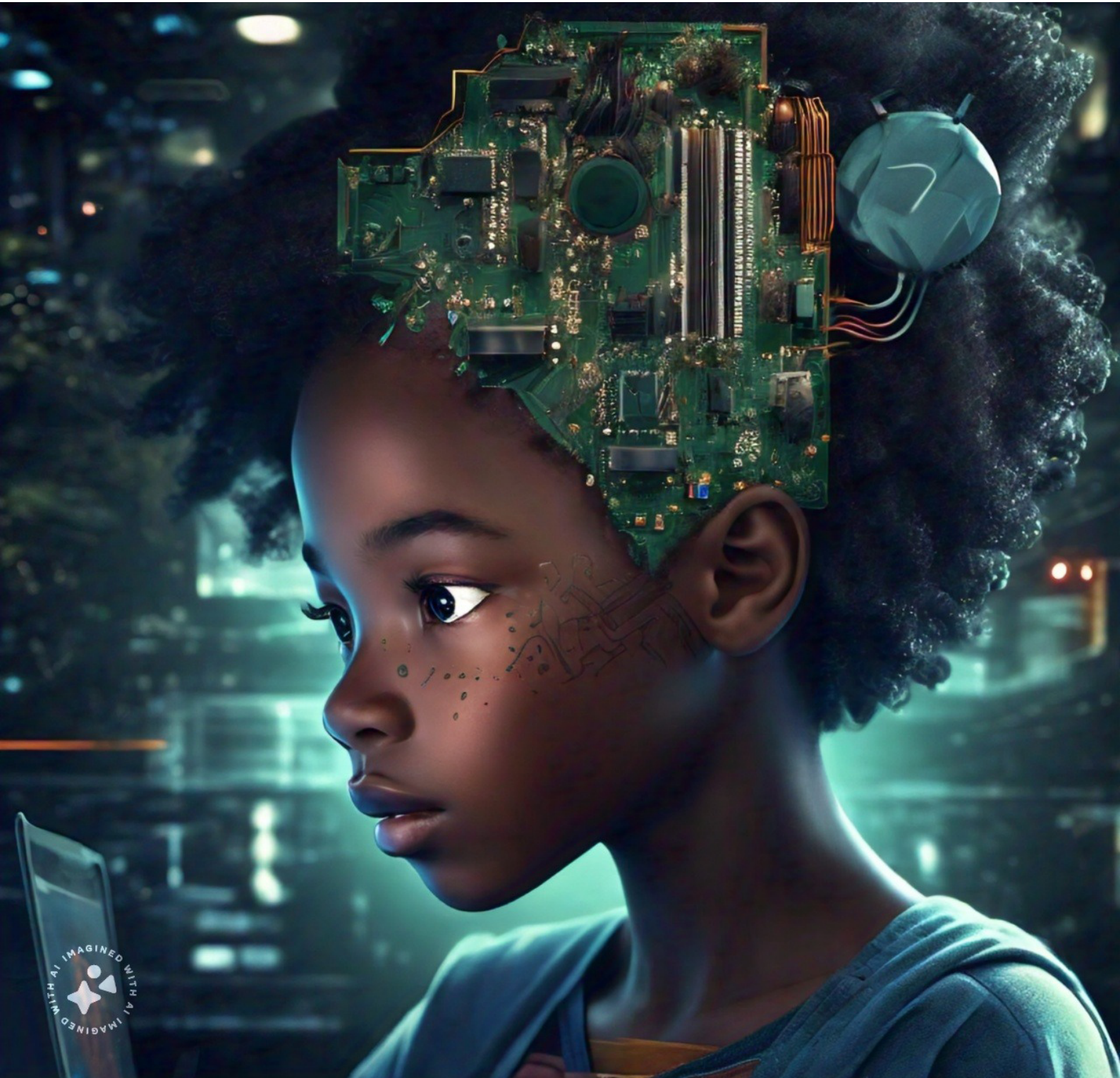


Artificial Intelligence for Inclusive Development:

