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Nigeria's Policy Preparedness for AI-Related Workforce Displacement: A Qualitative Analysis of the 2024 National Artificial Intelligence Strategy

Patience Ndidiamaka Agbo

Development Economics, University of Chinese Academy of Social Sciences, Beijing, China
Email: pagbo704@gmail.com

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Abstract

Artificial intelligence (Al) is revolutionizing labour markets by changing the activities that employees perform, changing the skills that employers need, opening up new job opportunities, and raising concerns about possible workforce displacement. These consequences might be especially important in developing nations like Nigeria, where workers' and businesses' ability to adjust to technological change may be impacted by informal employment, skills shortages, limitations on digital infrastructure, and unequal access to technology. This study uses a qualitative examination of the August 2024 draft National Artificial Intelligence Strategy (NAIS) to investigate Nigeria's policy readiness for Al-related labour displacement. The study evaluates the degree to which the NAIS includes workforce adaptation-related policy provisions and identifies areas in need of additional policy development and implementation rather than estimating the actual employment effects of Al in Nigeria. The main policy document is the NAIS, which is supplemented by reports from international bodies, peer-reviewed research, and Nigerian institutional and policy papers. Five interrelated dimensions were examined using a thematic coding framework based on socio-technical systems theory: workforce skills and lifelong learning; digital infrastructure; innovation and entrepreneurship; social inclusion and labor-market transition; and Al governance and institutional coordination. According to the analysis, the NAIS offers significant provisions for the development of Al skills, workforce training, job creation, infrastructure, innovation, inclusivity, and responsible Al governance. However, mechanisms for tracking Al-related occupational transitions, assisting workers who encounter technological displacement, providing transition support to informal and digitally excluded workers, and establishing systematic labor-mar-

ket evidence on Al exposure receive relatively less explicit attention in this strategy. However, mechanisms for tracking Al-related occupational transitions, assisting workers who encounter technological displacement, providing transition support to informal and digitally excluded workers, and establishing systematic labor-market evidence on Al exposure receive relatively less explicit attention in this strategy. As a result, the study finds a gap in policy readiness between Nigeria's general commitment to inclusive AI growth and the particular systems needed to oversee and manage labour shifts. The results indicate that labor-market information systems, lifelong learning, digital inclusion, entrepreneurship support, social protection, and responsible Al governance should all be linked with Al policy. The paper offers suggestions for improving Nigeria's ability to handle labor-market shifts connected to Al and proposes a policy-oriented framework for evaluating Al workforce preparedness in developing-country contexts.

Keywords

Artificial Intelligence, Workforce Displacement, Labour Market Transition, Nigeria, National Artificial Intelligence Strategy, Reskilling, Policy Preparedness, Socio-Technical Systems

1. Introduction

The role of artificial intelligence (Al) in the technological transformation of economies has grown (Choiri, 2025, p. 3). According to Vijay & Paruchuru (2025), the variety of tasks that computational systems can carry out or support has increased because to developments in machine learning, natural language processing, robotics, generative Al, and data analytics (Ragab & Salah, 2025, p. 9). Brandao (2025) supports that Al has the ability to increase output, facilitate decision-making, develop new goods and services, and modify current business models. Simultaneously, ILO (2025) argued that technology advancements have the potential to alter occupational structures, decrease the demand for specific tasks, and put pressure on individuals whose current skill set does not align with new labour market demands. However, UNCTAD (2025), is of the opinion that the employment implications of Al should not be reduced to the question of whether human labour will be replaced by machines. FMCIDE (2025) deferred by highlighting that economic growth, job creation, and social mobility is dependent on an affordable connectivity, and the lack of it restricts people's ability to engage in the digital economy. Based on the research carried out by Tiwari (2023), Al can create new tasks, modify the abilities needed to carry out current occupations, and replace some tasks while enhancing others. Thus, in addition to company behavior, employee skills, organizational structures, institutional arrangements, and public policy, Murire (2024) highlights that the employment consequences of Al also depend on technical capabilities, he also agrees that in developing economies, this distinction is especially crucial. Compared to advanced economies, nations with

low levels of digital infrastructure, a lack of skilled workers, inadequate labor-market information systems, and significant levels of informal employment may have distinct adjustment conditions (Sinha et al., 2024). However, workers' ability to adapt to technological change is influenced in part by their access to education, digital technologies, possibilities for reskilling, social protection, and alternative jobs (Alawiye et al., 2025, p. 103).

Nigeria offers a crucial framework for analyzing these problems, however, the nation's population is huge and relatively young, its technology ecosystem is expanding, and artificial intelligence is receiving more attention from policymakers (NAIS, 2025, pp. 9-10). Nonetheless, there are still a lot of structural limitations. According to the analysis made by ILO (2024) 92.3% of all jobs in Nigeria were informal, with the higher percentage rising to 96.0% among women and 97.2% in rural areas. Another significant aspect of work in Nigeria is self-employment, Folawewo & Orija (2020) noted that because traditional workforce-transition tools are frequently built on formal job relationships and may not reach workers working outside of them, therefore these features are important. Nigeria has developed a National Artificial Intelligence Strategy in response to Al's progress. The Federal Ministry of Communications, Innovation, and Digital Economy conducted a co-creation process with the government, industry, researchers, technology companies, and other stakeholders to establish the August 2024 draft National Artificial Intelligence Strategy (NAIS, 2024). The document identifies strategic pillars that cover foundational Al infrastructure, the Al ecosystem, Al adoption and sector transformation, responsible and ethical Al development, and Al governance. These pillars include economic growth and competitiveness, social development and inclusion, and technological advancement and leadership.

The 2024 draft specifically acknowledges the advantages and disadvantages of artificial intelligence. It includes measures pertaining to job creation, worker up skilling, Al education, reskilling, entrepreneurship, digital infrastructure, and inclusivity, and it lists potential labor-market displacement as one among the issues needing legislative attention. Therefore, the strategy offers an appropriate policy document that can be used to assess Nigeria's readiness for labour shifts associated to Al. But it's crucial to distinguish between workforce-transition readiness and Al-development readiness. A nation may have an Al capabilities strategy, but it may lack adequate mechanisms to monitor occupations affected by Al, support workers whose tasks are changed, facilitate occupational transitions, or safeguard workers who are unable to easily access opportunities for reskilling. Therefore, the amount of employment that Al will eliminate in Nigeria is not estimated in this study. It also doesn't presume that adopting Al will inevitably result in a loss of net employment. Rather, it enquires as to whether Nigeria's 2024 Al policy framework offers a sufficient basis for handling potential labour shifts brought on by Al adoption.

Three contributions are made by the study. It first offers a methodical examination of Nigeria's 2024 draft NAIS's workforce-related elements. Second, it uses

a socio-technical systems approach to link infrastructure, organizational structures, institutional governance, human capital, and technology transformation. Third, it highlights policy needs pertaining to inclusion, transition support, and labor-market monitoring and suggests policy options suitable for Nigeria's labor-market structure.

