Executive Summary

The advent of Artificial Intelligence (AI) has precipitated a paradigmatic shift in global innovation and transformation, driving cutting-edge advancements across nations and industries. The ramifications of its impact on the global ecosystem and specifically on the developmental trajectory of Nigeria and other African nations are profound and far-reaching. Nigeria, as the continent's most populous country, is singularly positioned to harness AI's transformative capacity to address pressing socio-economic problems, accelerate economic growth, and pivot the nation into a new epoch of technological empowerment, which unlocks unprecedented opportunities for sustainable development, economic prosperity, and human flourishing.

Nigeria's National AI Strategy (NAIS) sets a path to achieve the vision "to be a global leader in harnessing the transformative power of AI through responsible, ethical, and inclusive innovation, fostering sustainable development through collaborative e orts."

Vision and Guiding Principles

1.2.1. Vision Statement

"Our vision is to be a global leader in harnessing the transformative power of AI through responsible, ethical, and inclusive innovation, fostering sustainable development through collaborative efforts."

Strategic Objectives

1.3.1. Aims and Objectives

Considering Nigeria's strengths, weaknesses, opportunities, and threats, this National AI strategy has three broad objectives for leveraging AI. First is using AI as a tool for economic growth and competitiveness; second, for social development and inclusion; and third, for technological advancement and leadership. The sub-goals are enumerated below:

Economic Growth and Competitiveness

1. Boost economic productivity: Enhance efficiency and innovation across agriculture, manufacturing, and services sectors.
2. Create new industries and jobs: Fostering the development of AI-driven industries and upskilling the workforce for new opportunities.
3. Attract foreign investment: Positioning Nigeria as a leader in responsible AI development, attracting investment and collaboration.

Social Development and Inclusion

1. Improve access to essential services: Utilising AI to enhance healthcare delivery, education, and financial inclusion for all Nigerians.
2. Address social challenges: Leveraging AI to tackle such as poverty, inequality, and climate change.
3. Empower citizens: Equipping individuals with the skills and knowledge necessary to participate actively in the AI-driven future.

Technological Advancement and Leadership

1. Develop indigenous AI expertise: Building a strong research and development ecosystem to foster innovation and local solutions.
2. Establish ethical and regulatory frameworks: Ensuring responsible and transparent development and deployment of AI.
3. Become a regional and global leader: Positioning Nigeria as a key player in the global AI landscape.

Risks and Mitigation Strategies

1.6.1. AI Risks and Mitigation Strategies

1.6.1.1. Introduction

Artificial Intelligence (AI) is on the cusp of revolutionizing business, governance, and the pursuit of social welfare, with transformative implications for education, healthcare, and the mitigation of pressing global challenges such as climate change, poverty, and hunger. Nevertheless, the rapid advancement of AI has generated concerns regarding its potential pitfalls, and rightly so, as the unintended consequences of emerging technologies are a historical inevitability. Therefore, developing national AI strategies must prioritise leveraging country-specific strengths and opportunities while concurrently and proactively addressing potential risks through thorough assessment, anticipation, and mitigation measures.

This is not an insignificant undertaking. Government leaders are confronted with a profound paradox as they strive to leverage AI at scale while simultaneously fulfilling their responsibility to safeguard citizens' interests and harness Artificial Intelligence (AI) for the greater good. This dichotomy necessitates a delicate balance between fostering innovation and exercising control over the far-reaching societal implications of emerging technologies. To enable their global clients to leverage AI for competitive advantage, PwC has identified crucial tradeo s that governments must navigate in conjunction with
businesses, consumer advocacy groups, and international organisations, in addition to articulating six critical risks associated with AI adoption at both the business and national levels (66).

PwC characterises a grouping of risks as “National-Level,” these are risks that include economic risks (e.g., job displacement, loss of institutional knowledge), ethical risks (e.g., lack of values, goal misalignment), and societal risks (e.g., reputation, intelligence divide.) The National-Level risks are far-reaching and impact the socio-economic environment in which AI systems operate. These are issues that need to be resolved at the national, supranational, or societal level across the globe (66). Potential harms of poorly implemented AI systems, including misleading models, bias, and vulnerability
to adversarial actors, are an additional risk area that has already manifested since generative AI made its mark on the global stage last year. Drivers behind substandard outcomes include the brittleness of current systems, making them easy to mislead and manipulate with variations in input, and shifts in dataset characteristics over time that threaten model reliability, thus leading to unintended consequences (67)

SWOT Descriptors

Strengths	Rationale
A large and youthful talent pool	Nigeria's population of over 200 million, with 75% in the working age bracket represents a significant talent pool for AI development and adoption. This young demographic is often tech-savvy and eager to learn new skills, providing a strong foundation for AI human capital development. Strong economic performance
Strong economic performance	Nigeria's position as Africa's largest economy, with a nominal GDP of $477.39 billion, signifies a robust financial base. This economic strength can translate into resources for investment in AI research, development, and infrastructure, fuelling the growth of the AI ecosystem.

Weakness	Rationale
High and unstable inflation	Nigeria's current high inflation rate (26.72% in September 2023) creates significant economic uncertainty. This discourages long-term investments, a crucial factor for developing a sustainable AI ecosystem. Investors become hesitant to commit resources to AI projects with potentially long payback periods due to the risk of inflation eroding returns.
Reduced consumer spending power	As inflation increases, the purchasing power of Nigerian citizens shrinks. This can lead to decreased demand for AI-powered products and

	services, hindering the potential market growth needed to support a thriving AI industry. Consumers may prioritise necessities over adopting new technologies.

Opportunity	Rationale
Knowledge sharing	Partner with leading AI nations (e.g., China's Belt and Road Initiative) to facilitate knowledge exchange through joint research projects, student exchange programs, and technology transfer agreements.
Funding and investment	Collaborate with development institutions (e.g., African Development Bank) and explore funding opportunities for AI research, infrastructure development, and startup incubation. This can accelerate the growth of a robust AI ecosystem.

Threats	Rationale
Resistance to AI due to feared Job loss/Bias	Workforce reduction and inherent bias due to AI uptake can pose resistance to adopting Artificial Intelligence. The result will be an increased unemployment rate and social inequality.
Brain drain and capital flight	While international migration can generate valuable remittance inflows, it presents a significant challenge to Nigeria's AI development. The mass exodus of skilled labour weakens the talent pool necessary for developing and deploying AI solutions.