REGULATION IN THE ERA OF ARTIFICIAL INTELLIGENCE

#AMCOA2024

11 - 15 AUGUST 2024

AVANI RESORT, LIVINGSTONE

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ASSOCIATION OF MEDICAL COUNCILS OF AFRICA
REGULATION IN THE ERA OF ARTIFICIAL INTELLIGENCE
Proudly Hosted By: HEALTH PROFESSIONS COUNCIL OF ZAMBIA

Presented by: Banji M. Nyundo

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Scope

AI

This presentation will explore the opportunities and risks associated with AI in healthcare, focusing on the Zambian context. It will also delve into the urgent need for a robust regulatory framework to guide the responsible development and deployment of AI technologies.
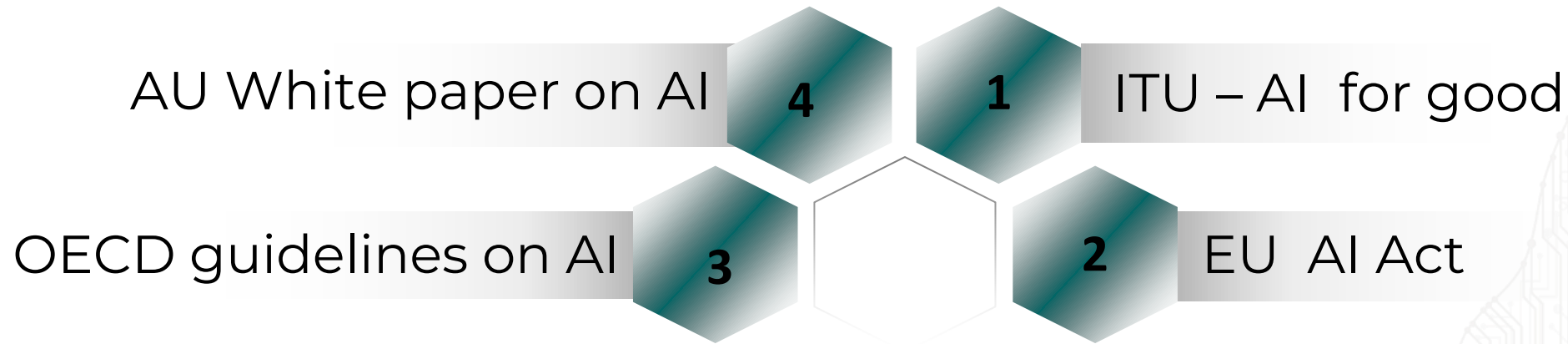
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WHAT IS AI

❑ Artificial intelligence, or AI, is technology that enables computers and machines to simulate human intelligence and problem-solving capabilities. Examples of AI include:

❑ Facial recognition systems

❑ GPS guidance such as Google Maps

❑ A typical example of the use of AI in Zambia is DawaMom, an AI-powered app in Zambia's health sector which provides tailored help to patients, predicting disorders, and improving pregnancy outcomes.

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International Regulatory Frameworks

AU White paper on AI **4**   **1** ITU – AI for good

OECD guidelines on AI **3**   **2** EU AI Act

❑ These frameworks are committed to ensuring that AI is developed and used in a way that is ethical, responsible, and beneficial to society.

❑ They share a common vision of promoting human-centered AI that addresses global challenges, supports sustainable development, and respects human rights.

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Concerns Relating to the Use of AI in Health Care

- ❏ Data privacy, patient privacy and Autonym
- ❏ AI Bias
- ❏ Job displacement
- ❏ AI and data transparency
- ❏ Algorithmic accountability
- ❏ Technical concerns
- ❏ Regulatory concerns.

- ❏ Risk of sensitive data exposure
- ❏ AI models reflecting human biases
- ❏ AI replacing certain job roles
- ❏ Explainability
- ❏ Determining responsibility.
- ❏ data quality, cybersecurity, cost of implementation of security measures.
- ❏ Frameworks unable to keep up with technology

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AI Regulatory Landscape In Zambia

National ICT Policy, 2023

- Adoption of emerging technologies.

- Revision of the ICT legal framework

AI Strategy

- Ministry of Technology and Science - Under development.

Data Protection Act, 2021:

- Regulates the collection, use, and disclosure of personal data

Cybersecurity & Cyber Crimes Act, 2021

- Provides for the protection of critical information and critical information infrastructure.

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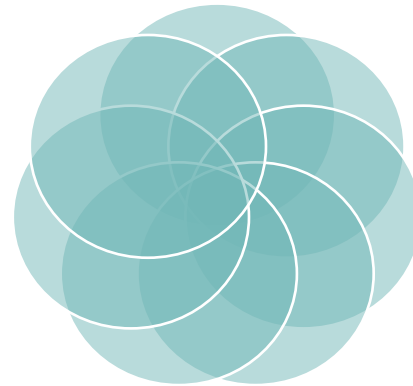
Considerations by Policy Makers and Regulators

Adaptive legal and Regulatory framework on AI covering aspects such as algorithmic transparency, audit, and accountability

Mandate ethical AI development and deployment practices.

Enhance compliance and enforcement mechanisms for existing legislation.

Issue Guidelines on the use of large datasets and bias.

Implement a Regulatory Sandbox for AI.

Educate and empower consumers about their data rights.

Align frameworks with global AI standards.

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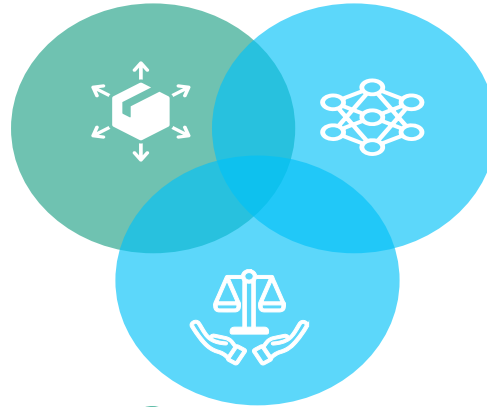**REGULATION IN THE ERA OF ARTIFICIAL INTELLIGENCE**

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End-to-End Framework

Development & Transparency

- Pre-specifying intended use
- Development process documentation.
- Training data sets & performance texting details.

Data Quality & Standardization

- Data source
- Data localization
- Raw data or cleaned data.
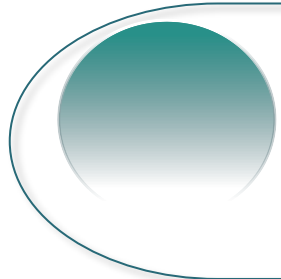- Data Usability

Data Governance

- Data privacy & protection at design and development.
- Data Access
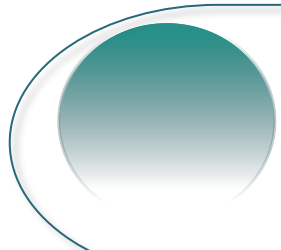- Liability
- Data usage and storage standards

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In summary

Responsible AI in healthcare requires robust ethical guidelines and legal frameworks.

Addressing issues like algorithmic bias, patient consent, and liability is essential.

Collaboration between regulators, healthcare providers, technologists, and patients is key to success

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The Peter Parker Principle

With great power comes great responsibility.

AI has great power to help the world, but must be developed and deployed in an ethical, explainable and equitable manner to realize its potential.

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Call to Action

Responsible AI in healthcare requires robust ethical guidelines and legal frameworks.

- Policymakers should prioritize the development and implementation of AI legal and regulatory frameworks that protect patients and promote innovation.

- There is need to discuss AI in the board room . What type of AI systems are we allowing in our institutions.

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