1.1. Research Problem

The increasing adoption of AI has generated concerns about changes in employment, occupational structures and skill requirements. AI may increase productivity and create new job opportunities, but it may also result in transition costs for workers whose jobs are significantly restructured or whose tasks are automated. This problem poses a unique policy dilemma for Nigeria. High rates of self-employment and informal employment, unequal access to digital infrastructure, and disparities in educational and training possibilities are characteristics of the nation's labor market. According to ILO (2024), 92.3% of all jobs are informal, with a larger percentage among women and rural workers. Because of these features, a significant number of workers may not be reached by traditional formal-sector techniques to technological transition. Therefore, our analysis does not assume that AI has already caused widespread displacement in Nigeria. Instead, it is about how well-equipped Nigeria's regulatory structure is to foresee and handle possible labor-market shifts brought on by growing AI usage. It is vital to assess if the NAIS's provisions on workforce development, job creation, AI skills, innovation, infrastructure, and inclusivity provide a sufficiently cohesive framework for workforce-transition readiness. As a result, the main issue is a possible mismatch between the advancement of AI capabilities and the creation of systems for tracking and controlling the effects of technological change on the labor market.

1.2. Research Objectives

The study seeks to:

- Examine the extent to which Nigeria's 2024 National Artificial Intelligence Strategy recognizes and addresses potential AI-related workforce transitions and displacement.
- Identify the policy provisions within the NAIS relating to workforce skills development, lifelong learning, digital infrastructure, innovation and entrepreneurship, social inclusion and AI governance.
- Assess policy gaps in the NAIS concerning the monitoring and management of potential AI-related workforce displacement, particularly among workers who may face barriers to digital access and reskilling.
- Compare selected dimensions of Nigeria's policy approach with relevant international and developing-country approaches to AI workforce adaptation.
- Develop evidence-based policy recommendations for strengthening Nigeria's preparedness for AI-related labour-market transitions.

1.3. Research Questions

The study addresses the following questions:

- To what extent does Nigeria's 2024 National Artificial Intelligence Strategy recognize and address potential AI-related workforce displacement and occupational transitions?
- What provisions does the NAIS contain concerning workforce skills development, lifelong learning, digital infrastructure, innovation and entrepreneurship, social inclusion and AI governance?
- What policy gaps exist in the NAIS concerning the monitoring and management of AI-related workforce transitions?
- What lessons from selected international and developing-country approaches are potentially relevant to strengthening Nigeria's policy preparedness?
- What policy measures could strengthen Nigeria's capacity to support inclusive labour-market adaptation as AI adoption expands?

2. Literature Review

2.1. Artificial Intelligence, Automation and Labour Market

According to Bourne (2026), Artificial intelligence refers broadly to computational systems capable of performing tasks associated with human cognitive capabilities, including learning, reasoning, problem-solving, prediction and language processing. Rashidi (2026) noted that while modern AI can progressively impact cognitive and information-processing jobs, earlier kinds of automation were often linked to regular physical labor. The expansion of AI has generated both positive and negative interpretations of AI's effects on the labor market have emerged as a result of its growth, their optimistic viewpoint places a strong emphasis on innovation, productivity, new goods, and new professions (Hess et al., 2023; Kumar et al., 2024). OECD (2025a) suggested that organizations could encourage the transition, reduce unemployment and unlock new opportunities in developing industries by creating the necessary skills in an AI-based economy for its workers. Schilirò (2023), pg. 2 argued that substitution, skill displacement, and unequal access are to the advantages of technological development. In other words, they mentioned that, while certain occupations may become obsolete, new roles and industries emerge as a result of technological progress. Lane & Saint-martin (2021) have emphasized that because AI can be used for non-routine cognitive tasks, it is none arguably different from earlier types of automation. Similar findings are shown by Acemoglu and Restrepo's research on automation, which depicts that while other technical advancements may have compensatory benefits, technology substitution may lower labor demand in some situations (Acemoglu & Restrepo, 2019). These conflicting scenarios show why exposure to AI should not be inherently associated with the loss of jobs.

2.2. AI Exposure, Task Automation, Job Displacement and Unemployment

Rashidi (2026) described the term "AI exposure" as how much an occupation's

tasks could be impacted by AI technologies, wherefore professions doesn't necessarily disappear as a result of exposure. IERC (2024) argued that AI increases productivity, but it also raises issues with labor market inequality, skills mismatch, and job security. Several researchers, like Mcclure & Graham (2026), claim that AI should be seen as a supplementary technology that can increase workers' productivity rather than as a complete replacement for human labor. However, Zakerinia et al. (2025) explain that the extent of the integration is mostly determined by the capabilities of employees, organizational preparedness, and governmental regulations that facilitate workforce adaption.

When technical systems carry out certain activities with little to no direct human interaction, Vu et al. (2025) said it is known as task automation. Pwc (2017) noted that certain duties may be replaced by automation, while other tasks carried out by employees may be enhanced. Judijanto et al. (2023) also analyzed that, global production processes, service delivery, transportation, healthcare, finance, education, and manufacturing have all been profoundly impacted by the incorporation of AI into automation

According to Haltiwanger (2022), a decrease or loss of employment brought on by organizational, technological, or economic change is referred to as "job displacement". Therefore, employment disruption linked to AI adoption is referred to as AI-related displacement.

The term "unemployment" was described by Vintu (2025), as the state of the labour market for individuals who are looking for work but do not currently have a job. Brand (2015) argued that unemployment may result from displacement, however this is not always the case. According to them, a displaced worker may change careers, learn new skills, start their own business, or enter a brand-new field.

Lastly, as labour demand shifts, occupational transition refers to switching between jobs or significantly different work configurations. These distinctions are crucial since the adoption of Al may concurrently automate some tasks, supplement workers doing other tasks, generate new occupations, and change existing occupations without resulting in comparable levels of net employment loss. Peter et al. (2026) opine that AI has the potential to worsen unemployment, inequality, and the digital divide in African countries in the absence of appropriate policy solutions.

Job Creation and Job Transformation.

In the past, technological advancement has created both new job prospects and displacement. According to Spencer (2017), digital technologies have the potential to significantly alter the economy while altering the distribution of skills and employment. Brynjolfsson & McAfee (2014) also agree that technological revolutions have traditionally produced new industries that eventually produce more job opportunities than those that were initially eliminated. The Future of Jobs literature published by the World Economic Forum (2025) also emphasizes the concurrent processes of job displacement and creation linked to technological change. There-

fore, whether impacted workers can move into those opportunities rather than just whether new jobs will arise is the pertinent policy question.

For Nigeria, this distinction is very crucial. Technical, analytical, or digital abilities that displaced workers do not possess may be necessary for new AI-related jobs. Taheri Hosseinkhani (2025) hinted that people impacted by automation may be found in various areas or industries, new jobs and may also be concentrated geographically in metropolitan technological hubs. NITDA (2023) implores that AI development can be advanced through research innovation, the acquisition of skills and public-private cooperation. Therefore, OECD (2026) supports that labour market data, skill development, and transition mechanisms should be added to policies that promotes AI entrepreneurship and innovation.

