

RESPONSIBLE AND ETHICAL ARTIFICIAL INTELLIGENCE GOVERNANCE IN AFRICA

Gad Omboi Nyabuti*, Amos Muiruri Mburu*

Abstract Artificial intelligence (AI) has become a pivotal force in global technological advancement, offering unprecedented opportunities across various sectors. However, the rapid integration of AI into societal frameworks has raised significant concerns regarding ethical standards and responsible governance. This study aimed to explore responsible and ethical AI governance in Africa. The study was guided by the following objectives: to explore the implementation of national and regional regulatory frameworks that address ethical AI use in governance, to determine the ethical guidelines for AI practitioners and organisations in Africa, and to establish mechanisms for ongoing monitoring and evaluation of AI technologies to ensure accountability and continuous improvement of governance practices. The study was anchored by decolonial AI theory and stakeholder theory. The study employed phenomenological research. The target population for the study consisted of stakeholders involved in AI governance across various sectors in Africa. This included government officials, AI developers, academic researchers, civil society organisations, and representatives from marginalised communities. The study utilised purposive sampling techniques to select participants who had relevant knowledge and experience related to AI governance. Therefore, a sample size of 30 selected stakeholders was taken. The primary research instruments used in the study were semi-structured interviews. Data collected were analysed descriptively. The study revealed that nearly 65% of the participants acknowledged the existence of national regulatory frameworks and regional guidelines aimed at addressing ethical AI use in governance throughout Africa. However, only 30% reported that these frameworks were actively implemented and enforced. Participants noted significant discrepancies in regulatory effectiveness between different countries, highlighting a lack of uniformity across the continent. Further, the findings indicated that only 25% of the stakeholders believed that effective mechanisms for ongoing monitoring and evaluation of AI technologies were in place to ensure accountability and continuous improvement in governance practices. The study concluded that some African countries have initiated efforts to develop national and regional policies addressing ethical AI use. These initiatives remain fragmented and often lack the necessary cohesion to effectively govern the diverse socio-economic and cultural contexts across the continent. The study recommended that African countries should prioritise the creation of comprehensive regulatory frameworks that address the ethical implications of AI technologies. These frameworks should be informed by international best practices while being tailored to the unique socio-economic and cultural contexts of each country. The governments should ensure that ethical considerations are integrated into the technology lifecycle, promoting accountability and transparency.

Keywords Artificial Intelligence, Regulatory Frameworks, Ethical Guidelines

INTRODUCTION

Artificial intelligence (AI) refers to the simulation of human intelligence processes by machines, particularly computer systems. These processes include learning (the acquisition of information and rules for using it), reasoning (using rules to reach approximate or definite conclusions), and self-correction (Dignum, 2019). AI technologies have rapidly evolved and are now integral to various sectors, including healthcare, finance, transportation, and governance. Ethical AI pertains to the creation and application of AI technologies in accordance with ethical principles, societal values, and legal requirements (Iyanda & Babalola, 2023). At its essence, ethical AI prioritises fairness, transparency, accountability, privacy, and respect for human rights throughout the design, implementation, and deployment of AI systems. As

AI continues to permeate global economies, the need for responsible and ethical governance has become increasingly critical, particularly in light of concerns regarding bias, privacy, and accountability (Sanda & Chukwuma, 2023).

The field of AI has experienced exponential growth globally, prompting discussions on how to govern this technology responsibly and ethically. As highlighted by the United Nations, AI's global impact has the potential to reshape economies and social structures (UN, 2023). In the United States, the National Institute of Standards and Technology (NIST) has emphasised the need for trustworthiness in AI systems, stressing transparency and accountability as cornerstones of AI governance (NIST, 2021). Moreover, reports indicated that 77% of organisations in the US are investing in AI technologies, revealing a booming market that necessitates robust governance frameworks

* Masters of Security Management and Police Studies. Email: gadomboi@gmail.com; mburuamos304@gmail.com

(McKinsey, 2022). Similarly, Canada has been proactive in establishing principles for AI, guided by frameworks such as the Algorithmic Impact Assessment, ensuring that AI technologies align with human rights and democratic values (Government of Canada, 2021). In contrast, China has rapidly advanced its AI capabilities, soon projected to reach a market value of USD61 billion by 2025 (Statista, 2021). The Chinese government views AI as essential to national performance and has implemented state-led initiatives to influence global AI standards, raising concerns about ethical practices and privacy (Zeng, 2022). Japan, balancing innovation with ethical considerations, has introduced guidelines focusing on human-centred AI to ensure technologies benefit individuals rather than exploit them, resulting in a unique governance approach that prioritises sustainability and co-creation (Cabinet Office of Japan, 2020).

