

ARTIFICIAL INTELLIGENCE AND AFRICAN ECONOMIC DEVELOPMENTAL GROWTH:

A PHILOSOPHICAL APPRAISAL

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ABSTRACT

Artificial Intelligence (AI) is quickly becoming one of the most powerful forces shaping the modern world, and Africa is not left out in this global transformation. This paper offers a philosophical appraisal of how AI connects to Africa's developmental growth. It begins by examining what AI really means not just in a technical sense but as a tool that can influence how societies think, grow, and make decisions. The paper looks into the opportunities AI brings to areas like education, agriculture, health care, and economic planning. It also considers how AI could help in solving deep-rooted social problems like poverty, insecurity, and unemployment, if applied wisely. However, it doesn't ignore the fears. Issues like digital inequality, lack of infrastructure, brain drain, and ethical concerns around AI decisions are deeply explored. From a philosophical angle, the work reflects on how AI must be handled with care so that it supports African values, human dignity, and justice. It raises questions about who controls AI in Africa and whether African countries are simply consumers or active creators of this new technology. The conclusion calls for a balanced approach: Africa must embrace AI but in a way that is ethical,

people-centered, and home-grown. This means investing in education, local innovation, and strong policies that protect human rights and fairness. Overall, the paper encourages Africans to see AI not as a threat but as a chance to grow wisely.

Keywords: Artificial Intelligence, Africa, Development, Ethics, Technology

INTRODUCTION

Africa stands at the doorstep of a new era, one where technology, especially Artificial Intelligence (AI), is becoming more than just a tool it is shaping how we live, learn, work, and grow. For a continent known for its rich natural resources, vibrant cultures, and youthful population, the question is no longer whether AI will affect Africa's development, but how and in what direction. This essay takes a philosophical look at the relationship between AI and African developmental growth, exploring both the promises and the challenges. Artificial Intelligence refers to the ability of machines to mimic human thinking and perform tasks that typically require intelligence, such as learning, decision-making, problem-solving, and even communication. From mobile banking to healthcare, agriculture to education, AI is gradually entering many parts of life in Africa. Countries like Rwanda, Kenya, Nigeria, and South Africa are beginning to use AI tools to solve local problems, manage resources, and create new opportunities. Yet, the rapid growth of this technology raises deep questions that go beyond the surface. These are questions about ethics, justice, freedom, and the meaning of development itself.

A philosophical appraisal means we are not only looking at the usefulness of AI but also asking deeper questions: What kind of development do Africans truly need? Is technology serving the people or the other way around? Will AI promote fairness and equality, or will it widen the gap between the rich and the poor? Can Africa adopt AI in a way that respects its cultures, values, and unique history, rather than simply copying Western models? This

introduction sets the stage for a thoughtful discussion on the place of AI in Africa's development. It is important to ask how Africans can make wise choices about the use of technology choices that are not just based on economic growth, but also on human dignity, social justice, and long-term sustainability. By looking through a philosophical lens, we aim to understand not just what AI can do for Africa, but what it should do. Philosophy helps us question assumptions, examine values, and seek balanced answers in the midst of rapid change. In this way, we can reflect on how to guide AI in a direction that truly benefits the people of Africa not just for today, but for generations to come.

AI AND ECONOMIC DEVELOPMENT

Artificial Intelligence, commonly called AI, is a modern tool that allows machines to do things that humans can do like learning from data, making decisions, and solving problems. In simple words, AI is when computers or machines are trained to think like humans. It is now becoming a very important part of how countries are growing and developing their economies. But how does AI affect economic development, especially in a place like Africa? Let's look at this in a way that is easy to understand. To start with, AI is helping to solve some major problems in agriculture. In Africa, most people depend on farming for their livelihood. But many farmers still use old methods. Now, with the help of AI, farmers can get real-time information about weather, soil, pests, and the best time to plant or harvest. For example, in Kenya, AI-powered apps help small-scale farmers make better decisions, leading to better yields and less loss (Cisse, 89). This improves food production and income, which is good for the economy. In healthcare, AI is also doing great work. Many parts of Africa don't have enough doctors or medical equipment. But AI can help by reading X-rays, predicting disease outbreaks, and giving quick health advice through chatbots. In Nigeria, some startups use AI to diagnose malaria and tuberculosis

by analyzing medical images (Nnaji, 42). This means quicker treatment and better health for the people. And when people are healthy, they are more productive, which also helps the economy grow.