Guiding Kenya's Policy Landscape

A Policy Brief



KICTANet
The Power of Communities

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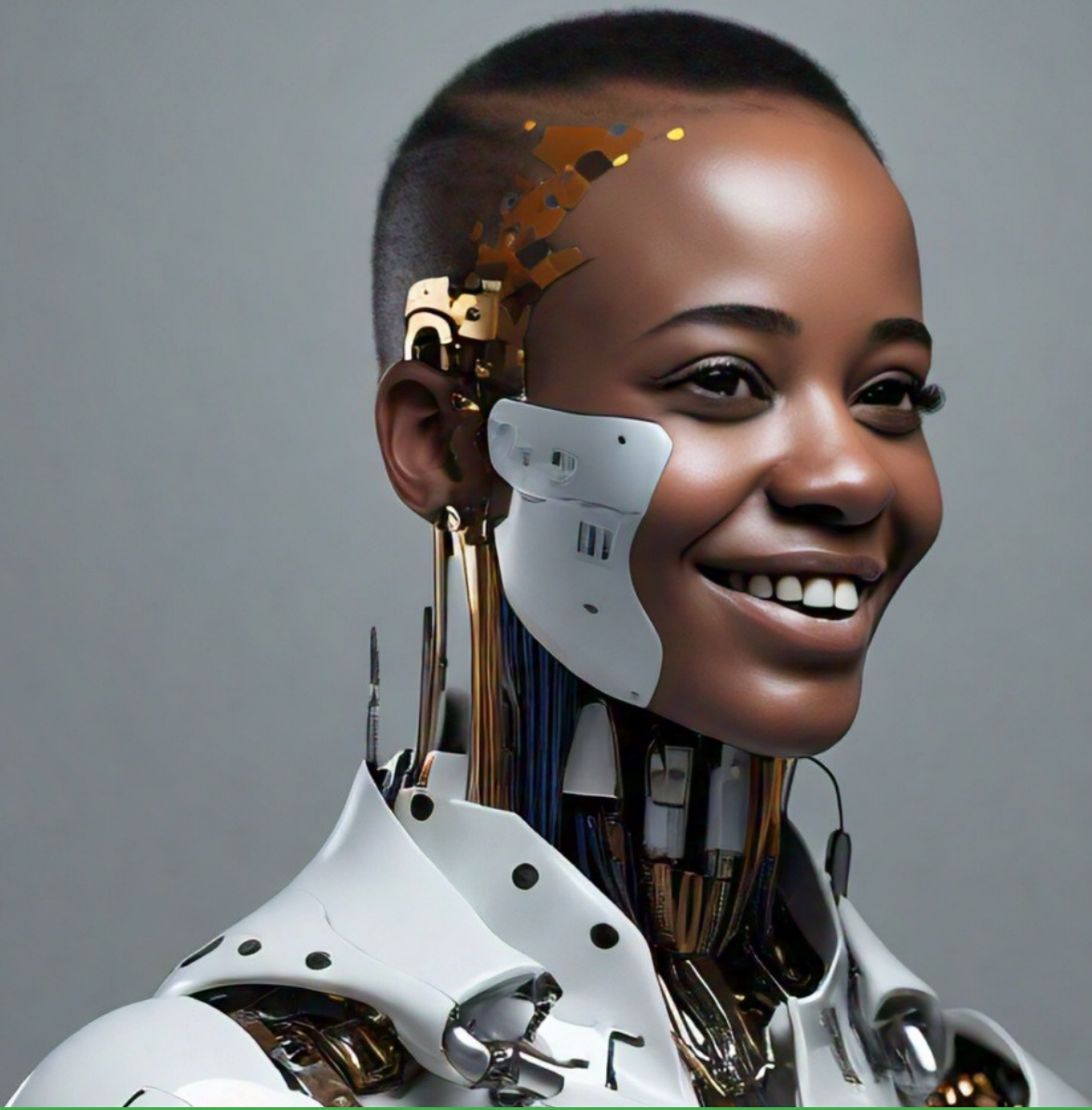


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Executive Summary

As Kenya ventures into the realm of artificial intelligence (AI), the nation encounters a crucial juncture where the transformative potential of AI must be harnessed, balanced with a vigilant policy approach to avoid potential pitfalls.

This policy brief underscores the imperative for Kenya to establish a robust and adaptive framework that facilitates the responsible and inclusive development of AI technologies.

The challenges faced by Kenya are multifaceted, ranging from the need to address algorithmic biases to ensure transparent and ethical AI deployment and the lack of access to necessary technology and funding to implement AI technologies.

One of the primary challenges is the cultivation of a skilled workforce equipped to navigate and contribute meaningfully to the evolving AI landscape. This executive summary provides an overview of the key policy actions proposed in the subsequent sections of this brief.

The proposed policy actions are centered on the development of a comprehensive national AI strategy, fostering collaborative efforts among diverse stakeholders, creating adaptive regulatory frameworks, and prioritizing open data, education, and skills development.

A strategic and cohesive national AI strategy will serve as the linchpin for guiding AI initiatives in Kenya. Multi-stakeholder collaboration is identified as pivotal, emphasizing the active involvement of government bodies, industry players, academic institutions, civil society, and international partners.

Adaptive regulatory frameworks are crucial for addressing the dynamic nature of AI technologies. Striking a balance between encouraging innovation and ensuring ethical considerations is a key facet of these frameworks. Unlocking public sector data that is held in ministry silos and often in non-digital formats would trigger localized AI solutions.

Additionally, Private Sector data should also be unlocked. For example, mobile telecom operators have data that comes from machine-generated-mobile phone signals that are not commercially useful to them but could be shared with and useful to the Ministry of Transport to address traffic jams.

Prioritizing education and skills development emerges as a foundational element. Integrating AI education into formal curricula at all educational levels and fostering specialized training programs for professionals will be instrumental in preparing a skilled workforce capable of steering Kenya's AI landscape.

In summary, this policy brief, advocates for a holistic approach that synergizes the proposed policy actions to propel Kenya into a leadership role in the responsible, inclusive, and innovative development and deployment of AI technologies. By adopting these measures, Kenya can mitigate potential challenges and position itself at the forefront of the global AI landscape, contributing to advancements in the field while safeguarding ethical considerations and societal well-being.



Integrating AI education into formal curricula at all educational levels and fostering specialized training programs for professionals will be instrumental in preparing a skilled workforce capable of steering Kenya's AI landscape.

Background

KICTANet through its Thought Leadership Forum series and in partnership with Meta Platforms Inc. hosted a roundtable “Policy Discussion on Artificial Intelligence (AI) in Kenya” which took place on Thursday, 16 November 2023, in Nairobi, Kenya.

The event was a half-day roundtable meeting with a keynote speech by the Principal Secretary of the State Department of ICT and Digital Economy Ministry, followed by expert presentations, panel discussions, and plenary sessions among the stakeholders present.

The 56 participants who attended the roundtable included relevant local actors drawn from the government, including relevant agencies and departments, the private sector, the technical community, development partners, academia, media, development partners, civil society, and

other non-governmental actors.

The objective of the roundtable was to provide a platform for dialogue and engagement on the potential harm, concerns, and opportunities arising from the use and development of artificial intelligence in Kenya. It was also an opportunity to identify priority policy actions and potential solutions to promote an enabling environment for AI development and use in Kenya.

