The Impact of Artificial Intelligence on the Labour Market in Nigeria: A Government Policy Approach

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Abstract

The rapid advancement of Artificial Intelligence (AI) technologies is transforming labour markets globally, with profound implications for economies, particularly in developing countries like Nigeria. This paper examines the dual impact of AI on Nigeria's labour market, highlighting its potential to drive economic growth and innovation while posing risks of job displacement and socio-economic inequality. AI adoption across sectors such as finance, healthcare, agriculture, and manufacturing offers opportunities for efficiency gains and new job creation in emerging fields like data analysis and machine learning. However, the automation of routine tasks threatens low-skilled jobs, exacerbating unemployment and widening income disparities. The study identifies critical challenges, including Nigeria's high unemployment rates, low digital literacy, and insufficient infrastructure, which hinder equitable AI integration. Current government policies, such as the National Digital Economy Policy, lack comprehensive strategies to address these labour market disruptions. Drawing on international best practices, this paper advocates for targeted interventions, including AI-focused education, vocational training, public-private partnerships, and social safety nets to mitigate job displacement and ensure inclusive benefits. Through a policy-oriented framework, this paper underscores the need for Nigeria to balance AI's transformative potential with its socio-economic challenges. Proactive measures can position Nigeria to harness AI's benefits while safeguarding its workforce and promoting equitable economic growth.

Keywords: Artificial Intelligence, Nigeria labour market, job displacement, digital literacy, economic policy, workforce development

1. Introduction

Artificial Intelligence (AI) has transformed industries globally, changing how companies and society function, but it also raises serious concerns about how it may affect jobs and economic stability. Robotics, machine learning, and natural language processing are examples of artificial intelligence (AI) technologies that are disrupting traditional workflows and reaching unprecedented levels of efficiency. For instance, Boavida & Candeias (2021) argue that advances in AI are speeding up a "second machine age," fundamentally altering the nature of labour and economic institutions. However, these improvements come with trade-offs, particularly in labour markets where technology is replacing traditional jobs, which raises concerns about widespread job displacement.

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unprecedented levels of efficiency. For instance, Boavida & Candeias (2021) argue that advances in AI are speeding up a "second machine age," fundamentally altering the nature of labour and economic institutions. These improvements do come with trade-offs, though, particularly in labour markets where technology is replacing traditional jobs, which raises concerns about widespread job displacement.

Nigeria's rapid adoption of AI has the potential to completely transform a variety of sectors, including banking, manufacturing, healthcare, and agriculture. However, this technological shift has disadvantages as well, particularly in a country with high unemployment and underemployment rates. Nigeria's unemployment rate has risen to over 33% in recent years, indicating a significant socioeconomic problem, per a Serifat (2020) report. In this sense, the application of AI raises both hopes and concerns. For example, AI innovations such as predictive analytics and chatbot-based customer service have increased customer satisfaction and operational effectiveness in the financial sector (Khurana, 2024; Agustiawan, 2024; Ahmadi, 2024). In a similar vein, AI-driven technologies such as precision agriculture are addressing food security issues by increasing yields and optimizing resource utilization (Addas, Tahir & Ismat, 2023; Hoque &Padhiary, 2024). However, the automation of typically manual tasks such as field labour and secretarial work poses a significant risk to Nigeria's workforce.

The adoption of AI causes both job displacement and a skills mismatch. Boavida & Candeias (2021) claim that because AI technology disproportionately affects low-skilled individuals, there is a greater need for high-skilled jobs like data scientists and AI specialists. The resulting discrepancy could exacerbate social inequality if deliberate measures are not implemented. This skills mismatch is particularly problematic in Nigeria, where educational systems are falling behind in equipping students with the skills necessary for artificial intelligence (Ewa, 2024). Underfunding technical education and vocational training exacerbates the issue by leaving many workers unprepared for artificial intelligence-driven labour markets.

The Nigerian government is just beginning to deal with these problems. The National Digital Economy Policy and Strategy (2020–2030) emphasizes how digital technology may stimulate economic growth and innovation (Umar, Mukhtar & Aziz, 2024). But when it comes to specifically addressing how AI is upending the job market, there are surprisingly few options. This policy gap is criticized by Deng (2023), who contends that inactivity could exacerbate the country's digital divide and severely penalize vulnerable people.

