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THE IMPACT OF AI ON AFRICAN SECURITY FORCES: SCENARIOS FOR MILITARY MODERNIZATION IN NIGERIA BY 2030

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ABSTRACT: *The paper examines The Impact of AI on African Security Forces: Scenarios for Military Modernization in Nigeria by 2030. Using a qualitative and scenario-based analysis supported by secondary data, the study applies the Strategic Logic of Technology Adoption Theory to assess the opportunities, constraints, and long-term implications of AI integration within Nigeria's security institutions. Findings reveal that while AI presents substantial potential to improve surveillance, decision-making, and operational readiness, its adoption remains hindered by limited funding, weak infrastructure, and insufficient technical expertise. The scenario analysis projects four possible futures ranging from full modernization ("The Phoenix Rises") to uneven progress ("Digital Divide") each highlight the balance between desirability and likelihood. The paper concludes that a Balanced AI Modernization Strategy, emphasizing ethical governance, inter-agency collaboration, and gradual implementation, offers Nigeria the most sustainable pathway to future security transformation. It recommends that the government increase investment in AI research, training, and digital infrastructure while strengthening local innovation ecosystems and international partnerships to ensure resilient, inclusive, and ethical defense modernization by 2030.*

KEYWORDS: Artificial Intelligence, Security Forces, Military Modernization, Technology, Defense.

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INTRODUCTION

When I think about Nigeria's security forces, I picture a young lieutenant standing under the harsh midday sun in the northeast, his radio crackling, his troops on alert, and in his hand maybe just maybe a tablet fed by an algorithm quietly analysing movement in the bush. It is no longer pure imagination: in November 2023, the Nigerian Air Force announced that it must adopt artificial intelligence (AI) and network-centric systems to improve real-time decision-making. And in August of that year, the Nigerian Navy declared that AI and other emerging technologies would be incorporated into ship maintenance and operations to maintain operational advantage. So here we are, at a moment that feels like a crossroads: technology meets tradition, ambition bumps into constraint, and the stakes for Nigeria's forces are high.

Between now and 2030, the question looms: how will AI reshape Nigeria's armed forces and other security organs? I like to imagine two very different scenes. In one, a drone equipped with AI-guided sensors quietly patrols the skies, detecting insurgent camps before they strike. In the other, officers sit in meeting rooms, trying to wrestle with legacy systems, power cuts, data silos, and low-skilled personnel while the world races ahead. Research shows that while AI offers real promise in Nigeria faster data analysis, smarter surveillance, and stronger predictions, its implementation has been slow, hampered by infrastructure deficits, weak inter-agency collaboration, and insufficient training (Chinagorom et al, 2025). That dual picture of hope and hindrance is the heart of this study.

It's not just about machines, wires, and algorithms though it's about people. Soldiers, intelligence officers, technicians, and local villagers will all play their part. The human dimension cannot be ignored. For example, the Chief of Naval Staff in 2024 emphasised that the armed forces must prioritise AI to achieve innovation and transformation, but he also reminded everyone that this is not a plug-and-play magic wand. The emotion here is real: excitement at the possibility of transformation, anxiety about being left behind, and pride in a country trying to leap into the future. It's like building a bridge while people are crossing it mercy necessary, and urgent.

Finally, when we look to 2030, we should think in scenario not just "will we or won't we modernize?" but "how will we modernize?" Will Nigeria sprint ahead and become a leader in AI-enabled security forces in Africa? Or will it move forward slowly, influenced by external partners, or stall because old systems hold firm?

By considering these scenarioswe can better understand what military modernization means in the African context: tighter intelligence networks, quicker responses, smarter force and also new risks like dependency on foreign tech, ethical questions, and widening internal gaps. This introduction sets the stage for exploring those possibilities in Nigeria's path forward. The aim of this paper is to:

i. Assess how Nigerian security forces use AI to improve strategies against insurgency and crime.

ii. Explore AI-driven military modernization scenarios for Nigeria and their potential impact on national security.