The outcomes were to identify priority policy actions, potential solutions, and best practices; and facilitate an enhanced understanding and engagement on the concerns and opportunities of artificial intelligence in Kenya.

The meeting resulted in this policy brief outlining the key policy issues and proposed recommendations to various stakeholders moving forward.

In Kenya's ambitious journey towards technological advancement, the integration of artificial intelligence (AI) ¹ emerges as both a beacon of promise and a terrain fraught with challenges. As we stand at the intersection of innovation and responsibility, a clear understanding of the problem is paramount for formulating effective policy solutions.

a) The Pervasiveness of Bias:

One of the central challenges in Kenya's AI landscape is the pervasive issue of bias within AI systems. ² AI algorithms, trained on historical data, often perpetuate and even amplify existing biases present in that data.

This bias can manifest in various forms, from reinforcing gender and racial stereotypes to creating discriminatory outcomes in areas like hiring, lending, and law enforcement.

b) Transparency and Accountability:

Another critical facet of the problem revolves around the lack of transparency and accountability in AI systems. ³ The inherent complexity of AI algorithms, often referred to as "black boxes," raises concerns about how decisions are made.

This opacity not only challenges the understanding of end-users but also poses a significant hurdle in holding developers and organizations accountable for the outcomes of AI systems.

c) Skills Gap and Workforce Readiness:

Kenya's workforce is grappling with a notable skills gap in AI-related fields. ⁴ The rapid evolution of AI technologies requires a dynamic and well-prepared workforce.

Without adequate education and training programs, professionals may find themselves ill-equipped to navigate the nuances of AI, hindering the country's ability to fully harness the potential of these technologies.

d) Ethical Considerations and Societal Impact:

Beyond technical challenges, ethical considerations loom large. The societal impact of AI, if not managed responsibly, can exacerbate existing inequalities and introduce new ethical dilemmas. ⁵

From job displacement due to automation to concerns about privacy infringement, the stakes are high, demanding a comprehensive approach that safeguards both individual rights and societal well-being.

e) The Urgency of Policy/Regulation:

While grappling with these challenges, Kenya finds itself at a crossroads regarding the regulation of AI. ⁶ The absence of a clear and adaptive policy and regulatory framework leaves room for potential misuse and unintended consequences.

1. Algorithmic transparency and accountability Author(s): Niklas Kossow, Svea Windwehr and Matthew Jenkins Transparency International (2021) https://link.springer.com/chapter/10.1007/978-3-031-21448-6_2#:~:text=A%20common%20definition%20of%20AI,imitate%20various%20complex%20human%20skills

2. Trustworthy AI in the Age of Pervasive Computing and Big Data <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9156127>

3. Algorithmic transparency and accountability <https://www.jstor.org/stable/pdf/resrep30838.pdf>

4. Artificial Intelligence for Africa: An Opportunity for Growth, Development, and Democratisation https://pic.strathmore.edu/wp-content/uploads/2019/03/PIC_AI_for_Africa_Whitepaper.pdf

5. Artificial Intelligence Practitioners' Guide: Kenya <https://www.data4sdgs.org/sites/default/files/2023-04/AI%20Practitioners%20Guide%20Kenya.pdf>

6. Artificial Intelligence in Kenya <https://paradigmhq.org/wp-content/uploads/2022/02/Artificial-Intelligence-in-Kenya-1.pdf>

The question of when and how to regulate AI is a pressing concern, especially as other nations, such as Egypt, Mauritius, and Rwanda, forge ahead with comprehensive national AI strategies.⁷

f) Cutting-edge hardware technology and funding:

To train AI models, one needs serious compute (GPUs) and storage capacities (data centers), both of which Kenya does not have and so they lease from global tech companies.⁸ This may require adequate funding from private sector investors, or government subsidies if they want to have local AI innovations.

g) Access to data sets:

AI models need large data sets to be meaningful.⁹ The rest of the developing world holds large datasets in the hands of government agencies (often in non-digital formats), and private sector players like hospitals, and transport and telecommunication companies.

This is probably the reason Western AI models have biases as they lack local nuances for developing regions. This data can trigger localized AI solutions.

f) Why It Matters:

The ramifications of not effectively addressing these challenges are multifaceted. On the economic front, Kenya risks falling behind in the global AI race, missing out on the potential economic growth and job creation that AI can stimulate.

Moreover, the ethical implications of unchecked AI development could erode public trust and exacerbate social inequalities, undermining the very fabric of a cohesive and inclusive society.

The following sections further underscore why AI matters;

a) Societal Transformation:

AI is not merely a technological advancement; it signifies a profound societal transformation.¹⁰ From revolutionizing industries to influencing governance and healthcare, the impact of AI extends to the very fabric of society.¹¹ Navigating this transformation responsibly is crucial for ensuring that the benefits are inclusive and equitable.

b) Global Competitiveness:

Countries with well-defined AI strategies and adaptive regulatory frameworks are positioning themselves as global leaders in AI innovation. For Kenya to compete on the international stage and attract investments, it is essential to establish a conducive environment for AI development.¹²

c) Ethical Imperative:

Beyond economic considerations, there is an ethical imperative to guide the development and deployment of AI. Ensuring fairness, transparency, and accountability in AI systems¹³ is not just a technological necessity but a moral obligation to protect the rights and well-being of individuals.

In essence, the problem underscores the urgency of action. It is not merely a technical challenge but a societal imperative to navigate the complexities of AI integration in a manner that ensures responsible development, safeguards against biases, and prepares the workforce for the digital future.