2.3. AI and Developing Economies

Khandre (2024) compared high-income nations and developing economies, their research shows that developing economies is confronted with distinct challenges. Khanfar et al. (2023) also opined that the rate and spread of AI adoption can be influenced by a number of factors, including institutional resources, research capability, educational quality, broadband connectivity, electricity supply, and digital infrastructure. The United Nations (2022) highlighted that AI also gives underdeveloped economies the chance to advance past some technological development stages, as evidence shows that applications in public administration, healthcare, education, agriculture, and finance enhances productivity and service delivery. Capraro et al. (2024, pp. 3-4) arguably mentioned that capturing the advantages of AI while minimizing the likelihood that already-existing disparities in access, infrastructure, and skills would worsen, therefore Policies must be established to lessen the possible issues brought about by AI with the goal of distributing benefits equitably throughout society.

2.4. Nigeria's Labour-Market Context

Nigeria's labour-market structure is essential to the analysis. ILO (2024) information indicates that informal employment comprised around 92.3% of overall employment, with greater percentages among women and rural workers. Self-employment, urban informal sector accounted for approximately 87.3% of employment in the stated labour-market estimations.

This structure has crucial implications for AI transition policy. Formal-sector employees may have access to employer-sponsored training, career-development programmes and institutional support that informal workers may not necessarily have. The issue should not be construed as proof that informal workers would necessarily endure increasing AI displacement. Rather, it implies that individuals may confront various institutional impediments when striving to adapt to technological development. Recent research carried out by UNCTAD (2025) has shown that less developed countries like Nigeria may face challenges especially, inadequate digital infrastructure, little or low level of digital literacy higher level

of unemployment rate. This therefore shows that a Nigerian workforce-transition program cannot rely primarily on formal employer-based reskilling.

2.5. Global Mitigation Approaches

International Labour Organization (2021) promotes active labor market policies, improved social safety systems, ongoing skill development, and lifelong learning initiatives. Wai et al. (2025) also supports that governments and multinational organizations have created plans to minimize job displacement while maximizing technology benefits in recognition of AI's disruptive potential. Lifelong learning, digital skills, active labor-market policies, social protection, and responsible technology governance are frequently highlighted in international policy discussions. OECD members urges the governments to make significant investments in workforce reskilling and digital education (OECD, 2025b). Gog et al. (2024) assures that comprehensive workforce adaptation programs have been put in place in nations like Singapore. One example of ongoing skill development is Singapore's Skills Future strategy Loh (2023), its therefore developing digital competencies constant training and financial assistance in its economy. United Nations (2025) highlights that effective regulations and global collaborative effort among stakeholders can ensure that the positive effects of AI are distributed fairly, encouraging social inclusion and sustainable growth in the economy. Germany's vocational education and training system provides an example of stronger connections between education and industrial skill requirements (Salomons et al. 2025). Laracy et al. (2025) place further emphasis on ethical AI development that gives equal access to technology opportunities, inclusivity, and human dignity first priority. Zepher (2026) opined that the goal of ethical governance frameworks is to make sure AI advances sustainable development rather than exacerbating social inequality. According to Jasmeen Sidhu (2026), initiatives to anticipate and address new skill requirements have also been developed in Canada. Whereas Nigeria cannot just adopt these strategies. World Bank (2024) affirms that nations like Nigeria often do not recognize their own unique capabilities and difficulties, hence wealthier countries may have the necessary facilities and assets to rapidly adjust to Artificial Intelligence-based technological innovations. Institutional capability, financial resources, labor-market systems, and the predominance of formal employment all influence its applicability. Therefore, the comparative goal of this study is to find policy mechanisms that may be tailored to Nigerian conditions rather than to find a foreign model for Nigeria to imitate.

3. Theoretical Framework

Socio-Technical Systems Theory

The study is guided by socio-technical systems theory Abbas & Michael (2026), which highlights the interaction between technology systems and the social, organizational and institutional environments in which they operate. The theory is particularly appropriate for examining AI-related workforce transitions because employment outcomes cannot be explained solely by the technical capacity of AI.

They are also influenced by worker skills, organizational structures, educational institutions, infrastructure, government policies and societal situations.

AI systems, automation, digital infrastructure, processing power, connectivity, and data systems are all included in this study's technological component. Workers' education, skills, computer literacy, and access to training are all part of the human dimension. The organizational dimension includes enterprises, entrepreneurship, research institutes, universities and public-private partnerships. The institutional dimension comprises government policies, labour-market institutions, social protection, AI regulation and governance.

The theory therefore informs five analytical dimensions:

- Workforce skills and lifelong learning;
- Digital infrastructure;
- Innovation and entrepreneurship;
- Social inclusion and labour-market transition;
- AI governance and institutional coordination.

The framework makes the assumption that these aspects are related to one another. For example, teaching personnel without proper digital infrastructure may reduce the benefits of training. In a similar vein, encouraging AI entrepreneurship without workforce transition mechanisms may create new jobs without guaranteeing that workers impacted by technological change can take advantage of such chances. Socio-technical systems theory therefore allows the study to move beyond a technology-centered interpretation of AI displacement and examine the broader conditions required for inclusive technological transition.

4. Methodology

4.1. Research Design

A qualitative policy-document analysis design is used in this study. The objective is to examine Nigeria's policy preparedness for potential AI-related workforce transitions rather than to estimate the actual employment effects of AI. This study is not an empirical case study because no primary case-study interviews, questionnaires, or firm-level observations were conducted. The principal object of analysis is the August 2024 draft National Artificial Intelligence Strategy.

4.2. Primary Policy Document

The primary document analyzed is:

Federal Ministry of Communications, Innovation and Digital Economy (FMCIDE, 2025). The National Artificial Intelligence Strategy 2024. Draft, August 2024.

The document is officially hosted by the National Centre for Artificial Intelligence and Robotics (NCAIR), under NITDA. The document identifies FMCIDE as a primary institutional contributor and acknowledges contributions from NITDA, NCC, Galaxy Backbone, Lagos Business School, Data Science Nigeria and other stakeholders.

The strategy was created through a four-day co-creation workshop conducted in Abuja from 15 - 18 April 2024, comprising more than 120 partners from government, research, industry and other sectors.

The document analyzed in this study is specifically the August 2024 draft. This specification is important because a later National Strategy was published in 2025. The later method is not evaluated in this study.

Official source: https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy_01082024-copy.pdf.

4.3. Document Corpus

The supporting corpus consisted of three categories.

Category 1: Primary Nigerian policy documents. These included Nigerian government and institutional documents concerning:

- AI;
- digital transformation;
- digital skills;
- labour markets;
- infrastructure;
- innovation;
- data governance; and
- Technology development.

Category 2: International institutional reports

Relevant publications from:

- International Labour Organization;
- World Bank;
- OECD;
- UNESCO;
- UNCTAD; and
- World Economic Forum

were examined when they specifically addressed AI, employment, digital skills, labor-market transformation, and policy responses.