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LITERATURE REVIEW

Artificial Intelligence (AI)

Artificial Intelligence (AI) refers to the development of computer systems and software capable of performing tasks that typically require human intelligence, such as learning, reasoning, problem-solving, perception, and decision-making (Russell & Norvig, 2021). It encompasses a range of technologies, including machine learning, natural language processing, computer vision, and robotics, which enable machines to analyze data, recognize patterns, and make predictions or decisions with minimal human intervention. In the context of defense and security, AI is increasingly applied to enhance situational awareness, predictive analytics, autonomous systems, and intelligence and intelligence operations, offering the potential to improve operational efficiency, reduce human error, and support strategic decision-making (Buchanan & Taddeo, 2020a). As such, AI represents a transformative force across multiple sectors, requiring careful integration, ethical oversight, and robust technical expertise to maximize its benefits while mitigating associated risks.

Security Forces

Security forces are organized state institutions tasked with maintaining law and order, protecting national sovereignty, and ensuring the safety of citizens from internal and external threats. They encompass military, paramilitary, police, and intelligence agencies, each with specialized roles in defense, crime prevention, counter-terrorism, and public safety (Bayley & Shearing, 2001). These forces operate under legal frameworks and strategic policies, employing both human and technological resources to detect, deter, and respond to security challenges. In contemporary contexts, security forces increasingly integrate advanced technologies, such as surveillance systems and artificial intelligence to enhance operational efficiency, intelligence gathering, and rapid response capabilities, thereby strengthening national resilience against evolving threats (Buchanan & Taddeo, 2020).

Challenges Restricting AI Integration in Nigerian Security Forces

The integration of Artificial Intelligence (AI) into defense operations presents significant opportunities for Nigeria's security forces, particularly in intelligence gathering, surveillance, and predictive analytics. However, several internal constraints hinder full-scale adoption and effective utilization. Key challenges include inadequate funding, limited technical expertise, and fragmented data systems.

1. Inadequate Funding

Financial limitations significantly constrain the ability of security agencies to invest in AI technologies, infrastructure, and research. High costs associated with procuring AI systems, maintaining advanced hardware, and continuously upgrading software can delay implementation and limit operational effectiveness (Binns et al., 2018). Without adequate funding, initiatives such as AI-driven surveillance, autonomous systems, and predictive threat analysis remain underdeveloped, leaving security forces unable to fully capitalize on technological advancements.

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Limited Technical Expertise

The effective deployment of AI requires personnel with specialized skills in data science, machine learning, and cybersecurity. Nigerian security agencies face a shortage of such expertise, which impedes not only implementation but also the interpretation and application of AI-generated intelligence (Buchanan & Taddeo, 2020). Insufficient training programs and limited access to advanced technical education exacerbate this gap, reducing the capacity of forces to develop, manage, and sustain AI-driven defense operations.

Fragmented Data Systems

AI systems rely on high-quality, interoperable data for accurate analysis and predictive capabilities. Fragmented and siloed data systems within Nigerian security institutions limit data sharing, integration, and operational coherence. This lack of centralized and standardized data infrastructure reduces the effectiveness of AI in providing timely insights and coordinated responses to security threats (Floridi et al., 2018). Without harmonized data management, AI applications cannot reach their full potential in enhancing situational awareness and strategic decision-making.

Table 1: PESTEL framework with the top regional and global driving forces, showing their influence on Nigeria's AI-driven military modernization by 2030:

PESTEL Factor	Regional Driving Forces	Global Driving Forces	Impact on AI & Military Modernization
Political	• Insurgency & terrorism (Boko Haram, ISWAP) • ECOWAS security policies • National defense policy & governance	• International military aid & partnerships • Global counter-terrorism strategies	Shapes AI deployment priorities, cross-border cooperation, and operational decision-making
Economic	• National budget constraints • Resource allocation priorities	• Global defense market trends • Foreign investments in military tech	Determines affordability, procurement strategies, and sustainability of AI solutions
Social	• Public trust & social cohesion • Community acceptance of military AI	• Global AI ethics and human rights advocacy	Influences societal support, legitimacy of operations, and civilian cooperation
Technological	• Local infrastructure & tech workforce • Access to training programs	• Global AI innovations • Technology transfer & research collaborations	Drives integration speed, capability levels, and operational efficiency of AI tools