The ensuing sections of this policy brief delve into proposed solutions and policy actions aimed at addressing these challenges comprehensively,

7. AI in Africa: Key Concerns and Policy Considerations for the Future of the Continent https://afripoli.org/uploads/publications/AI_in_Africa.pdf

8. Artificial intelligence national strategy in a developing country | AI & SOCIETY <https://link.springer.com/article/10.1007/s00146-023-01779-x>

9. Making AI meaningful again <https://link.springer.com/article/10.1007/s11229-019-02192-y>

10. How artificial intelligence is transforming the world <https://www.brookings.edu/articles/how-artificial-intelligence-is-transforming-the-world/>

11. The transformative potential of artificial intelligence <https://www.sciencedirect.com/science/article/pii/S0016328721001932>

12. Ibid

13. Ethics of Artificial Intelligence <https://www.unesco.org/en/artificial-intelligence/recommendation-ethics>

As Kenya stands on the cusp of the Artificial Intelligence (AI) era, it becomes imperative to unravel the multifaceted layers that constitute the country's AI trajectory.

This section offers an in-depth exploration of the background factors that shape Kenya's current AI landscape, providing the necessary context to comprehend the challenges and opportunities that necessitate thoughtful policy interventions.

a) The Digital Evolution:

Kenya has been at the forefront of digital evolution, with the widespread adoption of mobile technology revolutionizing various sectors.¹⁴ The success story of mobile money, exemplified by M-Pesa, has positioned Kenya as a global leader in innovative digital solutions.

This digital leap forms a crucial backdrop to the integration of AI technologies, as the nation's technological foundation provides a fertile ground for AI-driven innovations.

b) The Emergence of AI Technologies:

While AI is not a recent entrant into Kenya's technological narrative, the recent surge in AI technologies globally has prompted a reevaluation of its role and impact.

From chatbots enhancing customer service to machine learning applications in healthcare, AI is progressively becoming intertwined with

Kenya's technological landscape.^{15,16} However, this integration is not without its challenges, warranting a strategic and comprehensive policy response.

c) The Global and Regional AI Landscape:

Understanding Kenya's position in the global and regional AI landscape is pivotal. While global tech giants are leading the AI race, Kenya has a unique opportunity to carve its niche by leveraging AI for local problem-solving and sustainable development. Regional collaborations, such as the partnerships within the East African Community (EAC), offer avenues for shared learning and coordinated approaches to AI governance.

d) Policy Frameworks and Digital Transformation:

Kenya's digital aspirations are encapsulated in various policy documents, including the National ICT Policy¹⁷ and the Digital Economy Blueprint¹⁸, the Blockchain & AI (2019) Report¹⁹.

These frameworks articulate the government's commitment to harnessing technology for economic growth and societal advancement. However, as AI introduces novel challenges, the existing policy landscape requires augmentation to ensure a harmonious and inclusive transition into the AI era.

e) Technological Disparities and Inclusivity:

A critical aspect that demands attention is the digital divide within Kenya. While urban centers may experience accelerated AI adoption, rural

14. Kenya National Digital Master Plan 2022-2032

<https://cms.icta.go.ke/sites/default/files/2022-04/Kenya%20Digital%20Masterplan%202022-2032%20Online%20Version.pdf>

15. Ibid

16. The State of AI in Africa Report 2023 <https://cipit.strathmore.edu/wp-content/uploads/2023/05/The-State-of-AI-in-Africa-Report-2023-min.pdf>

17. National Information, Communications and Technology (ICT) Policy

<https://www.ict.go.ke/wp-content/uploads/2019/12/NATIONAL-ICT-POLICY-2019.pdf>

18. Digital Economy Blueprint <https://www.ict.go.ke/wp-content/uploads/2019/05/Kenya-Digital-Economy-2019.pdf>

19. Emerging Digital Technologies for Kenya EXPLORATION & ANALYSIS 2019 report <https://www.ict.go.ke/blockchain.pdf>

20. Assessing the Digital Divide. Understanding internet connectivity and digital literacy in cities and communities

https://unhabitat.org/sites/default/files/2021/11/assessing_the_digital_divide.pdf

areas face challenges of access and digital literacy.²⁰ Bridging these disparities is not only an ethical imperative but also aligns with the principle of inclusive AI development. Policy interventions must address these discrepancies to avoid exacerbating societal inequalities.

f) The Role of Stakeholders:

Kenya's AI journey is a collective endeavor that involves a myriad of stakeholders.²¹ The government, industry players, academia, civil society, and international partners play pivotal roles in shaping the AI landscape. Recognizing and harnessing the synergies among these stakeholders is fundamental to the success of any AI policy. Engaging in open and continuous dialogue ensures diverse perspectives are considered, fostering a holistic and adaptive policy environment.

g) Global Lessons and Best Practices:

