

# Lavina Ramkissoon explores the implications of generative Al for Africa's future

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Generative AI, as we all know, is having an impact on the world around us. Some of the impacts are negative, and some are positive. As part of Africa Month, we reached out to Lavina Ramkissoon, AI ethics and technology policy expert at the Africa Union, to find out more about AI and its implications for Africa. Ramkissoon unpacks more about her role and how generative AI will impact the African economy and society in future.



Lavina Ramkissoon | image supplied

**III** Can you tell us more about your role as an AI ethics and technology policy expert at the African Union? What are some of the key issues you are addressing in this role?

Ethics has become a fundamental pillar in the application of technologies like artificial intelligence, blockchain or even quantum computing. The role includes advisory on emerging technologies policy formulation, creation, and implementation thereof. In other words, develop, deploy and usage of AI systems in a way that adheres to the ethical principles of respect for human autonomy, prevention of harm, fairness and explicability with consideration for the inclusion of AI rights.

Intellectual property, digital identity, metaverse, augmented realities, artificial intelligence, blockchain, virtual realities, safety for youth, and data privacy are some areas I have personally worked on within the role. Being a technologist that is not in regulation is an exciting one, in creating a future like Africa that we can be proud of.

Regulation is never seen nor treated as a singular approach, therefore, all aspects of humanity, digital citizens, governments, big tech, non-profits and corporates need to be considered. Especially collectively as a continent driving the narrative for all its citizens, physical or digital.

**##** How do you see generative AI impacting the African economy and society, and what opportunities and challenges does this present?

Breakthroughs in generative AI have the potential to bring about sweeping changes to the African economy. Al-powered technologies such as natural language processing (NLP), image and audio recognition, and computer vision have revolutionised the way we interact with and consume media. With AI, we can process and analyse vast amounts of data quickly, making it easier to find and access the information we need.

Let's start with risks. Like other forms of AI, generative AI can influence several ethical issues surrounding data privacy, security, policies and workforces. Generative AI technology can also potentially produce a series of new business risks like misinformation, plagiarism, copyright infringements and harmful content.

Lack of transparency and the potential for worker displacement are additional issues that enterprises may need to address. Additionally, in Africa, there is a need for a constant power supply. Another is the costs attached to data.

- Distribution of harmful content. All systems can create content automatically based on text prompts by humans. This happens usage of deepfakes through voice mimicking, text-to-video creation, or misuse thereof. The risk of this information being created as 'true' or 'not true' comes into play and an amplification of existing bias that already exists within the data itself. Unintended consequences.
- Copyright and legal exposure. The debate of where and who has the rights to content generated. We have already
  sent Al winning art competitions, buying homes, selling NFTs, and becoming CEO of companies. The need to
  understand how society processes such things is becoming highly important.
- Data privacy violations. So much to say on this front. In Africa, we run the risk of a further digital divide being
  created. Big Tech has traditionally been asked to be 'responsible' and consider digital citizen data carefully. After
  many failed attempts data privacy laws are starting to be enforced, like the latest 1.2bn from EU to Meta. Privacy and
  surveillance require a more serious stance by all. Sensitive information disclosure is an example of privacy gone
  wrong.
- The human impact. Workforce roles and morale largely is impacted. Risks of no creativity, making humans lazy or unemployed seem to be misdirected by media at large.

### Opportunities:

According to Goldman Sachs, Generative AI could raise global GDP by 7%.

By large this implies the uplifting of societies economically. Change business models for example in education, finance, healthcare and so many more. Imagine healthcare at your fingertips. Africa has one of the not-so-better healthcare systems, and now through AI, you are able to bring healthcare into people's homes. In finance, you are able to bring forward optimised savings and investments daily, automatically reducing the costs of services. In education, you have children's skills for their actual future. Who knows if English will be a requirement soon. Let me clarify, the way we assess and examine children's skills needs to fundamentally change.

The power to process large amounts of data at rapid speed and come up with multiple revenue streams is an easy way to fast business adoption. A faster decision-making process is another. The increased power of productivity. Imagine, in the

South African context, you had AI real-time monitoring electricity supply chain in a fair and transparent manner while optimising supply with the least downtime.