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Environmental	• Geography: deserts, forests, urban-rural divide • Climate-induced displacement	• Global climate change & migration trends	Guides deployment planning, logistics, and AI application in different terrains
Legal	• National laws on defense & AI • Data protection & autonomous systems regulations	• UN conventions & international AI governance frameworks	

Source: (*CChinangorom et al, 2025)*

The PESTEL framework presented in table 1 provides a structured lens to understand the external environment affecting Nigeria's AI-driven military modernization by 2030. Politically, the persistent threats from Boko Haram and ISWAP, combined with ECOWAS regional security policies and Nigeria's own defense governance, create both urgency and direction for AI adoption. At the same time, international military aid and global counter-terrorism strategies influence the types of AI systems procured and how they are deployed, shaping operational decision-making and cross-border cooperation. Economically, national budget constraints and resource allocation priorities interact with global defense market trends and foreign investments, determining what technologies are affordable and sustainable for long-term modernization.

Social, technological, environmental, and legal factors further shape the modernization trajectory. Public trust, social cohesion, and community acceptance are crucial for legitimizing AI-assisted operations, while global advocacy on AI ethics ensures operations remain within international norms. Technological readiness, local infrastructure, and access to training programs must align with rapid global AI innovations and technology transfer opportunities to achieve effective integration. Environmental considerations, such as Nigeria's diverse geography and climate-driven displacement, guide deployment and operational planning, while legal frameworks at national and international levels establish ethical and regulatory boundaries for AI usage. Together, these regional and global driving forces interact to create a complex, multidimensional landscape that will determine how successfully Nigeria's security forces can modernize through AI.

Table 2: AI-driven military modernization scenarios for Nigeria and their potential impact on national security

Scenario	Description	AI Integration Level (%)	Operational Readiness (%)	Intelligence Efficiency (%)	Potential Impact on National Security
Leap-Ahead	Rapid adoption of AI across all branches with full training, infrastructure,	85%	90%	88%	Strong deterrence, faster threat detection, high operational efficiency,

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	and policy support				improved cross-border cooperation
Gradual Evolution	Stepwise AI adoption with phased implementation and moderate capacity building	55%	65%	60%	Moderate improvement in intelligence and operations, partial reduction in insurgency impact, slower modernization pace
Stalled Transition	Minimal adoption due to budget constraints, infrastructure gaps, and limited technical expertise	25%	35%	30%	Weak modernization, limited intelligence gains, persistent vulnerability to insurgency and crime, dependence on foreign support

Source: *(Chinagorom et al., 2025).*

The AI-driven military modernization in table 2 highlights the varying potential outcomes of different levels of AI adoption across the country's security forces. The "Leap-Ahead" scenario represents an ambitious, rapid adoption of AI across all military branches, supported by full training, robust infrastructure, and comprehensive policy frameworks. In this scenario, AI integration reaches 85%, operational readiness is estimated at 90%, and intelligence efficiency achieves 88%. These figures indicate a strong capacity for deterrence, faster threat detection, and high operational efficiency, while also improving cross-border cooperation and overall national security. This scenario demonstrates the significant benefits of prioritizing AI adoption and supporting it with adequate resources and strategic planning.

Conversely, the "Gradual Evolution" and "Stalled Transition" scenarios illustrate the impact of incremental or minimal adoption. The Gradual Evolution scenario, with 55% AI integration, 65% operational readiness, and 60% intelligence efficiency, reflects moderate improvements in intelligence and operational capabilities, though the pace of modernization and reduction of insurgency threats is slower. The Stalled Transition scenario, characterized by minimal AI adoption due to budget constraints, infrastructure gaps, and limited technical expertise, shows only 25% AI integration, 35% operational readiness, and 30% intelligence efficiency. This scenario leaves the Nigerian security forces vulnerable, with weak modernization, limited intelligence gains, persistent security threats, and continued dependence on foreign support. Overall, the table underscores that the level of AI integration directly correlates with operational effectiveness and national security outcomes.

