



Ministry of Foreign and
Diaspora Affairs
State Department For Foreign Affairs

DIPLOMAT'S PLAYBOOK

On Artificial Intelligence

**Shaping a Safe, Secure, Inclusive,
and Trustworthy AI Future:**

Kenya's Strategic Leadership in AI Global Diplomacy

A Publication by the Office of the
Special Envoy on Technology.



TABLE OF CONTENTS

Introduction	13	Geopolitics of AI—Kenya’s Ethical Leadership	83
		9. Geopolitics of AI: Kenya’s Ethical Leadership	84
What is Artificial Intelligence:	14	Critical AI Challenges for Kenyan Diplomats: Risks, Misuse, and Strategic Considerations	95
Kenya’s AI Policy: A Balanced Approach to Ethical and Inclusive AI Governance	16	10. Critical AI Challenges for Kenyan Diplomats	96
Core Principles	18	Opportunities of AI: Unlocking Potential and the Cost of Missed Use	109
Ethical AI and Human Rights	26	11. Opportunities of AI	110
1. Ethical, Equitable, and Inclusive AI Development	29		
2. AI and Human Rights	32	Policy Direction: Aligning AI Governance with ICT Sector Reforms	125
3. Ethical AI Anchored in International Law	37	12. Policy Direction	125
Inclusivity and Equity	40	AI Terminologies – Glossary	130
4. Inclusivity and Equity in AI Development	43		
5. Ensuring Equity in Global AI Standards	47		
Sustainable Development	50		
6. AI for Sustainable Development	53		
7. AI as a Global Public Good	60		
Digital Sovereignty and Governance	64		
8. Digital Sovereignty and AI Governance	67		



Foreword

**H.E. Musalia Mudavadi,
Prime Cabinet Secretary and Cabinet
Secretary for Foreign and Diaspora
Affairs**

In an era where Artificial Intelligence (AI) is rapidly reshaping the global landscape, its impact on international relations, economic development, and social progress cannot be overstated. AI has emerged as a critical factor in the evolving world order, influencing everything from geopolitical dynamics to the future of work and human rights. As Kenya positions itself at the forefront of technological advancement in Africa, it is imperative that our diplomats are not only well-versed in AI-related issues but also capable of articulating our nation's interests and values in global forums.



**Our vision for a Kenya,
where technology is a
key driver of economic
growth and social
inclusion.**

In the **Kenya Kwanza Manifesto**, we outlined our vision for a Kenya, where technology is a key driver of economic growth and social inclusion. Indeed, this government has committed to creating a **digital economy** that benefits all citizens by ensuring **affordable access to technology**, promoting **local innovation**, and building the capacity of our youth to excel in the global digital marketplace. This commitment is reflected in our national policy priorities, including the **Digital Economy Master Plan**, which lays the foundation for Kenya's leadership in the **Fourth Industrial Revolution**.

Kenya's leadership in global AI governance reflects these domestic priorities. Our participation in the **Global Digital Compact** and co-

sponsorship of the **UN AI Resolution** are key milestones in our journey towards ensuring that AI systems benefit the **Global South** and align with our broader vision of a **sustainable, equitable, and prosperous Kenya**.

This playbook is a testament to our commitment to shaping a **safe, secure, inclusive, and trustworthy AI future**. It will equip our diplomats with the tools they need to represent Kenya's interests in AI governance, ensuring that we remain at the forefront of global discussions on **AI for public good, fair access to AI technologies, and sustainable development**. Kenya's future is digital, and AI will be a key pillar of our success.





Foreword

Dr. Margaret Nyambura Ndungu,
Cabinet Secretary for ICT and the
Digital Economy

Kenya's commitment to building a thriving **digital economy** is rooted in our belief that **technology** is essential for driving economic growth, improving public services, and empowering our citizens. The **Digital Economy Master Plan** provides a strategic roadmap for how Kenya will leverage **Artificial Intelligence (AI)** and other emerging technologies to strengthen our economy, create jobs, and position our nation as a leader in the **Fourth Industrial Revolution**.

As outlined in the **ICT Sector Working Group Report**, Kenya has made significant strides in building the infrastructure necessary to support AI and digital innovation. We are investing in **data centers, broadband infrastructure, and capacity building** to ensure that our country is ready to harness the full potential of AI. But infrastructure alone is not enough—AI governance is equally critical. We must ensure that AI is deployed in ways that are **ethical, inclusive**, and aligned with our national development goals.

Kenya's leadership in the digital sphere extends beyond our borders, as evidenced by our active participation in key international organizations such as the International Telecommunication Union (ITU). Our engagement in these global platforms allows us to shape policies that impact the future of AI and digital technologies worldwide. As we navigate the complex landscape of AI governance, it is crucial that our diplomats work in close collaboration with technical experts to ensure that Kenya's interests are effectively represented and that our policy positions are grounded in sound technological understanding.

The Ministry of ICT and the Digital Economy plays a pivotal role in this process, spearheading the formulation of Kenya's national AI policy. This policy will serve as a cornerstone for our diplomatic efforts, providing a framework that aligns our international engagements with our domestic digital agenda.

By fostering this synergy between diplomatic expertise and technical knowledge, we are better positioned to advocate for AI systems that not only drive innovation and economic growth but also uphold our values of inclusivity, sustainability, and ethical governance.



“
We are investing in data centers, broadband infrastructure and capacity building.



Foreword

**Dr. Korir Singoei,
Principal Secretary for Foreign Affairs**

In today's AI-driven global landscape, Kenya's diplomats must be adept at articulating our nation's vision, critically engaging in AI discussions, and discerning the implications of AI initiatives to effectively represent our interests and values on the world stage.

As a proud member of the **Open Government Partnership (OGP)**, Kenya has long championed the principles of **transparency, accountability, and citizen participation** in governance. These values are equally critical in the governance of **Artificial Intelligence (AI)**. As we engage in discussions on how AI should be developed and deployed globally, we must ensure that these systems reflect the same openness and inclusivity that the **OGP** promotes.

Kenya's participation in the **Global Digital Compact** and co-sponsorship of the **UN AI Resolution** have demonstrated our commitment to **inclusive governance frameworks** for AI. We believe that **ethical AI** must be grounded in principles that respect human rights, protect citizens' data, and ensure fairness in decision-making processes. AI should not deepen inequalities but instead serve as a tool for **sustainable development** and **social justice**.

Indeed, the ability to meaningfully engage in AI discussions, critically analyze proposals, and discern the implications of various AI initiatives is now a fundamental skill for our diplomatic corps. This playbook serves as a crucial tool, empowering our representatives to navigate the complex terrain of AI diplomacy with confidence and insight.

By equipping our diplomats with a deep understanding of AI's potential and pitfalls, we ensure that Kenya's voice is heard and our interests are protected in shaping the future of this transformative technology.





Foreword

Ambassador Philip Thigo
Special Envoy on Technology

The world today stands at a pivotal moment, balancing immense promise with significant challenges. Artificial Intelligence (AI), the defining technology of our time, has the potential to unlock transformative opportunities for growth, inclusion, and innovation. Yet, with its power comes the critical responsibility to ensure it serves humanity's highest ideals—justice, equity, and sustainability.

Kenya has emerged as a global advocate for this responsible approach to AI, underpinned by the visionary leadership of H.E. President William Ruto. His deliberate strategy to anchor Kenya's transformation agenda on a responsive, inclusive, and green digital economy reflects a forward-looking commitment to leveraging technology for the common good. This approach not only drives innovation but also ensures that progress is shared equitably and aligned with environmental sustainability. Further emphasizing Kenya's leadership in this space, President Ruto's appointment of Africa's first-ever Special Envoy on Technology has positioned the nation as a trailblazer among leading technology economies.

Kenya's participation in global AI governance is about influencing technology—it is about shaping the future. As one of the first African nations to actively contribute to the UN High-Level Advisory Body on AI, we have played a key role in developing critical recommendations to govern AI in ways that uphold humanity's shared interests.

Our message in these discussions is clear: AI must be guided by principles of fairness, transparency, and inclusivity. It must empower the Global South, addressing the structural inequalities that have too often marginalized developing nations.

This playbook is a vital tool for our diplomats, enabling them to articulate Kenya's unified position in global AI discussions. It equips them to advocate for AI-driven public goods, ensure equitable access

to AI technologies, and champion ethical AI governance that serves everyone—particularly the most vulnerable. AI must serve the many, not the few, and be harnessed to address global challenges like climate change, education, and healthcare, rather than exacerbating them.

I encourage every Kenyan diplomat to use this playbook as a guide to ensure that our nation continues to lead in advocating for AI as a force for public good. Through our collective efforts, we can shape a future where AI uplifts humanity, leaving no one behind.



Acknowledgements:

This playbook would not have been possible without the invaluable contributions of numerous individuals whose expertise, insights, and dedication have shaped this comprehensive guide on Kenya's strategic approach to Artificial Intelligence (AI) governance and diplomacy.

We extend our deepest gratitude to **Yvonne Kivuti** from Kenya's Mission in Geneva and **Tony Oweke** from Kenya's Mission to the United Nations, whose diplomatic expertise and advocacy on the global stage have greatly enriched this playbook. Their commitment to representing Kenya's interests in AI diplomacy has provided essential insights that resonate throughout this work.

We also recognize **Dr. Charity Wayua**, Director at IBM Research Africa, whose thought leadership in AI and technological innovation has been instrumental in shaping the foundational principles of this playbook. Her commitment to advancing Africa's technological landscape has greatly influenced our approach to inclusive and ethical AI.

Special thanks to **Jamal Mohammed Hassan**, Technical Lead on AI and Emerging Technologies at the Ministry of Defence, for his contributions to the playbook's sections on responsible and

ethical AI in defense and security. His expertise has been critical in addressing the unique challenges of AI governance within military and national security contexts.

Our appreciation goes to **Munyala Mwalo**, Design Lead at Emerging Technologies Institute & Action Lab, whose creativity and design acumen have ensured that this playbook is both accessible and visually engaging. His design work has brought clarity and cohesion to our vision, making complex concepts approachable and comprehensible.

Finally, we extend our deepest appreciation to **Ambassador Philip Thigo**, Special Envoy on Technology and the lead author of this playbook. Ambassador Thigo's vision, leadership, and commitment to an AI future that serves humanity have been the driving force behind this project. His tireless efforts and insight have crafted a playbook that embodies Kenya's commitment to ethical, inclusive, and sustainable AI governance on the global stage.

To all those involved, both named and unnamed, your dedication and expertise have helped create a resource that will empower Kenya's diplomats, policymakers, and leaders in advancing our nation's strategic interests in the age of AI.

Thank you.

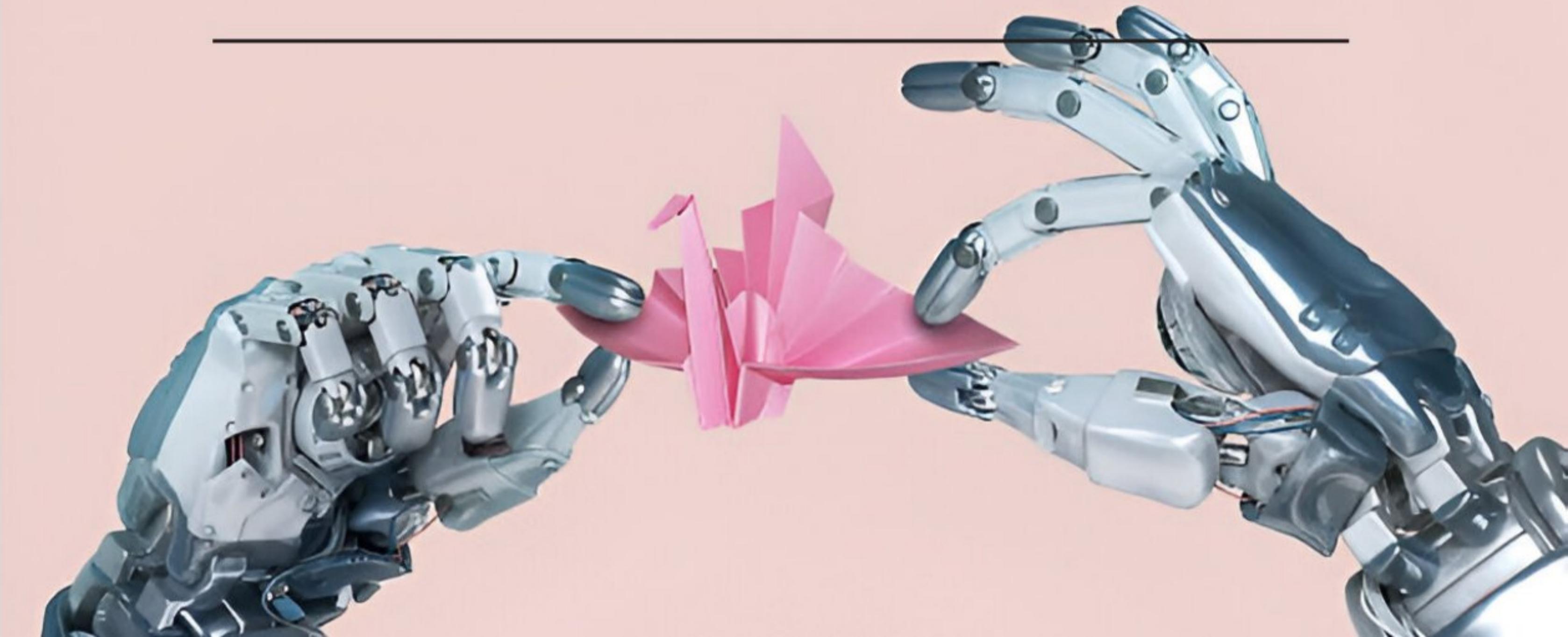
AI Playbook for Kenyan Diplomats

Introduction

Kenya is recognized as a leader in shaping **global AI governance**, playing an active role in advocating for **a Safe, Secure, Inclusive, and Trustworthy AI** development that benefits not only the country but also the broader African continent. Kenya's approach is rooted in its **adoption of key international declarations and**

resolutions, which serve as a foundation for its common position on AI. Through a robust diplomatic strategy, Kenya's representatives in international forums are tasked with ensuring that the country's voice and interests in **AI development and governance** are not only heard but also shape the global AI landscape.