Category 3: Academic literature

Peer-reviewed studies were examined where they addressed:

- AI and employment;
- automation;
- labour-market displacement;
- technological change;
- reskilling;
- digital inclusion;
- innovation; or
- AI governance.

4.4. Selection Criteria

Documents were included when they met at least one of the following criteria:

- Directly addressed AI and employment or workforce transitions.
- Examined Nigeria's labour-market, AI or digital policy environment.
- Addressed skills, infrastructure, innovation, inclusion or governance relevant to AI adoption.
- Provided evidence about international or developing-country approaches to technological workforce transitions.

Documents were excluded when they:

- lacked identifiable authorship or institutional provenance;
- were primarily promotional materials without substantive evidence;
- duplicated stronger authoritative sources;
- were unrelated to the research questions; or
- made unsupported employment claims that could not be independently traced.

4.5. Coding Framework

The research questions and socio-technical systems theory served as the basis for the deductive development of the theme coding framework. There were five primary coding categories that were established: The five-category coding framework used to organize the document analysis is summarized in Table 1. It links each analytical category to its principal sub-themes and corresponding socio-technical dimension.

Table 1. Coding framework.

Coding category	Sub-themes	Socio-technical dimension
Workforce skills and lifelong learning.	AI skills, digital literacy, reskilling, up skilling, curriculum, vocational training.	Human
Digital infrastructure	Broadband, computing, electricity, cloud systems, connectivity, data infrastructure.	Technological
Innovation and entrepreneurship	Start-ups, R&D, commercialization, investment, new industries and jobs.	Organizational/economic
Social inclusion and labour-market transition	Access, gender, rural, populations, vulnerable workers, transition support, social protection.	Social
AI governance and institutional coordination	Ethics, regulation, accountability, data governance, monitoring, partnerships.	Institutional

4.6. Analytical Procedure

There were four phases of the analysis.

First, the 2024 NAIS was read systematically and relevant passages were identified.

Second, the five analytical categories were used to code the sections.

Third, the coded content was contrasted with pertinent international literature and labour market data from Nigeria.

Fourth, by contrasting explicit NAIS provisions with the procedures necessary for efficient workforce-transition readiness, policy gaps were found.

The analysis distinguished among three levels of policy provision:

Explicit: The NAIS directly addresses the issue.

Implicit: the issue is indirectly addressed through a broader policy objective but lacks detailed mechanisms.

Limited/absent: The strategy is not sufficiently specific.

4.7. Comparative Analysis

The international comparison does not constitute a separate empirical case-study design. Selected countries were used as policy-reference cases and compared according to common dimensions:

- workforce skills;
- infrastructure;
- innovation and industrial policy;
- inclusion;
- social protection;
- governance; and
- implementation capacity.

The analysis also considers institutional and economic differences before identifying potentially transferable lessons.

5. Results

5.1. Overview

The analysis identified five interconnected policy dimensions relevant to Nigeria's preparedness for AI-related workforce transitions:

- workforce skills and lifelong learning;
- digital infrastructure;
- innovation and entrepreneurship;
- social inclusion and labour-market transition; and
- AI governance and institutional coordination.

The findings indicate that the NAIS provides substantial attention to developing an AI-enabled economy. However, its workforce provisions are more developed around building AI capability and creating opportunities than around establishing a detailed system for monitoring and managing displacement and occupational transition.

5.2. Workforce Skills and Lifelong Learning

Workforce development represents one of the strongest links between the NAIS and employment adaptation. The strategy identifies the development of a highly skilled workforce as necessary for Nigeria's AI ecosystem. It proposes training programmes, industry-academia partnerships and mechanisms for developing AI talent. The strategy's "Talent and Youth" section states that skills development includes education of future workers, training of the existing workforce, attracting

and retaining AI talent and developing technical and related skills. The strategy also proposes equipping 70% of Nigeria's young workforce with AI-related skills and knowledge, with inclusion of women and persons with disabilities.

Furthermore, Pillar 3 contains an objective on developing an AI-ready workforce and proposes comprehensive AI skills development involving curriculum reform, teacher training and reskilling initiatives. These provisions demonstrate that the NAIS recognizes the importance of human capital in technological transformation. However, a distinction exists between AI capability development and displacement-response policy. The strategy is relatively explicit about creating AI skills and preparing workers for new opportunities. It is less explicit about:

- occupational early-warning systems;
- individual transition pathways;
- recognition of prior learning;
- targeted income support;
- job-matching services for displaced workers;
- retraining guarantees following technological displacement; and
- mechanisms for tracking workers from displaced occupations into new employment.

Thus, the policy gap does not concern an absence of skills policy. It concerns the connection between skills policy and labour-market transition policy.

5.3. Digital Infrastructure

Digital infrastructure is another important component of the NAIS. The strategy identifies foundational infrastructure and computing capacity as necessary for a thriving AI ecosystem. Pillar 1 proposes high-performance computing resources, AI-specific hardware and software development and clean-energy AI clusters. The strategy also recognizes infrastructure limitations as a constraint on Nigeria's AI development. This has direct implications for workforce preparedness. Digital training cannot generate equal labour-market opportunities if workers do not have access to reliable connectivity, electricity, computing resources and digital services. Infrastructure therefore performs both a technological and social function. This is particularly relevant to rural communities and workers outside major technology centres. The finding is not that rural workers will necessarily experience greater AI displacement. Rather, uneven infrastructure may limit their ability to access the education, training and digital employment opportunities associated with AI.

5.4. Innovation and Entrepreneurship

The NAIS places substantial emphasis on innovation, entrepreneurship, research and commercialization. The strategy identifies NCAIR as an innovation and research institution and highlights programmes such as the Nigeria Artificial Intelligence Research Scheme. It also proposes mechanisms to connect researchers, entrepreneurs and investors and to develop AI-driven industries. These provi-

sions are relevant to workforce adaptation because new firms and industries may create new employment opportunities. However, new jobs cannot automatically be assumed to compensate for employment disruption. New occupations may require different skills, emerge in different regions and be concentrated among workers with greater educational or digital capabilities. Consequently, AI entrepreneurship should be connected with workforce-transition policy rather than treated as an automatic substitute for displaced employment.

5.5. Social Inclusion and Labour-Market Transition

Social development and inclusion constitute one of the three broad objectives of the 2024 NAIS. The strategy emphasizes citizen empowerment and inclusive AI development. However, the analysis identifies an important difference between inclusive AI development and workforce-transition protection. Inclusive AI development concerns ensuring that citizens can participate in and benefit from AI. Workforce-transition protection concerns what happens when workers experience technological disruption. Nonetheless, NAIS provides a strong basis for the former but provides less detailed guidance for the latter. For example, the strategy does not establish a detailed national framework for:

- unemployment transition assistance;
- wage insurance;
- job-matching services;
- displacement notification mechanisms;
- transition grants;
- occupational mobility programmes; or
- specific transition mechanisms for informal workers.