AI is also improving education. Some African schools now use AI platforms to help students learn at their own pace. These platforms understand the level of each student and provide lessons that suit them. This is very helpful because many schools are overcrowded or lack enough teachers. A good education system prepares young people for future jobs, especially in technology and innovation. Olayinka writes that “Africa's young population can benefit from AI if the education system includes digital skills and practical learning” (75). However, AI also comes with worries. One common fear is that it may take jobs away from people, especially those who do routine or simple tasks like driving, typing, or customer service. If not handled well, this could increase poverty and inequality. But the truth is that while AI may replace some jobs, it can also create new ones. Jobs like data analysts, AI developers, and digital marketers are now in high demand. What we need is to prepare our people through training and digital education. From a philosophical point of view, development is not just about having machines or making money. It's about improving human life and promoting justice. AI should be used in ways that respect human dignity and African values. As Wiredu wisely said, “Technology without cultural ownership is a new form of colonization” (119). Africa should not just consume AI technology created elsewhere. We must create our own solutions, using our languages, solving our own problems, and protecting our data and freedom. AI has the power to support economic development in Africa through better farming, health care, education, and new job opportunities. But we must use it wisely and not let it widen the gap between the rich and the poor. Our leaders should invest in local innovation, train the youth, and make sure that AI serves people not the other way

around. AI should not control us it should help us live better lives and move forward together.

CURRENT CHALLENGES OF AI IN AFRICA

Artificial Intelligence (AI) is transforming the world at a fast pace. From health care to education, finance to agriculture, AI is improving how things are done. However, in Africa, the journey is not so smooth. While some countries on the continent are beginning to adopt AI, many challenges are slowing down progress. These challenges are both technical and social. In this essay, we will look at some of the key problems Africa is facing in trying to grow with AI. One of the biggest challenges is lack of infrastructure. For AI to work properly, strong internet networks, power supply, data centres, and advanced computing systems are needed. Many African countries still struggle with unstable electricity and weak internet connections, especially in rural areas. Without these basic things, developing or even using AI becomes very difficult. According to Oxford Insights, many African countries scored low in AI readiness due to poor infrastructure and weak data ecosystems (Oxford Insights, 12). Another challenge is limited digital skills and education. AI is a highly technical field that requires training in machine learning, data science, robotics, and computer programming. But in many African schools and universities, there is little or no focus on these subjects. This makes it hard to find local talent that can build and manage AI systems. According to the International Finance Corporation, Africa needs nearly 230 million digital jobs by 2030, but the current education system is not preparing enough people for this demand (IFC, 23). As a result, the few who are skilled often move abroad, creating a “brain drain” problem.

Lack of funding and investment is also a major problem. AI research and development needs a lot of money. But most African

governments are still struggling with basic needs like food, housing, and security, and may not prioritize AI funding. Also, many local tech startups find it difficult to access investment from banks or international donors. According to Adebayo et al., African tech startups receive less than 1% of global AI investments, which makes it hard for them to grow (Adebayo et al. 67). Data availability and quality is another issue. AI depends on large and accurate data to learn and make decisions. But in Africa, reliable data is often missing, incomplete, or not properly stored. In some cases, the data that exists is not shared between institutions because of poor data policies or mistrust. This makes it difficult to develop AI systems that reflect local realities. As Ndubuisi Ekekwe rightly points out, “without African data, we will always have foreign solutions for local problems” (Ekekwe, 45). Ethical and regulatory concerns also pose a serious challenge. AI can raise questions about privacy, surveillance, and job loss. But many African countries do not yet have clear laws or policies to guide the use of AI technologies. This opens the door for abuse and misuse. For instance, facial recognition tools could be used by governments to monitor people unfairly, especially in times of political unrest. According to UNESCO, only a few African countries have national AI strategies, and even fewer have ethical guidelines for AI (UNESCO, 18).

PHILOSOPHICAL PERSPECTIVE ON AI AND AFRICAN DEVELOPMENT

Artificial Intelligence (AI) has become one of the most talked-about technological tools in today's world. From the way we work, learn, and communicate, AI is silently reshaping everything. But beyond the surface, there's a deeper question that philosophers are asking: how should Africa, with its own values and developmental struggles, relate to this fast-rising technology? AI must not only be

seen as a technical invention but as a tool that shapes human life, values, and destiny. African development, on the other hand, is not just about infrastructure or economy it's also about human dignity, cultural identity, and ethical progress. When we bring AI into the African conversation, it forces us to think critically: Will this technology help Africa grow in a human-centred way, or will it create more gaps and dependence? One of the main concerns from a philosophical view is autonomy. Africa has long suffered from a history of colonisation and foreign dependence. Philosophers like Kwame Gyekye and Kwasi Wiredu have spoken about African identity and the need for self-determination in development. If Africa simply imports AI systems created elsewhere without adapting them to fit local needs and ethical values, then the continent risks losing control over its own future (Wiredu, 105).

