

Leveraging Technology for Enhanced Administrative Governance and National Security in Nigeria

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Abstract

The increasing complexity of governance and national security challenges in Nigeria has made the adoption of technological innovations essential for improving public administration and safeguarding national sovereignty. The country continues to grapple with terrorism, insurgency, banditry, kidnapping, cybercrime, and transnational organized crimes, all of which threaten socio-economic development and political stability. At the same time, administrative inefficiencies, bureaucratic bottlenecks, corruption, and poor service delivery have weakened governance and reduced public confidence in government institutions. This study examines the role of technology in enhancing administrative governance and strengthening national security in Nigeria. A qualitative research design was adopted, relying on secondary data obtained from scholarly journal articles, government publications, policy documents, and reports from international organizations. The study found that technological innovations such as electronic governance, biometric identification systems, artificial intelligence, geographic information systems, drones, smart border surveillance technologies, and integrated intelligence databases have significantly improved transparency, accountability, decision-making, intelligence gathering, and inter-agency collaboration in countries where they have been effectively implemented. However, the study also revealed that inadequate digital infrastructure, insufficient funding, corruption, cybersecurity vulnerabilities, limited technical expertise, and weak institutional coordination continue to impede effective technological deployment in Nigeria. The study concludes that the strategic integration of technology into governance and national security operations can significantly enhance administrative efficiency and strengthen Nigeria's capacity to combat terrorism and other emerging security threats. It recommends increased investment in digital infrastructure, improved cybersecurity frameworks, regular capacity building for public officials and security personnel, strengthened inter-agency collaboration, and enhanced regional cooperation among West African countries.

Keywords: Technology, Administrative Governance, National Security, Terrorism, E-Governance, Digital Innovation, Nigeria.

1. Introduction

Technological innovation has transformed governance and national security across the world by improving the efficiency of public administration, promoting transparency, and strengthening the capacity of governments to respond to emerging security challenges. Governments increasingly rely on digital technologies to deliver public services, manage information, support evidence-based policymaking, and protect national territories against internal and external threats. Consequently, technology has become an indispensable instrument for achieving effective governance and sustainable national development.

Nigeria continues to face numerous security challenges that threaten its political stability and socio-economic development. These challenges include terrorism, insurgency, banditry, kidnapping, cybercrime, piracy, and transnational organized crimes. The activities of terrorist groups such as Boko Haram and the Islamic State West Africa Province (ISWAP) have resulted in significant loss of lives, displacement of communities, destruction of infrastructure, and disruption of economic activities. Furthermore, Nigeria's extensive and porous land borders have facilitated the illegal movement of persons, arms, and other contraband, thereby increasing the complexity of national security management.

In addition to these security concerns, Nigeria's public administration is confronted with persistent bureaucratic inefficiencies, corruption, poor record management, delays in service delivery, and inadequate coordination among government institutions. These challenges have reduced the effectiveness of government programmes and weakened citizens' confidence in public institutions. The increasing demand for transparency, accountability, and efficient service delivery has therefore heightened the need for the adoption of modern technological solutions within government institutions.

The emergence of Information and Communication Technology (ICT), artificial intelligence, biometric identification systems, geographic information systems, unmanned aerial vehicles, and electronic governance platforms has created new opportunities for improving administrative governance and strengthening national security. These technologies facilitate faster information processing, improve data management, enhance intelligence gathering, strengthen border

surveillance, promote inter-agency collaboration, and reduce opportunities for corruption through the automation of government processes.

Despite the growing recognition of technology as a catalyst for effective governance and national security, the level of technological integration within Nigeria's public sector remains inadequate. Several constraints, including inadequate funding, poor digital infrastructure, limited technical expertise, weak cybersecurity systems, and policy inconsistencies, continue to hinder effective implementation. Addressing these challenges is essential for maximizing the benefits of technological innovation in governance and national security.

This study therefore examines how technology can be leveraged to improve administrative governance and strengthen national security in Nigeria. It also identifies the challenges affecting technological adoption and proposes practical strategies for enhancing the effective use of technology in public administration and national security management.

1.1 Statement of the Problem

Nigeria has continued to experience increasing threats to national security despite significant investments in security operations and public administration reforms. Terrorism, insurgency, kidnapping, banditry, cybercrime, and transnational organized crimes have exposed weaknesses in intelligence gathering, border surveillance, information management, and inter-agency coordination. At the same time, administrative governance continues to be affected by bureaucratic delays, corruption, poor record management, inadequate transparency, and inefficient public service delivery.

Although technological innovations have transformed governance and national security management in many developed and developing countries, Nigeria has not fully utilized these technologies to improve administrative efficiency and strengthen national security. Existing technological initiatives remain fragmented, poorly coordinated, and constrained by inadequate infrastructure, insufficient funding, cybersecurity challenges, and limited technical capacity. Consequently, government institutions continue to face significant difficulties in responding effectively to emerging security threats and delivering quality public services.

The persistence of these challenges underscores the need for a comprehensive examination of the role of technology in improving administrative governance and national security in Nigeria. This study therefore seeks to assess the contributions of technological innovations, identify the factors limiting their effective implementation, and recommend strategies for strengthening technology-driven governance and security systems.

1.2 Objectives of the Study

The broad objective of this study is to examine the role of technology in enhancing administrative governance and strengthening national security in Nigeria.

The specific objectives are to:

1. examine the role of technology in enhancing administrative governance in Nigeria;
2. evaluate the contribution of technological innovations to strengthening national security against terrorism and other security threats;
3. identify the challenges affecting the adoption and implementation of technological innovations in administrative governance and national security; and
4. propose practical strategies for improving the deployment of technology in governance and national security management in Nigeria.