This playbook provides Kenyan diplomats with a **comprehensive guide** to effectively articulate Kenya's **common position** on AI, ensuring consistency in messaging and alignment with national objectives. It reflects the principles of **sustainable economic growth, equity, inclusivity, and ethical AI governance**, all of which are central to Kenya's AI policy.





What is Artificial Intelligence:

Artificial Intelligence (AI) is a field within computer science dedicated to creating systems that can perform tasks typically requiring human intelligence, such as language understanding, visual recognition, and decision-making.

At its core, AI relies on three main components: algorithms, data, and computing power. *Algorithms* are rules and instructions that guide how AI systems process information and make decisions. *Data*—often vast amounts from various sources—allows these systems to identify patterns, learn from experiences, and improve over time. *Computing power* refers to the hardware that enables these systems to handle large amounts of information quickly, allowing AI to function effectively.

The significance of AI in daily life and global relations

AI is already transforming areas such as healthcare, finance, and public services, providing tools for personalized services, predictive analysis, and efficient automation. While its potential is immense, AI also raises ethical questions, especially regarding transparency and fairness. There are different types of AI: *narrow AI*, which is designed for

specific tasks (such as a language translation tool), and *general AI*, which aspires to broader, human-like intelligence but remains largely theoretical. As AI continues to evolve, it offers new opportunities to improve public welfare and address complex challenges, making a foundational understanding of its capabilities and limitations essential for informed diplomatic decisions.



Kenya's AI Policy:

A Balanced Approach to Ethical and Inclusive AI Governance

Kenya's Artificial Intelligence (AI) policy is grounded in a foundation of principles derived from global and regional frameworks that the country has adopted. These frameworks reflect Kenya's commitment to ethical and sustainable AI development and

position the nation as a leader in advocating for a balanced approach to AI governance. This approach ensures that AI technologies are developed and deployed in a manner that promotes global equity, respects national sovereignty, and fosters inclusive growth.

"Recognizing the transformative potential of AI in driving economic growth, enhancing public services, and addressing global challenges such as climate change, food security, and public health, Kenya is dedicated to ensuring that AI development and governance are ethical, inclusive, and aligned with both national and global development goals."

Amb. Philip Thigo, MBS.
Special Envoy On technology, Kenya



Core Principles



Ethical AI and Human Rights

01

Upholding Human Dignity and Rights:
AI systems must respect human rights, adhere to international laws, and promote non-discriminatory outcomes.

02

Transparency, Accountability, and Fairness: Ensure that AI decision-making processes are transparent and explainable & Developers and users are accountable for AI outcomes.

03

Mitigating Bias and Discrimination:
Actively address and eliminate biases in AI systems to prevent discrimination against any individual or group.



Inclusivity and Equity

04

Bridging the Digital and AI Divides:
Address infrastructure and access challenges to ensure all nations, especially those in the Global South, benefit from AI advancements.

05

Equitable Access to AI Technologies:
Advocate for financing models that enable developing nations to access AI technologies without incurring unsustainable debts.

06

Empowering Underrepresented Groups:
Promote the inclusion of women, youth, and marginalized communities in AI development and utilization.





Sustainable Development

07

Leveraging AI for National Development Goals: Utilize AI to enhance productivity and innovation in key sectors such as agriculture, energy, manufacturing, and public services.

08

AI as a Tool for Public Good: Employ AI to address global challenges and promote green AI initiatives that support environmental sustainability.

09

Building Digital Public Infrastructure: Invest in AI-driven infrastructure to improve public service delivery and ensure digital inclusivity.



Digital Sovereignty and Governance

10

Balancing National Autonomy with Global Cooperation: Maintain control over digital infrastructure and data governance while engaging in international collaboration.

11

Data Governance and Protection: Uphold data sovereignty with robust protection laws aligned with international standards, ensuring privacy and security.

12

Cybersecurity and AI Governance: Implement strong cybersecurity measures to protect AI systems & participate in global efforts to address cyber threats.

13

Promoting AI Interoperability and Global Standards: Advocate for inclusive global AI standards that ensure interoperability and ethical practices, benefiting all nations.

14

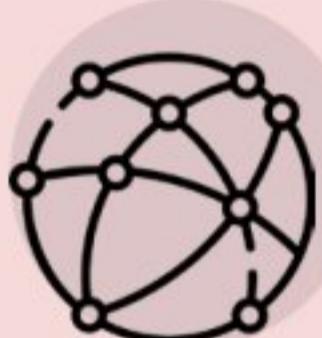
Ethical AI in Migration: Protect the rights of migrants by promoting transparent and fair AI systems in migration management.



Diplomatic Objectives



Advocate for Ethical AI Development: Promote international AI governance frameworks that emphasize ethical development, human rights, transparency, and accountability.



Ensure Inclusivity and Equity: Work towards international AI policies that prioritize inclusivity, capacity-building, and equitable access to AI technologies for all nations.



Leverage AI for Sustainable Growth: Encourage international cooperation on AI technologies that contribute to sustainable development, green growth, and climate resilience.



Respect Digital Sovereignty While Collaborating Globally: Champion AI governance that respects national sovereignty over digital assets while fostering global collaboration on shared challenges like cybersecurity and data privacy.

Key Messages

01

Ethical AI Commitment

"Kenya supports ethical, transparent, and fair AI systems that respect fundamental human rights and promote global well-being."

02

Inclusivity in the AI Revolution

"Kenya calls for global AI governance that ensures no nation or community is left behind in the AI revolution."

03

AI for Sustainable Development

"Kenya is committed to using AI to promote sustainable economic development that benefits all citizens and addresses global challenges."

04

Digital Sovereignty and Collaboration

"Kenya advocates for digital sovereignty within international law, ensuring control over our AI systems and data while promoting global collaboration for shared prosperity."

05

Protecting Migrants' Rights

"Kenya champions ethical AI in migration management to protect our diaspora and uphold the rights of all migrants worldwide."

Call to Action

Kenya's AI diplomacy strategy is centered on harnessing the benefits of AI while mitigating its risks, ensuring that AI technologies are developed and used responsibly. By advocating for **ethical principles, inclusivity, sustainable development, and respect for digital sovereignty**, Kenya aims to shape global AI governance in a way that benefits all of humanity.

Kenyan diplomats are called upon to:

01 **Actively engage in international discussions:**

Participate in global forums to influence AI policies and standards.

02 **From strategic partnerships:** Collaborate with other nations, organizations, and the private sector to promote shared AI objectives.

03 **Promote policies aligning with core principles:** Advocate for international agreements and regulations that reflect Kenya's commitment to ethical and inclusive AI.

Through these efforts, Kenya positions itself as a leader in the responsible and equitable advancement of AI, committed to fostering an AI ecosystem that is ethical, inclusive, and conducive to global progress.

A **Ethical AI and Human Rights**



Key Principles:



Upholding Human Dignity and Rights

- AI systems must respect human rights and adhere to the UN Charter.
- Promote non-discriminatory outcomes and protect fundamental freedoms.



Transparency, Accountability, and Fairness

- **Transparent AI Systems:** Ensure AI decision-making processes are explainable and understandable.
- **Accountable AI Practices:** Implement mechanisms to hold AI developers and users responsible.
- **Fairness in AI:** Address and mitigate bias, racism, and discrimination in AI systems.



Diplomatic Objective:

Advocate for international AI governance frameworks that ensure ethical development, emphasizing fairness, transparency, and accountability.



Key Messages:

"Kenya supports ethical, transparent, and fair AI systems that respect fundamental human rights."

Ethical, Equitable, and Inclusive AI Development



1.1. Upholding Human Dignity and Rights

Kenya's policy on AI is deeply rooted in the principles of ethical AI, guided by the UN Charter and international human rights law. The country's leadership in AI governance is based on its commitment to developing AI systems that uphold human dignity, protect fundamental rights, and ensure non-discriminatory outcomes. Ethical AI is not just a technical standard but a governance principle that ensures AI serves humanity rather than exacerbates existing inequalities.

1.2. Transparency, Accountability, and Fairness

Transparent AI Systems: Ensuring that AI decision-making processes are explainable and understandable.

Accountable AI Practices: Implementing mechanisms to hold AI developers and users responsible for their systems' outcomes.

Fairness in AI: Addressing bias, racism, and discrimination in AI systems to promote fairness and justice in AI applications.



Diplomatic Objective

Kenyan diplomats are tasked with ensuring that the AI processes that Kenya participates in reflect the country's strong commitment to ethical AI development, where fairness, transparency, and accountability are paramount.



Key Messages

"Kenya advocates for AI systems that are ethical, transparent, and fair, ensuring that the benefits of AI are distributed equitably and that the systems respect fundamental human rights."

AI and Human Rights

02



2.1. Privacy and Data Protection as Fundamental Rights

In international discussions, Kenya advocates for global data governance frameworks that prioritize individual privacy and encourage data sharing only under secure, consent-based, and lawful conditions.

Kenya places a high priority on data privacy, recognizing it as a fundamental human right in the age of digital transformation. As AI systems often rely on large datasets, including sensitive personal and health information, the protection of this data is essential. Kenya's Data Protection Act and ICT sector reforms ensure that citizens' data is collected, stored, and processed with the utmost respect for privacy.

2.2. Addressing Bias and Ensuring Fairness in AI Systems

Kenya acknowledges the risk of bias and discrimination in AI algorithms. Historical and societal biases can inadvertently be embedded within AI systems, leading to unfair outcomes for certain groups based on race, gender, or socioeconomic status.

Kenya's approach to AI prioritizes the development of fair and unbiased systems by:

Promoting algorithmic transparency and regular auditing of AI models.

Advocating diverse, representative datasets to reduce bias.

Supporting international standards that require AI developers to incorporate fairness principles.

2.3. Equitable Access to AI's Benefits

For Kenya, AI is a tool to drive inclusive growth and improve quality of life across all sectors. This perspective calls for the equitable distribution of AI benefits, ensuring that AI technology is accessible to underserved and marginalized communities.

Kenya's policies promote:



- Public investment in AI infrastructure and digital literacy programs.
- International partnerships that prioritize technology transfer, capacity building, and financial assistance.

2.4. Transparency and Accountability in AI Development and Deployment

Transparency and accountability are essential to Kenya's human rights approach to AI. Kenya emphasizes that AI systems should operate in a way that is explainable and understandable to both the public and regulators.

Kenya's policies support:



- Mechanisms for regular audits, oversight, and public reporting on AI performance and outcomes.
- Encouraging the development of explainable AI (XAI) systems.

2.5. Ethical Use of AI for Global Public Good

Kenya advocates for the ethical deployment of AI technologies that respect human rights and support global public goods, from sustainable development to public health.

Kenya opposes:



- The development of AI technologies that violate human rights, such as autonomous weaponry and invasive surveillance tools.

2.6. Education and Empowerment on AI Rights

Kenya promotes AI literacy and digital education, ensuring that citizens are aware of their rights concerning AI and data protection.

Kenya's policies encourage:



- Integration of AI ethics and digital rights education in school curricula.
- Public awareness campaigns to empower individuals.

Diplomatic Objective



Kenyan diplomats are dedicated to promoting AI governance frameworks that respect human rights, ensuring fairness, transparency, and accountability in AI systems.



Key Messages

"Kenya champions a human rights-centered approach to AI that emphasizes fairness, accountability, and transparency."

"We call on the global community to support AI frameworks that protect individual rights, ensure equitable access, and promote ethical AI use."

Ethical AI Anchored in International Law

03



3.1. Compliance with International Humanitarian Principles

Kenya's leadership in ethical AI governance is grounded in the principles of the UN Charter and applicable international humanitarian law. Kenya calls for AI development that upholds the rule of law, human rights, and ethical standards.

3.2. Preventing Harmful AI Applications

Kenya opposes:

- The development of lethal autonomous weapons (LAWs) and other AI systems that can make life-or-death decisions without human oversight.
- AI applications that violate humanitarian principles.



Diplomatic Objective

Kenyan diplomats should engage in multilateral discussions to ensure that AI development is rooted in ethical frameworks that protect human rights and global peace.



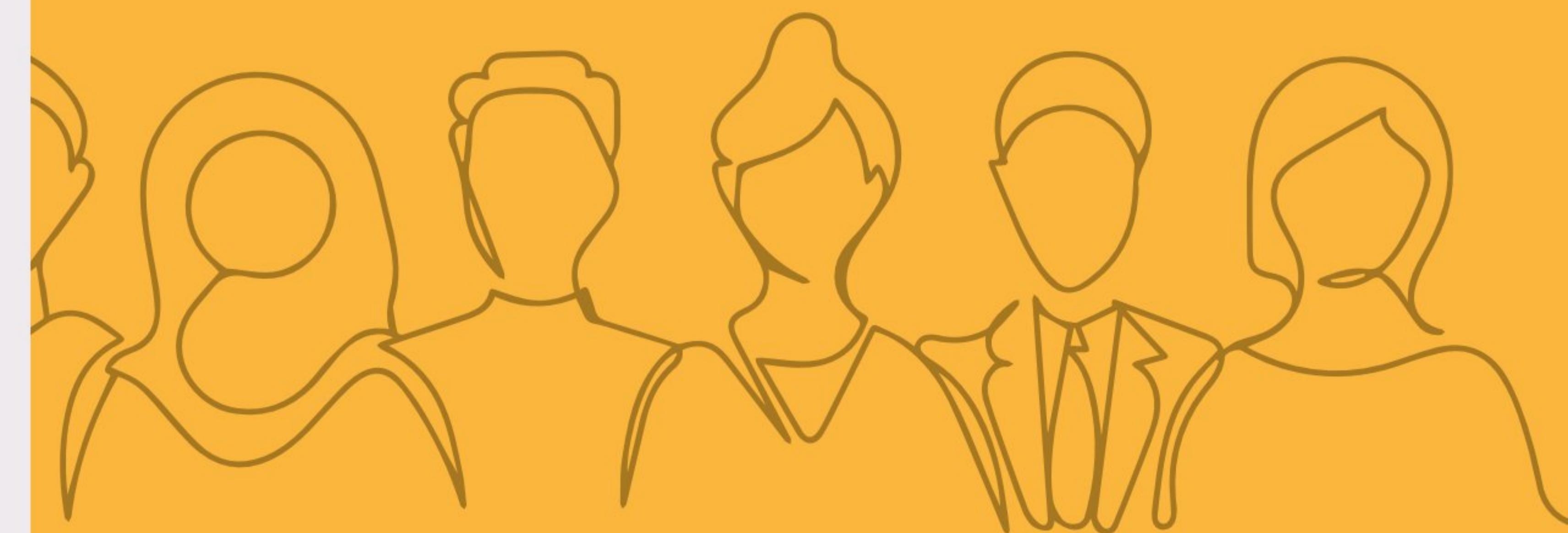
Key Messages

"Kenya calls for ethical AI development rooted in international law and humanitarian principles."