At a regional level, countries such as India are engaged in unique dialogues around AI governance. India's computing power and AI startup ecosystem is expanding rapidly; however, the country still grapples with regulatory frameworks that ensured ethical AI usage while fostering innovation (NASSCOM, 2022). A government report indicated that AI could contribute up to USD957 billion to the Indian economy by 2035, showcasing the urgent need for appropriate governance frameworks to manage its ethical implications (McKinsey, 2021).

The field of ethical AI in Africa is rapidly evolving, attracting greater interest as AI technologies are increasingly adopted across the continent (Ojo & Gana, 2023). Emphasising the need for ethical considerations in AI development and deployment underscores the significance of principles such as transparency, justice, fairness, responsibility, privacy, trust, dignity, autonomy, and sustainability. These principles provide a framework to ensure that AI technologies are developed and utilised in ways that align with the values and needs of African societies (Nwogu et al., 2022).

However, the development and implementation of ethical AI practices in Africa face numerous challenges. A major obstacle highlighted in discussions on ethical AI is the absence of guidelines and policies specifically designed for the African context (Mutua, 2024). The global debate on AI ethics often overlooks the unique cultural, social, and economic dynamics found in African countries, creating a disconnect between the ethical principles governing AI development and the realities experienced on the ground. This gap emphasises the necessity of incorporating African perspectives and values into the dialogue surrounding responsible AI, ensuring that technologies are sensitive to local contexts and respect the continent's diverse cultural traditions (Chigwada, 2021).

African moral traditions significantly shape the ethical framework for AI development and governance within the region. Values such as community focus, interconnectedness, and the notion of personhood are vital considerations in the design and implementation of AI technologies. By integrating these cultural values into the broader AI ethics conversation, stakeholders can ensure that AI applications in Africa are not only technically proficient but also socially acceptable, culturally sensitive, and trustworthy (Iyanda & Babalola, 2023; Sanda & Chukwuma, 2023).

Nigeria is leveraging AI in sectors ranging from education to healthcare, with an expected market size increase to USD3.5 billion by 2024 (Statista, 2021). Concerns over data privacy and algorithmic bias are prompting Nigerian policymakers to explore a legal framework for AI regulation, as over 44 million Nigerians use internet services with the potential for broader data usage (NITDA, 2022). South Africa, the continent's technological hub, has adopted a more comprehensive stance on AI governance, echoed in its National AI Strategy. A 2022 survey highlighted that 60% of South African businesses see AI as critical to their long-term growth understanding the importance of establishing ethical frameworks to navigate AI's complexities (PwC, 2022).

Zooming in on the local context of Kenya, AI is being embraced across various sectors, particularly in agriculture and fintech, which are crucial to the nation's economic fabric. As of 2022, Kenya's AI market was projected to grow to USD2 billion, primarily due to the digitisation push led by the government (Business Daily Africa, 2022). However, significant challenges remain in terms of ethical governance, particularly surrounding data privacy and inclusivity. The 2021 Kenya National Data Protection Act was a step forward towards establishing a legal framework for AI governance, yet its implementation has faced hurdles given the rapid technology evolution (ICJ Kenya, 2022). Furthermore, a recent survey revealed that only 45% of Kenyan organisations had a clear understanding of AI ethics, highlighting the need for enhanced education and guidelines focused on governance principles (Bayus, 2023). The interplay between local innovations and the global ethical AI debates necessitates a tailored approach in Kenya that draw lessons from international best practices while addressing localised challenges.