Another important issue is justice and equity. Development should be inclusive, not just benefitting a few elites in big cities while the rural majority are left behind. AI can worsen inequality if it is not managed properly. For example, many AI systems depend on access to internet, electricity, and digital education resources that are unevenly distributed across Africa. As philosopher Thomas Pogge would argue, any development model that increases the suffering or exclusion of the poor is ethically questionable (Pogge, 29). Moreover, there's the issue of digital colonialism. Some thinkers argue that Africa may once again fall into the trap of being exploited this time not for raw materials, but for data. Big tech companies from the West and Asia are already collecting African data to train their AI models, often without proper regulation or benefits returning to local communities. This raises serious moral questions about consent, ownership, and sovereignty in the digital age (Coudry and Mejias, 337). However, African philosophers also see opportunities. The Ubuntu philosophy, which is built around the idea of community and mutual care “I am because we

are” offers a different way to think about AI. Instead of using AI for profit or competition, Africa can shape AI to support cooperation, health, education, and local wisdom. This would make technology serve the people, not the other way around. The philosophical perspective reminds us that AI should not be accepted blindly. It should be questioned, adapted, and humanised. Africa must not only be a consumer of AI but a creator of its own path rooted in its values, needs, and visions of justice. Development should be about building lives, not just building machines.

AI AS A CATALYST FOR SUSTAINABLE DEVELOPMENT IN AFRICA

Sustainable development is not just about economic growth but also involves improving education, healthcare, agriculture, and the environment in a way that benefits both present and future generations. Africa faces many development challenges, such as poverty, food insecurity, poor infrastructure, and environmental degradation. However, if properly managed, AI has the potential to address these issues in a sustainable and long-lasting way. One of the most important ways AI can help in Africa is through agriculture. Many Africans depend on farming for survival, but they face issues like unpredictable weather, pests, and poor soil. AI can assist farmers by predicting weather patterns, suggesting the best planting seasons, and detecting crop diseases early. For instance, apps like PlantVillage Nuru, developed by Penn State University and partners, use AI to help farmers in Kenya and Nigeria identify diseases in crops like cassava and maize by simply taking pictures (Mohamed et al. 6). This helps farmers make quick decisions and improve their harvest, which can reduce hunger and poverty. In the health sector, AI tools are being used to improve diagnosis and treatment. For example, AI is helping in predicting disease outbreaks like Ebola or COVID-19 by analyzing data in real-time. It also supports remote healthcare services where doctors are not available, especially in rural areas. In Rwanda, a company

called Babyl, in partnership with the government, uses AI to provide consultations through mobile phones. This system helps reduce hospital overcrowding and ensures more people get medical advice on time (Chisenga and Chanda, 142).

Another key area is education. AI can make education more inclusive and accessible in remote parts of Africa. Through personalized learning platforms, students can learn at their own pace. Tools like ULesson, a Nigerian ed-tech startup, use AI to deliver interactive video lessons and practice questions tailored to students' needs. This not only improves learning but also gives rural children access to quality education, which is vital for long-term development. AI is also contributing to environmental protection. It can monitor deforestation, track illegal mining, and predict floods and droughts. This is very important for a continent that faces major environmental threats due to climate change. In West Africa, AI systems are being developed to monitor forest changes using satellite data, helping governments to act quickly before damage becomes too severe (Ndung'u et al. 15). Despite all these advantages, Africa must overcome challenges like lack of infrastructure, low digital literacy, and poor data protection laws. But with proper investment, local innovation, and support from government and private sectors, AI can play a big role in building a more sustainable Africa. Importantly, African countries need to build their own AI systems that reflect African realities, not just copy systems from Europe or America. AI has the power to drive sustainable development in Africa by transforming key sectors like agriculture, health, education, and the environment. However, this can only happen if African leaders, researchers, and citizens work together to make AI systems that are ethical, inclusive, and focused on long-term growth.

STRATEGIES FOR ENHANCING AI ADOPTION AND IMPACT IN AFRICA

Artificial Intelligence (AI) holds the power to change the face of

Africa's development. But for it to truly bring growth, jobs, and better services to the continent, Africa must first tackle the barriers to AI adoption and focus on smart strategies that work for its people. These strategies must be simple, people-driven, and centered around Africa's unique needs. In this essay, we will discuss some key strategies to enhance AI adoption and its real-life impact in Africa.

First, investing in education and digital skills. Many African youths are creative and full of potential, but lack the digital skills needed to develop or work with AI systems. Governments and private sectors should invest in teaching AI, coding, data science, and robotics in schools and universities. Countries like Rwanda and Kenya are already starting to include AI and digital innovation in their national plans. According to the African Development Bank, increasing investments in education and innovation will help Africa prepare for the future of work (AfDB, 22). Moreover, local communities need awareness campaigns to understand how AI works and how it can solve their day-to-day problems, like farming, transportation, or healthcare.