"AI systems must be designed to respect human rights, protect global peace, and prevent harm, particularly in areas like military applications and surveillance."



Inclusivity and Equity



Key Principles:



Bridging the Digital and AI Divides

- Address infrastructure and access challenges in the Global South.
- Emphasize international cooperation for capacity-building and technical support.



Equitable Access to AI Technologies

- Advocate for differentiated pricing and financing models for developing nations.
- Prevent unsustainable debt burdens.



Empowering Underrepresented Groups

- Promote inclusion of women, youth, and marginalized communities in AI development and use.
- Combat algorithmic bias and discrimination.



Diplomatic Objective:

Ensure international AI frameworks prioritize inclusivity, support capacity-building, and promote equitable access to AI technologies.



Key Messages:

"Kenya calls for global AI governance that ensures no one is left behind in the AI revolution."



Inclusivity and Equity in AI Development

04



4.1. Bridging the Digital and AI Divides

Kenya advocates for an **inclusive approach to AI development**, ensuring that AI technologies are accessible and beneficial to all, especially for developing countries.

The global discourse on AI and resultant frameworks must account for the needs of the **Global South**, where infrastructure, access to compute, talent, and other enablers are insufficient, but the potential of AI to be transformative is evident.

Kenya's position on inclusivity in AI development includes:



- **Bridging the digital and AI divides:** Ensuring that international cooperation addresses the impediments developing countries face in their digital transformation pathways and in accessing and using AI.



- **International cooperation:** Capacity-building, technical support, funding mechanisms, and technology transfer are of the utmost importance.

4.2. Equitable Access to AI Technologies

Kenya advocates for differentiated pricing models and financing mechanisms that allow developing nations to access and benefit from AI technologies without creating unsustainable debt burdens.

4.3. Empowering Underrepresented Groups

Promoting AI policies that support the inclusion of women, youth, marginalized communities, and persons with disabilities in the AI workforce as developers, innovators, and beneficiaries of AI systems.

This includes advocating for accessible and inclusive design principles that ensure AI systems are equitable and usable by individuals with diverse abilities. Efforts should also emphasize promoting principles within multilateral frameworks that address the importance of combating racism, discrimination, algorithmic bias, and ableism in Artificial Intelligence systems.



Diplomatic Objective

Kenyan diplomats should work towards ensuring that international AI frameworks and agreements prioritize inclusivity, support capacity-building in the Global South, and promote equitable access to AI technologies.



Key Messages

"Kenya calls for global AI governance that prioritizes inclusivity and ensures that developing nations and marginalized communities are not left behind in the AI revolution."

Ensuring Equity in Global AI Standards

05



5.1. Inclusive Standard Setting

As the global community works to develop **AI standards** and governance frameworks, Kenya's position emphasizes the need for **equitable participation** by all countries, particularly those in the **Global South**. The creation of global AI standards must reflect the interests of all nations, ensuring that developing countries have a voice in shaping the future of AI governance.

Kenya's position emphasizes:

- The need for equitable participation by all countries, particularly those in the Global South.
- Global AI standards must reflect the interests of all nations, ensuring that developing countries have a voice in shaping the future of AI governance.

5.2. Addressing Information Asymmetries

Acknowledging that information asymmetries exist between states and regions, Kenya emphasizes the role of multilateralism in the production and dissemination of evidence-based scientific knowledge to promote the development of national, regional, and global AI Governance frameworks



Diplomatic Objective

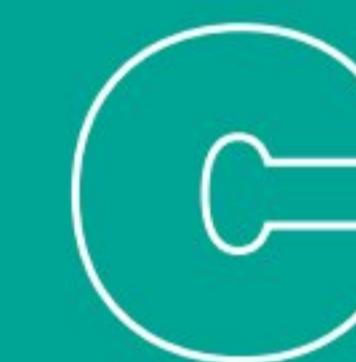
Kenyan diplomats should work to ensure that developing nations have a meaningful role in shaping global AI standards. This includes advocating for frameworks that promote fair access to AI technologies, open research, and technology transfer to support development in the Global South.



Key Messages

"Kenya advocates for inclusive and equitable AI governance standards that reflect the interests of all nations, particularly developing countries."

"Global AI protocols must ensure that all nations have access to AI technologies and can contribute to shaping the future of AI governance."



Sustainable Development



Key Principles:

01

Leveraging AI for National Development Goals

- Enhance productivity and innovation in key sectors: agriculture, energy, manufacturing, and public services.
- Align AI initiatives with Kenya's Vision 2030 and the Sustainable Development Goals (SDGs).

02

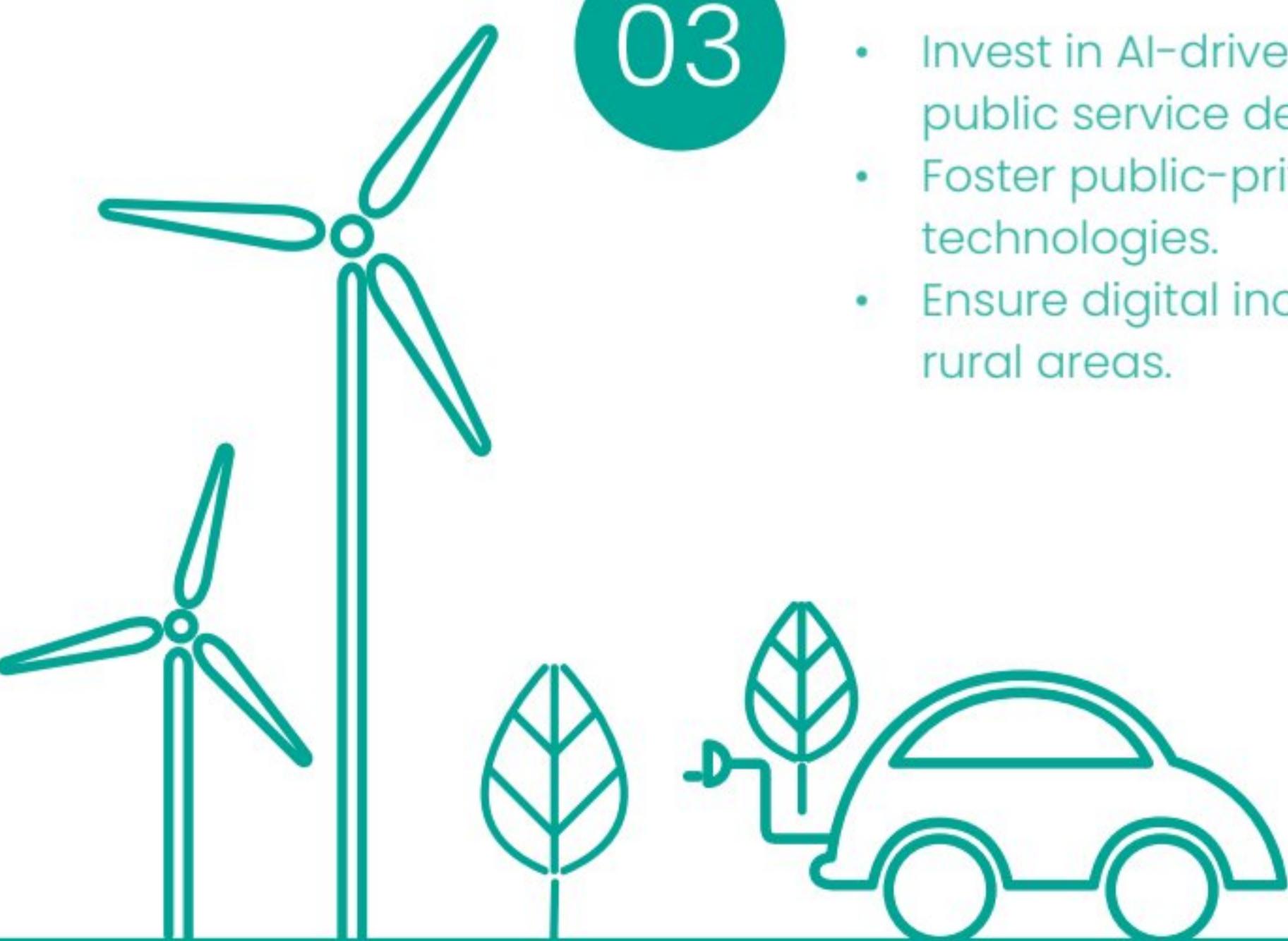
AI as a Tool for Public Good

- Use AI to address global challenges like climate change, food security, and public health.
- Promote green AI initiatives that minimize environmental impact.

03

Building Digital Public Infrastructure

- Invest in AI-driven infrastructure to improve public service delivery.
- Foster public-private partnerships to scale AI technologies.
- Ensure digital inclusivity for underserved and rural areas.



Diplomatic Objective:

Promote AI as a catalyst for sustainable development and advocate for international cooperation on AI technologies that contribute to green growth and climate resilience.



Key Messages:

—
"Kenya is committed to using AI to promote sustainable economic development benefiting all citizens."

—
"We advocate for collaborative AI development to address shared global challenges."

AI for Sustainable Development

06



6.1. Leveraging AI in National Development Goals

AI has the potential to drive transformative solutions for global challenges, including climate change, food security, and public health. Kenya emphasizes the use of AI to enhance productivity, innovation, and efficiency in key sectors such as agriculture, energy, manufacturing, and public services.

AI technologies are essential tools for addressing some of the most pressing challenges facing the country, including climate change, resource scarcity, and energy access.



Kenya's Position:

Contributing to Environmental Sustainability:

- **Green AI Initiatives:** Promoting the development and deployment of AI systems that minimize carbon footprints and support environmental conservation.
- **Climate Change Mitigation:** Utilizing AI for climate modeling, disaster prediction, and the development of sustainable practices.

Fostering Inclusive Economic Development:

- **Equitable Access to AI Benefits:** Ensuring that AI technologies are accessible to all segments of society, particularly vulnerable and marginalized communities.
- **Job Creation and Skills Development:** Leveraging AI to create new employment opportunities and invest in workforce training programs.

Supporting Innovation and New Industries:

- **Africa Green Industrialization Initiative:** Aligning AI development with President Ruto's initiative to promote sustainable and inclusive industrial growth across the continent.
- **Research and Development:** Encouraging innovation in AI technologies that align with sustainable development goals.

International Collaboration:

- **Global Partnerships:** Developing AI systems in collaboration with international partners to address common global challenges.
- **Sectoral Focus:** Promoting the use of AI in agriculture, energy, water management, and healthcare to ensure sustainable development in Africa and beyond.

6.2. AI as a Tool for Public Good

Kenya promotes the ethical use of AI as a tool for public good, emphasizing its role in solving global challenges and improving quality of life.

Kenya's Initiatives:



Agriculture:

- **Precision Farming:** Using AI to optimize planting cycles, irrigation, and crop management, enhancing food security.
- **Supply Chain Optimization:** Improving efficiency from farm to market.



Energy:

- **Smart Grids:** Implementing AI-driven energy distribution for efficiency and integration of renewable energy sources.
- **Energy Conservation:** Reducing waste and promoting sustainable consumption patterns.



Water Management:

- **Resource Allocation:** Utilizing AI to monitor water resources and predict shortages.
- **Sustainable Practices:** Encouraging conservation through data-driven insights.



Healthcare:

- **Diagnostics and Treatment:** Enhancing disease detection and personalized medicine through AI analytics.
- **Public Health Surveillance:** Using AI to monitor and manage health crises effectively.

Ethical AI Deployment:

01

Respecting Human Rights: Ensuring AI technologies are developed and used in ways that uphold human dignity and privacy.

02

Opposing Harmful Applications: Rejecting the use of AI in developing autonomous weapons or invasive surveillance tools.



6.3. Building Digital Public Infrastructure

Kenya recognizes the importance of robust digital infrastructure to support AI applications that benefit the public.

Kenya's Focus:

01

Investments in AI-Driven Infrastructure:

- **Public Services Enhancement:** Deploying AI to improve education, healthcare, and government services.
- **Connectivity:** Expanding broadband access to support AI technologies nationwide.

02

Public-Private Partnerships (PPPs):

- **Collaborative Development:** Engaging with private sector partners to develop and scale AI technologies.
- **Innovation Hubs:** Establishing centers for AI research and development.

03

Digital Inclusivity:

- **Bridging the Digital Divide:** Ensuring rural and underserved communities have access to AI-powered services.
- **Capacity Building:** Providing training and resources to empower citizens to utilize AI technologies.



Diplomatic Objective

Kenyan diplomats should promote international cooperation on AI technologies that contribute to green growth, sustainable development, resource efficiency, and climate resilience. They should advocate for collaborative efforts to harness AI's potential in solving global issues, particularly in the Global South.



Key Messages

- "Kenya is committed to using AI to promote sustainable economic development that benefits all citizens, focusing on green AI and innovation that supports environmental sustainability and resource efficiency."
- "Kenya advocates for collaborative AI development to address shared global challenges such as climate change, food security, and public health. International cooperation and partnerships are essential to ensure that AI technologies benefit all nations and support sustainable development goals."

AI as a Global Public Good

07



7.1. Recognizing AI's Potential for Humanity

Kenya strongly advocates for AI to be recognized and treated as a global public good. This means that AI technologies, especially those capable of addressing critical global challenges, must be accessible to all nations and serve the collective interests of humanity.