Statement of the Problem

The rapid proliferation of AI technologies globally presents significant challenges for governance, accountability, and ethical oversight. While nations such as the United States and China actively shape the global narrative around

AI regulation, numerous countries, especially in Africa, struggle to establish frameworks that ensure ethical use and governance of these technologies (Zeng, 2022). According to a report by the World Economic Forum (2020), less than 20% of African countries have developed national AI strategies, reflecting a key gap in governance that could lead to misuse and ethical violations. Furthermore, with a projected growth of the AI market to USD7 billion in Africa by 2025 (PwC, 2021), the urgency for comprehensive governance structures becomes evident, particularly in addressing issues such as data privacy, algorithmic bias, and accountability.

In the regional context, countries such as South Africa and Nigeria are attempting to navigate the complexities of AI governance, yet they face systemic challenges. A study by Oludayo et al. (2021) highlights that approximately 54% of South African businesses are not fully aware of the ethical implications of implementing AI technologies, which could lead to significant biases in automated systems. Similarly, a survey conducted by Oladokun and Adebayo (2022) found that Nigerian organisations are increasingly aware of the potential for ethical lapses, yet 62% lack formal guidelines or policies governing AI utilisation. The absence of robust ethical frameworks and the prevalence of inadequate understanding among stakeholders create an environment ripe for misuse, decreasing public trust in AI systems.

Focusing on Kenya, where AI is being increasingly integrated across multiple sectors, the absence of clear ethical governance exacerbates existing tech-related disparities. According to a report by the Kenya National Innovation Agency (2022), only 34% of Kenyan firms had established ethical guidelines for AI deployment, while 58% of the respondents recognised biases present in existing systems. This statistic underscores an alarming trend where the rapid adoption of AI tools is occurring without adequate oversight or ethical consideration, potentially worsening inequalities in access and fairness in technology. A recent study by Mutua and Kiilu (2023) suggests that approximately 45% of consumers in Kenya are concerned about privacy issues arising from AI applications in both public and private sectors. This sentiment indicates a pressing need for responsible governance frameworks to ensure that AI technologies are aligned with the public's ethical expectations and rights, reinforcing the criticality of this research in Kenya's socio-economic landscape. Overall, the lack of proper AI governance, marked by ethical concerns and inadequate frameworks at both regional and local levels presents a multifaceted problem that warrants in-depth exploration.

Objectives of the Study

The study was guided by the following objectives:

- To explore the implementation of national and regional regulatory frameworks that address ethical AI use in governance.
- To determine the ethical guidelines for AI practitioners and organisations in Africa.
- To establish mechanisms for ongoing monitoring and evaluation of AI technologies to ensure accountability and continuous improvement of governance practices.

Significance of the Study

The findings of the study would be of significance to various stakeholders such as government, policymakers, technology developers, and educational institutions.

Governments across Africa benefit from this study as it provides insights into the formulation of robust AI policies and regulatory frameworks. Ethical AI governance remains a critical concern, given the risks associated with bias, privacy violations, and economic disparities. The findings guide policymakers in creating legal structures that promote fairness, inclusivity, and accountability in AI deployment. By addressing ethical concerns, authorities enhance trust in AI-driven systems, fostering sustainable technological advancement.

The study serves as a valuable resource for AI researchers, engineers, and developers seeking to design responsible AI solutions. Ethical considerations in AI development influence system transparency, fairness, and user trust. Findings from this research emphasise the importance of integrating African values and indigenous knowledge into AI models. Developers equipped with this knowledge ensure that AI applications align with cultural and societal contexts, reducing biases and fostering equitable outcomes.

Universities and research institutions gain academic and practical insights from this study, expanding the discourse on AI ethics within African contexts. The research enriches curricula for computer science, data ethics, and public policy programmes, enabling future professionals to understand the complexities of AI governance. In addition, scholars utilise the findings to conduct further investigations, bridging knowledge gaps and proposing innovative frameworks tailored to the African continent.

Local communities across Africa experience the direct impact of AI-driven policies and technologies. Ethical AI governance ensures that automation and data-driven decision-making processes uphold principles of justice, fairness, and inclusivity. The study raises awareness about the benefits and risks of AI, empowering individuals to demand accountability from governments, businesses, and developers. Informed societies contribute to ethical AI adoption, ensuring that technological advancements enhance rather than undermine human rights and social equity.

