



A South African woman crossing a digital bridge covered in Ndebele Art. Source: PlaygroundAI.com

Navigating the impacts of generative AI in South Africa: challenges, opportunities and ethics

*In April, the HSRC hosted a webinar to discuss the impact of generative artificial intelligence tools in South Africa, with a focus on employment, equality, and ethical considerations. This article, produced with the assistance of ChatGPT (which summarised the recorded webinar transcript), presents a comprehensive analysis of the webinar's key points and insights. By **Krish Chetty, Nothando Ntshayintshayi and Prof. Sharlene Swartz***

Like many other countries, South Africa is grappling with the digital divide, which has created inequalities in access to education, healthcare, and economic opportunities. The rapid advancement of artificial intelligence (AI) technologies has the potential to either bridge or exacerbate these inequalities. In a society marked by stark resource disparities, the use of AI technologies could further widen the gap between the haves and the have-nots, particularly in respect of employment and access to essential services. On 12 April 2023, the HSRC hosted a webinar that explored the potential impact of generative AI on South Africa, with a focus on the opportunities and challenges it presents and the ethical considerations that must be addressed.

Employment

The webinar brought attention to the increasing role of AI in the workplace and its potential impact on employment opportunities across various sectors. AI-driven tools, such as ChatGPT, are becoming increasingly adept at performing tasks that have traditionally been reserved for human workers, including writing code, diagnosing vulnerabilities in software systems, and even generating creative content. As AI technologies advance, they are expected to automate certain tasks performed by knowledge workers such as programmers, lawyers, and therapists, which raises concerns about job displacement and the need for workers to adapt to new roles.

The panellists discussed the potential of AI to automate routine tasks and to shift the focus of human workers towards more complex, creative and decision-making roles. They emphasised the importance of developing educational and training programmes that prepare individuals for an AI-driven workforce and enable workers to transition into new roles as AI technologies evolve.

The discussion also touched on the potential for AI to create new job opportunities by spurring innovation and driving economic growth in areas such as AI research, development, and maintenance. In this context, it is crucial to ensure that South Africa's workforce is prepared to take advantage of these emerging opportunities and that access to education and training be equitable and inclusive.

Lastly, the panellists highlighted the importance of fostering collaboration between the government, industry, academia and civil society to develop policies and strategies that address the challenges of AI and to harness the potential benefits of AI for the workforce.

Equality

The issue of equality was also emphasised during the webinar, as panellists discussed the potential implications of AI technologies in some respects exacerbating the digital divide and in other respects bridging the digital divide. Panellists expressed concern about the potential for AI to contribute to unequal access to opportunities, particularly in employment, education and essential services. They emphasised that the benefits of AI should not be limited to a privileged few but should be extended to all members of society, including those in marginalised and underprivileged communities.

The discussion also explored the potential role of AI in supporting social justice and empowerment initiatives. Panellists noted that AI tools could be used to identify and address systemic inequalities, to support evidence-based policymaking and to improve the delivery of public services in areas such as education, healthcare and social welfare. However, they also emphasised the need for transparent and ethical AI systems that respect individual privacy and do not reinforce existing biases and discrimination.

Ethics

Ethical considerations were a prominent topic during the webinar, as panellists discussed the responsible development and deployment of AI technologies in various sectors, including research and education. Recognising the transformative potential of AI, the panellists acknowledged the need for a strong ethical framework to guide the use of these technologies and to ensure that they are harnessed for the benefit of all.

One key ethical issue raised during the discussion was the potential for a lack of transparency and accountability in AI systems. They emphasised the importance of protecting individual privacy and ensuring that AI technologies do not compromise the rights and freedoms of users. This includes developing robust data protection measures and addressing potential biases in AI algorithms that could lead to unfair treatment or discrimination against certain groups or individuals.

In the context of education, the panellists emphasised that AI should support and enhance traditional educational methods rather than replace them and that ethical considerations should be an integral part of designing and deploying AI-driven educational tools and resources.

Finally, the panellists highlighted the importance of interdisciplinary collaboration in addressing the ethical challenges posed by AI technologies. By engaging experts from diverse fields, stakeholders can work together to develop a comprehensive and robust ethical framework that ensures AI is harnessed in a manner that respects human rights, promotes social justice, and contributes to a more equitable and inclusive society.

HSRC AI Project

The HSRC is committed to developing an AI research and development programme that fosters partnerships between researchers, businesses, the government and civil society. The aim is to ensure that AI technologies are developed and implemented to address the unique challenges South Africa and the Global South are facing. The participants expressed their interest in collaborating on this initiative and emphasised the importance of data sharing, accessibility and bridging the digital divide to ensure that the benefits of AI are distributed equitably.

The live session led to the development of a brief action plan for the HSRC team, which includes the following initiatives:

- creating a research ChatBot informed by HSRC research outputs to promote public and policymaker engagement;
- developing a government policy ChatBot that identifies policy gaps and inefficiencies in the education sector;
- designing a ChatBot that proposes solutions to reduce the digital gap within local municipalities and that compares their experiences to those of developed countries;
- developing a community-specific ChatBot that utilises local data from social media and community communication platforms; and
- building an AI system that identifies and prevents duplication of research questions in areas such as vaccine hesitancy and disease epidemiology.

These initiatives will drive the HSRC's AI Research and Development Programme forward and achieve a meaningful impact.

Conclusion

As AI technologies advance and reshape various aspects of society, stakeholders must monitor and proactively address the potential consequences. The HSRC webinar on the impact of generative AI in South Africa provided valuable insights and key learnings in areas such as employment, equality and ethics. It also highlighted the potential for AI-driven projects to address the nation's unique challenges. The discussions emphasised the need for a multi-stakeholder approach involving the government, academia, industry and civil society in ensuring that AI technologies are developed and implemented responsibly, ethically, and inclusively.

The HSRC's AI Research and Development Programme presents an opportunity for diverse stakeholders to collaborate and contribute to the responsible development and implementation of AI technologies in South Africa and the Global South. This collaborative approach aims to address the challenges of AI and harness the potential benefits of AI in a manner that promotes equity, inclusivity, and sustainable development while mitigating the risk of harmful consequences.

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AI generated image of two women walking across a bridge. Source: Prompts by Ilze Visagie, [Freepik](#)