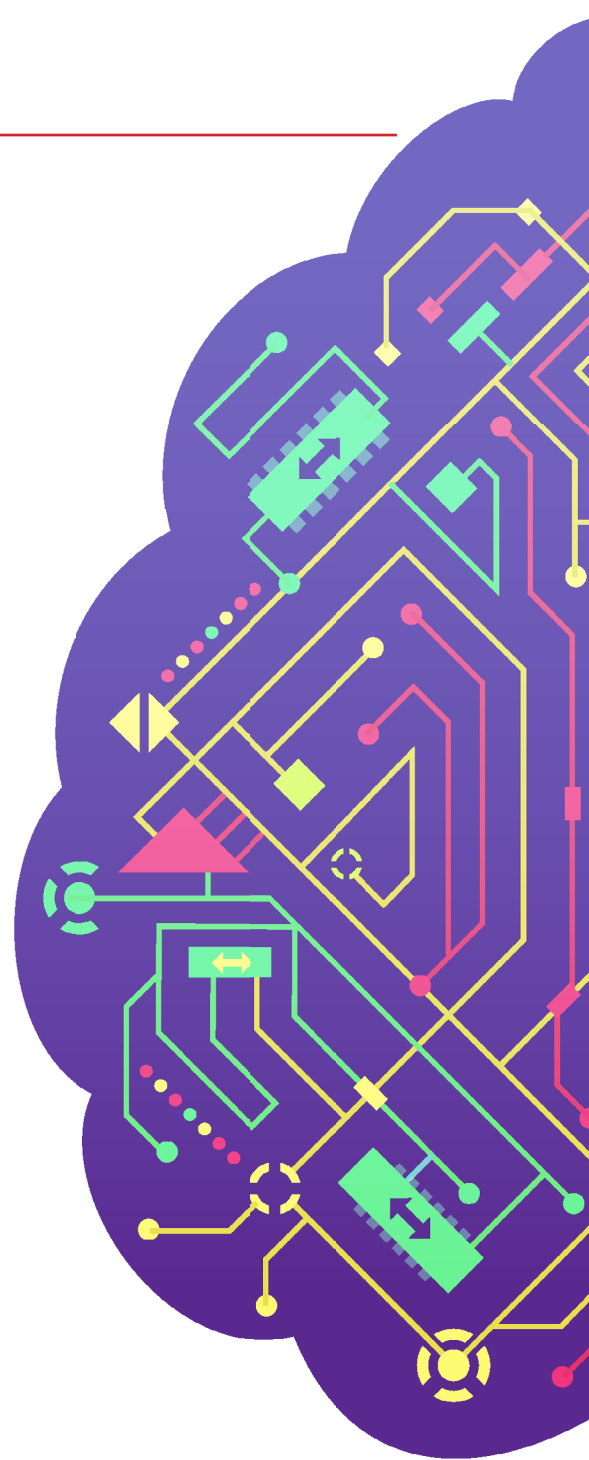
Drawing inspiration from global AI governance models provides Kenya with valuable insights. Models such as the European Union's General Data Protection Regulation (GDPR)²² and Canada's Pan-Canadian AI Strategy²³ offers lessons in balancing innovation with ethical considerations. By aligning with international best practices, Kenya can navigate the complexities of AI governance and establish itself as a responsible player in the global AI ecosystem.

h) Economic Impacts and Job Reskilling:

The integration of AI technologies is poised to reshape the economic landscape, with potential impacts on employment patterns.²⁴ A proactive approach to reskilling the workforce and aligning education systems with the demands of the AI era is crucial.

Balancing the economic benefits of AI with strategies to minimize job displacement forms a delicate policy challenge that requires foresight and adaptability.

The subsequent sections delve into proposed policy actions, recognizing that a nuanced understanding of this context is imperative for the formulation of policies that are not only effective but also tailored to Kenya's unique socio-economic fabric.



²¹. *ibid*

²². European Union. "General Data Protection Regulation (GDPR)." <https://gdpr.eu>

²³. Government of Canada. "Pan-Canadian AI Strategy." <https://www.cifar.ca/ai/pan-canadian-ai-strategy>

²⁴. *ibid*

Kenya, like many countries venturing into the realm of AI, is grappling with the challenge of formulating policies that strike a delicate balance between fostering innovation and safeguarding against potential risks.

The current policy landscape is marked by a mix of overarching digital strategies and sector-specific regulations that, while laying a foundation, may not comprehensively address the nuances of AI development. Here, we dissect the existing policies, shedding light on their strengths and identifying gaps that necessitate focused attention.

a) National ICT Policy:

Kenya's National Information Communication Technology (ICT) Policy²⁵ serves as a guiding framework for the country's digital agenda. Enacted in 2006 and later revised in 2016, the policy primarily focuses on creating an enabling environment for the growth of the ICT sector.

While it recognizes the importance of emerging technologies, including AI, its broad scope necessitates complementary, targeted policies to address the unique challenges posed by AI.

b) Digital Economy Blueprint:

The Digital Economy Blueprint,²⁶ launched in 2019, outlines Kenya's vision for harnessing digital technologies to drive economic growth. It identifies AI as a key enabler and emphasizes the need to

build capacity, foster innovation, and create an inclusive digital economy.

However, the blueprint primarily provides a high-level strategic direction and lacks specific policy measures for the responsible development and deployment of AI.

c) Taskforce on Distributed Ledgers Technology and Artificial Intelligence:

In response to the evolving digital landscape, the Kenyan government established the Taskforce on Distributed Ledgers Technology and Artificial Intelligence.²⁷

This task force, initiated in 2019, was entrusted with the responsibility of providing recommendations for the formulation of policies and regulatory frameworks for emerging technologies including Blockchain and AI. While a step in the right direction, the task force's recommendations are yet to be fully translated into concrete policies.

d) Data Protection Act:

The Data Protection Act,²⁸ enacted in 2019, is a critical component of Kenya's regulatory framework, especially concerning AI's reliance on vast amounts of data.

The Act establishes principles for the lawful processing of personal data, including provisions for obtaining consent, data subject rights, and measures for ensuring data security.