To balance AI's potential to boost productivity with its disruptive effects on the labour market, policymakers must move swiftly. Learning from other nations, like Germany, which uses social safety nets to prevent job displacement (Vishnevskaya &Zudina, 2020), and India, where inclusive growth is given priority in government-led AI efforts (Cruz, Firozi, Bonsay& Camaro, 2021), may be helpful. Nigeria must make investments in AI education, foster public-private partnerships, and implement robust social safety measures to effectively address these issues.

Although artificial intelligence (AI) presents an unprecedented opportunity for social and economic transformation, its effects on the Nigerian labour market must be carefully regulated. Evidence-based regulations must be implemented to mitigate any risks and ensure that the benefits of AI are distributed equitably across society. By proactively tackling these issues, Nigeria may safeguard its workforce from adverse consequences while leveraging AI's promise.

1.1 Problem Statement

According to this report, artificial intelligence (AI) has the potential to improve Nigeria's economy, but because of its implications on the labour market, the government must take

significant steps to ensure inclusive benefits, minimize job displacement, and promote skill development.

AI technologies create problems for the global labour market that are more severe in developing countries like Nigeria because of employment and educational shortcomings. According to Ubah, Bowale, Ejemeyovwi, and Okereke (2021), 40% of jobs in Nigeria's industrial sector are at risk from automation, highlighting the need to address displacement issues.

Similarly, Cubric (2020) highlights the use of AI in healthcare and agriculture, which boosts output while displacing low-skilled workers. According to Onwo and Ohazulike (2021), over 85% of Nigerians are employed in informal jobs, making task-based occupations like inventory management and delivery services particularly vulnerable to disruptions from AI. (Natarajan, Ramasamy, and Sathyamoorthy, 2024). The skills gap widens as AI is adopted. Many workers are unprepared because most Nigerian institutions do not provide degrees focused on artificial intelligence, despite the growing demand for highly qualified roles in this field (Muhammad, Umar & Adam, 2023).

According to Susanto &Khaq (2024), businesses that use AI for customer support report a 25% increase in efficiency. Adoption of AI has positive economic effects, such as increased creativity and production. However, without intentional policies, these benefits run the risk of widening disparities. Babina, Fedyk, He, and Hodson (2024) warn that if AI adoption is allowed to continue unchecked, it may narrow economic benefits to a select few companies, thereby excluding the majority of workers.

Governmental policies are crucial for addressing these issues. The National Digital Economy Policy and other existing frameworks are insufficient in managing AI-driven workforce shifts (Cramarenco, Burcă-Voicu & Dabija, 2023). Canada and Singapore are prime examples of proactive policies that work, such as upskilling, safety nets, and incentives for inclusive innovation (Intaratat, 2021).

In conclusion, even if AI has the potential to improve Nigeria's economy, the company's disruptions of the labour market necessitate a comprehensive legal strategy to ensure equitable benefits and prepare people for the AI of the future.

2. Literature Review

There is broad recognition in the literature of artificial intelligence's (AI) dual impact on economies and labour markets. On the one hand, AI promotes creativity and creates new opportunities, particularly in highly specialized domains like data science, robotics, and machine learning. AI automation, however, reduces the need for repetitive, low-skilled work, which poses issues for labour stability and socioeconomic justice.

Opportunities Created by AI

It is commonly known that artificial intelligence (AI) can increase creativity and productivity. Boavida & Candeias (2021) claim that AI-enabled technologies like predictive analytics and robotic process automation have revolutionized sectors including finance, healthcare, and logistics. For instance, AI applications in healthcare are improving diagnosis accuracy, maximizing resource allocation, and providing customized treatment (Akinola, 2024). AI-powered robots have also reduced waste and operational costs in the manufacturing sector by streamlining production processes (Lodhi, Gill & Hussain, 2024).

The rise of new job roles in AI-related industries is another area of interest. According to Jadhav &Banubakode (2024), AI has led to the creation of highly sought-after professions such as data

scientists, machine learning engineers, and AI ethicists. Additionally, the use of AI has made customer service more creative, with chatbots and virtual assistants offering 24/7 support and creating jobs in AI creation and maintenance (Ghosh, Ness & Salunkhe, 2024; Mwikali, 2024).