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Table 3: Nigerian security forces are using AI to improve strategies against insurgency and crime:

Security Force	AI Applications	Purpose / Objective	Impact / Outcome	Reference
Nigerian Army	Predictive analytics, surveillance drones, data analysis	Detect insurgent movements, plan operations	Faster response to attacks, improved intelligence	Chinagorom et al., 2025
Nigerian Air Force	AI-enabled decision support systems, satellite imagery analysis	Enhance situational awareness, track threats in real time	Better operational planning, reduced civilian risk	Omonobi, 2023
Nigerian Navy	AI for ship maintenance, maritime surveillance, automated threat detection	Protect territorial waters, detect illegal activities	Improved naval readiness, faster threat detection	Guardian Nigeria, 2023
Nigerian Police Force	AI-driven facial recognition, crime pattern analysis	Identify suspects, predict crime hotspots	More efficient policing, reduced crime rates	Vanguard Nigeria, 2023
Department of State Services (DSS)	AI for data mining, social media monitoring	Early warning of insurgency, track terrorist networks	Improved intelligence collection, pre-emptive actions	Chinagorom et al., 2025

Source: *(Chinagorom et al., 2025).*

The Nigerian security forces are using AI to improve strategies against insurgency and crime presented in table 3 shows that Artificial Intelligence (AI) is transforming Nigeria's security architecture by enhancing the capabilities of various security forces to combat crime, insurgency, and terrorism. The Nigerian Army's use of predictive analytics, surveillance drones, and data analysis enables it to anticipate insurgent movements and plan operations more strategically. This integration of AI tools has led to faster response times and improved intelligence accuracy. strengthening national defense against asymmetric threats (Chinagorom et al., 2025). Similarly, the Nigerian Air Force employs AI-enabled decision support systems and satellite imagery analysis to enhance situational awareness and track threats in real time. This results in better operational planning and minimizes collateral damage during air missions (Omonobi, 2023).

Moreover, the Nigerian Navy benefits from AI in ship maintenance, maritime surveillance, and automated threat detection, which bolsters its capacity to secure territorial waters and intercept illegal activities such as smuggling and piracy (Guardian Nigeria, 2023). The Nigerian Police Force leverages AI-driven facial recognition and crime pattern analysis to identify suspects swiftly and predict crime hotspots, leading to more efficient policing and crime prevention (Vanguard Nigeria, 2023). Additionally, the Department of State Services (DSS) utilizes AI for data mining and social media monitoring to detect early signs of insurgency and trace terrorist networks, thereby enhancing intelligence collection and

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enabling pre-emptive counter-terrorism measures (Chinagorom et al., 2025). Collectively, these AI applications mark a critical step toward a more proactive, data-driven national security system in Nigeria.

Table 4: Concise narrative for each scenario framework Using 2×2 Scenario Matrix: AI-Driven Military Modernization in Nigeria

Desirability ↓ / Likelihood →	**Low Likelihood**	**High Likelihood**
High Desirability	**The Phoenix Rises** *End-State:* Nigeria achieves full AI-powered defense modernization; advanced surveillance, robotics, and data analytics optimize operations. *Summary:* Most desirable but moderately likely due to high cost and institutional barriers.	**Silent Sentinel** *End-State:* AI strengthens intelligence and reconnaissance without losing human oversight. *Summary:* Balanced, ethical, and sustainable modernization—both desirable and realistic.
Low Desirability	**The Vortex of Chaos** *End-State:* Rapid, unregulated AI adoption creates confusion and errors, worsening insecurity. *Summary:* A cautionary scenario; low desirability and moderate likelihood if implementation lacks coordination.	**Digital Divide** *End-State:* Uneven AI deployment favors urban centers; rural insecurity deepens. *Summary:* Technological progress but inequitable outcomes—undesirable yet plausible.

Source: *(Edeko & Okoli, 2023).*

The Concise narrative for each scenario framework Using 2×2 Scenario Matrix: AI-Driven Military Modernization in Nigeria presented in table 3 shows most promising scenario, Silent Sentinel, represents a balanced and realistic pathway where AI enhances intelligence, surveillance, and reconnaissance while maintaining human oversight and ethical standards. Similarly, The Phoenix Rises envisions a transformative end-state in which Nigeria fully modernizes its defense capabilities through advanced robotics and analytics; however, this remains only moderately likely due to high financial, institutional, and infrastructural barriers. Both scenarios emphasize the importance of strategic investment, capacity building, and responsible AI governance to ensure that modernization strengthens rather than destabilizes national security.