Second, building local data ecosystems is crucial. AI systems learn from data, and for African solutions to work, they need African data. This means building strong data collection and storage systems that respect privacy and are well organized. For instance, healthcare apps need local health data to help predict and treat diseases more effectively. But if the data is not available or is stored poorly, these solutions will not work. According to the United Nations Economic Commission for Africa, Africa must focus on gathering inclusive and quality data for AI to have a long-term impact (UNECA, 15).

Third, developing strong policies and structure for AI will guide how it is used and managed. This includes rules around ethics, privacy, data protection, and fair use. In 2021, UNESCO adopted a

global agreement on the ethics of AI. African governments should align their laws with such international structure while also developing homegrown policies that reflect their social and cultural realities. According to Njoku et al., AI regulation should be made with the input of Africans themselves to avoid copying Western models that may not fit African societies (Njoku et al. 77).

Fourth, supporting local startups and innovation hubs will boost creativity and give room for local AI projects to grow. Many African entrepreneurs are using AI to solve problems like waste management, crop monitoring, and online education. But they lack funding and infrastructure. Governments and international partners should provide grants, mentorship, and access to tools like cloud computing to these innovators. Organizations like Google AI, IBM, and Facebook have already launched AI labs and research centers in Africa, but more partnerships are still needed across rural and urban communities.

Fifth, regional cooperation is also key. Africa is made up of many small economies. Working together through the African Union (AU) and regional blocs like ECOWAS or SADC can help countries share knowledge, build joint research centers, and create unified AI strategies. For example, the Smart Africa Alliance is already pushing for digital transformation through regional collaboration.

Raising public trust and awareness is important. Many Africans fear that AI will take away jobs or increase surveillance. It is true that AI can disrupt traditional work patterns, but it also creates new job roles. The message should be clear: AI is not here to replace people but to help them. Governments, educators, and media must work together to create public understanding and build trust around AI systems. Africa can benefit from AI only if it adopts a people-

centered and inclusive approach. Investing in skills, building strong data systems, making clear policies, supporting innovators, working together as a region, and creating trust among the people are all strategies that will make AI meaningful on the continent. These steps will not only bring technological progress but also improve lives in ways that are truly African.

CONCLUSION

It is a question of values, direction, and priorities. AI, in itself, is a tool neither good nor bad. But the way we use it, especially in the African context, carries moral weight. Through a philosophical lens, AI forces us to ask: What kind of development do we want? Who should benefit from it? And how do we make sure no one is left behind? One cannot deny that AI has great potential to solve some of Africa's long-standing problems. From improving agriculture through smart irrigation systems, to enhancing healthcare delivery using AI-powered diagnostics, the possibilities are endless. Economically, AI can improve efficiency, reduce human error, and open up new sectors like fintech, e-commerce, and data-driven farming. According to Agboli et al., AI presents a unique opportunity to “leapfrog” into a new stage of industrialisation and service delivery (Agboli et al. 118). But these benefits do not come automatically. They must be planned for and guided by thoughtful policies. From a philosophical point of view, development is not just about GDP or infrastructure. It's about human well-being, dignity, and freedom. African philosophers like Kwame Gyekye and Julius Nyerere have long emphasized communalism, participation, and dignity of labour as essential African values. If AI is to truly help Africa develop, it must align with these values. For example, deploying AI in a way that takes away people's jobs without offering new opportunities violates the principle of dignity. It turns people into victims of progress instead of beneficiaries.

Another critical point is justice and inclusion. Africa has millions of rural dwellers, informal workers, and people with low digital literacy. If AI is only concentrated in urban cities and rich sectors, it will deepen inequality. We must think about distributive justice how the benefits and burdens of AI are shared. That's why policy makers, tech companies, and educators must work together to ensure access to AI tools, digital education, and data protection. As philosopher Thomas Pogge argues, true development must address systemic inequality and ensure that all people have a fair chance (Pogge, 37).

Moreover, we must not copy Western AI models blindly. Africa has its own social realities, traditions, and ways of reasoning. Culturally appropriate solutions must be designed, where technology respects local languages, customs, and human interactions. A one-size-fits-all approach will not work. Philosopher Amílcar Cabral once said that liberation means being able to “create and develop culture freely.” In the same way, AI must not enslave Africa to foreign data and systems, but empower it to build its own. Artificial Intelligence is a powerful engine for economic growth in Africa but it must be guided by human wisdom. Technological progress without ethical reflection is dangerous. A truly African approach to AI development must be inclusive, just, and rooted in our values. It must not widen the gap between the rich and poor, but instead bridge it. With thoughtful planning, ethical leadership, and collective vision, AI can become not just a tool of profit, but a pathway to dignity, empowerment, and shared prosperity.

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