Challenges of AI Adoption

Despite its many benefits, artificial intelligence has significant disadvantages, particularly for labour markets. Because of the automation of routine and repetitive tasks, many industries have experienced a large loss of jobs. For example, a study by Chung & Lee (2022) found that in certain regions, the proportion of robots per 1,000 workers can reduce employment rates by up to 0.34%. According to Hémous Olsen (2022), automation also makes economic inequality worse by disproportionately harming low-skilled workers. AI has an impact on growing skills gaps in addition to job displacement.

Bushuyev, Igbal, and Elams (2024) note that while AI increases the demand for technical skills, educational systems in many countries struggle to adapt their curricula to meet this need; this gap is particularly noticeable in developing economies where inadequate infrastructure and scarce resources impede effective skill development (Mullan & Rolleston, 2020).

Government Policy and Workforce Readiness

According to studies from developed economies, proactive measures like social safety nets, labour upskilling, and encouraging inclusive innovation can lessen the negative effects of AI. For example, Canada's Pan-Canadian AI Strategy has received praise for its emphasis on training initiatives and AI research centres (Hachkevych, Fainyk&Fediura, 2024), and Singapore's Smart Nation strategy places a strong emphasis on lifelong learning and workforce digital transformation (Das, Lim & Aravind, 2022). The ability of governments to implement adaptive policies will have a significant impact on the overall impact of AI.

Identification of Gap

Because most research focuses on rich countries, there is a knowledge gap regarding the effects of AI in developing environments, even if the literature now in print provides important information concerning AI's dual impact. In AI research, Nigeria is underrepresented due to its unique infrastructure and socioeconomic challenges.

Socio-Economic Context in Nigeria

More than 85% of Nigerian workers are employed in informal jobs, which dominate the labour market (Onwo&Ohazulike, 2021). Because many informal jobs involve repetitive tasks that can be automated, this market is particularly vulnerable to disruptions from AI. Cubric (2020) highlights the increasing use of AI-powered solutions in sectors like retail and transportation, where informal labour is increasingly being replaced.

Additionally, Nigerian educational institutions lag in terms of AI-related training. Less than 15% of Nigerian institutions offer courses in artificial intelligence or related fields, according to Aiyedun (2024). This weakness causes the skills gap to increase since the workforce is not prepared to manage the new opportunities brought about by the deployment of AI.

Infrastructural Challenges

Nigeria's infrastructure constraints further restrict AI's potential benefits. Unstable power supply, limited internet penetration, and inadequate technological expenditures hinder the adoption of AI

solutions in numerous industries (Nnaomah, Odejide, Aderemi, Olutimehin, Abaku &Orieno, 2024). These challenges underscore the need for context-specific strategies to maximize AI's benefits and minimize its risks.

Policy

There are no particular steps to limit the impact of AI on the labour market in Nigeria's present legislative frameworks, such as the National Digital Economy legislative. Abidin, Rahim, and Shaari (2024) critique the absence of comprehensive solutions to issues like employment relocation and the growing skills gap. Comparative research suggests that by enacting tailored laws similar to those in Singapore and Canada, Nigeria could be able to use AI's potential while mitigating its disadvantages. This study closes a gap in the literature by examining the infrastructure and socioeconomic obstacles to AI deployment in Nigeria. The study aims to provide tailored policy solutions to help advance a more nuanced understanding of AI's effects on labour markets in underdeveloped countries. To guarantee that AI-driven economic progress results in fair societal benefits, it also emphasizes how crucial government engagement is.

3. Supporting Arguments and Analysis

a. Potential for Job Creation in Emerging Sectors

AI has a lot of potential to open up new career opportunities, especially in developing fields like data analysis, AI system maintenance, and other technology-related occupations. The increasing application of AI across multiple industries suggests untapped potential for high-value employment development.