This is significant because Nigeria's labour market is overwhelmingly informal. ILO evidence indicates that informal employment represents 92.3% of employment, with rising percentage 96.0% among women and 97.2% in rural area. Therefore, a workforce-transition strategy focused only on formal employees would not address a substantial proportion of the Nigerian workforce.

5.6. AI Governance and Institutional Coordination

The NAIS contains extensive provisions concerning responsible and ethical AI. Its strategic framework includes responsible AI development and a robust AI governance framework. The strategy also recognizes the importance of data governance, accountability, risk management, ethics and public trust. These provisions are relevant to employment because AI systems can influence recruitment, workplace monitoring, task allocation and performance evaluation. However, the analysis identifies a need to strengthen the connection between AI governance and labour-market governance. In particular, Nigeria would benefit from institutional mechanisms for monitoring:

- AI adoption by sector;
- occupations with changing demand;

- emerging skill requirements;
- worker transitions;
- employment effects;
- access to reskilling; and
- distributional effects across regions and groups.

5.7. NAIS Policy Assessment Matrix

The findings from all the five analytical aspects are summarized in Table 2. The matrix distinguishes areas where the 2024 NAIS provides an explicit policy foundation from areas where provisions are limited or where more specific implementation mechanisms are needed. It is an analytical summary of the document examination rather than measurement of an actual employment results.

Table 2. NAIS Policy assessment matrix.

Dimension	Evidence in 2024 NAIS	Workforce Relevance	Assessment
Skills and lifelong learning	AI education, training, reskilling, curriculum reform and AI-ready workforce	Supports adaptation to changing skill requirements	Explicit foundation; transition mechanisms require further development
Digital infrastructure	HPC, AI infrastructure, connectivity and computing capacity	Enables access to AI-related employment and training	Explicit
Innovation and entrepreneurship	Start-ups, R&D, commercialization and AI industries	Supports creation of new firms and employment	Explicit
Social inclusion	Citizen empowerment and inclusive AI development	Supports broader access to AI benefits	Explicit principle; specific displacement support less developed
Labour-market monitoring	Workforce development is discussed, but systematic occupational monitoring is less developed	Needed to identify emerging displacement and skills gaps	Limited
Transition support	Reskilling is included, but detailed displacement assistance is less explicit	Helps workers move between occupations	Limited
Informal workers	Inclusion is a broad principle, but informal employment is not specifically developed as a transition category	Critical given Nigeria's labour-market structure	Limited
AI governance	Ethical, responsible and regulatory frameworks	Supports responsible technological deployment	Explicit
Labour-market governance	Limited explicit integration with AI governance	Necessary for monitoring employment effects	Requires strengthening
Public-private collaboration	Partnerships and ecosystem development	Can align skills and innovation with labour demand	Explicit, but implementation indicators require strengthening

6. Discussion

6.1. From AI Adoption to Workforce Transition

The findings suggest that Nigeria's policy discussion should move beyond the bi-

nary distinction between job creation and job destruction. AI adoption is better understood as a process of labour-market transformation, whereby some tasks may be automated, some workers may become more productive, some occupations may be redesigned and new occupations may emerge. The policy question is therefore whether institutions can support workers as these changes occur. The NAIS recognizes the importance of skills, infrastructure, innovation and inclusion. Its relative weakness is not a failure to recognize employment as relevant but the limited development of mechanisms connecting AI development with continuous labour-market monitoring and worker-transition support.

6.2. Skills Development versus Displacement Response

The NAIS provides significant attention to AI skills. This is important but insufficient by itself. Training programmes are effective only when they are connected to actual labour-market demand and accessible to workers who need them. A situation whereby a worker displaced from an administrative occupation, for example, may not automatically become an AI engineer after receiving a short training course. Workforce transition should therefore include multiple pathways:

- digital literacy;
- occupational retraining;
- micro credentials;
- vocational education;
- job matching;
- entrepreneurship;
- recognition of prior learning; and
- continuing education.

6.3. Informality and Workforce Transition

Nigeria's high level of informality creates an important difference from many developed-country policy models. Formal employees may have access to employers, unions, training departments and social insurance systems, while informal workers may interact with labour markets through self-employment, microenterprises, family businesses and short-term arrangements. Therefore, workforce-transition policy in Nigeria should not depend entirely on employer-based mechanisms. Community-based training, digital platforms, vocational institutions, entrepreneurship programmes and all targeted public support may be necessary complements which could be useful.

6.4. Digital Infrastructure as a Labour-Market Policy

Infrastructure is often treated as an AI technology issue. The findings indicate that it should also be treated as a labour-market issue, meaning that without connectivity and reliable electricity, workers cannot fully participate in online learning, remote work, digital entrepreneurship or AI-enabled services. Infrastructure pol-

icy however affects who can access the benefits of AI.

6.5. Innovation Does Not Automatically Offset Displacement

The NAIS's emphasis on entrepreneurship and innovation is vital because if new businesses are established, they can easily generate employment. Nevertheless, new employment should not automatically be assumed to compensate workers affected by technological change.

There may be:

- skill mismatches;
- geographic mismatches;
- age-related barriers;
- educational barriers;
- financial constraints; and
- unequal access to entrepreneurial opportunities.

Innovation policy however vitally needs to be linked with workforce policy.

6.6. AI Governance and Labour-Market Intelligence

The NAIS provides important foundations for responsible AI governance. However, responsible AI governance should include labour-market evidence. A said AI governance system should be capable of answering questions such as:

- Which occupations are experiencing increasing AI exposure?
- Which skills are becoming more valuable?
- Which sectors are adopting AI most rapidly?
- Which workers are receiving training?
- Are training programmes producing employment transitions?
- Are some regions being excluded from AI-related opportunities?

These questions require systematic labour-market data.

7. Comparative Policy Analysis

International experiences are applied in this study as policy-reference cases rather than direct models.

Singapore

Singapore's Skills Future approach shows the importance of lifelong learning and continuous skills development. The relevance to Nigeria depends on the principle of continuous learning rather than direct institutional replication. Nigeria would need to adapt lifelong learning mechanisms to its larger informal sector and different fiscal and institutional context.

Germany

Germany provides an example of close connections between vocational training and industrial transformation. The transferable lesson is the importance of aligning training with employer and sectorial skill requirements. Nigeria could therefore strengthen connection among vocational institutions, universities, firms and emerging technology sectors.

Canada

Canada's workforce-skills initiatives demonstrate the necessity in collaboration among government, employers, education institutions and other stakeholders in anticipating future skills needs. For Nigeria, the relevant lesson is institutional co-ordination rather than direct policy transplantation.

South Korea

South Korea's digital transformation policies shows the importance of combining technology investment with workforce development. Lesson to be taken from it by Nigeria is that infrastructure and skills policies should develop together rather than as separate policy areas.