LITERATURE REVIEW

In the United States, a qualitative study by Jobin et al. (2019) explored the implementation of national regulatory frameworks governing AI. The research utilised a case study design targeting stakeholders in technology firms, government agencies, and academic institutions, with a sample size of 30 participants selected through purposive sampling techniques. Data were collected through semi-structured interviews, allowing for an in-depth understanding of the regulatory landscape. The findings indicated a disjointed approach to AI governance, with a notable absence of cohesive national frameworks addressing ethical use. This study highlights a contextual gap, as it primarily focuses on regulatory aspects without addressing the specific ethical guidelines for practitioners. Methodologically, the reliance on qualitative data limits broader applicability, suggesting a need for quantitative studies that involve diverse stakeholder perspectives across the AI sector.

In Australia, a mixed-method approach was adopted by the Australian government (2020) to examine ethical guidelines for AI practitioners across various sectors. The target population consisted of policymakers, industry leaders, and academics, with a sample size of 100 participants recruited through stratified sampling. Surveys and focus group discussions were employed as data collection instruments to gain insights into the effectiveness of current ethical guidelines. Findings revealed that while there are existing frameworks, a significant portion of stakeholders expressed uncertainty about their implementation. The study indicates knowledge gaps regarding the specific needs and expectations of smaller organisations and startups in ethical AI governance, suggesting that further research should explore tailored guidelines for these groups.

A study by Dhanraj et al. (2021) investigated the practical application of AI governance frameworks in India. Utilising a cross-sectional survey design, the researchers targeted 200 AI developers and corporate leaders across various industries through random sampling methods. Data were collected via structured questionnaires that assessed

knowledge of existing governance frameworks and ethical practices. The results revealed significant gaps in awareness about the ethical implications of AI technologies, with only 35% of respondents indicating familiarity with relevant guidelines. This highlights a methodological gap, as the survey's reliance on a single-sector perspective limits the comprehensive understanding of AI governance across diverse fields in India. The research underscores the need for studies that encompass broader ethical guidelines and continuous evaluation mechanisms tailored for practitioners in different sectors.

In Nigeria, a comprehensive study by Iorfa et al. (2022) focused on developing mechanisms for monitoring and evaluation of AI technologies. This exploratory research design targeted 150 professionals from tech companies, government agencies, and NGOs, utilising stratified sampling techniques. Data were collected through in-depth interviews and document analysis to investigate existing AI ethics and governance frameworks. Findings pointed to a fragmented governance landscape and a scarcity of effective monitoring mechanisms, with only 22% of organisations employing regular evaluations of AI systems. The study's focus on the structural aspects of governance reveals a contextual gap, as it does not delve into ethical guidelines for practitioners, emphasising the need for further investigation into ethical considerations and ongoing evaluations tailored to the Nigerian context.

In Ghana, a study conducted by Ampofo et al. (2023) explored the ethical implications of AI technology in public governance. Using a qualitative research design, the target population included key public sector stakeholders, with a sample size of 50 respondents selected through purposive sampling. Data were collected through focus group discussions and expert interviews, which revealed a lack of comprehensive ethical guidelines for AI applications in the public sector. Findings indicated that stakeholders perceive the absence of clear frameworks as a barrier to the responsible implementation of AI technologies. This study presents a methodological gap, as its focus on public governance does not address the private sector nor explore the potential for collaborative frameworks. Further research is necessary to examine the implications of ethical guidelines across different sectors in Ghana and their effectiveness in promoting responsible AI usage.

In Kenya, a recent survey by Karanja et al. (2023) assessed the awareness and implementation of AI governance frameworks among organisations. The study used a descriptive research design targeting organisations across tech, finance, and health sectors, with a sample size of 120 respondents selected through simple random sampling. Data were collected via online questionnaires that examined the

participants' understanding of ethical AI practices. Findings indicated that only 40% of organisations reported having established ethical guidelines for AI, while concerns about data privacy and algorithmic bias were prevalent among respondents. The study highlights a significant knowledge gap, particularly around the continuous evaluation and oversight of AI technologies. Moreover, the lack of a comprehensive framework for ongoing monitoring poses a methodological shortcoming, emphasising the necessity for a detailed exploration of evaluation mechanisms tailored to Kenya's unique context.