Kenya's Position:



Equitable Access:

- **Inclusive Availability:** AI technologies should be accessible to all countries, particularly developing nations.
- **Differentiated Pricing Models:** Advocating for financing mechanisms that prevent unsustainable debt burdens on developing countries.



Addressing Global Challenges:

- **Climate Change:** Leveraging AI for environmental monitoring, sustainable practices, and disaster management.
- **Public Health:** Utilizing AI in disease prevention, diagnostics, and managing health crises.
- **Food Security:** Applying AI to enhance agricultural productivity and supply chain efficiency.

7.2. Promoting Multilateral Cooperation

Kenya believes that multilateral cooperation is essential for developing AI systems that address common challenges and prevent the monopolization of AI technologies.

Kenya's Advocacy:

01

Inclusive AI Governance:

- **Global Collaboration:** Encouraging all nations to participate in shaping AI policies and standards.
- **Reflecting Diverse Interests:** Ensuring that AI governance frameworks consider the needs of the Global South.

02

Preventing Technological Imperialism:

- **Multipolar Development:** Advocating against the concentration of AI capabilities in a few countries or corporations.
- **Shared Benefits:** Promoting a fair distribution of AI's advantages globally.

03

International Frameworks:

- **Ethical Standards:** Establishing guidelines that ensure AI is developed responsibly and ethically.
- **Knowledge Sharing:** Facilitating the exchange of expertise, resources, and best practices.



Diplomatic Objective

Kenyan diplomats should advocate for AI to be recognized as a global public good in international negotiations and agreements. They should promote policies that ensure equitable access to AI technologies and collaborative efforts to address global challenges.



Key Messages

- “Kenya advocates for AI to be recognized as a global public good that benefits all humanity. The equitable sharing of AI’s benefits is essential to drive sustainable development worldwide.”
- “We support collaborative AI development to tackle shared global issues like climate change, food security, and public health. International cooperation is vital to ensure that AI technologies uplift all nations.”



Digital Sovereignty and Governance



Key Principles:

01

Balancing National Autonomy with Global Cooperation

- Maintain control over digital infrastructure, data governance, and AI systems.
- Collaborate globally within the framework of the UN Charter and international law.

02

Data Governance and Protection

- Uphold data sovereignty: national control over data collection, storage, and usage.
- Develop robust data protection laws aligned with international standards.
- Strive for global data governance enhancing interoperability and balancing innovation with data sovereignty.

03

Cybersecurity and AI Governance

- Implement robust cybersecurity frameworks to protect AI systems from malicious attacks.
- Collaborate internationally to address cyber threats and establish common security protocols.

04

Promoting AI Interoperability and Global Standards

- Advocate for inclusive participation in developing global AI standards.
- Ensure AI systems are interoperable, transparent, and accountable across borders.

05

Migration in the Age of AI

- Protect the rights and dignity of migrants, including Kenya's diaspora.
- Advocate for ethical AI systems in migration management that prevent discrimination and bias.



Diplomatic Objective:

Advocate for AI governance frameworks that respect national sovereignty while promoting global collaboration on AI safety, data privacy, and cybersecurity.



Key Messages:

"Kenya supports digital sovereignty within international law, ensuring control over our AI systems and data while promoting global collaboration."

"We call for inclusive global AI standards that serve the interests of all nations."

"Kenya champions ethical AI in migration to protect our diaspora and uphold migrants' rights worldwide."

8. Digital Sovereignty and AI Governance

Kenya's approach to digital sovereignty emphasizes balancing national autonomy with global cooperation, recognizing that while sovereignty is crucial, effective AI governance also requires countries to collaborate in building resilient digital ecosystems that serve the public interest. Kenya's leadership on the global stage focuses on ensuring that countries in the Global South, particularly in Africa, can maintain control over their digital infrastructure, data governance, and AI systems, while benefiting from applicable international partnerships.

However, this control must operate **within the framework of the UN Charter, governance frameworks, and applicable international law**.

8.1. Balancing National Autonomy with Global Cooperation

Kenya's approach to digital sovereignty emphasizes balancing national autonomy with global cooperation. While digital sovereignty is crucial for nations to retain control over their digital futures and develop AI systems aligned with local needs and priorities, Kenya recognizes that effective AI governance also requires collaboration to build resilient digital ecosystems serving the public interest.

Kenya's Position:



Digital Sovereignty as a Pillar of Development:

- **National Control:** Ensuring that nations have authority over their digital infrastructure, data governance, and AI systems.
- **Alignment with Local Needs:** Developing AI systems that reflect the values, languages, and societal needs of the Kenyan people.



International Cooperation:

- **Collaborative Governance:** Building AI governance frameworks that allow countries to exercise sovereignty while promoting global collaboration.
- **Addressing Transnational Issues:** Recognizing that issues like cybersecurity, data privacy, and AI safety require collective action.



Sovereignty within International Law:

- **UN Charter and International Law:** Operating within the framework of the UN Charter and applicable international laws, ensuring respect for global norms.
- **Ethical AI Governance:** Balancing sovereignty and collaboration to ensure ethical AI governance benefiting all nations.



Diplomatic Objective:

Kenyan diplomats must advocate for international AI governance frameworks that respect national digital sovereignty and ensure that countries, particularly in the Global South, can control their AI systems and data infrastructure while adhering to applicable international laws. They should promote collaborative frameworks for global cooperation on AI safety, data protection, and cybersecurity.



Key Message:

"Kenya advocates for digital sovereignty within the framework of the UN Charter and international law, ensuring that countries have control over their AI systems and data while promoting global collaboration. We must have control over our AI systems and data while collaborating globally to address issues of AI safety, data privacy, and cybersecurity."

8.2. Key Elements of Digital Sovereignty

2.8.1. Data Governance and Protection in the Age of AI

Data is the lifeblood of AI systems, and ensuring data sovereignty is a key aspect of Kenya's AI governance strategy. With vast amounts of data processed by AI, Kenya advocates for strong legal frameworks that protect

personal data, ensure privacy, and safeguard national security. Simultaneously, international data flows must support innovation and trade, balancing national control with global openness.

Kenya's Position:

01

Data Sovereignty:

- **National Authority over Data:** Full control over how data is collected, stored, used, and shared within national borders, especially in sensitive sectors like healthcare, education, and public services.
- **Domestic Laws Reflecting Citizens' Priorities:** Data governance should align with domestic laws and reflect the priorities and values of Kenyan citizens.

02

Data Protection Laws:

- **Alignment with International Standards:** Developing robust data protection regulations that align with global standards like the GDPR.
- **Balancing Innovation and Privacy:** Striving for a balance between fostering innovation and protecting individual privacy and rights.

03

Global Data Governance Frameworks:

- **Enhancing Interoperability:** Working towards global data governance that enhances data interoperability and harmonizes regulatory approaches.
- **Secure Cross-Border Data Flows:** Supporting multilateral frameworks for secure international data sharing for AI innovation, research, and trade.

04

Balancing Innovation and Sovereignty:

- **Global Collaboration:** Advocating for a framework that balances innovation and data sovereignty, promoting both national interests and international cooperation.



Diplomatic Objective:

Kenyan diplomats should engage in international discussions on data governance to promote a balanced approach that upholds national data sovereignty while fostering secure and ethical international data sharing.



Key Message:

"Kenya advocates for strong data sovereignty and protection laws that align with international standards, ensuring that national data is securely governed while enabling international cooperation for AI development and innovation."

2.8.2. Digital Infrastructure Development

Nations must develop and manage their own digital infrastructure to support AI ambitions, including cloud services, AI data centers, and computing power.

Kenya's Position:

01

Investing in Infrastructure:

- **Self-Reliance:** Building domestic capabilities to reduce dependence on foreign technologies.
- **Capacity Building:** Strengthening national infrastructure to support AI research, development, and deployment.

02

Public-Private Partnerships:

- **Collaborative Development:** Encouraging government and private sector partnerships to build robust digital infrastructure.
- **Innovation Hubs:** Establishing centers of excellence for AI and emerging technologies.

2.8.3. Promoting AI Interoperability and Global Standards

While digital sovereignty is critical, Kenya recognizes the importance of collaborating to establish global AI standards ensuring interoperability, security, and ethical practices across borders.

Kenya's Position:

01

Inclusive Participation:

- **Voice of Developing Countries:** Promoting inclusive participation in developing global AI governance frameworks reflecting the interests of all nations, particularly the Global South.

02

Ethical and Transparent AI:

- **Global Standards:** Supporting international standards promoting openness, transparency, and ethical use of AI systems.
- **Interoperability:** Ensuring national AI systems can interoperate with global systems, enabling cross-border collaboration.



Diplomatic Objective:

Kenyan diplomats should actively engage in developing international AI standards, ensuring frameworks reflect Kenya's interests and promote AI interoperability while maintaining national control over critical infrastructure.



Key Message:

"Kenya advocates for AI governance frameworks that promote interoperability and global standards, ensuring AI systems are transparent, accountable, and serve the interests of all nations."

8.3. Cybersecurity and AI Governance

The security of AI systems is critical to national sovereignty and the integrity of digital infrastructure. Kenya emphasizes the need for robust cybersecurity frameworks to protect AI systems from malicious attacks, data breaches, and cyber warfare.

Kenya's Position:

01

AI Cybersecurity:

- **Resilient Systems:** Promoting the development of secure AI systems resilient to cyberattacks.
- **Alignment with Global Frameworks:** Ensuring national cybersecurity policies align with international standards.

03

Global Collaboration:

- **Shared Responsibility:** Recognizing cybersecurity as a global concern requiring collective action.
- **International Cooperation:** Advocating for collaborative measures to address cyber threats, especially in critical infrastructure.



Diplomatic Objective:

Kenyan diplomats should strengthen international cybersecurity standards for AI and advocate for collaborative measures to address threats posed by cybercrime and cyber warfare in AI systems.



Key Message:

"Kenya supports developing robust cybersecurity frameworks for AI systems, advocating for global cooperation to secure critical digital infrastructure and prevent cyber threats."

8.4. Migration in the Age of AI

Kenya recognizes the vital contributions of its over 3 million diasporans to national development and host economies. As AI systems increasingly influence migration policies, border control, and employment practices globally, it's essential to ensure these technologies do not perpetuate discrimination against Kenyan citizens abroad.

Kenya's Position:

01

Ethical AI in Migration Management:

- Transparency and Accountability:** Advocating for AI systems in migration that are transparent, accountable, and respect migrants' rights and dignity.
- Prohibiting Bias:** Calling for international cooperation to prohibit biased algorithms in visa processing, employment screening, and social services.

02

Protection of Rights:

- Regular Audits:** Mandating audits of AI systems for potential discriminatory impacts.
- Explainability and Contestability:** Ensuring AI-driven decisions in migration are explainable and contestable.

03

Empowerment of Diaspora:

- Digital Literacy:** Supporting initiatives enhancing digital literacy among the diaspora to navigate and challenge potential AI-driven discrimination.

Diplomatic Objective:



Kenyan diplomats should advocate for ethical AI systems in global migration management to protect the diaspora from discrimination, ensure fair treatment, and promote equal opportunities.



Key Message:

"Kenya champions the development and implementation of ethical AI systems in global migration management to protect our diaspora from discrimination, ensure fair treatment, and promote equal opportunities, while advocating for international frameworks safeguarding all migrants' rights in the age of AI."

8.5. Balancing Sovereignty with Collaboration

Kenya recognizes that sovereignty and collaboration must work together to ensure ethical AI governance.

Kenya's Position:

Collaborative Sovereignty:

01

- **Shared Challenges:** Understanding that issues like cybersecurity, data privacy, and AI safety require collective action.

02

- **Ethical Governance:** Promoting AI systems respecting national sovereignty within international law while engaging in global collaboration.



Diplomatic Objective:

Kenyan diplomats must advocate for international AI governance frameworks respecting national digital sovereignty and promote collaborative frameworks addressing global challenges.



Key Message:

"Kenya advocates for digital sovereignty within the UN Charter and international law, ensuring control over our AI systems and data while promoting global collaboration to address AI safety, data privacy, and cybersecurity."

Geopolitics of AI— Kenya's Ethical Leadership



9. Geopolitics of AI: Kenya's Ethical Leadership

As Artificial Intelligence (AI) rapidly becomes a strategic asset, shaping global power dynamics, technological leadership, and economic competition, the geopolitical implications of AI are profound. Kenya advocates for a global approach to AI development that ensures equity, ethical governance, and multilateral collaboration. Recognizing that AI will play a central role in shaping the future of industries, national security, and global influence, Kenya's leadership in AI governance emphasizes that AI must be governed in a way that promotes peace, justice, and inclusive development as guiding principles.

Kenya's position on the geopolitics of AI rests on the following key pillars:

9.1. AI as a Global Public Good

Kenya strongly advocates for AI to be recognized and treated as a global public good. This means that AI technologies, particularly those with the potential to address critical global challenges such as

climate change, public health, and sustainable development, must be accessible to all nations. AI should not be monopolized by a few countries or corporations but rather serve the collective interests of humanity.

Kenya's Position:

Equitable Access to AI Technologies:

- AI technologies, especially those related to public goods like healthcare, agriculture, and climate resilience, should be developed and shared in a way that promotes global equity.
- Ensuring that all nations, particularly those in the Global South, have access to AI technologies that drive sustainable development.



Multilateral Cooperation:

- Multilateral cooperation is essential for creating AI systems that address common challenges faced by the global community.
- AI governance must reflect the interests of all nations, ensuring that AI does not exacerbate existing inequalities.



Diplomatic Objective:

Kenyan diplomats should work to ensure that AI is framed as a global public good in international negotiations and agreements. By promoting AI as a tool for addressing global challenges, Kenya positions itself as a leader in advocating for inclusive AI governance that benefits all nations.



Key Message:

"Kenya advocates for AI to be recognized as a global public good that contributes to solving humanity's most pressing challenges. The benefits of AI must be shared equitably, ensuring that all nations, particularly those in the Global South, have access to AI technologies that drive sustainable development."

9.2. AI's Role in Global Power Dynamics

The development of AI has the potential to reshape global power dynamics, with certain countries and tech giants currently dominating the AI landscape. Kenya's position is that the concentration of AI capabilities in a few countries and corporations

represents a threat to global equity and could create a new form of technological imperialism. AI should be developed in a way that prevents the monopolization of its benefits and power.