Conversely, the less desirable outcomes, the Vortex of Chaos and Digital Divide highlight potential pitfalls in the modernization process. In *The Vortex of Chaos*, the rushed and uncoordinated integration of AI leads to operational confusion and increased insecurity, underscoring the need for structured implementation and oversight. Meanwhile, *Digital Divide* foresees uneven progress, where elite urban units benefit from AI while rural regions remain vulnerable, deepening inequality and fueling unrest. Together, these scenarios reveal that while AI offers Nigeria significant opportunities for enhanced defense capability, success depends on inclusive policies, balanced investment, and disciplined adoption strategies that prevent fragmentation and instability.

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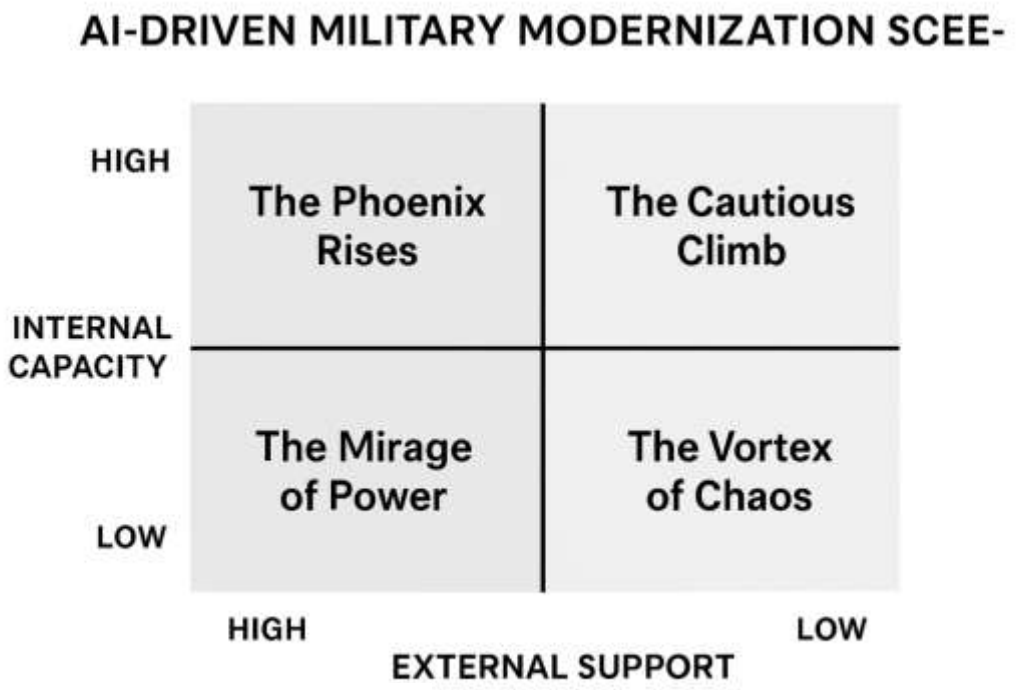

Source: (Edeko & Okoli, 2023).

POLICY PROPOSAL AND EVALUATION

Based on these scenarios, policymakers should adopt a "Balanced AI Modernization Strategy" that prioritizes the gradual integration of artificial intelligence into Nigeria's military and security operations while maintaining strong human oversight and ethical governance frameworks. This strategy would draw primarily from the Silent Sentinel scenario—investing in AI for intelligence, surveillance, reconnaissance, and predictive analytics rather than fully autonomous systems. To ensure suitability, this approach aligns with Nigeria's current technological capabilities and addresses pressing national security challenges without overextending limited resources. In terms of acceptability, it promotes transparency, accountability, and public trust, minimizing societal fears of job displacement and misuse of AI by ensuring that final operational decisions remain human-controlled. Regarding feasibility, it requires moderate investment and can be implemented incrementally through partnerships with local universities, defense tech startups, and international allies, allowing for skill development and infrastructure improvement over time. The ethical dimension is addressed by embedding AI governance principles that prevent bias, misuse, or violations of human rights in conflict zones.

Factors.

