ARTIFICIAL INTELLIGENCE (AI) TECHNOLOGIES IN NIGERIA AND ETHICAL CONSIDERATIONS: WHY IT MATTERS

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ABSTRACT
Artificial Intelligence (AI) technologies have transformed the way we live, work, and interact with each other. From virtual assistants to self-driving cars, AI has become an integral part of our daily lives. As AI technologies become more pervasive, there is a growing concern about the ethical implications.Nigeria has yet to fully embrace AI technologies, when compared with the developed world where a lot of works have been taken over by machines. As the transition into the use of AI grows in Nigeria, the ethical considerations surrounding the adoption, data privacy, transparency, accountability etc become paramount. The Nigerian Artificial Intelligence Regulatory Framework is not yet fully codified. However, framework may propose a guiding principle, stressing the importance ofdata privacy, transparency and accountability in various sectors.This paper will discuss the ethical considerations surrounding the use of AI technologies in Nigeria, the implications for individuals and society in general, and will suggest a proactive approach towards a responsible AI development in line with our diverse population and culture.

Key Words: Artificial Intelligence, ethical considerations, organisations and society

INTRODUCTION:

WHAT IS ARTIFICIAL INTELLIGENCE (AI) TECHNOLOGIES?

Artificial Intelligence (AI) technologies refer to the development of computer systems that can perform tasks that typically require human intelligence, such as learning, problem-solving, and decision-making. These technologies are rapidly transforming and offering immense potential and significant challenges (Ghosh and Arunachalam, 2021; Kana, 2024).

The main principle of AI is in allowing computers to learn, reason, make decisions andmimichuman cognitive abilities. From voice assistants, self-driving cars, legal processes medical diagnostics, image recognition to recommendation algorithms, the AI technologies are integrated into daily lives and activities. The benefits of these technologies include increased efficiency, improved decision-making, zero-errors and the automation of complex tasks (Ghosh and Arunachalam, 2021; Mahato, 2022.).Thus, these machines utilize data and algorithms to perform taskssimilar to those performed by humans.

The key components of AI technologies include Machine learning (ML), Deep learning,Natural language processing (NLP), Neural networks (Neural networks) and Evolutionary algorithms(Keresztesi, and Reş, 2022; Kanade, 2025). Thus,AI is classified into 3 main categories based on their capacity:

Artificial Narrow Intelligence (ANI): Thisartificialintelligencehastheskillsto autonomously perform only operations and calculations for which it was programmed and trained without exceeding the limits of the task for which it was programmed. Most artificial intelligences fall into this category.

Artificial General Intelligence (AGI): Thisartificialintelligence system hypothetically is able to understand and develop its own knowledge and skills.

Artificial SuperIntelligence (ASI): This is a hypothetical advanced artificial super-intelligence system, with learning and permanent development skills, capable of solving problems and with intellectual capacity far above the humans(Keresztesi, and Reş, 2022).

The AI also raises serious concerns, including but not limited to job displacement, data privacy, and potential for misuse. The responsible development and deployment of AI is important, and requires careful consideration of the impact on individuals and the society at large. Thus, the use of AI technologies requires robust ethical guidelines, and regulations.

Despite technological revolution and innovations, almost everything is done manually in Nigeria when compared with the developed countries where a lot of works have been taken over by machines (Artificial Intelligence). Artificial intelligence if properly enhanced, has a key role to play in economic and technological advancement of developing nations like Nigeria. For artificial intelligence to be enhanced in Nigeria there is need to consider some ethical concerns for its potential misuse, data privacy, efficiency,the advancement of other technologies and more (Robinson, 2018). The future of AI in Nigeria, therefore hinges on our ability to harness its power for good, while mitigating the risks and ensuring a future where humans and machines collaborate effectively (Stahl, 2021).

METHODOLOGY: This study adopted a research design that involved the use of secondary data. This is basically collecting data from existing resources, already published studies and reports which was easily accessed through online journals and libraries.