Kenya, Indonesia, Egypt and Vietnam

The developing-country comparisons demonstrate the importance of adapting AI policy to local institutional and economic conditions. Kenya demonstrates the role of digital ecosystems and financial technology in the economy. Indonesia illustrates the vitality of coordinating AI across sectors and addressing uneven digital access. Egypt shows the role of government coordination, digital government and international partnerships. Vietnam demonstrates the need of connecting AI and digital technology with industrial development, research and entrepreneurship. These experiences are not directly transferable, rather their usefulness lies in identifying mechanisms that Nigeria could adapt according to its own institutional and labour-market circumstances.

8. Policy Implications

The findings have several implications for Nigerian policy as follows.

- AI policy should be connected more explicitly with labour-market policy;
- reskilling should be treated as one component of workforce transition rather than the complete solution;
- labour-market monitoring should become an integral component of AI governance;
- workforce-transition policies should include informal and self-employed workers;
- infrastructure investment should be recognized as a prerequisite for inclusive participation in the AI economy;
- innovation and entrepreneurship programmes should be linked to skills development and employment pathways.

9. Policy Recommendation

9.1. Establish an AI and Labour-Market Observatory

Nigeria should develop an AI and Labour-Market Observatory or integrate AI-related indicators into existing labour-market information systems. The system should look out for:

- AI adoption by sector;
- occupational demand;

- emerging occupations;
- declining tasks;
- skills requirements;
- wages;
- worker transitions;
- training participation;
- gender;
- age; and
- regional differences.

This would enable government to respond to observed labour-market changes rather than relying primarily on forecasts.

9.2. Develop an AI Workforce Transition Programme

A dedicated workforce-transition programme should complement existing AI training initiatives.

The programme should possibly include:

- training vouchers;
- micro credentials;
- vocational retraining;
- career counselling;
- job-matching;
- recognition of prior learning;
- entrepreneurship support; and
- temporary transition assistance.

9.3. Include Informal and Self-Employed Workers

Given the structure of Nigeria's labour market, AI workforce policy should not be designed only around formal employer-worker relationships. Programmes should provide accessible digital and occupational training through: vocational centres, community organizations, local governments, digital platforms, trade associations; and entrepreneurship networks.

9.4. Link Training to Labour-Market Demand

Training programmes should be periodically checked against actual employer demand. Industry, universities, vocational institutions and government agencies should jointly identify emerging skills, when that is done, training should therefore be measured not only by the number of people trained but also by employment outcomes, income changes, occupational transitions, employer demand, retention and entrepreneurship outcomes.

9.5. Develop Sector-Specific AI Transition Plans

Nigeria should establish sector-specific transition frameworks for areas where AI adoption is expanding, such areas includes: financial services, telecommunica-

tions, manufacturing, agriculture and public administration. Each of the framework should be able to identify:

AI application → tasks affected → skills required → training pathway → transition support → monitoring indicators.

9.6. Strengthen Digital Infrastructure

AI workforce policy should be accompanied by investments in digital infrastructures such as:

- broadband;
- electricity;
- computing infrastructure;
- cloud services;
- digital public infrastructure; and
- rural connectivity.

9.7. Strengthen Innovation and Entrepreneurship

Nigeria should continually support AI start-ups, university research and commercialization. Moreover, entrepreneurship support should be linked to employment and skills objectives. Some of these potential instruments may include: competitive grants, research funding, incubators, technology parks, tax incentives, public procurement, university-industry partnerships and venture financing.

9.8. Integrate Labour Considerations into AI Governance

Nigeria's AI governance framework should include but not limited to provisions for:

- algorithmic accountability;
- workplace AI;
- data protection;
- worker privacy;
- automated employment decisions;
- discrimination monitoring;
- transparency and
- labour-market impact assessments.

9.9. Establish Public-Private Partnerships

There's a great need that Government works with:

- technology firms;
- universities;
- research institutions;
- employers;
- training providers;
- civil society organizations and
- worker representatives.

These partnerships goes a long way to improve the alignment between technological development and workforce requirements.

9.10. Improve Public Awareness

Public awareness of AI can be constantly promoted by the government through different means, including:

- community digital-literacy programmes;
- public education campaigns;
- stakeholder consultations; and
- accessible information on AI opportunities and risks.

10. Conclusion

This study used a qualitative review of the August 2024 draft National Artificial Intelligence Strategy to assess Nigeria's policy preparedness for AI-related workforce transition. The precise number of Nigerian jobs that AI might displace is not estimated in the report. Instead, it explores whether Nigeria's policy framework contains mechanisms capable of preparing people and institutions for anticipated labour-market shifts. The analysis demonstrates that the NAIS provides a substantial foundation for AI development. It thereby addresses workforce skills, job creation, innovation, digital infrastructure, inclusion, responsible AI and governance. But there is a crucial difference between workforce transition preparedness and AI development preparedness. The strategy's focus on building the technological, and human resources required for an AI economy is comparatively strong. Mechanisms for tracking occupational change, identifying workers impacted by technological disruption, assisting with career transitions, and engaging workers outside of formal employment relationships are less clear. This distinction is particularly crucial in Nigeria because of the country's high level of informal employment and self-employment. The appropriate policy approach is therefore not to assume that AI will invariably produce a widespread unemployment, nor to believe that advancement in technology would automatically compensate for displaced employment. Nigeria should instead create an evidence-based framework for the workforce transitions that incorporates digital infrastructure, labor-market intelligence, AI skills, innovation, social inclusion, transition support, and responsible AI governance. Therefore, the study reframes the employment implications of AI in Nigeria as a question of preparedness for transition. As AI adoption grows, such a framework would enable policymakers to respond to real labor-market evidence while ensuring that communities and workers have significant possibilities to engage in the developing AI economy.

11. Study Limitations

These are some of the limitations inherent in this study.

- The study depends mostly on secondary literature and qualitative examination of the National Artificial Intelligence Strategy draft from August 2024. As such, it evaluates policy preparedness instead of real employment impacts.

- Neither primary interviews nor surveys with employees, businesses, legislators, educational institutions, or tech corporations are included in the study.
- The study is unable to assess the extent to which workers in specific Nigerian occupations have already been displaced by AI.
- Rather than providing proof of direct causal effectiveness or transferable policy models, international examples are employed only as policy-reference cases.
- The August 2024 draft NAIS is the main policy document examined. Therefore, the results should be measured within that time frame and not as an assessment of subsequent policy changes or execution.

12. Future Research

Future study should include the following:

- Empirical research at the firm level and work level to complement this policy analysis.
- Research at the firm level could look at whether the use of AI replaces labour, enhances workers, or modifies the set of necessary skills.
- Worker surveys could look at hurdles to digital engagement, workforce transitions attitudes of AI, and access to reskilling.
- Financial services, telecommunications, manufacturing, agriculture, public administration, and other sectors where AI use is growing should all be the focus of sector-specific research.
- Future research should also construct longitudinal labour-market indicators capable of monitoring changes in wage, employment, working hours, skills and occupational structures associated with AI adoption.
- Informal workers, women, rural areas, young workers, and those with limited access to the internet should all receive special attention.
- Further comparative African research might investigate whether various combination of social protection, labor-market institutions, infrastructure, innovation assistance, and skills policy lead to varied workforce-transition outcome.