25. *Ibid*

26. Kenya Digital Economy Blueprint <https://www.ict.go.ke/wp-content/uploads/2019/05/Kenya-Digital-Economy-2019.pdf>

27. *Ibid*

28. Kenya gazette data protection Act 2019

<https://www.odpc.go.ke/download/kenya-gazette-data-protection-act-2019/?wpdmdl=3235&refresh=656f31ab6c8d41701786027>

However, the Act is not tailored explicitly to the intricacies of AI, barely addressing issues like algorithmic transparency and accountability. Furthermore, it is limited to personal data while AI data sets go beyond personal data and includes non-personal data.

e) Kenya Robotics and AI Bill:

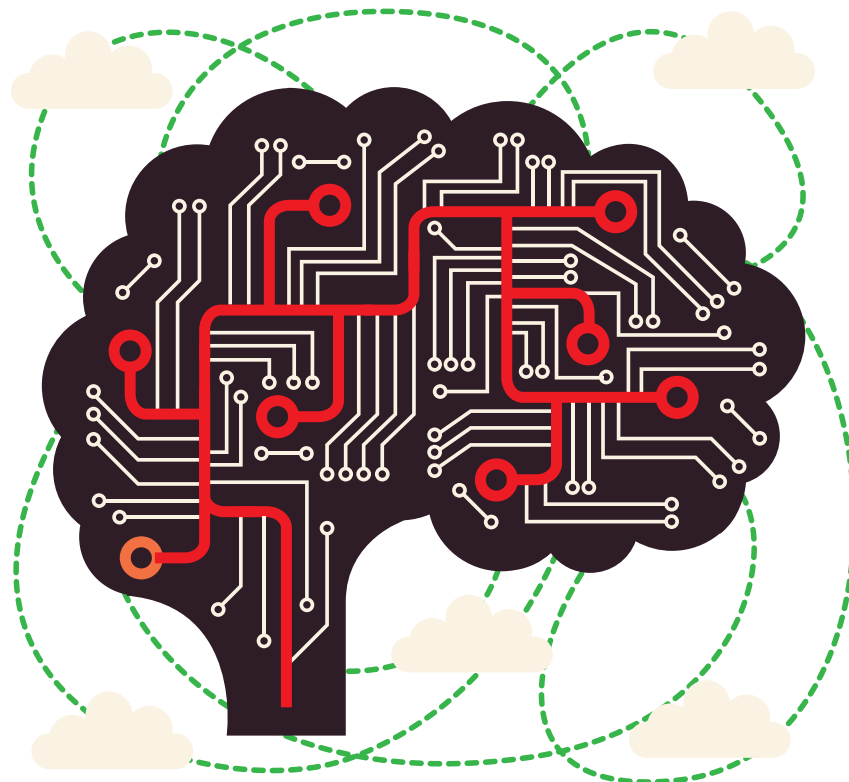
The Kenya Robotics and AI Bill,²⁹ in its nascent stages, aims to provide a regulatory framework for the development and deployment of robotics and AI technologies.

While it is an attempt toward specific AI-related legislation, this bill seeks to control and even stifle AI and innovation. It proposes a money bill and is rent-seeking from innovators going by the proposed high penalties for those who will not register with the proposed Robotics Society of Kenya. In addition, stakeholders are still trying to comprehend AI and its implications for different things.

Therefore, the effectiveness of this bill will depend on its ability to keep pace with the rapidly evolving landscape of AI technologies and address the diverse applications across sectors. Furthermore, the nascent stage of AI development in Kenya is more suitable for soft law (principles & guidelines), rather than a full-blown Act of Parliament to steer the sector.

Finally, regulation should follow innovation and not the other way around. This bill could hold back a nascent sector by reducing the flow of private investment, locking young people out of opportunities, and undermining Kenya's 'Silicon Savannah' reputation.

The bill in its current form fails to address key issues such as data protection, privacy, and the potential misuse of AI technology.



²⁹ The Kenya Robotics and Artificial Intelligence Society Bill 2023

https://www.dataguidance.com/sites/default/files/the_kenya_robotics_and_artificial_intelligence_society_bill_2023.docx.pdf

Policy Recommendations:

Forging Kenya's Path to Responsible AI Leadership

In charting the course for Kenya's foray into the realm of AI, it is imperative to translate aspirations into tangible policy actions that navigate the nuanced landscape of AI development.

The proposed policy recommendations presented herein encapsulate a holistic approach, addressing the complexities of AI while laying the groundwork for responsible, inclusive, and innovative AI development in Kenya.

a) Comprehensive National AI Strategy: A Blueprint for AI Excellence

The cornerstone of Kenya's AI policy framework must be the formulation and implementation of a Comprehensive National AI Strategy. This strategy, developed through a multi-stakeholder approach involving government, industry, academia, civil society, and international partners, will serve as a guiding document for the entire AI ecosystem.

The strategy should articulate a clear vision, mission, and a set of strategic goals that align with Kenya's broader development objectives.

Key Components of the National AI Strategy:

i. Vision and Mission:

Clearly articulate the envisioned role of AI in Kenya's development, emphasizing its potential to drive economic growth, enhance public services, and address societal challenges.

ii. Strategic Goals and Milestones:

Define specific, measurable, achievable, relevant, and time-bound (SMART) goals for AI development in Kenya. These goals should encompass aspects such as research and development, education and skills development, ethical guidelines, economic impacts, and international collaboration.

iii. Stakeholder Engagement Plan:

Detail a comprehensive approach to stakeholder engagement, ensuring that diverse perspectives are considered in the strategy's development, implementation, and evolution.

iv. Monitoring and Evaluation Framework:

Establish robust mechanisms for monitoring the progress of the strategy, conducting regular assessments, and adapting goals and actions based on evolving technological, economic, and societal landscapes.

v. Resource Allocation:

Clearly outline the budgetary and resource allocations required for the successful implementation of the strategy, encompassing funding for research, education, infrastructure, and collaborative initiatives.

b) Multi-Stakeholder AI Advisory Board: Nurturing Inclusive Decision-Making

To ensure the strategy's effectiveness and relevance, the establishment of a dedicated Multi-Stakeholder AI Advisory Board is paramount.