The chance to shift Africa into gears far beyond society's expectations is there, like we did with mobile money.

## **What steps do you think African governments and businesses can take to ensure that technology is developed and used ethically and responsibly?**

Ethical practices include promoting the values of autonomy, transparency, and trustworthiness: To create and maintain a healthy relationship between technologists and the public, respect for autonomy, transparency, and trustworthiness is key.

As a digital citizen, contribute to society and human well-being, avoid harm to others, be honest and trustworthy, be fair and take action not to discriminate.

As a government place guardrails and frameworks for these emerging technologies to best be applied. In companies and bug tech alike, including policies and creative safe spaces to spur creativity and innovation.

Designing, developing, and deploying AI with good intentions to empower employees and businesses, and fairly impact customers and society, allowing everyone to engender trust and scale emerging technologies with confidence.

Creation of pillars so AI can function within. Privacy and security, fairness and inclusion, robustness and safety, transparency and control, accountability and governance, collaborating on the future of responsible AI. Human augmentation, bias evaluation, explainability, and reproducibility must be included as a new mindset.

## In your opinion, what are some of the most promising AI and tech innovations currently being developed in Africa, and how do you see them impacting the continent in the coming years?

I imagine a future where every Africa has equal accessibility and affordability to things like credit to those previously ignored by traditional financial institutions through the added backbone of web3 technologies revolutionising the economic space. A future where data is affordable and accessible leaving no 'man' behind. A future focused on augmentation and experiences in a sustainable effort ensuring Africa's wellbeing. Access to fresh wholesome foods and lifestyles. Supply chain optimisation in real time that solves for Africa's needs, an education system that helps support and nurture the workforce with future-driven upskilling, with things like quantum. A shift from a developing continent to a developed one. Africa's potential is being redirected into a more meaningful one.

# **##** How important is collaboration between different stakeholders in driving innovation and growth in Africa, and what are some ways in which this collaboration can be encouraged and facilitated?

Collaborative innovation is defined as bringing a range of people together. They share diverse ideas, knowledge, skills, experience and resources to innovate and solve problems. Innovation through collaboration can deliver real value to an organisation. We in Africa are embracing different languages, cultures, ideas, skills and knowledge, hence 2000+ languages are currently being spoken within the continent.

Traditionally we have seen wonderful things come from collaboration for good.

What are some potential risks associated with generative AI in Africa, and how can these risks be mitigated to ensure that the technology is used for the greater good?

Imagine a moment you use technology to become inclusive of society. Examples are plentiful in Africa. Manufacturing, supply chain, healthcare, agriculture, financial, economic, societal and so many more.

Specific examples include:

### World hunger

In order to feed the world's population by 2050, the estimates we will need to increase the world's food production by 70%. This gargantuan task seems more plausible with the support of artificial intelligence. In addition to developing hearty seeds, artificial intelligence can be used to automate tedious tasks, detect disease for earlier interventions, apply herbicide precisely and generally maximize crop production.

### - Human rights

Artificial intelligence makes the task of identifying human rights violations such as human trafficking quicker and more comprehensive. Using face recognition technology powered by artificial intelligence photos can be analyzed to find missing people and images can be reviewed to spot other human rights violations.

Other examples include bringing sensory to one billion people that suffer from some form of disability. Real-time climate change and monitoring. Aid in fighting fake news. Resilience to become inclusive of homeless and refugees. Where leaving out anyone is no longer an option.

There's no shortage of challenges that need to be solved today to enable a better tomorrow for our planet, cultures and society.

Answered above in challenges and opportunities – let me know if you would like me to elaborate further.

## What advice do you have for young people interested in pursuing a career in Al and tech in Africa, and what skills and knowledge do you think will be most valuable for success in this field?

Be curious. Be hopeful. Be human.

An example is generative AI in that it differs from predictive models in that it generates new content rather than predicting an outcome. Find use cases that speak to humanity at large. Matching technologies' potential with impact creates beauty.

Embrace technologies by taking a moment to redefine humanity in a collective manner that speaks to the 'human' side of being human. I am from Africa. Africa is me. Every nanosecond of every day you have a choice.

#### ABOUT IMRAN SALIE

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