Data Analysis and AI System Maintenance: The ability of AI to analyze massive datasets has led to an upsurge in the demand for skilled data analysts, AI researchers, and machine learning engineers. For instance, the financial industry in Lagos is utilizing AI for predictive analytics, fraud detection, and automated customer service systems. Apart from advancing financial inclusion, fintech companies such as Flutterwave and Paystack are creating job opportunities for IT professionals with knowledge of AI-powered financial systems. These businesses are expanding and creating a demand for experts who can manage, upgrade, and invent AI algorithms, creating a job market that did not exist a few years ago. Similar patterns may be observed in agritech, where AI is being applied to crop yield forecast optimization, environmental monitoring, and agricultural equipment control. In rural Nigeria, agritech companies like FarmCrowdy and ThriveAgric are using AI to boost agricultural output, creating jobs in agronomy, farm management, and technical support for AI-powered systems.

The creation of high-value jobs in these industries may also be accelerated by government support for AI education and training programs. According to Muhammad, Umar, and Adam (2023), artificial intelligence (AI) has the potential to grow the global economy by \$15.7 trillion by 2030, with developing countries like Nigeria playing a major role. Nigeria might take advantage of this potential and provide opportunities for its younger generation, who are becoming more tech-savvy, by investing in AI education.

Government's Role in Maximizing Opportunities: The Nigerian government ought to take full advantage of these employment opportunities by promoting public-private partnerships to develop AI-related training and education programs. Encouraging partnerships with global IT companies can also help build the expertise and infrastructure required to support these new

companies. The expansion of these programs would result in a skilled workforce capable of meeting the growing demand for AI in both urban and rural regions.

Risk of Job Displacement and Widening Inequality

Even if AI has the potential to provide new job possibilities, it also carries the risk of displacing existing ones, especially in sectors that primarily depend on regular activities and physical labour. Automating routine operations in industries like manufacturing, banking, and transportation might lead to a significant loss of employment, particularly for low-skilled workers.

Automation in Banking and Transportation: The banking industry is a clear illustration of how automation is displacing workers. Automated teller machines (ATMs), smartphone banking apps, and AI-powered customer assistance systems have already reduced the need for traditional bank tellers. According to Akilimalissiga& Sukdeo (2024), this trend is expected to continue, with an estimated 40% of banking employment at risk of automation over the next 20 years. In a similar vein, the rise of autonomous vehicles, such as self-driving trucks, in the transportation sector is putting jobs in the driving and logistics industries at risk. Long-haul truck drivers in Nigeria may be particularly vulnerable to job loss as more companies use AI-driven logistics systems that automate cargo handling and vehicle navigation.

Impact on Low-Skilled Workers:Since low-skilled workers typically lack the education and training necessary to adjust to the new, AI-driven economy, they are most at risk of losing their jobs to automation. This makes already-existing economic gaps worse since lower-income individuals and groups are more likely to labour in industries that are susceptible to automation. Due to limited access to technology and knowledge, as well as the digital divide between urban and rural areas, this issue is particularly apparent in Nigeria.

Widening Inequality: Workers may be displaced in the absence of adequate safety nets or retraining programs, which makes it more difficult for individuals who lose their jobs to acquire new ones. This might lead to an increasing disparity in inequality. According to Acemoglu & Restrepo (2017), automation may make inequality worse by preventing low-skilled workers from obtaining profitable jobs and upward economic mobility. In Nigeria, this would most likely result in a growing divide between individuals who can thrive in new industries using digital and artificial intelligence (AI) and those who are left behind in the traditional labour market.

Need for Workforce Reskilling and Education Reform

To address the challenges of job displacement and prepare for an AI-driven economy, Nigeria must prioritize education and skill development. The workforce needs to have a variety of skills to fulfil the demands of the new economy, including data management, machine learning, and programming.

Integrating AI in Educational Curricula: AI-related curricula must be implemented in schools and institutions to ensure that Nigerian children are prepared for the AI-driven future. As of 2020, just sixteen percent of Nigerian universities offered research on artificial intelligence (Aiyedun, 2024). Expanding AI-focused education, especially in STEM (Science, Technology, Engineering, and Mathematics) subjects, would provide students with the technical skills needed

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to thrive in AI-related industries. For instance, the University of Lagos has already incorporated AI and machine learning courses into its computer science curriculum in an attempt to bridge the skills gap.