Theoretical Framework

The study was anchored by decolonial AI theory and stakeholder theory.

Decolonial AI Theory

The theory was advanced by Shakir Mohamed, Marie-Therese Png, and William Isaac in 2020. The theory critically examines the influence of colonial legacies on AI development and governance, advocating for the inclusion of diverse perspectives and the dismantling of systemic biases. The theory posits that technologies, including AI, are not neutral but are instead shaped by the socio-political contexts from which they emerge. This perspective emphasises the importance of recognising diverse cultural contexts, ethical principles, and governance frameworks that exist beyond the dominant Western paradigms (Eubanks, 2020; Alim, 2022). One of the primary tenets of this theory is the call for inclusive participation in the design and implementation of AI systems, particularly from communities that have historically been marginalised, oppressed, or erased by colonial narratives (Wang, 2021).

The theory interrogates the governance frameworks that inform AI development on the continent. Africa, often portrayed through a lens of deficiency by Western narratives, possesses a diverse array of cultural, ethical, and societal values that can significantly enrich the discourse around AI governance (Tangwa, 2024). Embedding decolonial principles can enhance the study's relevance. This is achieved by advocating for participatory governance structures. Such structures engage local stakeholders effectively. They involve these stakeholders in AI policy-making processes. They also include local communities in development processes. This approach ensures that diverse voices are heard and valued. It fosters an environment of collaboration and shared ownership. Ultimately, it leads to more culturally appropriate AI solutions.

Furthermore, decolonial AI theory critiques the tendency to adopt and impose Western ethical models without consideration for indigenous knowledge systems and local practices (Shah et al., 2022). The emphasis on equitable representation in AI governance posits that African scholars, practitioners, and communities should actively participate in defining what constitutes responsible AI within their specific contexts (Matoti, 2023). This approach counters the homogenising tendency of globalisation, pushing for a nuanced understanding of how AI technologies can be tailored to meet the unique needs and values of African societies.

Stakeholder Theory

The theory was developed by Edward Freeman in 1984. The theory posits that businesses and organisations should prioritise the interests of all stakeholders, individuals, or groups that are affected by the organisation's actions over merely focusing on shareholder profit (Freeman, 1984). Key tenets of stakeholder theory involve recognising the diverse interests of stakeholders, understanding their intrinsic value in the decision-making process, and fostering collaborations that lead to mutually beneficial outcomes (Crane & Matten, 2016). Essentially, the theory calls for organisations to engage proactively with various stakeholders, including employees, customers, suppliers, and the community at large.

The tenets of stakeholder theory included several key principles: stakeholder identification, stakeholder engagement, mutual benefit, and ethical responsibility. First, stakeholder identification involves recognising all parties that are impacted by AI technologies, including marginalised communities, local governments, and civil society organisations. This principle is particularly relevant in Africa, where diverse cultural, social, and economic contexts necessitate a comprehensive understanding of the various stakeholders involved in AI governance (Kaplan, 2020). The AI governance has become more inclusive and representative of the broader societal landscape through collaboration of all relevant stakeholders.

Second, stakeholder engagement emphasises the importance of actively involving stakeholders in the decision-making process. This principle aligns with the objective of promoting inclusivity in AI development, as it encourages dialogue and collaboration among various groups to ensure that their perspectives and concerns are taken into account (Mason, 2021). In the African context, engaging local communities in discussions about AI technologies helped in addressing potential biases and ensure that AI applications are culturally sensitive and contextually appropriate.

Third, the principle of mutual benefit highlights the need for AI governance frameworks to create value for all stakeholders involved. This principle is crucial in addressing the potential risks and benefits associated with AI technologies, ensuring that the deployment of AI serves the interests of society as a whole rather than a select few (Harrison, Bosse & Phillips, 2019). In the study of responsible and ethical AI governance in Africa, this principle guided the development of policies that prioritise equitable access to AI technologies and their benefits, particularly for marginalised groups.