Kenya's Position:



Preventing Concentration of AI Capabilities:

- AI capabilities should not be concentrated in the hands of a few global powers or corporate monopolies.
- Advocating for a multipolar approach to AI development, where technological capabilities and benefits are shared across nations.



Promoting Multilateralism:

- Multilateralism is essential to prevent the emergence of digital hegemony, where powerful countries dictate the rules and standards of AI development.
- Calling for a collaborative framework that encourages shared development, knowledge exchange, and resource sharing.



Diplomatic Objective:

Kenyan diplomats should advocate for international frameworks that democratize AI development and prevent any one country or corporation from controlling the future of AI. This includes pushing for open access to AI tools, shared research initiatives, and equitable standards for AI governance.



Key Message:

"Kenya supports a multipolar approach to AI governance, where no single country or corporation holds disproportionate control over AI technologies. Global collaboration is essential to ensure that AI development is democratic and inclusive, preventing the emergence of technological monopolies."

9.3. Ethical AI Anchored in International Law and Humanitarian Principles

Kenya's leadership in ethical AI governance is grounded in the principles of the UN Charter and international humanitarian law. Kenya calls for AI development that upholds the rule of law, human rights, and ethical standards, ensuring that AI

systems do not perpetuate harm or violate global norms. This includes advocating for the ethical use of AI in areas such as military applications, surveillance, and autonomous systems.

Kenya's Position:



Alignment with International Law and Ethical Standards:

- Supporting the development of AI systems that are aligned with international law and global ethical standards.
- Ensuring that AI technologies are used for peaceful purposes and do not undermine human rights or global stability.



Opposition to Harmful AI Applications:

- Opposing the development of lethal autonomous weapons (LAWs) and other AI systems that can make life-or-death decisions without human oversight.
- Advocating for international agreements that prohibit the use of AI in ways that violate humanitarian principles.

Diplomatic Objective:



Kenyan diplomats should engage in multilateral discussions to ensure that AI development is rooted in ethical frameworks that protect human rights and global peace. This includes advocating for international agreements that regulate the use of AI in military contexts and promote ethical guidelines for AI deployment in sensitive areas like surveillance.



Key Message:

"Kenya calls for ethical AI development rooted in international law and humanitarian principles. AI systems must be designed to respect human rights, protect global peace, and prevent harm, particularly in areas like military applications and surveillance."

9.4. Responsible AI in the Military Domain (REAIM)

Kenya's commitment to the responsible use of AI in the military domain is reflected in its active participation in REAIM. Kenya recognizes the transformative potential of AI in enhancing national defense capabilities but also acknowledges the ethical, legal, and security risks associated with its military applications. Kenya advocates for the responsible development, governance, and deployment of AI technologies in defense, ensuring that they align with international standards, uphold human rights, and contribute to global peace and stability.

Kenya's Position:



Ethical Use of AI in Defense:

- Supporting the integration of AI in military operations only when these technologies adhere to global ethical and humanitarian standards.
- Ensuring they enhance security without compromising human dignity or international law.



Transparency, Accountability, and Human Oversight:

- Advocating for transparency, accountability, and human oversight in the use of AI in defense.
- Opposing any deployment of AI technologies, such as lethal autonomous weapons, that operate without meaningful human control.



Global Framework for Regulation:

- Calling for international agreements that regulate the use of AI in the military domain.
- Ensuring its application is ethical, transparent, and focused on peacekeeping rather than aggression.



Diplomatic Objective:

Kenyan diplomats should actively engage in multilateral forums such as the REAIM initiative to promote responsible AI governance in military contexts. This includes advocating for international agreements that regulate the use of AI in defense, ensuring that these technologies are deployed in ways that protect human rights and prevent their misuse. Diplomats should push for the adoption of ethical guidelines that ensure AI systems, particularly in surveillance and autonomous systems, are used in ways that preserve global security and humanitarian principles.



Key Message:

"Kenya advocates for the responsible development and deployment of AI in military operations, rooted in transparency, accountability, and human oversight. We call for global cooperation to ensure AI technologies are used to strengthen peace and security, in alignment with international law and humanitarian values."

9.5. Geopolitical Considerations

Kenya recognizes the complex geopolitical landscape surrounding AI and seeks to navigate these dynamics to promote inclusive, ethical, and equitable AI governance.

Key Considerations:



US-China AI Rivalry:

- Acknowledging that the US and China are in strategic competition over AI dominance, which has global implications.
- Promoting multilateralism to prevent the bifurcation of AI governance structures that could leave developing nations dependent on one bloc or the other.



South-South Cooperation:

- Kenya is a leading voice in advocating for South-South cooperation on AI.
- Promoting regional collaboration to build AI capacity and infrastructure that reflects the unique needs and challenges of the Global South.



AI in Global Trade and Security:

- Recognizing the increasing role of AI in global trade, supply chains, and security.
- Focusing on ensuring that AI regulations in trade and security are inclusive, transparent, and do not disadvantage developing nations.



Diplomatic Objective:

Kenyan diplomats should focus on ensuring that AI governance frameworks at the United Nations, African Union, and other multilateral forums are inclusive, ethical, and collaborative. They should advocate for AI systems that respect the sovereignty of nations within international law, reduce inequalities, and enhance global collaboration.



Key Message:

"Kenya promotes a multilateral and ethical approach to AI governance, ensuring that AI technologies respect national sovereignty within international law, uphold human rights, and reduce global inequalities. We call for global cooperation to prevent the concentration of AI power in a few countries and corporations."

Critical AI Challenges for Kenyan Diplomats:

Risks, Misuse, and Strategic Considerations



As AI becomes a crucial component of global technological development, Kenyan diplomats must stay vigilant about the risks that can arise from its misuse. AI has the potential to drive growth and innovation, but it also presents significant challenges in areas such as bias, security, job displacement, misinformation, and weaponization. These risks could undermine national stability, economic progress, and social cohesion if not properly addressed. Kenyan diplomats must engage in global AI discussions, ensuring that governance frameworks reflect Kenya's commitment to equity, transparency, and ethical AI use.

10.1. Bias and Discrimination in AI Systems

One of the most significant risks of AI is its potential to replicate and exacerbate societal biases. Since AI systems are trained on historical data, any biases in that data can become embedded in the algorithms, leading to discriminatory outcomes. This is especially concerning in sensitive areas such as employment, criminal justice, healthcare, and financial services, where biased AI systems could disproportionately affect vulnerable and marginalized groups.

Key Concerns:

01

Discriminatory Decision-Making:

- AI systems that learn from biased data can lead to discrimination in hiring, credit scoring, law enforcement, and healthcare.
- Gender, racial, and ethnic biases can become amplified, further entrenching inequality.



Diplomatic Focus:

Kenyan diplomats should advocate for global standards that detect and mitigate bias in AI systems. This includes pushing for regulations requiring algorithmic transparency, regular audits, and the inclusion of diverse datasets to reduce discrimination risks.



Key Message:

"Kenya advocates for global AI standards that detect and mitigate bias in AI systems to promote fairness and inclusivity in all sectors."

10.2. Data Privacy and Cybersecurity Concerns

AI systems are data-intensive, and the more data they process, the greater the risks to data privacy and cybersecurity. With AI integration into critical systems like energy grids, financial systems, and healthcare, the potential for cyberattacks increases. Additionally, the misuse of personal data by AI systems could lead to privacy violations and expose sensitive information to malicious actors.

Key Risks:

01

Infringement on Personal Privacy:

- AI systems processing vast amounts of personal information without adequate protection can infringe on data privacy rights.

02

Cybersecurity Threats:

- AI-enabled cyberattacks could target critical infrastructure, leading to national security risks.
- AI can be used for identity theft, phishing, and financial fraud.

03

Data Sovereignty Issues:

- Cross-border data flows raise concerns about data sovereignty, security, and ethical use, especially when sensitive data is stored in other jurisdictions.



Diplomatic Focus:

Kenyan diplomats should advocate for international agreements that strengthen data protection, promote cybersecurity, and address cross-border data flow risks. This includes pushing for robust data protection regulations aligning with global best practices.



Key Message:

"Kenya calls for international frameworks that protect data privacy and secure AI systems from cyber threats, ensuring the integrity of critical infrastructure and safeguarding citizens' rights."

10.3. AI-Driven Job Displacement and Economic Inequality

While AI can drive innovation and economic growth, it poses significant risks of job displacement, particularly in industries reliant on manual labor and routine tasks. Automation fueled by AI could lead to widespread job losses, exacerbating economic inequality and potentially causing social unrest. Kenyan diplomats must push for policies ensuring a just transition for workers affected by AI technologies.

Key Concerns:



Unemployment Risks:

- Automation in sectors like manufacturing, retail, and logistics could lead to high unemployment levels, especially among low-skilled workers.



Need for Reskilling:

- Without reskilling and upskilling programs, displaced workers may face long-term unemployment, contributing to economic stagnation.



Worsening Digital Divide:

- AI-driven economic inequality could widen the digital divide, leaving developing nations behind in the global economy.



Diplomatic Focus:

Kenyan diplomats should ensure international AI frameworks address job displacement by promoting reskilling initiatives and social safety nets. Kenya should advocate for policies fostering inclusive economic growth, ensuring AI benefits all segments of society.



Key Message:

"Kenya advocates for global cooperation to address the economic impacts of AI, ensuring that workers displaced by automation are supported through reskilling programs and social protections."

10.4. AI-Enabled Misinformation and Disinformation

AI, particularly generative AI, can create and amplify misinformation and disinformation at an unprecedented scale. AI-generated content like deepfakes and fake news can manipulate public opinion, disrupt democratic processes, and exacerbate social instability. Kenyan diplomats must engage in discussions on countering AI-driven misinformation, particularly where it undermines public trust and national security.

Key Risks:



Manipulation of Public Opinion:

- AI-generated deepfakes and fake news can influence elections, sow discord, and undermine democratic institutions.



Social Unrest:

- Disinformation campaigns can lead to political polarization, ethnic tensions, and social unrest.



Public Health Risks:

- Misinformation can undermine public health efforts or create panic during crises.



Diplomatic Focus:

Kenyan diplomats should advocate for international agreements regulating AI use in creating and spreading misinformation. These should include transparency and accountability measures for social media platforms and AI developers, ensuring content origins are clear and traceable.



Key Message:

"Kenya calls for international efforts to counter the spread of AI-driven misinformation and disinformation, ensuring that AI technologies are used responsibly and transparently."

10.5. AI Weaponization and Autonomous Systems

The weaponization of AI, especially through developing lethal autonomous weapons systems (LAWs), poses a serious threat to global security and international humanitarian law. Kenya's position is clear: AI should not be used to

develop autonomous weapons making life-or-death decisions without human intervention. The potential for AI weaponization could lead to new forms of warfare, arms races, and unintended escalation in global conflicts.

Key Risks:

01

Ethical Concerns:

- LAWs operating without human oversight raise issues about accountability and compliance with international law.

02

Increased Conflict Risks:

- AI-powered military technologies could heighten global conflict risks, arms races, and military escalation.

03

Human Rights Violations:

- AI systems designed for military surveillance could be misused to suppress dissent or violate human rights.



Diplomatic Focus:

Kenyan diplomats should advocate for international treaties regulating AI in military applications and prohibiting lethal autonomous weapons. Kenya must promote AI use in peacebuilding and conflict prevention, particularly in unstable regions.



Key Message:

"Kenya supports global efforts to prohibit the development of lethal autonomous weapons and advocates for the ethical use of AI in military applications, ensuring compliance with international humanitarian law."

10.6. The Potential Cost of AI Misuse

AI misuse can have far-reaching economic, social, and political costs if not properly regulated. From disinformation campaigns undermining democracy to job displacement and cybersecurity breaches, unchecked AI

development could be devastating. Kenyan diplomats must remain mindful of these potential costs, ensuring global AI governance frameworks include provisions for accountability, fair use, and risk mitigation.

Key Costs:



Erosion of Trust:

- Misinformation and biased AI systems can erode public trust in institutions, leading to political instability and social unrest.



Economic Losses:

- AI-driven cyberattacks or job displacement could lead to significant economic losses, particularly in critical infrastructure sectors.



National Security Risks:

- The weaponization of AI or its use for cyberwarfare could undermine national security and increase the risk of global conflicts.



Diplomatic Focus:

Kenyan diplomats should engage in global AI discussions with a focus on preventing AI misuse and mitigating its costs. This includes advocating for global AI accountability standards that hold developers and users responsible for the consequences of their AI systems.



Key Message:

“Kenya advocates for global AI governance frameworks that include accountability standards to prevent the misuse of AI and mitigate potential costs to society, economy, and national security.”

Opportunities of AI: Unlocking Potential and the Cost of Missed Use



AI presents Kenya with unparalleled opportunities to drive economic growth, improve public services, and address some of the most pressing global challenges, including climate change, public health, and agriculture. However, failing to effectively adopt and integrate AI technologies can result in significant missed opportunities, leading to economic stagnation, inefficiencies, and the widening of the digital divide. For Kenya to remain competitive on the global stage, it must fully leverage the transformative potential of AI while minimizing the cost of its missed use.

This section highlights key opportunities AI offers and explores the **cost of missed use**, emphasizing the importance of timely and strategic adoption of AI technologies.

11.1. Economic Development and Innovation

AI is projected to add up to **\$15.7 trillion** to the global economy by 2030, according to a PwC report. In Africa, the economic impact of AI could be transformative, potentially adding **\$1.5 trillion** to the continent's GDP by 2030. For

Kenya, strategically investing in AI could add approximately **\$1.5 to \$3 billion** annually to the economy by 2030. This growth would come from increased **productivity, efficiency, and innovation** across sectors such as **agriculture, finance, and energy**.

Key Opportunities:



AI-Driven Innovation:

- AI enables the development of new business models and innovative services.
- In FinTech, AI-powered tools like algorithmic trading, fraud detection, and chatbots can enhance financial inclusion by providing services to underserved populations.

Example: By 2030, AI in Kenya's FinTech sector could contribute approximately \$500 million annually to the economy.



Productivity Gains:

- AI adoption could lead to 15-20% improvements in productivity, particularly in manufacturing, agriculture, and logistics.

