

The Ethical Dimension of Information Society and the Quest for Open Science

By

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Abstract

Since the WSIS 2003 and 2005 respectively, the issue of ethical dimension of information society particularly, with the emergent of transformative generative AI technologies such as robotics, machine learning, blockchain, nanotechnology, internet of things, cloud computing, augmented reality, big data and digital analytics have gained more traction. This paper, prepared for oral presentation or/and panel discussion is predicated on Responsible and ethical application of AI and ML in libraries. It examines the responsible generation, processing, access, and use of knowledge for sustainable development to reduce youth unemployment and poverty in sub Saharan Africa. The paper addresses the following questions: what are the ethical dilemmas that confront libraries in their quest to leverage emerging technologies to facilitate information generation, processing access and dissemination? What generative AI technologies are available to libraries to process, store and disseminate information? What are the new information-based jobs available in the market for library professionals to alleviate youth unemployment in sub Saharan Africa? How can Open science be leveraged by libraries to make scientific research from all fields accessible to everyone for the benefits of scientists and society as a whole? What policy and legislative frameworks exist in sub Saharan Africa to leverage generative AI tools? What infrastructure is available to facilitate library application of generative AI?

The paper is underpinned by WSIS Action Line C10 and Open science frameworks. The relevant literature is mined from government policy declarations, artificial intelligence and machine learning, repositories and projects. The findings of this paper have practical, policy and theoretical implications for libraries, government, and industry.

Keywords: Information Society, AI, Generative AI, ICT4D, WSIS, Ethics, Open Science, sustainable development, digital transformation, Africa.