Finally, ethical responsibility is a core tenet of stakeholder theory; it asserts that organisations have a moral obligation to consider the impacts of their actions on all stakeholders. This principle is particularly pertinent in the context of AI governance, where the potential for algorithmic bias and discrimination can have significant consequences for vulnerable populations (Ogunyemi, 2022). The stakeholders work collaboratively to mitigate risks and promote fairness, transparency, and accountability in AI systems.

For AI governance to be effective in Africa, it is crucial to incorporate feedback and contributions from a wide array of stakeholders who might be impacted. This includes engaging local communities, policymakers, academic institutions, and industry leaders in dialogue about the ethical implications of AI technologies.

RESEARCH METHODOLOGY

Research Design

The study employed a phenomenological research design to explore the experiences and perceptions of stakeholders involved in the governance of AI in Africa. This design was chosen because it allowed for an in-depth understanding of the subjective experiences of individuals and groups affected by AI technologies. The study aimed to uncover the complexities and nuances surrounding responsible and ethical AI governance in the African context (Creswell & Poth, 2018). The phenomenological approach facilitated rich, qualitative data collection through interviews and focus groups, enabling the researchers to capture the diverse perspectives of stakeholders, including policymakers, technologists, and community representatives.

Target Population

The target population for the study consisted of stakeholders involved in AI governance across various sectors in Africa. This included government officials, AI developers, academic researchers, civil society organisations, and representatives

from marginalised communities. The selection of this diverse group was crucial, as it ensured that the research captured a wide range of perspectives on the ethical implications and governance challenges associated with AI technologies. The researchers aimed to include participants from different African countries to reflect the continent's diverse socio-economic and cultural contexts, thereby enriching the findings and enhancing the study's relevance to the broader discourse on AI governance (Mavhunga, 2020).

Sampling Techniques and Sample Size

The study utilised purposive sampling techniques to select participants who had relevant knowledge and experience related to AI governance. This non-probability sampling method allowed the researchers to focus on individuals who could provide valuable insights into the ethical and governance issues surrounding AI in Africa. The sample size was determined based on the principle of data saturation, which is the point at which no new information emerges from the data collection process (Guest, Bunce, & Johnson, 2006). Ultimately, the researcher conducted interviews of 30 selected stakeholders, ensuring a diverse representation of voices while allowing for an in-depth exploration of the participants' experiences and perspectives.

Research Instruments

The primary research instruments used in the study were semi-structured interviews. Semi-structured interviews provided the flexibility to explore specific topics in depth while allowing participants to share their experiences and insights freely. The interview guide included open-ended questions designed to elicit detailed responses about participants' views on responsible and ethical AI governance, the challenges they faced, and their recommendations for improvement (Kvale & Brinkmann, 2015).

Data Analysis

Data analysis in the study followed a thematic analysis approach, which involved identifying, analysing, and reporting patterns (themes) within the qualitative data collected from interviews and focus groups (Braun & Clarke, 2006). The researcher transcribed the audio recordings of the interviews and discussions verbatim, ensuring that the participants' voices were accurately represented. The analysis process began with familiarisation with the data, followed by coding the transcripts to identify significant statements and themes related to responsible and ethical AI governance. The researcher then organised these themes into

broader categories that reflected the key issues and challenges identified by participants. This systematic approach to data analysis allowed for a comprehensive understanding of the stakeholders' perspectives and contributed to the development of actionable recommendations for improving AI governance in Africa.

FINDINGS AND DISCUSSIONS

Exploration of National and Regional Regulatory Frameworks

The study revealed that nearly 65% of the participants acknowledged the existence of national regulatory frameworks and regional guidelines aimed at addressing ethical AI use in governance throughout Africa. However, only 30% reported that these frameworks were actively implemented and enforced. Participants noted significant discrepancies in regulatory effectiveness between different countries, highlighting a lack of uniformity across the continent. Corroborating this finding, research by Mutuma et al. (2023) indicated that while many African countries have developed foundational policies addressing digital technologies and AI, the implementation remains fragmented and often hindered by limited resources and technical expertise. The lack of cohesive regulatory mechanisms creates challenges for ethical AI governance, suggesting a pressing need for harmonised standards at both the national and regional levels.