ETHICAL CONSIDERATIONS:

The AI has significantly changed the Nigerian landscape in some ways, particularly in the fields of education, entertainment, monitoring, finance, data analysis, research and social media outreach (Mohammed and Chris-Ubah, 2025).Nigeria faces a unique challenge in harnessing the benefits of AIwith ethical concerns raised for potential misuse, socio-economic gap, lack of infrastructure to support the technology and data privacy. With the proper laws in place, AI will become a tool for the benefit of all citizens regardless of socio-economic background.

IMPLICATIONS FOR INDIVIDUALS:

1. Bias and Discrimination: AI systems can perpetuate existing biases and discrimination if they are trained on biased data. For example, a facial recognition system may be more accurate for white faces than for black faces.

2. Privacy: AI systems often rely on vast amounts of personal data, which raises concerns about privacy and data protection.AI systems become more pervasive, individuals may lose control over their personal data and decision-making processes.

3.Loss of Autonomy: As AI systems become more autonomous, there is a risk that they may make decisions that are not in the best interests of humans.

4. Accountability: As AI systems become more complex, it becomes increasingly difficult to determine who is responsible when something goes wrong.

5. Job Insecurity and Job Displacement: The increasing use of AI technologies has raised concerns about job displacement, particularly for low-skilled and low-wage workers.

6. Dependence on Technology: The increasing reliance on AI technologies may lead to a decline in critical thinking and problem-solving skills.

IMPLICATIONS FOR ORGANIZATIONS AND SOCIETY:

1. Reputation Risk: Organizations that use AI technologies may be at risk of reputational damage if their systems are found to be biased or discriminatory.

2. Regulatory Compliance: Organizations must ensure that their use of AI technologies complies with relevant regulations and laws.

3. Job Redesign: Organizations may need to redesign jobs to take into account the increasing use of AI technologies.

4. Widening Inequality: The increasing use of AI technologies may exacerbate existing social and economic inequalities.

5. Social Isolation: The increasing reliance on AI technologies may lead to social isolation and a decline in human interaction.

6. Ethical Governance: There is a need for ethical governance frameworks to ensure that AI technologies are developed and used in ways that benefit society.

RECOMMENDATIONS:

The following recommendations will address the ethical considerations surrounding the use of AI technologies in Nigeria:

1.Developing Ethical Frameworks: The Nigerian government through relevant agencies, in collaboration with organizations, must develop AI policies that reflect the diverse cultural, social, and economic realities of the country. These policies must consider the human values to ensure that AI does not dehumanize the population. They must develop ethical frameworks that will ensure a careful, human-centered integration of AI into various sectors that will not undermine the existing system especially the educational system.In addition, this framework must consider the level of unemployment, poor utilities and technological advancement, such that AI will support human workforce, and not to replace them.

2. Ensuring Transparency and Accountability: AI systems must be transparent and accountable, with clear lines for responsibility. Regulationsand guidelines established for AI-driven data collection must account for data privacy and protection, consent, data misuse and curriculum content especially in our educational institutions.

3. Investing in Education and Training:The Nigerian government through relevant agencies, in collaboration with organizations, must invest in education and training programs to ensure that the population are in touch with AI technologies and workers have the skills they need to work with AI.In addition, AI reforms and integration by teaching ethical AI literacy, the algorithms, the potential biases and the ethical consequences should be put in place. This approach will foster and create awareness of the societal impacts of AI technologies.

4. Encouraging Diversity and Inclusion: The government and Organizations must encourage diversity and inclusion in the development and use of AI technologies to ensure that they are fair and unbiased that benefit society as a whole (Abubakar*et al*., 2024).

CONCLUSION:

Nigeria, like other developing countries, is still navigating into AI technologies. The major challenges of AI in Nigeria are lack of infrastructure to support the technology especially in remote areas, economic inequality, data privacy and protection, lack of skilled manpower, and lack of comprehensive AI regulations.The use of AI technologies has impact on the individuals and the society in general with

respect to job security, data privacy and protection, AI regulation and governance. The Nigerian government through relevant agencies, in collaboration with organizations, must develop AI policies that reflect the diverse cultural, social, and economic realities of the country, especially with job securities and educational sector. They must invest in education and training programs, to create awareness for end users and to mitigateagainst negative consequences.

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