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Author Contributions

The author solely was responsible for the study's conception, methodology, policy document analysis and interpretation, development of the results, and the writing and revising of the paper. The final draft of the work was examined and approved by the author.

Conflicts of Interest

Regarding the publication of this work, the author discloses no conflicts of interest.

References

Abbas, R., & Michael, K. (2026). *Socio-Technical Theory: A Review.* In S. Papagiannidis (Ed.), *TheoryHub Book* (pp. 206-223). TheoryHub. https://open.ncl.ac.uk/theories/9/socio-technical-theory/

Acemoglu, D., & Restrepo, P. (2019). Automation and New Tasks: How Technology Displaces and Reinstates Labor. *Journal of Economic Perspectives, 33,* 3-30. https://doi.org/10.1257/jep.33.2.3

Alawiye, P. O., Anya, P. J., Ishola, S., Okpara, B. I., & Adedotun Adeniyi, A. (2025). Reskilling, Upskilling, and Workforce Adaptability in the Age of Automation: A Comprehensive Analysis of Strategic Responses to Technological Disruption. *IRE Transactions on Communications Systems, 9,* 95-109. https://www.irejournals.com/formatedpaper/1711149.pdf

Bourne, P. A. (2026). Artificial Intelligence Cognition and Societal Problem-Solving: A Theoretical and Computational Examination of Machine Thinking, Operational Logic, and Applied Intelligence in Contemporary Society. *International Journal of Information Technology Insights & Transformations, 10,* 19-34. http://www.technology.eurekajournals.com/index.php/IJITIT/article/view/887

Brand, J. E. (2015). The Far-Reaching Impact of Job Loss and Unemployment. *Annual Review of Sociology, 41,* 359-375. https://doi.org/10.1146/annurev-soc-071913-043237

Brandao, P. R. (2025). The Impact of Artificial Intelligence on Modern Society. *AI, 6,* Article 190. https://doi.org/10.3390/ai6080190

Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies.* W. W. Norton & Company. http://digamo.free.fr/brynmacafee2.pdf

Capraro, V., Lentsch, A., Acemoglu, D., Akgun, S., Akhmedova, A., Bilancini, E. et al. (2024). The Impact of Generative Artificial Intelligence on Socioeconomic Inequalities and Policy Making. *PNAS Nexus, 3,* pgae191. https://doi.org/10.1093/pnasnexus/pgae191

Choiri, A. (2025). The Role of Artificial Intelligence (AI) in Economic and Labor Market Transformation. *Digital Marketing, Consumer Behavior, and Economic Trends Journal, 1,* 1-9. https://doi.org/10.70865/dmcbej.v1i1.11

Federal Ministry of Communications, Innovation and Digital Economy (FMCIDE) (2025). *Broadband Access for All: Deepening Nigeria's National Backbone and Middle Mile Infrastructure [White Paper].* https://nban.gov.ng/wp-content/uploads/2025/02/FMCIDE-White-Paper-BROADBAND-ACCESS-FOR-ALL-DEEPENING-NIGERIAS-NATIONAL-BACKBONE-AND-MIDDLE-MILE-INFRASTRUCTURE-JANUARY-2024.pdf

Folawewo, A. O., & Orija, O. A. (2020). *Informal-Formal Workers' Transition in Nigeria: A Livelihood Analysis (WIDER Working Paper 2020/146).* UNU-WIDER.

Gog, S. J., Tan, E., & Tan, K. (2024). Future-Skilling the Workforce: Skillsfuture Movement in Singapore. In *Zukunft der Hochschulbildung—Future Higher Education* (pp. 515-528). Springer. https://doi.org/10.1007/978-3-658-42948-5_26

Haltiwanger, J. (2022). Entrepreneurship in the Twenty-First Century. *Small Business Economics, 58,* 27-40. https://doi.org/10.1007/s11187-021-00542-0

Hess, A., Narteh-Yoe, S. B., Gregorious, D., & Moloi, T. (2023). Technological Advances and Their Impact on Productivity and Standard of Living—Evidence from the Last Four Decades. *International Business and Global Economy, 42,* 7-22. https://doi.org/10.26881/ibage.2023.42.01

IERC (2024). *Artificial Intelligence Impact on Labor Markets Literature Review*. International Economic Development Council. https://www.iedconline.org/clientuploads/EDRP%20Logos/AI_Impact_on_Labor_Markets.pdf

ILO (2024). *Navigating Nigeria's Economic and Labour Market Challenges: Pathways to Inclusive Growth and Structural Transformation (ILO Brief)*. https://www.ilo.org/sites/default/files/2024-11/Nigeria%20policy%20brief%207%20Nov.pdf

ILO (2025). *World Employment and Social Outlook: Trends 2025.* https://www.ilo.org/sites/default/files/2025-01/WESO25_Trends_Report_EN.pdf

International Labour Organization (2021). *World Employment and Social Outlook. Trends 2021*. ILO. https://www.ilo.org/publications/world-employment-and-social-outlook-trends-2021

Judijanto, L., Ahmad, M., Amer, B., Shreifeen, I. A. A., & Arabia, S. (2023). The Impact of Artificial Intelligence and Automation: A Literature Review on Industrial Transformation. *International Journal of Society Reviews, 1,* 35-43. https://injoqast.net/index.php/INJOSER/article/view/795

Khandre, S. (2024). Income Inequality and Economic Growth: A Study of Developing Countries. *Journal of Indian Research, 12,* 40-62. https://jir.mewaruniversity.org/wp-content/uploads/2025/12/Mewar%20Journal-JIR-Mewar-July-December%202024-final%20online%20version.pdf

Khanfar, A. A., Kiani Mavi, R., Iranmanesh, M., & Gengatharen, D. (2023). Factors Influencing the Adoption of Artificial Intelligence Systems: A Systematic Literature Review. *Management Decision, 63,* 3727-3755. https://doi.org/10.1108/md-05-2023-0838

Kumar, K., Sunil, C., & Kumeti, K. (2024). Artificial Intelligence and Its Impact on Labor Productivity and Employment. *Naveen Shodh Sansar, 1,* 190-194 https://www.nssresearchjournal.com/current-edition-details/NSS8851

Lane, M., & Saint-Martin, A. (2021). *The Impact of Artificial Intelligence on the Labour Market: What Do We Know So Far? (OECD Social, Employment and Migration Working Papers No. 256)*. OECD Publishing.

Laracy, J. R., Kirova, V. D., Ku, C. S., & Marlowe, T. J. (2025). Human Dignity and the Ethics of Artificial Intelligence: A Framework for Responsible Design and Use from the Perspective of Catholic Social Teaching. In *2025 IEEE International Symposium on Ethics in Engineering, Science, and Technology (ETHICS)* (pp. 1-10). IEEE. https://doi.org/10.1109/ethics65148.2025.11098185

Loh, C. (2023). *Digital Transformation in Skills: Enablers for a Data-Driven Skills Ecosystem [PowerPoint Slides]. SkillsFuture Singapore, Masterclass Series "The Skills Bridge": Promoting Lifelong Learning (LLL) for the Future of Work*. https://www.ilo.org/media/279796/download

Mcclure, T., & Graham, J. R. (2026). *Artificial Intelligence, Productivity, and the Workforce: Evidence from Corporate Executives (FRB Atlanta Working Paper No. 2026-4)*. Federal Reserve Bank of Atlanta.