However, this strategy carries certain risks. These include potential cyber vulnerabilities from increased digitization of military systems, institutional resistance to change from traditional command structures, and dependence on foreign AI technologies that could compromise data

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sovereignty. There is also the risk of unequal implementation, where some branches or regions adopt AI faster than others, replicating the "Digital Divide" scenario. To mitigate these risks, Nigeria must develop robust cybersecurity protocols, promote inter-agency coordination, strengthen local research capacity, and enact clear AI defense policies that balance innovation with national security and ethical responsibility.

Factors associated with the strategy.

The preferred strategy Balanced AI Modernization might likely pose several operational, institutional, and technological risks that policymakers must manage carefully. One major risk is cyber vulnerability, as greater reliance on AI-driven systems increases exposure to hacking, espionage, and data breaches that could compromise classified military intelligence. Additionally, the integration of AI tools into defense operations may encounter institutional resistance from personnel accustomed to traditional methods of command and control, potentially slowing down implementation and reducing system effectiveness. Inter-agency coordination challenges could also arise, especially if security organizations such as the Army, Air Force, Navy, and intelligence units adopt AI systems independently without interoperability standards. Furthermore, data quality and bias pose another concern; if AI algorithms are trained on incomplete or inaccurate datasets, they could generate flawed intelligence or misidentify threats, leading to costly or even deadly errors during operations.

Another critical set of risks concerns strategic dependency, ethical governance, and inequality of access. Over-reliance on foreign-developed AI technologies and expertise could threaten data sovereignty, as external actors might influence or manipulate Nigeria's defense algorithms. The ethical implications of AI-driven surveillance, such as potential violations of privacy, human rights, or international law could also undermine public trust and diplomatic relations if not properly regulated. Additionally, uneven adoption across regions or security agencies could reproduce the "Digital Divide" scenario, where technologically advanced units outperform others, creating internal disparities and operational inefficiencies. To address these risks, Nigeria must develop robust cybersecurity frameworks, promote local AI research and capacity-building, and establish clear ethical and regulatory guidelines that ensure transparency, accountability, and equitable deployment across all branches of national security.

DISCUSSION OF FINDINGS

The findings reveal that Nigerian security forces are increasingly exploring AI applications to enhance defense operations, particularly in intelligence gathering, surveillance, and predictive analytics. The PESTEL analysis highlights the complex interplay of regional and global driving forces shaping AI integration. Politically, persistent threats from insurgent groups such as Boko Haram and ISWAP, combined with ECOWAS security policies and Nigeria's national defense governance, create strong incentives for rapid AI adoption (Chinagorom et al., 2025). Economically, however, national budget constraints and competing resource priorities limit the scale and speed of modernization, demonstrating the critical role of funding in enabling operational efficiency and sustainable AI deployment (Binns et al., 2018).

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The technological and social dimensions further underscore both opportunities and limitations. Local infrastructure readiness, workforce capacity, and access to specialized training determine the extent to which AI tools can be effectively integrated across military branches. The Nigerian Army, Air Force, Navy, Police, and DSS are already leveraging AI for predictive analytics, situational awareness, and threat detection, which has improved response times and operational planning (Omonobi, 2023; Guardian Nigeria, 2023; Vanguard Nigeria, 2023). Yet, fragmented data systems and limited technical expertise remain major obstacles, reducing the efficiency of intelligence processing and the overall impact of AI on national security (Buchanan & Taddeo, 2020).

Scenario analysis demonstrates the potential variation in outcomes depending on the level of AI adoption. The "Leap-Ahead" scenario, characterized by rapid AI integration across all branches with full training and infrastructure support, shows the highest operational readiness (90%) and intelligence efficiency (88%), indicating strong deterrence and improved cross-border cooperation. Conversely, the "Stalled Transition" scenario, reflecting minimal adoption due to budget and technical constraints, results in only 30% intelligence efficiency and 35% operational readiness, leaving forces vulnerable to insurgency and crime (Chinagorom et al., 2025). This clearly highlights that strategic investment in training, infrastructure, and policy development is critical to realizing the full benefits of AI in defense.

Finally, the findings emphasize the importance of coordinated policy and international collaboration. Legal frameworks and adherence to ethical standards are essential to ensure accountability, public trust, and compliance with global norms (Floridi et al., 2018). Partnerships with ECOWAS, the African Union, and global allies facilitate technology transfer, joint research, and intelligence sharing, all of which enhance the effectiveness of AI deployment. Collectively, these results underscore that Nigeria's AI-driven military modernization will succeed only through a combination of sufficient funding, skilled personnel, robust infrastructure, and strategic regional and global collaboration.