Vocational Training and Certification Programs: In addition to formal education, vocational training facilities and certification programs are crucial for upskilling individuals, especially those in low-skilled sectors that are vulnerable to automation. Partnerships with global digital companies and organizations like Google, Microsoft, and Coursera may enable the establishment of training centres that provide certification in AI-related fields like data science and machine learning. These programs may be tailored to specific industries, such as healthcare, agriculture, and finance, to ensure that workers are prepared to meet their evolving needs.

Promoting Lifelong Learning:To allow people to reskill at their speed, the Nigerian government ought to invest in websites that provide online learning possibilities, such as LinkedIn Learning and Udemy. Given how quickly technology is evolving, lifelong learning must be given top priority in the national education reform agenda. To guarantee that people can adjust to AI-driven labour markets, government initiatives that promote lifelong learning and skill development are crucial.

Counterarguments: Critics of AI Adoption in Nigeria

Some argue that infrastructure problems, such as erratic power supplies and low internet penetration, are impeding Nigeria's adoption of AI, despite the technology's immense potential for economic growth. The widespread use of AI technology may be hampered by these issues, particularly in rural areas with poor internet and electricity access.

Infrastructural Deficits: The Nigerian government can work with private tech firms to build the necessary infrastructure, including reliable power supplies, robust internet connectivity, and affordable technology access. In the direction of filling these infrastructure gaps, initiatives like the Rural Electrification Agency's solar power projects and the National Broadband Plan are encouraging. Other emerging nations also deal with the issue of poor infrastructure; Nigeria is not the only one.

Private Sector Partnerships:Partnerships between international IT companies and the private sector can promote the usage of AI and speed up infrastructure development. For instance, through initiatives aimed at expanding internet access in disadvantaged areas, Google and Facebook have already invested in Africa's internet infrastructure. Together with government initiatives, these partnerships can expand access to AI technology, lowering the likelihood of exclusion in rural and impoverished areas.

Long-Term Solutions:In the end, fixing these infrastructure flaws requires a consistent commitment from the public and private sectors. Nigeria can fully leverage AI and create a more egalitarian economy by prioritizing infrastructure development. Artificial intelligence presents Nigeria with both potential and challenges. However, the country's ability to fully capitalize on these changes will depend on its intentional expenditures in infrastructure, education, and workforce development. By fostering an environment that supports the development of artificial intelligence (AI) in emerging industries while reducing worries about inequality and job

displacement, Nigeria may use AI to drive economic growth and development. Nigeria may become a leader in AI innovation in Africa by collaborating with the corporate community and enacting significant regulatory changes.

Refutation of Opposing Views Presentation of Opposing Arguments

The socioeconomic context in Nigeria is not yet ready for broad AI integration, according to those who oppose the country's adoption of AI, who point to several important barriers. Low levels of digital literacy, particularly in rural areas, and high rates of poverty are two major challenges that are commonly raised. It is believed that these challenges are intractable and could prevent AI from enhancing the labour market and stimulating the economy overall. If these fundamental issues are not resolved, the use of AI, according to critics, may exacerbate already-existing imbalances, leaving many Nigerians behind and widening the digital divide.

i. High Poverty Levels: Jaiyeola and Choga (2020) report that over 40% of Nigerians are below the poverty line, which is still a very high rate. Many critics argue that in such a situation, the resources needed for broad AI deployment would be better allocated to more urgent problems like satisfying basic needs, improving infrastructure, and providing access to essential services. They argue that the usage of AI could further isolate the poor since they may not have the means to purchase or use AI-driven technologies.

In Nigeria, where poverty is more widespread, rural residents may be excluded from AI advancements due to limited access to technology and ignorance of the potential advantages of AI. To better the lives of the impoverished, it is therefore suggested that Nigeria cannot afford AI and that it would be more sensible to focus on digital inclusion and infrastructure.

ii. Low Digital Literacy: Another significant concern is Nigeria's low level of digital literacy, especially in rural and impoverished areas. A major barrier to the use of AI is the estimated 100 million Nigerians who lack digital literacy, according to the National Bureau of Statistics (2020). Critics claim that even if AI technology is implemented, many people will not be able to use or understand it well. If people in both rural and urban regions lack the basic digital skills required to access AI-enhanced services or find employment in AI-driven businesses, the digital gap may get wider.