Example: AI-powered systems in Kenya's manufacturing sector could boost annual production output by 15-25%, contributing an additional \$500 million to \$1 billion to GDP annually.



Data-Driven Decision-Making:

- AI's ability to analyze vast amounts of data can improve decision-making at both corporate and government levels.
- In agriculture, AI can optimize planting cycles, water usage, and pest control, leading to higher yields.

Example: Integration of AI in precision farming could improve yields by 10-15%, adding \$300 million annually to Kenya's agricultural GDP.

Cost of Missed Use:

01

Reduced Global Competitiveness:

- Countries failing to adopt AI could experience 40% slower economic growth by 2035.
- For Kenya, this could mean a loss of \$1-2 billion annually in potential economic gains.

02

Missed Innovation:

- Without AI, Kenya could miss out on establishing itself as a regional leader in emerging technologies.
- Other African nations investing heavily in AI may overtake Kenya in key sectors such as FinTech, AgriTech, and HealthTech.

03

Digital Divide:

- If Kenya doesn't invest in AI, the gap between tech-savvy urban centers and rural areas will likely widen, leading to unequal access to technology-driven services and exacerbating socioeconomic disparities.

11.2. Public Service Transformation

AI has the potential to revolutionize public services, enhancing the quality, efficiency, and accessibility of essential services such as healthcare, education, and governance. Kenya can capitalize on this trend to modernize its public sector.

Key Opportunities:



AI in Healthcare:

- AI-driven diagnostics and predictive analytics can transform healthcare delivery.

Example: AI tools could save an estimated \$500 million annually in Kenya by improving healthcare efficiency, reducing diagnostic errors, and enhancing patient outcomes.

- AI-powered telemedicine platforms could expand access to healthcare for rural populations, potentially reducing the need for physical infrastructure by 15-20% in underserved areas.



AI in Education:

- AI can provide personalized learning experiences tailored to individual student needs.

Example: AI-powered tools in education could improve literacy rates by 10-15% over the next decade, translating into long-term economic benefits of \$200 million annually in enhanced human capital development.



AI in Governance:

- AI can improve government efficiency by automating routine administrative tasks and reducing corruption.

Example: AI-based governance solutions could enhance transparency and accountability in public fund management, potentially saving \$300 million annually by reducing inefficiencies and corruption.

Cost of Missed Use:

01

Inefficient Public Services:

- Governments that fail to integrate AI may face inefficiencies costing up to 15% of GDP annually.
- For Kenya, this could mean losing \$3-5 billion in potential savings and productivity gains by 2030.

02

Healthcare Disparities:

- Without AI, Kenya risks continuing healthcare inequalities, particularly in rural areas.

03

Education Gaps:

- Lack of AI in education could widen the learning divide, hindering Kenya's efforts to achieve its Vision 2030 goals.

11.3. Sustainable Development and Climate Action

AI is key to achieving sustainable development goals (SDGs) and combating climate change by optimizing the management of natural resources, predicting environmental changes, and reducing the environmental footprint of industries. AI's ability to analyze environmental data and manage resources more efficiently can help Kenya meet its climate action targets.

Key Opportunities:



AI in Agriculture:

- AI can significantly boost agricultural productivity while reducing environmental impacts.

Example: AI-driven agriculture could increase yields by 20-30% in Kenya, contributing an additional \$400-600 million annually to the agricultural GDP. AI could also reduce water use in farming by 10-20%, enhancing sustainability.



AI in Energy:

- AI can optimize energy production and distribution, leading to better energy efficiency and a transition to renewable energy sources.

Example: AI could reduce energy consumption by 10-15%, potentially saving \$200 million annually in energy costs while supporting Kenya's green energy transition.



Climate Monitoring and Mitigation:

- AI can analyze environmental data to monitor climate change, predict weather patterns, and manage deforestation and wildlife conservation.

Example: AI tools could improve disaster preparedness and response, potentially saving hundreds of millions of dollars by preventing the worst impacts of droughts, floods, and other climate-related events.

Cost of Missed Use:

01

Vulnerability to Climate Change:

- Without AI-driven climate solutions, Kenya could face increased vulnerability to extreme weather events, with economic losses potentially exceeding \$500 million annually by 2030.

02

Agricultural Inefficiency:

- Missing out on AI technologies in agriculture could result in lower yields and inefficient resource use, leading to \$300-500 million in lost agricultural output annually.

11.4. AI and Job Creation vs. Job Displacement

AI presents both opportunities and challenges in terms of employment. While AI has the potential to create new jobs in data science, AI engineering, and related fields, it also poses risks of job displacement in sectors vulnerable to automation.

Job Displacement:



Automation Risks:

- AI could automate up to 20-25% of jobs in Africa by 2030.

Example: In Kenya's manufacturing sector, up to 35% of jobs could be automated by 2030, potentially displacing around 400,000 workers.
- Other industries likely to experience job losses include agriculture (particularly in farm labor), transportation, and administrative services.

Job Creation:



New Opportunities:

- AI could generate 1 million new jobs in Africa by 2030, with Kenya potentially benefiting from 10-15% of these jobs.

Example: Kenya's emerging tech ecosystem could generate 100,000+ new jobs in AI-related fields by 2030, including roles in AI engineering, data science, and machine learning.



Reskilling Initiatives:

- With the right reskilling initiatives, Kenya can minimize job losses and ensure that workers displaced by AI automation can transition into new roles in tech-driven sectors.

Cost of Missed Use:

01

Missed Job Creation Opportunities:

- If Kenya does not fully embrace AI, it could miss out on creating 1 million new jobs by 2030.

02

Increased Unemployment:

- Without investment in reskilling and upskilling, Kenya risks higher unemployment rates as AI automates jobs, leading to social unrest and economic inequality.

11.5. The Cost of AI Misuse: Diplomatic Advocacy and Engagement

As Kenyan diplomats engage in international discussions on AI governance, they must emphasize the risks of AI misuse, including its potential to erode public trust, compromise national security, and widen inequalities. Ensuring that AI is developed and used ethically and responsibly is key to avoiding these pitfalls.

Diplomatic Focus:

01

Advocating for International Agreements on AI Governance:

- Calling for global AI governance frameworks that prioritize ethical use and prevent AI misuse.

Potential Language:

"Kenya advocates for a global framework that ensures AI is developed and deployed ethically. We must prevent the misuse of AI in spreading disinformation, undermining privacy, and perpetuating biases."

02

Engaging with Corporations on Responsible AI Use:

- Encouraging corporations to adopt best practices in AI development and deployment.

Potential Language:

"Kenya urges your organization to adopt rigorous standards for responsible AI use, including transparency in algorithmic decision-making and adherence to data privacy regulations."

03

Addressing Cybersecurity Risks in AI Systems:

- Highlighting the cybersecurity vulnerabilities associated with AI and calling for international cooperation.

Potential Language:

"Kenya calls for a united global approach to AI cybersecurity. We must share intelligence, establish common standards, and ensure that AI systems are secure from malicious actors."

04

Pushing for Accountability in AI Bias and Discrimination:

- Advocating for mechanisms that detect and mitigate bias in AI systems.

Potential Language:

"Kenya calls for international regulations that require AI developers to conduct regular bias audits to prevent discrimination."

11.6. Mitigating Risks and Harnessing Opportunities: Diplomatic Action and Engagement

Kenyan diplomats play a pivotal role in navigating the global AI landscape, ensuring that the risks associated with AI are mitigated while seizing the immense opportunities AI offers for economic growth, innovation, and sustainable development.

Diplomatic Focus: Mitigating Risks

01

Promoting AI Governance and Ethical Standards:

- Leading discussions in multilateral forums to advocate for AI governance frameworks that prioritize human oversight, data privacy, and fair use.

Potential Language:

"Kenya is committed to fostering a governance model that ensures AI is developed and used responsibly."

02

Engaging with Companies to Promote Responsible AI Use:

- Encouraging companies to adopt ethical AI practices.

Potential Language:

"Kenya welcomes companies committed to responsible AI practices, prioritizing fairness and accountability."

03

Advocating for AI Cybersecurity:

- Collaborating with international partners to develop AI-specific cybersecurity protocols.

Potential Language:

"Kenya is ready to work with global partners to establish international AI cybersecurity protocols."

04

Promoting Reskilling and Upskilling Initiatives:

- Advocating for global efforts to address job displacement through reskilling programs.

Potential Language:

"Kenya advocates for international collaboration on reskilling initiatives to prepare workers for the AI economy."

05

Encouraging International AI Cooperation:

- Engaging in global AI partnerships to influence governance and ensure AI benefits the Global South.

Potential Language:

"Kenya believes that AI should be a tool for inclusive development and sustainable growth."

Diplomatic Focus: Harnessing Opportunities

01

Positioning Kenya as a Regional Leader in AI-Driven Innovation:

- Promoting investments in AI research and development, highlighting Kenya's potential to lead in sectors like FinTech, AgriTech, and HealthTech.

Potential Language:

"Kenya invites international investors to collaborate in advancing AI-driven innovation."

02

Promoting AI for Public Goods in Rural Areas:

- Highlighting AI's potential to improve services in underserved areas.

Potential Language:

"Kenya is committed to harnessing AI to serve the public good, particularly in rural areas."

03

Driving AI for Green and Sustainable Development:

- Advocating for AI solutions that address climate change and advance SDGs.

Potential Language:

"We encourage international cooperation to harness AI for sustainable development."

04

Attracting AI Investment and Innovation:

- Emphasizing Kenya's strategic advantages as a hub for AI innovation.

Potential Language:

"Kenya is a prime destination for AI investment, with a commitment to sustainable development."

05

Engaging in International AI Cooperation for Sustainable Development:

- Promoting ethical AI governance and leading efforts on AI-driven innovation and sustainability.

Potential Language:

"Kenya is leading in integrating AI into our sustainability efforts and encourages global cooperation."

Policy Direction: Aligning AI Governance with ICT Sector Reforms

Kenya is actively pursuing ICT sector reforms to enhance the country's digital infrastructure, AI capabilities, and data governance frameworks. These reforms are instrumental in driving Kenya's leadership in AI and emerging technologies on the global stage. Kenyan diplomats play a key role in advocating for international cooperation, investment, and partnerships that support these domestic reforms while advancing Kenya's broader AI agenda.



12.1. Strengthening ICT Policy and AI Infrastructure

Kenya's ongoing ICT sector reforms are focused on enhancing AI infrastructure to support economic growth and technological advancement.

Key Initiatives:

01

Incorporating AI into ICT Policy Reforms:

- Updating ICT policies to reflect rapid developments in AI and emerging technologies.

Diplomatic Focus:

"Kenya's ICT sector reforms integrate AI governance, ensuring our policy framework supports ethical AI development, data sovereignty, and cross-border data flows."

02

Encouraging AI Infrastructure Investment:

- Prioritizing building AI infrastructure, including data centers, cloud services, and high-performance computing.

Diplomatic Focus:

"Kenya is committed to developing advanced AI infrastructure under our ICT reforms. We welcome international collaborations to drive technology-led growth and innovation through AI."

03

Supporting Semiconductor Manufacturing:

- Attracting investments essential for AI hardware development.

Diplomatic Focus:

"As part of our ICT sector reforms, Kenya is seeking partnerships to establish local semiconductor manufacturing, ensuring Africa's resilience in AI-driven economies."

12.2. Data Governance and Digital Sovereignty

Kenya's data governance strategy emphasizes protecting digital sovereignty while aligning with global standards for data privacy and security.

Key Initiatives:

01

National Data Policy Implementation:

- Creating a comprehensive policy to regulate data collection, storage, and usage while ensuring secure cross-border data flows.

Diplomatic Focus:

"Kenya's ICT reforms include a robust National Data Policy that balances digital sovereignty with secure cross-border data flows."

02

Strengthening Data Protection Laws:

- Updating laws to address AI-related challenges like AI-driven decision-making, biometric data, and algorithmic transparency.

Diplomatic Focus:

"Kenya's ICT sector reforms focus on strengthening data protection laws that address AI-related challenges, ensuring privacy, transparency, and accountability in AI systems."

12.3. Digital Skills Development and Capacity Building

Ensuring the workforce is prepared for the demands of an AI-driven economy is a key aspect of Kenya's ICT sector reforms.

Key Initiatives:

01

National Digital Skilling Strategy in AI:

- Developing targeted training for youth, professionals, and public servants.

Diplomatic Focus:

"Kenya's ICT reforms include a national digital skilling strategy aimed at preparing our workforce for the AI-driven future. We seek global partnerships to enhance these training programs and build digital literacy across sectors."

02

Establishing AI Research and Innovation Hubs:

Promoting the establishment of AI research hubs in collaboration with universities, research institutions, and the private sector.

- Presidential Announcement of the Emerging Technologies Institute and Action Lab:
- Creation of an institute under the Office of the Special Envoy on Technology to focus on AI and emerging technologies.

Diplomatic Focus:

"Kenya's ICT reforms include the establishment of AI research hubs, including the recently announced Emerging Technologies Institute and Action Lab. We invite global partners to collaborate in creating innovation centers that will drive cutting-edge AI research, foster talent development, and position Kenya as a leader in emerging technologies across Africa."

12.4. Council of Emerging Technologies and AI Governance

As part of the ICT reforms, Kenya is establishing a Council of Emerging Technologies to oversee AI governance and other technological innovations.

Key Initiatives:

01 Forming the Council of Emerging Technologies:

- Overseeing AI, blockchain, and other cutting-edge technologies, providing policy guidance and innovation support.

Diplomatic Focus:

"As part of Kenya's ICT sector reforms, we are establishing a Council of Emerging Technologies to guide AI and frontier technology governance. We seek global partnerships to promote ethical AI and foster responsible innovation."

02 Developing an Ethical AI Governance Framework:

- Establishing an AI Ethics Framework promoting fairness, transparency, and accountability in AI systems.

Diplomatic Focus:

"Kenya's ICT reforms include the development of an AI ethics framework that promotes fairness, transparency, and accountability in AI systems. We encourage international cooperation to build a global standard for ethical AI governance."

AI Terminologies - Glossary

Accuracy: A metric used in binary classification that measures the proportion of true results (both true positives and true negatives) among the total number of cases examined.