This board should comprise representatives from government, industry, academia, civil society, and international organizations, fostering collaboration, diversity of thought, and inclusive decision-making.

Functions of the AI Advisory Board:

i. Policy Guidance: Provide expert guidance on the development and refinement of AI policies, ensuring they align with ethical principles, international best practices, and Kenya's unique socio-economic context.

ii. Knowledge Exchange:

Facilitate continuous knowledge exchange among stakeholders, promoting a deep understanding of AI's implications, opportunities, and challenges.

iii. Oversight and Accountability:

Serve as a mechanism for overseeing the implementation of AI policies, holding stakeholders accountable for their commitments, and recommending adjustments based on real-world experiences.

iv. Public Engagement:

Act as a bridge between the AI ecosystem and the public, promoting transparency, understanding, and trust through regular communication and engagement initiatives.

c) Adaptive Regulatory Framework: Navigating the Dynamics of AI Evolution

Recognizing the fast-paced evolution of AI technologies, Kenya should adopt an adaptive regulatory framework.

Traditional, static regulations may not adequately address the dynamic nature of AI applications, necessitating a framework that can evolve in tandem with technological advancements and emerging challenges.

Components of the Adaptive Regulatory Framework:

i. Regular Review and Updates:

Incorporate mechanisms for regular reviews of AI policies, ensuring they remain relevant, effective, and aligned with evolving ethical standards and technological capabilities.

ii. Agile Regulatory Authority:

Enhance existing regulatory authorities like the Communications Authority of Kenya, or the Office of the Data Protection Commissioner to be responsible for overseeing AI development and deployment. This authority should possess

the agility to respond promptly to emerging issues, enforce compliance, and collaborate with stakeholders for continuous improvement.

iii. Stakeholder Consultations:

Prioritize ongoing consultations with stakeholders, including industry players, researchers, and civil society, to gather insights, address concerns, and integrate diverse perspectives into regulatory decisions.

iv. Ethical Impact Assessments:

Integrate ethical impact assessments into the regulatory process, ensuring that AI applications are scrutinized for potential biases, discrimination, and societal impacts before deployment.

v. International Alignment:

Align regulatory efforts with international standards and collaborate with global partners to contribute to the development of ethical norms and regulatory best practices on the international stage.

d) Ethical AI Principles: Building Trust in AI Systems

Embedding ethical considerations into AI development is non-negotiable. Establishing clear and comprehensive Ethical AI Principles is a fundamental policy recommendation to guide developers, organizations, and policymakers in the responsible creation and use of AI systems.

Key Tenets of Ethical AI Principles:

i. **Fairness:** Ensure that AI systems are designed and implemented without biases, treating all individuals and groups fairly and avoiding discrimination.

ii. **Transparency:** Promote openness in AI algorithms and decision-making processes, allowing stakeholders to understand how AI systems operate and reach conclusions.

iii. Accountability:

Hold developers, organizations, and users accountable for the outcomes of AI systems, establishing mechanisms for addressing errors, biases, and unintended consequences.

iv. Privacy:

Prioritize the protection of individuals' privacy rights, incorporating robust measures to safeguard data and prevent unauthorized access or misuse.

v. Inclusiveness:

Foster the development of AI technologies that consider the needs of all segments of the population, avoiding exclusionary practices and addressing the diverse requirements of different user groups.

vi. Reliability:

Ensure the reliability and safety of AI systems, minimizing risks of errors, system failures, and adverse impacts on individuals or society.

e) Education and Skills Development Initiatives: Empowering the AI Workforce

The success of Kenya's AI journey hinges on the preparedness of its workforce. Integrating AI education into formal curricula and implementing targeted skills development initiatives are critical policy recommendations to nurture a workforce ready for the demands of the AI era.

Strategic Initiatives for Education and Skills Development:

i. Curriculum Integration:

Collaborate with educational institutions to integrate AI education into formal curricula at all levels, from primary schools to universities, ensuring students acquire foundational knowledge in AI concepts and applications.

ii. Professional Training Programs:

Establish training programs for the current workforce, equipping professionals with the

skills required to adapt to evolving technological landscapes. These programs should be tailored to different industries and job roles.

iii. Industry-Academia Collaboration:

Foster collaboration between industry and academic institutions, ensuring that educational programs align with industry needs, and facilitating research initiatives that bridge the gap between theoretical knowledge and practical applications.

Universities must create curricula that speak to emerging job roles such as Data Scientists, and ML Engineers amongst others.

iv. Public Awareness Campaigns:

Launch public awareness campaigns to inform the general population about the significance of AI, its potential benefits, and the importance of continuous learning. These campaigns should demystify AI and encourage a positive and informed perspective.

f) Economic and Job Impact Mitigation: Balancing Progress and Inclusivity

The transformative potential of AI comes with concerns about job displacement and economic impacts. Mitigating these concerns requires a multifaceted approach, including reskilling programs, support for startups, and incentives for industries to adopt responsible AI practices.

Key Policy Measures for Economic and Job Impact Mitigation:

i. Reskilling and Upskilling Programs:

Implement comprehensive reskilling and upskilling programs to empower individuals with the skills needed for emerging jobs in the AI-driven economy. These programs should be accessible to workers across different sectors and skill levels.

ii. Startup Support:

Provide support mechanisms for AI startups and entrepreneurs, including access to funding,

mentorship programs, and collaborative spaces. Fostering a vibrant startup ecosystem will contribute to job creation, innovation, and economic growth.

iii. Incentives for Responsible AI Practices:

Introduce incentives for industries that adopt responsible AI practices, including measures to ensure fairness, transparency, and accountability in AI applications. Encourage businesses to prioritize ethical considerations in their AI strategies.

iv. Job Transition Support:

Implement measures to support individuals transitioning from industries heavily impacted by AI, offering guidance, financial support, and access to reskilling programs to facilitate a smooth transition to new employment opportunities.

g) International Collaboration Initiatives: Positioning Kenya on the Global AI Stage

AI development is inherently global, and Kenya's success in this domain is intricately linked to international collaboration. Actively participating in international forums, forging bilateral partnerships, and aligning with global standards are crucial policy recommendations for positioning Kenya as a responsible AI player on the global stage.