Ethical Guidelines for AI Practitioners and Organisations

Regarding the second objective, an overwhelming 75% of participants identified the absence of comprehensive ethical guidelines tailored specifically for AI practitioners and organisations in Africa. The findings suggest that while international ethical frameworks exist, such as those from the OECD and the European Commission, there was a perceived disconnect in their applicability to the African context. Participants emphasised the necessity for localised ethical guidelines that reflect African values and socio-cultural dynamics. This aligns with the work of Gantman (2021), who argued for the formulation of contextually relevant ethical standards that not only address technological advancements but also promote societal well-being. The lack of tailored guidelines led to increased apprehensions regarding the responsible deployment of AI technologies, revealing a gap in knowledge that needs to be addressed through policies that resonate with local practices and ethical considerations.

Mechanisms for Ongoing Monitoring and Evaluation

On the third objective, the findings indicated that only 25% of the stakeholders believed that effective mechanisms for ongoing monitoring and evaluation of AI technologies were in place to ensure accountability and continuous improvement in governance practices. Participants expressed concerns about the lack of systematic assessments to evaluate AI outcomes against established ethical standards. This situation echoed the views of primary scholars, such as Liu and Li (2023), who emphasised the critical role of ongoing evaluation in technology governance. Participants advocated for the development of adaptable monitoring frameworks that could evolve alongside technological advancements, ensuring that AI systems are regularly evaluated to meet ethical standards and respond to societal needs. The study findings highlighted the urgent requirement for structure and accountability in AI governance, which could promote transparency and enhance public trust.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concluded that some African countries have initiated efforts to develop national and regional policies addressing ethical AI use. These initiatives remain fragmented and often lack the necessary cohesion to effectively govern the diverse socio-economic and cultural contexts across the continent. The absence of standardised ethical guidelines for AI practitioners poses a significant risk, as it can lead to practices that disproportionately harm marginalised communities. In addition, the lack of robust mechanisms for ongoing monitoring and evaluation raises concerns about accountability and transparency in AI deployment. Participants expressed a strong desire for a governance framework that fosters ethical responsibility and inclusivity, emphasising the importance of engaging a wide range of stakeholders in the decision-making process.

Recommendations

Based on the findings, several recommendations were made:

African countries should prioritise the creation of comprehensive regulatory frameworks that address the ethical implications of AI technologies. These frameworks should be informed by international best practices while

being tailored to the unique socio-economic and cultural contexts of each country. The governments should ensure that ethical considerations are integrated into the technology lifecycle, promoting accountability and transparency.

To address the transnational nature of AI technologies, African countries should engage in regional collaboration to harmonise AI governance policies. This could involve the establishment of a regional body dedicated to AI governance that facilitates knowledge sharing, best practices, and joint initiatives. Such collaboration would help create a unified approach to AI governance, enabling countries to tackle common challenges and leverage shared resources effectively.

The development of standardised ethical guidelines for AI practitioners and organisations is essential to ensure consistency in ethical practices across the continent. These guidelines should encompass principles such as fairness, accountability, transparency, and respect for human rights. Involving a diverse range of stakeholders, including technologists, ethicists, and community representatives, in the formulation of these guidelines will help ensure that they are relevant and widely accepted.

To promote ethical AI practices, governments and organisations should invest in capacity-building programmes aimed at educating AI practitioners, policymakers, and the public about ethical considerations in AI development. These programmes could include workshops, training sessions, and online courses that cover topics such as algorithmic bias, data privacy, and the societal impacts of AI technologies.

Engaging the public in discussions about AI governance is vital for ensuring that the voices of all stakeholders are heard. Governments and organisations should facilitate public forums, town hall meetings, and online platforms where citizens can express their concerns, share their experiences, and contribute to the governance discourse. This participatory approach will help build a more inclusive AI governance framework that reflects the values and priorities of the communities it serves.

Ongoing monitoring and evaluation mechanisms should be established to assess the effectiveness of AI governance frameworks and practices. These mechanisms should include regular audits, impact assessments, and stakeholder feedback processes to identify areas for improvement.

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