Actionable Intelligence: Information that can be acted upon or used to make informed decisions.

Adversarial Learning: A machine learning technique where models are trained to compete with one another, often to improve the robustness and accuracy of the final model.

Adversarial Machine Learning: A technique focusing on how machine learning models can be exploited or manipulated through malicious inputs. Understanding adversarial attacks is crucial for developing AI systems that are secure and resilient against such threats.

AgriTech: The application of technology, including AI, to improve agricultural practices. AI-driven AgriTech solutions in Kenya can optimize farming operations, increase crop yields, and enhance food security.

AI (Artificial Intelligence): A field of computer science focused on creating systems capable of performing tasks that typically require human intelligence. These tasks include decision-making, problem-solving, learning, and adapting to new situations.

AI Accelerator: Specialized hardware designed to speed up AI computations, particularly in deep learning tasks.

AI and Cybersecurity: The intersection of AI technologies with cybersecurity, including using AI to detect threats and addressing the security risks posed by AI systems.

AI and Human Rights: Examining how AI technologies impact human rights, including concerns about surveillance, discrimination, and freedom of expression.

AI and International Law: Exploring how AI technologies fit within existing international legal frameworks and the need for new regulations.

AI and Sustainable Development Goals (SDGs): Leveraging AI technologies to achieve the United Nations' SDGs, addressing issues like poverty, inequality, and climate change.

AI and Workforce Development: Initiatives to prepare the workforce for changes brought by AI, including education and reskilling programs.

AI Augmentation: Using AI to enhance human capabilities rather than replace them, promoting collaboration between humans and machines.

AI Certification: Programs that certify the proficiency of individuals or organizations in AI technologies and ethical practices.

AI Diplomacy: The practice of international relations concerning AI policies, agreements, and collaborations between nations.

AI Ecosystem: The network of stakeholders, technologies, policies, and infrastructures that collectively support the development and deployment of AI.

AI Ethics: A field of study that examines the moral implications of AI technologies. It involves developing guidelines to ensure AI is developed and used responsibly.

AI Ethics Guidelines: Frameworks developed by organizations or governments to guide the ethical development and use of AI technologies.

AI for Public Goods: The use of AI technologies to improve the delivery of essential services, such as healthcare and education, particularly for underserved populations.

AI for Social Good: The application of AI technologies to address societal challenges, such as healthcare, education, and environmental sustainability.

AI governance: The strategies, policies, and regulations that govern the development, deployment, and use of artificial intelligence technologies to ensure that they are safe, ethical, and beneficial for society.

AI Governance: The frameworks, policies, and regulations that guide the development, deployment, and use of AI technologies to ensure they are ethical, transparent, and accountable.

AI Governance Frameworks: Policies and structures that guide the ethical development and deployment of AI technologies, ensuring they align with societal values and legal norms.

AI Literacy: The knowledge and skills needed to understand and engage with AI technologies effectively. Promoting AI literacy is crucial for informed decision-making.

AI Regulation: Legal measures enacted to control the development, deployment, and use of AI technologies. Regulations aim to mitigate risks and protect citizens' rights.

AI Roadmap: A strategic plan outlining the development and implementation of AI technologies within an organization or nation.

AI Safety: Ensuring that AI systems operate reliably and as intended, without causing unintended harm to humans or the environment.

AI Standardization: Developing and implementing technical standards to ensure compatibility and safety of AI technologies globally.

AI Strategy: A comprehensive approach to integrating AI into various sectors, including setting goals, policies, and initiatives to guide AI development.

AI technologies: Tools and systems that utilize artificial intelligence to perform functions that would typically require human intelligence, such as analyzing data, automating processes, or interacting with users.

AI-driven economy: An economic system significantly influenced or controlled by technologies based on artificial intelligence, altering how industries and markets operate.

Algorithm: A set of rules or steps used by computers to perform tasks and solve problems.

Algorithmic Accountability: The responsibility of organizations to ensure their AI systems are fair, transparent, and do not cause harm. It involves regular audits and assessments.

Algorithmic Bias: Systematic and repeatable errors in a computer system that create unfair outcomes, such as privileging one arbitrary group of users over others.

Algorithmic Fairness: Ensuring that AI algorithms make decisions that are free from unfair biases and do not discriminate against any group.

Algorithmic Impact Assessment: A process to evaluate the potential effects of an AI system before deployment, including ethical, social, and legal implications.

Algorithmic Transparency: The principle that the workings of algorithms should be open and understandable to stakeholders. Transparency helps in building trust and ensuring accountability in AI systems.

Anaphora: In linguistics, the use of a word referring back to another word for its meaning, commonly a pronoun referring back to a previously mentioned noun.

Annotation: The process of adding interpretative information to a text, which can be used to identify and flag grammatical, semantic, or phonetic elements.

Artificial Intelligence: A field of computer science focused on creating systems capable of performing tasks that typically require human intelligence. These tasks include decision-making, problem-solving, learning, and adapting to new situations.

Artificial Neural Network (ANN): Computational models inspired by the human brain, consisting of interconnected nodes that process information in a manner similar to biological neurons.

Auto-classification: The use of AI techniques to automatically classify and sort text into predefined categories, improving efficiency and accuracy.

Auto-complete: A feature in digital interfaces that predicts and displays suggestions to the user as they enter text, improving user experience.

Automation: The use of technology to perform tasks without human intervention. AI-driven automation enables more complex and adaptive operations.

Autonomous Systems: Systems capable of performing tasks without human intervention, using AI to make decisions based on sensor data and environmental inputs.

BERT (aka Bidirectional Encoder Representation from Transformers): Google's technology. A large scale pretrained model that is first trained on very large amounts of unannotated data. The model is then transferred to an NLP task where it is fed another smaller task-specific dataset which is used to fine-tune the final model.

BERT (Bidirectional Encoder Representations from Transformers): A transformer-based machine learning technique for natural language processing pre-trained on a large corpus of text.

Bias: Systematic favoritism or prejudice in data or algorithms that can lead to unfair outcomes, particularly affecting marginalized groups.

Bias in AI: Refers to systematic errors in AI systems that lead to unfair outcomes, often discriminating against certain groups. Addressing bias is essential to ensure AI technologies are fair and equitable.

Cataphora: A figure of speech in which a pronoun or other linguistic unit refers forward to another unit (the referent appears later in the text).

Categorization: The process in natural language processing of assigning a category to text based on its content.

Category: A class or division in a system of classification that groups entities based on common characteristics.

Category Trees: Hierarchical models that show how categories are related to each other, often used to organize information and data.

Classification: The process of predicting the category of a given input based on trained models, commonly used in text analysis and other AI applications.

Cloud Computing: The delivery of computing services over the internet, allowing for scalable resources and flexible solutions for AI deployment.

Co-occurrence: The appearance of two or more items or events together in time or space, often used in statistics and data analysis to infer associations or correlations.

Cognitive Biases in AI: The tendencies of AI systems to reflect human cognitive biases present in training data, leading to skewed outcomes.

Cognitive Computing: Systems that simulate human thought processes, often using AI and machine learning to solve complex problems.

Cognitive Map: A mental representation of a person's physical environment and spatial orientation.

Completions: In AI, the generated output that completes an input sequence provided to a language model.

Composite AI: Integration of various AI technologies to enhance learning efficiency and solve complex problems by leveraging diverse AI methodologies.

Computational Linguistics: The scientific study of language from a computational perspective, often focused on programming computers to process and analyze large amounts of natural language data.

Computational Linguistics (Text Analytics, Text Mining): Computational linguistics is an interdisciplinary field concerned with the computational modeling of natural language.

Computational Semantics: The field of study dedicated to understanding how machines can comprehend and interpret human languages in terms of meaning.

Computational Semantics (Semantic Technology): Computational semantics is the study of how to automate the construction and reasoning of meaning representations of natural language expressions.

Computing: The process of utilizing computer technology to complete a task. It involves the design and operation of computer systems and software.

Content: In the context of digital media, content refers to information and experiences that are directed towards an end-user or audience.

Content Enrichment: The enhancement of existing content with additional information or modifications to increase its usefulness, often through AI processes.

Content Enrichment or Enrichment: The process of applying advanced techniques such as machine learning, artificial intelligence, and language processing to automatically extract meaningful information from your text-based documents.

Controlled Vocabulary: A predefined list of terms and phrases used in a particular context to ensure consistency and accuracy in information retrieval and data processing.

Conversational AI: Artificial intelligence technologies that enable computers to understand, process, and respond to voice or text inputs in a human-like manner.

Convolutional Neural Networks (CNN): A type of deep neural network used primarily to analyze visual imagery, known for its ability to pick out invariant features for classification tasks.

Corpus: In linguistics, a large and structured set of texts (nowadays usually electronically stored and processed) used for statistical analysis and hypothesis testing, checking occurrences or validating linguistic rules within a specific language territory.

Council of Emerging Technologies: A proposed national body under Kenya's ICT reforms tasked with overseeing the governance and regulation of AI and other emerging technologies.

Custom/Domain Language Model: A language model that is specifically tailored to the vocabulary and stylistic needs of a particular field or profession, enhancing the accuracy and relevance of outputs.

Cybersecurity: The protection of systems, networks, and data from cyberattacks, ensuring the integrity and confidentiality of information, particularly in AI applications.

Data Annotation: The process of labeling data to make it usable for training AI models, crucial for supervised learning.

Data Center: A facility used to house computer systems and associated components, essential for storing and processing large volumes of data used in AI.

Data Discovery: The process of identifying and understanding data that can be used to drive business decisions and strategy, often through automated tools and AI.

Data Drift: The change in model input data that can occur due to unforeseen factors over time, potentially degrading the model's performance.

Data Ethics: The principles and guidelines that govern the ethical use of data, including issues of consent, privacy, and fairness.

Data Extraction: The process of retrieving specific data from structured or unstructured sources.

Data Governance: The management of data availability, usability, integrity, and security within an organization. Effective data governance is essential for reliable AI systems.

Data Ingestion: The mechanism of moving data from one or more sources to a destination where it can be stored and further analyzed.

Data Labeling: The activity of identifying raw data (such as images, text files, videos, etc.) and adding one or more meaningful and informative labels to provide context so that a machine learning model can learn from it.

Data Minimization: The principle of collecting only the data that is necessary for a specific purpose, reducing privacy risks.

Data Privacy: The aspect of information technology that deals with the ability an organization or individual has to determine what data in a computer system can be shared with third parties.

Data Protection: Legal and technical measures to safeguard personal and sensitive data from unauthorized access or misuse.

Data Protection Law (Kenya): Kenya's legal framework for data protection, ensuring the ethical handling of personal data and safeguarding individuals' privacy rights.

Data Scarcity: The lack of sufficient data needed to train models effectively, often a challenge in machine learning projects.

Data Sovereignty: The concept that data is subject to the laws and governance structures within the nation it is collected. Data sovereignty is significant for countries in protecting data privacy and ensuring compliance with local regulations.

Deep Learning: A subset of machine learning that uses neural networks with three or more layers. These networks can learn complex patterns in large amounts of data.

Deep Reinforcement Learning: An area of machine learning combining deep learning and reinforcement learning principles to create systems that learn from actions and outcomes.

Deepfake: Synthetic media where a person in an existing image or video is replaced with someone else's likeness using AI. Deepfakes raise concerns about misinformation and privacy.

Deepfakes: Synthetic media in which a person's likeness is digitally manipulated to create realistic-looking images or videos, often used to spread misinformation.

Did You Mean (DYM): A feature in search engines that suggests alternative queries when the entered search term might have been misspelled.

Digital Divide: The gap between individuals and communities with access to modern digital technologies and those without. Bridging this divide is essential for ensuring equitable access to AI-driven services.

Digital future: The anticipated developments in digital technology that are expected to transform society, economy, and governance.

Digital Public Goods: Technology solutions designed for public use, providing open access to essential services like healthcare, education, and governance.

Digital Public Infrastructure: Foundational systems and technologies that support public services in the digital age, ensuring equitable access to essential services.

Digital Sovereignty: The principle that a nation has control over its own digital infrastructure, data, and technologies, aligning them with national goals and values.

Disambiguation: The resolution of ambiguity in language, such as when a word can have multiple meanings depending on the context.

Disinformation: Deliberately false or misleading information spread with the intent to deceive or manipulate the audience.

Domain Knowledge: Specific knowledge or expertise in a particular area or industry that enhances the relevance and effectiveness of AI solutions.

Economic Development: The process by which a country improves the economic, political, and social well-being of its people, focusing on sustainable and equitable growth.

Economic growth: The increase in the inflation-adjusted market value of the goods and services produced by an economy over time. In the context of AI, this refers to growth driven by innovations and improvements in AI technologies.

Edge AI: The deployment of AI algorithms on devices at the edge of the network (e.g., smartphones, IoT devices) rather than in centralized cloud servers. This reduces latency and improves data privacy.

Edge Computing: Processing data near the source of data generation (edge of the network) to reduce latency and bandwidth use.

Edge Model: A computational model that performs data processing at or near the source of data generation, often used in IoT devices.

Embedding: A representation of data where elements with a similar meaning have a similar representation in a vector space, commonly used in machine learning.

Emerging Technologies: New, advanced technologies that are expected to transform industries and societies, including AI, blockchain, and the Internet of Things (IoT).

Emotion AI (aka Affective Computing): AI that identifies human emotions and adapts its response based on them, often used in customer service and interaction scenarios.

Entity: Any item in a dataset that is distinguishable from other items. Entities are often labeled in data to teach models to recognize and categorize them.

Environmental, Social, and Governance (ESG): Criteria used to evaluate a company's operations and its future sustainability, increasingly relevant in AI ethics discussions.

Ethical AI: The development and use of AI technologies in ways that align with ethical principles, such as fairness, transparency, and accountability.

Ethical Hacking: Authorized attempts to gain unauthorized access to a system to identify vulnerabilities, helping organizations strengthen their security.

Ethics: Moral principles that govern a person's behavior or the conducting of an activity. In AI, ethics guide the development and use of technologies in a way that benefits society and avoids harm.

ETL (Extract, Transform, Load): Refers to a process in database usage and data warehousing that involves extracting data from outside sources, transforming it to fit operational needs, and loading it into the end target.