This issue is particularly concerning because a significant portion of Nigeria's workforce currently lacks the digital competency required for the adoption of AI in industries like finance, healthcare, and agriculture. Critics claim that unless there are significant improvements in digital literacy, the use of AI could lead to the exclusion of sizable segments of the population from the new job prospects created by AI technologies.

Refutation: Proactive Policies Over Inaction

Although the worries of opponents are valid, they do not excuse inaction; rather, they emphasize the pressing need for targeted initiatives and efficient policies to address these problems. Instead of resisting AI adoption on the grounds of poverty and digital illiteracy, Nigeria should focus on overcoming these barriers through well-constructed government policies that ensure AI's benefits are distributed equitably. This approach can lessen the possibility of exclusion and ensure that the country's long-term socioeconomic development is aided by the use of AI.

i. Addressing Poverty Through Targeted Interventions: Poverty is certainly a significant issue, but it shouldn't be seen as a hindrance to technological development. Indeed, there is potential for using artificial intelligence (AI) to address poverty in new ways. For example, AI can boost productivity in sectors like manufacturing, healthcare, and agriculture that are vital to Nigeria's economy. One AI-driven innovation that can help increase agricultural output and reduce food insecurity is precision farming, which would directly benefit rural areas where poverty is most prevalent.

To ensure that the adoption of AI satisfies the needs of the poor, the government might implement targeted initiatives that highlight the inclusive use of AI technology. Programs that offer financial aid for access to AI-related technologies, platforms, and services, for example, can enable those with lower incomes to benefit from AI's promise. These subsidies might be in the form of government-backed loans to purchase AI-driven equipment, incentives for small and medium-sized firms (SMEs) in rural areas to embrace AI technology to boost productivity or inexpensive internet connections.

AI can also improve social services like healthcare and education, which are essential for lowering poverty. To improve health outcomes and reduce costs for individuals who might not otherwise be able to pay for medical care, AI-powered telemedicine platforms, for example, can provide remote healthcare services to poor populations. In a similar vein, AI can be applied to the education industry to provide tailored learning experiences, enabling disadvantaged children to receive a top-notch education at a lower cost.

By increasing employment opportunities, stimulating economic growth, and enhancing service accessibility, artificial intelligence (AI) has the potential to significantly lower poverty, according to 2020 World Economic Forum research. Poverty should therefore be seen as a call to develop laws that ensure the most vulnerable people benefit from AI, not as a reason to postpone its implementation.

ii. Bridging the Digital Literacy Gap:Despite being a real issue, insufficient digital literacy is not an insurmountable obstacle. Closing the digital literacy gap is essential to the successful integration of AI in Nigeria. Public-private partnerships, targeted government initiatives, and community-based programs can all aid in bridging this gap. Since the government is essential to bridging the digital divide, Nigeria should take inspiration from other countries that have implemented comprehensive digital literacy programs.

Digital literacy has been successfully incorporated into the national school system. Through the inclusion of these skills in elementary and secondary school curricula, the government may ensure that future generations have the basic digital skills necessary to operate in an increasingly digital society. Additionally, coding and artificial intelligence can be taught in schools to better prepare students for the changing labour market. According to a 2019 UNESCO assessment on digital literacy in Sub-Saharan Africa, it is crucial to integrate digital skills into education to ensure that youth are prepared for the workforce of the future.

Initiatives to promote digital literacy in the community are essential for adults. Rural communities have the lowest levels of computer literacy, thus these programs can be tailored to each population's specific needs. To offer free or inexpensive digital literacy training in local languages, for example, the government can work with tech companies and non-governmental organizations (NGOs). The focus of these programs should be on practical skills that are necessary for interacting with AI-driven platforms, such as utilizing cellphones, searching the internet, and using online services.

Another significant method the corporate sector may help is by providing people in poor neighbourhoods with training sessions and digital literacy efforts. Companies like Google and Microsoft have already launched initiatives to raise digital literacy across Africa; Nigeria can expand these efforts by implementing comparable programs across the continent.