Strategic Components of International Collaboration Initiatives:

i. Participation in International Fora:

Actively engage in international fora, conferences, and collaborative initiatives focused on AI development. This participation will provide Kenya with exposure to global best practices, emerging trends, and opportunities for collaboration.

ii. Bilateral Partnerships:

Establish bilateral partnerships with leading AI nations, fostering collaboration in research, policy development, and knowledge exchange. These partnerships should be mutually beneficial, promoting the sharing of expertise and resources.

iii. **Alignment with International Standards:** Ensure that Kenya's AI policies align with established international standards and frameworks.

This alignment will enhance Kenya's credibility, facilitate interoperability with global systems, and contribute to the development of universally accepted ethical norms for AI.

iv. Contributions to Global Initiatives:

Actively contribute to global initiatives addressing the ethical, social, and economic dimensions of AI. By participating in these initiatives, Kenya can shape the discourse, share its unique perspectives, and contribute to the establishment of ethical norms on the global stage.

h) Enhancing Access to Datasets for Inclusive AI Development

The challenge of limited access to datasets in the developing world, often held by government agencies and private sector entities, poses a significant hurdle to the development of meaningful and unbiased AI models.

To address this challenge and promote inclusive AI development with localized nuances, a multi-faceted policy approach is recommended.

Key Components of Enhancing Access to Datasets:

i. National Data Accessibility Framework:

Establish a National Data Accessibility Framework that outlines guidelines for government agencies and private sector entities to share relevant datasets for AI development.

This framework should include provisions for ensuring data privacy, security, and ethical use. Government agencies should be encouraged to digitize existing datasets to facilitate accessibility.

ii. Public-Private Data Partnerships:

Encourage partnerships between public and private entities to share datasets for AI research and development. Create incentives for private sector players to collaborate with government agencies in making datasets available for AI purposes. This collaboration can be facilitated through tax incentives, research grants, or other mutually beneficial mechanisms.

iii. Data Localization Requirements:

Implement regulations that require companies operating in the country to store and share a certain portion of their datasets locally.

This can be tied to obtaining business licenses or permits, creating a symbiotic relationship where companies contribute to the development of localized AI solutions in exchange for operating in the market.

iv. Open Data Initiatives:

Launch open data initiatives to encourage transparency and accessibility of non-sensitive datasets. Government agencies should prioritize making non-sensitive data openly available to the public and the AI research community. This not only supports AI development but also fosters innovation in various sectors.

v. International Collaboration:

Engage in international collaborations to exchange best practices and explore models adopted by other countries facing similar challenges. Collaborate with international organizations and tech communities to facilitate the transfer of knowledge, resources, and technologies that support ethical and responsible data sharing.

Conclusion,

The policy recommendations outlined in this brief, collectively form a comprehensive and actionable roadmap for Kenya's journey into the AI era. By embracing these recommendations, Kenya can position itself not just as an adopter but as a leader in responsible AI development, contributing to global efforts to harness the benefits of AI while safeguarding against potential risks.

The successful implementation of these recommendations will require a concerted effort from government, industry, academia, civil society, and international collaborators, underscoring the collaborative and collective nature of the responsibility to shape Kenya's AI future.

Stakeholder Engagement:

Key Quotes from Stakeholders.

The key stakeholders drawn from the government, civil society, industry (including the top international AI players - Microsoft, Google, and Meta and Safaricom), academia, International Development Partners, and civil society participants had the following to say:

““

"We should take AI models and use them for our benefit. Even if they are generalized because we can't develop our own yet. We should relax anti-counterfeiting laws to allow the import of AI technologies."

““

Kenya is trying to play catch up with technology and policies. Do we need an AI policy, and is it the best time for us to regulate AI?"

““

"AI is going to cluster and classify data and introduce chat features, and predictions. This leaves us with questions, for example, if I build a weather prediction, who will pay a fine for a wrong prediction?"

““

"There are no laws that are focused on data extraction and mining in Africa. AI systems are running and extracting data without any regulation."

““

"There are no laws that are focused on data extraction and mining in Africa. AI systems are running and extracting data without any regulation. We need to consider extraction and mining in AI development and legislation."

““

"We have to balance opportunities with protection. We should not fight the companies giving livelihoods to our young people."

““

"Tech usually goes ahead of laws and it is difficult to find a balance between the two but there is a need for balance for the sake of the end users."

““

"Gatekeeping is not good and the technical communities should be at the forefront of the conversation."

““

AI has been around for a while in the background but now there is a front face to it. The big challenge is the lack of knowledge among customers and also the government

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"We need to structure data ecosystems in a way that builds inclusive AI for the benefit of women and people living with disabilities."

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"Oftentimes, AI developers and practitioners in unregulated markets tend to have an advantage over those operating in a more regulated environment."

““

"AI needs to be properly moderated and AI systems need to be infused with our values."

About KICTANet



KICTANet is a multi-stakeholder think tank for ICT policy and regulation whose guiding philosophy encourages synergies for ICT policy-related activities and initiatives.

The network provides mechanisms and a framework for continuing cooperation and collaboration in ICT matters among industry, technical community, academia, media, development partners, and Government. KICTANet appreciates



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