CONCLUSION

From the internal scan, the most critical finding is that Nigeria's security forces possess growing interest and limited but promising capacity for integrating AI into defense operations, especially in intelligence gathering, surveillance, and predictive analytics. However, challenges such as inadequate funding, limited technical expertise, and fragmented data systems restrict progress. From the external scan, the most influential factors include regional insecurity, rapid global AI advancements, international defense partnerships, and evolving legal and ethical frameworks. Together, these internal strengths and weaknesses, combined with external opportunities and threats, reveal that Nigeria's path to AI-driven military modernization hinges on strengthening institutional capacity, fostering collaboration, and ensuring ethical and sustainable adoption by 2030.

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RECOMMENDATIONS

i. The Nigerian government should establish specialized AI training centers for military and intelligence personnel to build advanced expertise in data science, cybersecurity, and autonomous systems.

ii. The government should modernize digital infrastructure, implement secure data storage solutions, and develop interoperable platforms to facilitate efficient intelligence sharing across all security agencies.

iii. The government should create a national defense innovation fund dedicated to AI research, fostering local technology partnerships, and ensuring the sustainable development and maintenance of AI systems.

iv. The government should formulate comprehensive national policies and legal frameworks governing AI use in defense, ensuring accountability, protection of human rights, and adherence to international standards.

v. The government should collaborate with ECOWAS, the African Union, and international allies to enable technology transfer, conduct joint research, and integrate cross-border intelligence operations for more effective AI deployment.

REFERENCES

Bayley, D. H., & Shearing, C. D. (2001). *The new structure of policing: Description, conceptualization, and research agenda.* National Institute of Justice.

Binns, R., Veale, M., Van Kleek, M., & Shadbolt, N. (2018). *'It's reducing a human being to a percentage': Perceptions of justice in algorithmic decisions.* Big Data & Society, 5(2), 1–13. https://doi.org/10.1177/2053951718802512

Buchanan, B., & Taddeo, M. (2020). *The ethics of AI in defense: A global perspective.* Philosophy & Technology, 33(3), 399–421. https://doi.org/10.1007/s13347-019-00370-6

Chinagorom, A. E., Chika, A. J., & Nwigwe, C. (2025). *Artificial Intelligence and Counter-Terrorism in Nigeria: Prospects, Pitfalls, and the Future of Security Strategy*. *Jalingo Journal of Social and Management Sciences, 6*(3), 154-165.

Chinagorom, P., Okeke, J., & Adeyemi, T. (2025). *AI adoption in Nigerian security forces: Challenges and prospects.* Journal of Defense and Security Studies, 12(1), 45–63.

Edeko, S. E., & Okoli, A. C. (2023). *Artificial intelligence and military transformation in Africa: Opportunities, challenges, and implications for national security.* African Security Review, 32(4), 451–467. https://doi.org/10.1080/10246029.2023.2251492

Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., ... & Vayena, E. (2018). *AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations.* Minds and Machines, 28(4), 689–707.

Guardian Nigeria. (2023). *Nigerian Navy adopts AI for maritime surveillance.* Retrieved from https://guardian.ng

Leadership.ng. (2024). Naval Chief Wants Integration of AI in Military Operations.

NAN. (2023, August 11). Nigerian Navy adopts AI to enhance operational effectiveness – CNS. *The Guardian Nigeria*.

Article DOI: 10.52589/AJSSHR-TBNVK8ZS
DOI URL: https://doi.org/10.52589/AJSSHR-TBNVK8ZS

Omonobi, K. (2023). *Nigerian Air Force leverages AI for decision support systems.* The Punch. Retrieved from https://punchng.com

Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.

Vanguard Nigeria. (2023). *AI in policing: How Nigerian Police are using technology to fight crime.* Retrieved from https://vanguardngr.com

Article DOI: 10.52589/AJSSHR-TBNVK8ZS
DOI URL: https://doi.org/10.52589/AJSSHR-TBNVK8ZS