AI-focused vocational training programs can also help equip the workforce with specific skills that are directly applicable to AI-related jobs. For instance, the government should collaborate with business giants like Google and IBM to establish certification programs in AI, data science, and machine learning to help people acquire the skills they need to thrive in the AI economy.

iii. Ensuring Equitable Distribution of AI Benefits: Nigeria's government must pass inclusive laws to ensure that the benefits of AI are distributed equitably throughout the socioeconomic spectrum of the nation. Particularly in rural areas, this entails investing in infrastructure to improve internet connection and power supply to ensure that digital technologies, including artificial intelligence, can be broadly employed.

In addition to providing access to technology, the government can formulate policies that encourage the participation of marginalized groups, like women, youth, and persons with disabilities, in the AI-driven economy. Affirmative action programs like scholarships for women in technology and entrepreneurship programs for youth interested in AI and tech companies can help achieve this.

AI adoption ought to be part of Nigeria's broader economic development strategy. Policies should ensure that AI is used to boost productivity in existing sectors and to create new industries that can create long-term job opportunities. This includes creating innovation ecosystems that support AI startups and businesses, particularly in sectors with the potential to transform the economy like agritech, fintech, and edtech.

Computer literacy and poverty in Nigeria are significant problems, but they shouldn't be seen as insurmountable barriers to AI adoption. Rather, they highlight the necessity for proactive policy to address these problems and ensure that the benefits of AI are distributed equitably. The Nigerian government can bridge the digital divide and ensure AI fosters fair socioeconomic development by putting targeted interventions like community-based digital literacy programs, free internet access, and job training into place. Through these efforts, Nigeria can tackle the problems of poverty and digital illiteracy while positioning itself to benefit from AI's revolutionary potential.

4. Conclusion

This article claims that artificial intelligence (AI) has the power to significantly change Nigeria's labour market, promoting economic expansion and innovation. However, if these benefits are to be fully realized, proactive government action is required to reduce the potentially disruptive effects of AI on the workforce. It is crucial to carefully manage the risks of job displacement, rising inequality, and a lack of digital literacy, even though AI can revolutionize entire industries, create high-value jobs, and boost productivity. If these issues are not resolved, AI's effects could worsen poverty and inequality in Nigeria by widening the country's already-existing socioeconomic gaps.

Summary of Key Arguments

This paper has presented several key arguments regarding the impact of AI on Nigeria's labour market:

- 1. Job Creation in Emerging Sectors: AI has the potential to create new jobs, especially in industries that are currently showing promise, like fintech, agritech, and tech services. For instance, the rise of agritech in rural Nigeria and fintech in Lagos is generating high-value job possibilities. The need for qualified professionals has also increased due to the emergence of AI-driven businesses including data analysis, software engineering, and machine learning.
- 2. Job Displacement and Inequality: Even if AI can create jobs, there is a serious risk that it may displace existing ones, especially for low-skilled people in sectors like manufacturing, finance, and transportation. The demand for bank tellers has already decreased due to the automation of repetitive operations, such as the introduction of Automated Teller Machines (ATMs), and similar disruptions are anticipated in other industries. Vulnerable workers may be disproportionately affected, and economic inequality may worsen in the absence of sufficient intervention.
- 3. Workforce Reskilling and Education Reform: Nigeria must give workforce reskilling and educational reform top priority given the growing need for digital skills. The creation of vocational training programs and the inclusion of AI-related curricula in schools will give Nigeria's workforce the skills it needs to adjust to an AI-driven economy. This will lessen the likelihood of workers being displaced by assisting them in moving into higher-value positions in developing industries.
- 4. Counterarguments and Nigeria's Readiness for AI: Critics contend that because of issues including inadequate infrastructure, unstable power supplies, and low internet penetration, Nigeria is not prepared for the widespread use of AI. These difficulties shouldn't stop people from adopting AI, though. Instead, they draw attention to the necessity of focused interventions, like government collaborations with private tech companies to enhance digital infrastructure and increase access to AI technologies. Nigeria will be in a better position to take advantage of AI if these infrastructure deficiencies are filled.

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