good For?' (2020) <https://arxiv.org/pdf/2004.00686> (last accessed 19th November 2024).

defined by such datasets. Language barriers further intensify the problem because Swahili, being the most widely spoken language in Tanzania, is used by the majority of the population. However, most AI systems are designed for English speakers, making them inaccessible to those who primarily communicate in Swahili, which creates another layer of exclusion. Tanzania's legal system, being the second root cause, addresses discrimination between individuals or entities, allowing for accountability when acts of bias occur. Yet, there is no clear framework for holding AI systems accountable when they perpetuate discrimination. Henceforth, a tailored strategy that caters for a representative data collection, by integrating Swahili in AI systems, and establishing accountability frameworks for AI bias, is essential. Without these considerations, AI risks prolonging systemic inequalities in Tanzania.

3.0. Recommendations

An AI- specific legislation in Tanzania that reflects the local needs and challenges would be a cornerstone for advancing ethical AI development. Presently, there is no comprehensive legislation or regulations in Tanzania that regulate the development of AI or specifically restricts its use. Kombo points out that Tanzania is currently in the early stages of drafting a comprehensive National AI Strategy and Guidelines, so as to identify priority areas and establish governance frameworks that integrate AI into the country's development agenda.⁴⁰ Although Tanzania is in the process of drafting these guidelines, there is a pressing need for a binding and enforceable legislative framework specifically addressing AI. A strategy alone provides a plan but lacks the legal enforceability to regulate AI's complexities in areas such as data breaches and algorithmic decision- making. Perhaps, Tanzania can draw lessons from the European Union (EU), which has adopted the EU AI Act, the first- ever comprehensive legal framework on AI, which addresses the risks of AI and positions Europe to play a leading role

⁴⁰ Sakwa Kombo 'Tanzania is Drafting a National AI Strategy and Guidelines' (Techweez, 4 June 2024) <https://techweez.com/2024/06/04/tanzania-developing-a-national-ai-strategy/> (last accessed 23rd November 2024).

globally.⁴¹ The Act's approach, particularly its categorization of AI systems into different risk levels, as well as its emphasis on the obligations of deployers of AI and management of data serves as a robust model for other countries to consider when developing their own AI legislation. However, from a bird's-eye viewpoint, one can opine that while the EU's approach is comprehensive, Tanzania should customize its AI legislation to align with the socio-economic challenges and existing legal frameworks. By example of the Personal Data Protection Act, 2022, despite addressing data privacy and protection through automated means, it does not fully account for the complexities of informed consent as it pertains to AI. These additional complexities thus necessitate a dedicated AI-specific legislation to ensure comprehensive protection, governance and ethical considerations beyond what is addressed in the PDPA 2022. Spiecker and Döhmann raise an argument, but in the light of EU AI regulation.⁴² They argue that parts of a EU Artificial Intelligence Act may overlap with already existing legislations such as the General Data Protection Act (GDPR), which covers regulatory aspects derived from data protection and privacy. As their literature suggests, there may be some overlap with AI-related concerns in existing legislations that pertain to data protection, but the presence of such legislations does not eliminate the need for AI-specific legislation. There are areas that require more detailed legal provisions, particularly the aspect of informed consent in the context of automated decision-making and the aspect of liability in cases where AI systems make a decision that causes harm or violates an individual's right. With an AI-specific Act in Tanzania, the process of obtaining consent would be clearly defined, especially in terms of how data is used for automated decision-making, and would simplify the process of determining which party is responsible when AI systems make biased decisions. Such an Act would further contribute to a more ethical deployment of AI systems, creating a legal framework that

⁴¹ Marta. C. Gamito & Christopher. T. Marsden, 'Artificial Intelligence Co-Regulation? The Role of Standards in the EU AI Act' (2024) 32(1) *International Journal of Law and Information Technology* 19.

⁴² *Ibid* 20

would address how individuals can access explanations for how AI systems make particular decisions.

Another key proposal would be incorporating principles of inclusivity and equity to ensure that AI solutions address the needs of both urban and rural communities. Eke *et al* suggest that in order to ensure that AI applications in Africa are ethically sound and socially responsible, there needs to be a strong emphasis on defining African AI values first and aligning AI frameworks with these values.⁴³ Their approach is mirrored by many such as Professor Virginia Dignum who argues that the impacts of AI technology are determined not by the technology itself but by the socio- cultural context in which it is used.⁴⁴ She refers to the philosophy of 'Ubuntu' as a case study where she suggests that integrating diverse sociocultural perspectives can lead to more responsible and ethical AI applications. For Zamaraeva and Kolesnik, technologies that are created need to resonate with the local population and respect their unique perspectives and traditions.⁴⁵ As the aforementioned literatures have pointed out, it is vital to understand the values specific to African contexts into the adoption of AI systems. In the context of Tanzania, promoting ethical foundations in AI systems should prioritize fostering inclusive partnerships that ensure that AI solutions not only address the needs of both urban and rural communities but also aligns with Tanzania's cultural identity and societal values. To achieve this, policies and frameworks should mandate the involvement of diverse stakeholders, including local communities, cultural leaders, civil societies, as well as local authorities that operate at a village, municipal, district and regional level in order to ensure that AI systems respect Tanzanian traditions, languages, and values.

⁴³ Eke D.O., Wakunuma K, & Akintoye S, "Introducing Responsible AI in Africa" in *Responsible AI in Africa: Challenges and Opportunities (Social and Cultural Studies of Robots and AI)* (eds., Palgrave Macmillan, London 2023) 1-11.

⁴⁴ *Ibid* p.208

⁴⁵ Julia Zamaraeva & Maria Kolesnik, 'On the Issue of Cultural (African) Specifics of "Responsible Artificial Intelligence".' (2023) 1 *Asia, America and Africa History and Modernity* 43-75.

4.0. Conclusion

The rapid push towards AI adoption in Tanzania is commendable, but it is far from sufficient. Significant challenges remain, particularly in revising the legal framework to accommodate the ethical issues that AI presents. Tanzania, though currently having already adopted AI in various sectors of the economy, is not fully prepared for the effective integration of AI because there are no laws that are specifically tailored to address the ethical challenges and the unique needs of Tanzanian communities – both urban and rural. As Tanzania moves forward, the focus should not be on whether AI will transform the nation economically or technologically, but on whether the country is prepared to shape AI in a way that aligns with its cultural identity and on whether it is grounded in strong ethical foundations. Tanzania, therefore, has the opportunity to harness its benefits while addressing the ethical and practical challenges presented by AI systems. In light of the discussions in this Article, further research is necessary to fully explore other ethical challenges presented by AI systems in Tanzania, as well as a comprehensive analysis of the provisions that should be included in the proposed AI- specific legislation. This article also underscores the need for further research to evaluate the exact stage of AI development and adoption in the country. Understanding this stage is critical, as each level of AI maturity presents unique challenges and gaps that require tailored interventions.