Murire, O. T. (2024). Artificial Intelligence and Its Role in Shaping Organizational Work Practices and Culture. *Administrative Sciences, 14,* Article 316. https://doi.org/10.3390/admsci14120316

NAIS (2024). *National Artificial Intelligence Strategy*. National Centre for Artificial Intelligence and Robotics. https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy_01082024-copy.pdf

NAIS (2025). *National Artificial Intelligence Strategy.* National Centre for Artificial Intelligence and Robotics. https://ncair.nitda.gov.ng/wp-content/uploads/2025/09/National-Artificial-Intelligence-Strategy-19092025.pdf

NITDA (2023). NITDA Plans Centre for Artificial Intelligence, Robotics. *Economic Confidential.* https://economicconfidential.com/2020/09/nitda-centre-artificial-intelligence-robotics/

OECD (2025a). *Artificial Intelligence for Advancing Smart Cities*. OECD. https://www.oecd.org/content/dam/oecd/en/about/programmes/cfe/the-oecd-programme-on-smart-cities-and-inclusive-growth/Issues-Note-AI-for-advancing-smart-cities.pdf

OECD (2025b). *Bridging the AI Skills Gap: Is Training Keeping up?* OECD Publication.

OECD (2026). *Recent Policy Developments on AI in the Labour Market (OECD Artificial Intelligence Papers No. 63)*. OECD Publishing.

Peter, L., Zikhona, K., & Ngqula, N. (2026). AI: Inclusive Innovation or Digital Dispossession? Inequality and African Ways of Knowing. *Digital Society, 5,* Article 7. https://doi.org/10.1007/s44206-026-00248-4

Pwc (2017). Will Robots Really Steal Our Jobs? An International Analysis of the Potential Long-Term Impact of Automation. *PwC*. https://www.pwc.co.uk/economics/assets/international-impact-of-automation-feb-2017.pdf

Ragab, A., & Salah, M. (2025). The Impact of Technology and AI on Economic Growth [Preprint]. *ResearchGate*.

Rashidi, S. (2026). *Future of Work in the Age of Automation, Augmentation, and Agentic AI.* Mossavar-Rahmani Center for Business & Government, Harvard Kennedy School. https://www.hks.harvard.edu/centers/mrcbg/publications/future-work-age-automation-augmentation-and-agentic-ai

Salomons, A., Zierahn-Weilage, U., & Zierahn-Weilage, U. (2025). *Expertise at Work: New Technologies, New Skills, and Worker Impacts (IZA Discussion Paper No. 18248)*. IZA Institute of Labor Economics.

Schilirò, D. (2023). Technological Progress and the Future of Work. *International Journal of Business Management and Economic Research, 14,* 2108-2018. https://mpra.ub.uni-muenchen.de/117927/

Sidhu, J. (2026). *AI-Ready Through Experience: Embedding AI Literacy into Canada's Work-Integrated Learning Infrastructure [Policy Brief]*. Senate of Canada. https://sencanada.ca/Content/Sen/Committee/451/SOCI/briefs/SOCI_SS-2_Brief_Jasmeen-Sidhu_e.pdf

Sinha, M., Estrada, G., Park, D., & Tian, S. (2024). *Digitalization and Employment: Lessons from Developed and Developing Economies. (ADB Economics Working Paper No. 802)*. Asian Development Bank.

Spencer, D. (2017). Work in and beyond the Second Machine Age: The Politics of Production and Digital Technologies. *Work, Employment and Society, 31,* 142-152. https://doi.org/10.1177/0950017016645716

Taheri Hosseinkhani, N. (2025). Economic and Social Implications of AI-Driven Automation and Workforce Transformation. *SSRN*.

Tiwari, R. (2023). The Impact of AI and Machine Learning on Job Displacement and Employment Opportunities. *Interantional Journal of Scientific Research in Engineering and Management, 7,* 1-9. https://doi.org/10.55041/ijsrem17506

UNCTAD (2025). *Preparing to Seize Artificial Intelligence Opportunities with Strategic National Policies (UNCTAD Policy Brief No. 120).* https://unctad.org/publication/preparing-seize-artificial-intelligence-opportunities-strategic-national-policies

United Nations (2022). *The State of Science, Technology and Innovation in the Least Developed Countries.* https://www.un.org/technologybank/sites/www.un.org.technologybank/files/high_level_chapters_the_state_of_science_technology_and_innovation_in_the_least_developed_countries.pdf

United Nations (2025). *Global Collaboration for Inclusive and Equitable AI.* https://unctad.org/system/files/official-document/presspb2025d2_en.pdf

Vijay, V., & Paruchuru, K. (2025). The Role of AI and Machine Learning in Automating Tasks and Decision-Making. *International Journal for Research Publication and Seminar, 16,* 195-214. https://doi.org/10.36676/jrps.v16.i1.42

Vintu, D. (2025). Unemployment Rate: Concepts and Indicators. *International Journal of Advanced Research in Accounting, Economics and Business Perspectives, 9,* 129-146. https://internationalpolicybrief.org/wp-content/uploads/2025/11/ARTICLE-8-1.pdf

Vu, H., Haase, J., Leopold, H., & Mendling, J. (2025). *Towards a Theory on Process Automation Effects.* arXiv. https://arxiv.org/pdf/2506.10992

Wai, H. A., Wiley, R., & Tantong, K. (2025). *Potential Solutions for Job Displacement by Artificial Intelligence*. https://www.researchgate.net/publication/399486684_Potential_Solutions_for_Job_Displacement_by_Artificial_Intelligence

World Bank (2024). *Nigeria Development Update: Staying the Course—Progress amid Pressing Challenges.* World Bank. https://documents1.worldbank.org/curated/en/099101624100574290/pdf/P502989-76dd5e27-3b7a-492b-8e9c-be0acefcb58e.pdf

World Economic Forum (2025). *The Future of Jobs Report 2025.* https://www.weforum.org/publications/the-future-of-jobs-report-2025/

Zakerinia, S., Chen, W. X., & Srinivasan, S. (2025). Displacement or Complementarity? The Labor Market Impact of Generative AI. In *Americas Conference on Information Systems (AMCIS) 2025 Proceedings* (Vol. 3, pp. 1606-1615). Association for Information Systems. https://aisel.aisnet.org/amcis2025/sig_cnow/sig_cnow/18/

Zepher, A. (2026). *AI Ethics and Governance: Frameworks for Responsible Development: Definition, Principles and Practices for Responsible EAI [Technical Report].* ResearchGate. https://www.researchgate.net/publication/399487315_AI_Ethics_and_Governance_Frameworks_for_Responsible_Development_Definition_Principles_and_Practices_for_Responsible_EAI