



MINISTRY
COMMUNICATIONS AND DIGITAL TECHNOLOGIES
REPUBLIC OF SOUTH AFRICA

ADDRESS BY MINISTER MONDLI GUNGUBELE ON BUILDING AN AI-POWERED FUTURE FOR AFRICA DURING THE ARTIFICIAL INTELLIGENCE EXPO AFRICA 2023

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Programme Director

Director of AI Expo Africa, Mr Nick Bradshaw

Captains of Industries and CEOs

Board of Directors of the South African Artificial Intelligence Associations

Head of State-Owned Companies

Foreign Guest

Leaders of AI Start-ups and ICT SMMEs

Ladies and Gentlemen

INTRODUCTION

Programme Director, Ladies and Gentlemen

The famous American inventor and electrical engineer, Nikola Tesla, once remarked, and I quote:

“The desire that guides me in all I do is a desire to harness the forces of nature to the services of mankind.” close quote.

AI emergence has been profound to the extent that the Secretary General of the International Telecommunications Union (ITU), Madam Doreen Bogdan-Martin, observed that:

“2022 was a watershed year for artificial intelligence” and she further stated that *“the world has witnessed major advances in AI-powered robotics, quantum computing, and the emergence of generative AI tools moving human-like conversations into the mainstream.”* close quote.

This statement demonstrates how AI has caught the attention of global and international actors in all spheres of engagement and collaboration.

Programme Director, Ladies and Gentlemen

At every stage of human development there has always been a technology that impacts the human lives in a fundamental way.

This kind of technologies are often referred to as “General-Purpose Technologies (GPTs). Some of the known GPTs are for example the discovery of a “wheel,” automobiles, aeroplanes, computers, etc, which have emerged over the centuries.

GPTs are constantly reshaping how we work, live and interact. In the current century, Artificial Intelligence (AI) has emerged as a GPT together with other digital technologies such as the internet, Blockchain, and others.

GPTs such as AI have the potential to simultaneously create positive and negative externalities.

Already we note that more than 2.6 billion people in the world are not connected to the internet and communications networks as reported by the International Telecommunications Union (ITU).

Meanwhile, new business models and industries are quickly shifting towards the implementation and maturity of AI-driven products and services. We are at an inflection point in our trajectory of social and economic development.

Several matters at a global level related to AI need to be addressed substantively when confronting the emergence of this general-purpose technology, which amongst include:

- Data as a meaningful developmental tool
- Digital skills and Job Impacts (Employment)
- Global Bodies / Formations and Approaches to AI
- Ethical use of AI
- AI Start-ups and New Emerging Business

The founder and Chairman of the World Economic Forum, Prof Klaus Schwab, in his book titled “Shaping the future of 4IR” refers to data as the “new oil.” He argues that just like oil, reckless and negligent use of data can be catastrophic.

The value of Data in terms of the rapid advancement of AI have quadrupled in terms of value add and economic growth. It is projected that Big Data is going to drive the future economic growth of countries and regions especially through the adoption of AI.

Biases and discrimination in AI can result from the use of poor quality, flawed or inadequate data in ML models, or unintentionally through inference and proxies (for example, inferring gender by looking into purchasing activity data). This is a global matter that needs to be tackled head on.

MAPPING OF AI SKILLS AND TALENTS

We must comprehend that generative AI is here and is used. ChatGPT is being used in sectors such as education and the legal fraternity. Now whilst teachers are against the use of ChatGPT by scholars, this is the future. We need to find ways of harnessing the power of data to improve learning and expand knowledge. However, we must also guard against its misuse and misinformation in distorting the power of the human brain.

Equally I read in the newspaper of Magistrates rebukes Lawyers over ChatGPT 'bogus case' – as the arguments on case file was sourced were not bogus cases. As such, we must acknowledge that as we use generative AI, it must not absolve us on ethical responsibility as members of the digital society.

Programme Director,

GLOBAL FORMATIONS AND REGIONAL APPORACHES

Documentation and blueprints on AI have emerged from different regions of the world. For instance, there is the Global Partnership in AI (GPAI) which involves US, France, Canada etc. There is OECD AI partnerships, ASEAN, SMART AFRICA, etc.

These countries have gathered to tackle AI from their regional and continental perspectives. These approaches have their own advantages and disadvantages and should be assessed based on inclusivity.

ETHICAL DIMENSIONS AND CONSIDERATIONS

The ethical dimensions on AI ranges in the different global bodies can be assessed to determine the most appropriate approach for us, for instance:

- ITU calls for – AI for Good
- UNESCO calls for – Ethical Use of AI
- UN calls – AI for development
- OECD calls for – AI Trustworthy and Responsible use.

In summation from the different approaches is four (4) aspects emerging:

1. Respect for Human Rights, Freedoms, and Dignity
2. Ensuring of Peace and Global Connected world
3. Protecting Diversity and Ensuring Inclusiveness
4. Protection of Environment and Climate change

As a country, we need to make a call based on our circumstances and challenges.

POLICY AND REGULATORY APPROACHES

There are potential steps for policymakers to consider such as fully unlocking AI's economic potential in Africa.

Governments taking a forward-thinking approach to adopting and deploying AI while ensuring that workers are equipped with a broad set of skills that enables them to adapt to an AI-driven economy, and that downside risks are mitigated.

Governments themselves must also procure and use AI tools in a manner that demonstrates thought leadership in harnessing AI for inclusive economic growth.

EMERGING AI START-UP AND BUSINESS MODELS

AI Business models are currently highly concentrated in just few countries and handful of global firms, with male dominance teams, without cultural diversity, characterising the patriarchal world we live in.

There is a need to advance the agenda of global diversity in the adoption of AI.

As governments and industry, we need to be deliberate in our support for our own indigenous start-ups and business models that would increase our competitiveness and innovation.

To get a sense of just how quickly the generative AI world is moving, we need only look at the number of new models, replacement of work and the amount of money saved or generated from use. Equally a number of jobs (highlighted below) are likely to see (or already seeing) AI disruption where AI can reduce the time to do tasks associated by at least 50%:

- Accountants
- Administration and Legal Assistants
- Policy Analysts
- Reporters and Journalists
- Teachers
- Tax preparers and Financial Analysts
- Writers and Authors
- Web Designers
- Blockchain Engineers
- **And the list goes on.**

We must not see this as humans replaced 100% but machine learning is assisting us to improve productivity.

In the list above, I was relieved to see that Politicians have not been replaced.

Programme Director,

SOUTH AFRICA'S POSITION ON AI AS TOOL FOR DEVELOPMENT AND ADVANCEMENT

The PC4IR Report recommended that South Africa should leverage Artificial Intelligence *“to help improve energy efficiency. This can be achieved on an individual, municipal, and national level.”*

We need to utilise AI to tackle some of the socio-economic challenges we are facing as a country.

The draft Data and Cloud Policy has been developed by the Department and will be tabled for approval by the Cabinet soon.

The Department has established the Artificial Intelligence Institute of South Africa (AIISA) with the aim of creating AI Centres of Excellence aligned with the AI sector enhancement. The expansion of the centres of excellence is continuing as a government initiative.

GENERATIVE AI EXPLOSION

We are currently developing an AI National Plan which will address both the Generative and Applied AI. Applied AI impact on value-chain efficiencies in key multiple Sectors as well and government through the Artificial Intelligence Institute of South Africa (AIISA) as government initiative.

WAY FORWARD

I am glad to see that there is sustainable engagement between government, industry, academia, and civil society. The creation of South Africa AI Association as a great step and is highly encouraged.

I am looking forward to receiving the report on the Africa AI Expo and wish you all success,

Thank you.

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