Explainable AI (XAI): AI systems designed to provide clear explanations for their decisions and actions, fostering trust and accountability.

Explainable AI/Explainability: Refers to methods and techniques in the application of artificial intelligence such that the results of the solution can be understood by human experts.

Extraction or Keyphrase Extraction: The task of automatically identifying terms that best describe the subject of a document.

Extractive Summarization: A type of document summarization that involves pulling key sentences or phrases directly from the text to create a condensed version.

F-score (F-measure, F1 measure): A measure of a test's accuracy, which considers both precision and recall to compute the score.

Fairness: In AI, fairness refers to ensuring that decisions made by AI systems are free of bias and do not lead to discriminatory outcomes.

Federated Learning: A machine learning approach that enables models to be trained across multiple decentralized devices holding local data samples, without exchanging them. This enhances data privacy and security.

Few-shot Learning: An approach to machine learning where the model learns to recognize new objects or patterns from a very small amount of sample data.

Fine-tuned Model: A pre-trained model that has been fine-tuned on a specific dataset to perform better on tasks related to that data.

FinTech (Financial Technology): The use of technology to improve and automate financial services, enhancing access and efficiency, particularly through AI applications.

Foundational Model: A comprehensive initial model used as a baseline for further specific training and adaptation.

General AI (Artificial General Intelligence): A hypothetical AI that possesses the ability to understand, learn, and apply intelligence broadly, similar to a human being.

General Data Protection Regulation (GDPR): A comprehensive data protection regulation enacted by the European Union governing how personal data is collected, processed, and stored.

Generative AI: AI systems that create new content—such as text, images, or audio—based on patterns learned from existing data.

Generative AI (GenAI): AI techniques that use models trained on large datasets to generate new and original content that mimics the training data.

Generative Summarization: Using AI to generate concise summaries from larger text documents, maintaining the original content's intent and critical information.

Global Digital Compact (GDC): A UN-led initiative establishing principles for an open, inclusive, and secure digital future for all, promoting equitable access to digital technologies.

Global stage: The international arena in which countries interact, negotiate, and compete, involving diplomatic engagements, treaties, and global governance.

Green AI: The development of AI technologies that promote environmental sustainability and reduce the carbon footprint of AI systems.

Grounding: The linking of words and phrases to specific meanings or real-world objects and contexts to improve the model's understanding of abstract concepts.

Hallucinations: In AI, refers to instances where models generate incorrect or misleading information that is not supported by the input data.

HealthTech: The application of technology, including AI, to improve healthcare delivery and outcomes.

Human-in-the-loop: An AI system design where humans are involved in the training, tuning, or operation of the system. This approach combines human expertise with machine efficiency.

Human-in-the-Loop (HITL): Systems that involve human oversight and input in the AI decision-making process, ensuring that AI technologies align with human values.

Hybrid AI: AI systems that combine different AI methodologies, such as rule-based and machine learning, to leverage the strengths of each approach.

Hyperparameters: Variables set before the learning process begins in machine learning models that control the learning process and affect model performance.

Inclusive: In the context of AI, this refers to technologies and policies designed to benefit a broad range of people, including marginalized and disadvantaged groups, ensuring that AI advancements do not lead to increased inequality.

Inclusive AI: The design and deployment of AI systems in ways that ensure they benefit all segments of society, including marginalized and underrepresented groups.

Inference: In the context of artificial intelligence and machine learning, inference refers to the process of using a trained model to make predictions or decisions based on new, unseen data. After a model has been trained on a set of data, inference allows it to apply what it has learned to actual tasks, such as classifying data, recognizing patterns, or processing natural language inputs.

Inference Engine: A component of AI systems that applies logical rules to the knowledge base to deduce new or additional information, helping in decision-making processes.

Insight Engines: Tools that apply AI to describe, discover, organize, and analyze data, thereby providing actionable insights through search and AI capabilities.

Intelligent Document Processing (IDP): Technologies that automate the extraction of data from written documents, converting unstructured and semi-structured data into a structured format.

International humanitarian law: A set of rules which seek, for humanitarian reasons, to limit the effects of armed conflict. It protects persons who are not or are no longer participating in hostilities and restricts the means and methods of warfare.

Interoperability: The ability of different systems, platforms, and applications to work together and exchange information seamlessly.

IoT (Internet of Things): Refers to the network of physical objects—"things"—that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet. These objects range from ordinary household items to sophisticated industrial tools.

IPv6 (Internet Protocol version 6): The most recent version of the Internet Protocol (IP), which provides an identification and location system for computers on networks and routes traffic across the Internet. IPv6 was developed to deal with the long-anticipated problem of IPv4 address exhaustion.

Justice: In the context of AI, it refers to the principle of fairness and moral righteousness that ensures all individuals receive equitable treatment without discrimination.

Kenyan diplomats: Officials who represent Kenya in international settings, engaging in negotiations, policy making, and advocacy to advance Kenya's national interests and values.

Knowledge Base: A technology used to store complex structured and unstructured information used by a computer system.

Knowledge Graphs: Data structures that capture relationships between entities, enabling AI systems to reason and provide contextually relevant information.

Language Model: A statistical machine learning model that understands language based on probability and predictions, often used in AI for processing and generating human language.

Lethal Autonomous Weapons: AI-powered military systems capable of identifying and engaging targets without human intervention, raising ethical and security concerns.

Machine Ethics: The branch of ethics that studies the moral behavior of humans as they design, construct, use, and treat artificially intelligent beings.

Machine Learning: A subset of AI that enables systems to learn from data patterns and improve their performance without being explicitly programmed.

Machine Learning (ML): A subset of AI involving algorithms that allow computers to learn from data and improve their performance over time.

Machine Translation: The use of AI to automatically translate text or speech from one language to another, facilitating cross-lingual communication.

Metadata: Data that provides information about other data, which can be used to improve understanding, management, and organization of the data.

Misinformation: False or misleading information spread without harmful intent, often arising from misunderstandings.

Model Generalization: The ability of an AI model to perform well on new, previously unseen data, based on its training data.

Model Interpretability: The degree to which a human can understand the cause of a decision made by an AI model, important for transparency.

Model Training: The process in machine learning where a model learns from data, improving its ability to predict outcomes or classify information.

Multimodal AI: AI systems that can process and interpret multiple types of data simultaneously, such as text, images, and audio.

National Digital Skilling Strategy: A government-led initiative to equip Kenya's workforce with the necessary skills to thrive in an AI-driven economy.

Natural Language Processing (NLP): A branch of AI that helps computers understand, interpret, and manipulate human language.

Natural Language Understanding (NLU): A subfield of NLP focused on machine reading comprehension, enabling AI to understand intent and context in human language.

Neural Architecture Search (NAS): A process of automating the design of artificial neural networks, an area of machine learning that aims to optimize network architecture automatically.

Neural Network: A network of algorithms modeled loosely after the human brain that is designed to recognize patterns and interpret data.

Neural Networks: Computational models inspired by the human brain, consisting of interconnected nodes that process information in a manner similar to biological neurons.

Open Government: A governance approach emphasizing transparency, accountability, and public participation in decision-making processes.

Open Source Software: with source code that anyone can inspect, modify, and enhance, fostering collaboration and innovation.

OpenAI Charter: A set of principles guiding the mission and values of OpenAI, emphasizing safety, transparency, and long-term benefit to humanity.

Optimization: The process of making a system or design as effective or functional as possible, often used in the context of mathematical models and algorithms.

Pattern Recognition: The recognition of patterns and regularities in data, which is a fundamental technique in machine learning.

Playbook: A strategic guide designed to help individuals, such as diplomats, understand and perform specific roles or strategies effectively. In this context, it equips Kenyan diplomats with knowledge and tactics to navigate global AI discussions.

Predictive Analytics: Techniques that use historical data to predict future events, typically through statistical algorithms and machine learning.

Privacy-Preserving AI: Techniques that allow AI models to learn from data without compromising individual privacy. Methods include differential privacy and homomorphic encryption.

Public-Private Partnerships (PPPs) in AI: Collaborations between the government and private sector to develop and implement AI technologies, driving innovation and investment.

Quantitative Analysis: The use of mathematical and statistical modeling, measurement, and research to understand behavior and predict outcomes.

Quantum Computing: An area of computing focused on developing computer technology based on the principles of quantum theory, which explains the nature and behavior of energy and matter on the quantum (atomic and subatomic) level.

Recurrent Neural Networks (RNN): A type of neural network where connections between nodes form a directed graph along a temporal sequence, allowing it to exhibit temporal dynamic behavior.

Red Teaming: The practice of simulating potential threats or vulnerabilities in AI systems to identify weaknesses and improve security.

Reinforcement Learning: A type of machine learning where an agent learns to behave in an environment by performing actions and seeing the results.

• **Robotic Process Automation (RPA):** Technology that allows employees in a company to configure computer software or a "robot" to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses, and communicating with other digital systems.

Reskilling: Training individuals to acquire new skills, particularly in response to job displacement caused by automation.

Responsible AI: Practices that ensure AI technologies are developed and used in ways that are ethical, fair, and beneficial to society.

Responsible AI in the Military Domain (REAIM): This is a global initiative focused on addressing the development, governance, and deployment of artificial intelligence (AI) technologies in military and defense settings.

Robotic Process Automation (RPA): Technology that allows employees in a company to configure computer software or a “robot” to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses, and communicating with other digital systems.

Safe: Refers to the attribute of AI systems that are designed to operate without causing harm or undue risk to humans or the environment.

Secure: In the context of AI, ensuring that systems are protected against unauthorized access and malicious attacks that could lead to data breaches or other forms of cyber harm.

Semantic Analysis: The process of understanding the meaning and interpretation of words, phrases, and sentences in the context of languages.

Sentiment Analysis: The use of natural language processing, text analysis, and computational linguistics to identify, extract, quantify, and study affective states and subjective information.

Societal good: The overall well-being and beneficial outcomes for society as a whole, achieved through responsible and ethical applications of technology like AI.

Supervised Learning: A type of machine learning where the model is trained on labeled data, i.e., data paired with the correct answer.

Sustainable AI: Developing AI technologies that are environmentally friendly and contribute to sustainability goals, considering energy consumption and resource use.

Sustainable Development Goals (SDGs): A set of 17 global objectives established by the UN to address critical global challenges by 2030. Technological Leapfrogging The ability of developing countries to bypass certain stages of technological development by directly adopting advanced technologies, such as AI.

Swarm Intelligence: Collective behavior of decentralized systems, often used in AI algorithms inspired by social insects like bees and ants.

Synthetic Data: Artificially generated data that mimics real-world data. Synthetic data is used to train AI models when real data is scarce, sensitive, or expensive to obtain.

Transfer Learning: A machine learning method where a model developed for one task is reused as the starting point for a model on a second task.

Transparency: The quality of being easily understood or the characteristic of being open about how decisions are made by AI systems.

Trustworthy AI: AI systems that are reliable and worthy of trust by adhering to established ethical standards, demonstrating transparency, and ensuring fairness.

Turing Test: A test proposed by Alan Turing to determine a machine's ability to exhibit intelligent behavior indistinguishable from a human.

UN Charter: The foundational treaty of the United Nations that sets out the rights and obligations of member states, and the framework for international cooperation and security.

UN High-Level Advisory Body on AI: A body providing recommendations on the governance of AI at the global level, ensuring alignment with human rights and sustainable development.

Unsupervised Learning: A type of machine learning that looks for previously undetected patterns in a data set with no pre-existing labels and with a minimum of human supervision.

Virtual Reality (VR): The use of computer technology to create a simulated environment that can be similar to or completely different from the real world.

Visualization: The process of creating visual representations of data or systems to communicate information clearly and effectively through graphical means.

Voice Recognition: The ability of a machine or program to receive and interpret dictation, or to understand and carry out spoken commands.

Web Scraping: A technique used to extract large amounts of data from websites whereby the data is extracted and saved to a local file in your computer or to a database in table (spreadsheet) format.

Widget: A small application with limited functionality that can be installed and executed within a web page by an end user.

Workflow Automation: Technology that uses rule-based logic to automate manual work, such as data entry or lead nurturing processes, improving efficiency and reducing the need for human intervention.

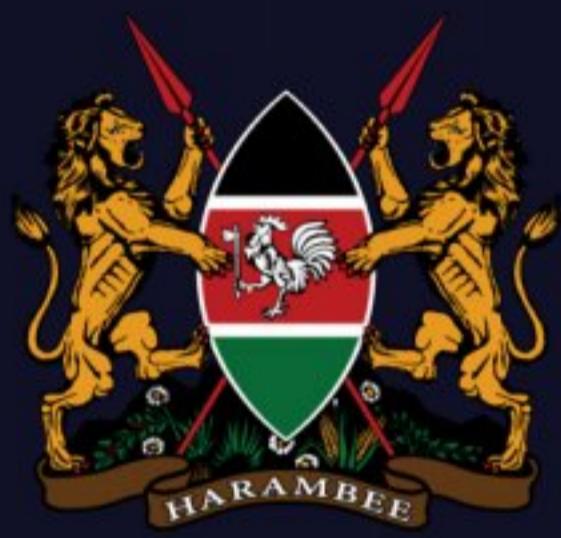
XaaS (Everything as a Service): A collective term that encompasses several services provided over the internet via cloud computing instead of being provided locally or on-site. This includes SaaS (Software as a Service), PaaS (Platform as a Service), IaaS (Infrastructure as a Service), and more, reflecting the shift towards more flexible, service-oriented models.

Z-Test: A statistical test used to determine whether two population means are different when the variances are known and the sample size is large. It is a type of hypothesis testing that is commonly used in scenarios where data scientists need to validate assumptions made based on data models.

Z-Wave: A wireless communications protocol used primarily for home automation. It is designed for low-energy consumption, to control home devices like lights, locks, and thermostats remotely.

Zero-shot Learning: An approach where a model can correctly make predictions on new, unseen classes without having received any training data for those classes.

Zettabyte: A unit of digital information storage that equals one sextillion (10^{21}) bytes. The growth in data generated each year is often measured in zettabytes, highlighting the scale at which data is handled and the importance of efficient data management systems.



A Publication by the Office of the
Special Envoy on Technology.