1.3 Methodology

This study adopted a qualitative research design based on documentary analysis. Data were obtained from secondary sources, including peer-reviewed journal articles, textbooks, government publications, policy documents, conference papers, and reports from reputable international organizations. The collected data were critically reviewed and analyzed using descriptive content analysis to identify emerging themes relating to technology, administrative governance, national security, and counter-terrorism strategies in Nigeria. The use of secondary data was considered appropriate because it enabled the study to synthesize existing knowledge and provide evidence-based recommendations for strengthening technology-driven governance and national security.

LITERATURE REVIEW

2.1 Conceptual Framework

The conceptual framework provides a theoretical understanding of the major concepts that underpin this study. It explains the meanings and relationships among technology, administrative governance, national security, terrorism, and electronic governance, which collectively form the basis for examining how technological innovations can improve governance and strengthen Nigeria's security architecture.

2.1.1 Concept of Technology

Technology refers to the practical application of scientific knowledge, digital innovations, and technical skills to solve human problems and improve organizational efficiency. In contemporary public administration, technology encompasses information and communication technologies (ICT), artificial intelligence (AI), biometric identification systems, cloud computing, geographic information systems (GIS), drones, cybersecurity systems, and digital databases that facilitate efficient decision-making and service delivery.

The rapid advancement of technology has transformed the way governments perform administrative functions and respond to security challenges. Public institutions across the world increasingly rely on digital technologies to improve operational efficiency, automate government services, manage public records, and strengthen communication among government agencies. Technological innovation has also enhanced data collection, analysis, and dissemination, thereby supporting evidence-based policy formulation and implementation.

In Nigeria, technology has become increasingly important in addressing governance and security challenges. Government agencies have introduced digital platforms such as electronic tax administration, online procurement systems, biometric identity registration, electronic passport processing, and digital payment systems to improve service delivery and reduce administrative

inefficiencies. Despite these initiatives, the adoption of technology remains constrained by inadequate infrastructure, poor funding, limited technical expertise, and inconsistent policy implementation.

2.1.2 Administrative Governance

Administrative governance refers to the processes, structures, and institutional mechanisms through which government policies are formulated, implemented, monitored, and evaluated to ensure effective public service delivery. It involves the efficient management of public resources, coordination among government institutions, accountability, transparency, and responsiveness to citizens' needs.

Effective administrative governance promotes good governance by ensuring that government institutions operate efficiently, ethically, and transparently. It also strengthens public confidence in government by improving service delivery, reducing bureaucratic delays, minimizing corruption, and encouraging citizen participation in governance. In modern societies, administrative governance increasingly depends on digital technologies that simplify administrative procedures, improve record management, facilitate information sharing, and enhance communication between government agencies and citizens.

The integration of technology into administrative governance has given rise to electronic governance, which enables governments to deliver services more efficiently through digital platforms. This transformation has significantly reduced paperwork, improved access to public information, and strengthened accountability in many countries.

2.1.3 National Security

National security refers to the protection of a country's territorial integrity, sovereignty, political stability, economic interests, critical infrastructure, and citizens from both internal and external threats. It encompasses military security, border protection, intelligence gathering, cybersecurity, economic security, environmental security, and the protection of democratic institutions.

The concept of national security has evolved beyond traditional military defence to include emerging threats such as terrorism, cybercrime, organized crime, human trafficking, arms smuggling, and attacks on critical national infrastructure. Governments are therefore expected to develop comprehensive security strategies that integrate technology, intelligence, law enforcement, and regional cooperation to effectively respond to these complex challenges.

In Nigeria, national security remains a major concern due to persistent threats posed by terrorism, insurgency, banditry, kidnapping, piracy, and transnational organized crimes. These security challenges have negatively affected economic development, foreign investment, agricultural production, and social stability. Consequently, strengthening national security requires the effective application of modern technologies that enhance intelligence gathering, surveillance, border management, and inter-agency collaboration.

2.1.4 Terrorism

Terrorism refers to the deliberate use or threat of violence by individuals or organized groups to create fear, intimidate governments or populations, and pursue political, ideological, or religious objectives. Terrorist activities often target civilians, public institutions, security personnel, and critical infrastructure, resulting in widespread destruction, displacement of communities, and economic instability.

Nigeria has experienced significant terrorist activities over the past decade, particularly through the operations of Boko Haram and the Islamic State West Africa Province (ISWAP). These groups have carried out attacks on schools, markets, religious centres, military formations, and rural communities, leading to thousands of deaths and the displacement of millions of people. The activities of these groups have also undermined national development by discouraging investment, disrupting education, and weakening public confidence in government institutions.

Modern terrorist organizations increasingly utilize digital technologies for recruitment, propaganda, financing, intelligence gathering, and communication. This development underscores the importance of adopting advanced technological tools such as artificial intelligence, biometric identification systems, surveillance technologies, and digital intelligence platforms to detect, prevent, and respond effectively to terrorist threats.

2.1.5 Electronic Governance (E-Governance)

Electronic governance, commonly referred to as e-governance, is the application of information and communication technologies to improve government operations, public service delivery, citizen participation, and institutional transparency. It involves the use of digital platforms to facilitate interactions between government institutions, citizens, businesses, and other stakeholders.

E-governance enables governments to provide faster, more transparent, and more efficient public services while reducing administrative costs and opportunities for corruption. Through electronic governance, citizens can access government services online, make digital payments, obtain official documents, submit applications, and monitor government activities without unnecessary bureaucratic procedures.

The adoption of e-governance also enhances accountability by promoting transparency in financial management, procurement processes, tax administration, and public expenditure. Furthermore, digital governance strengthens data management and facilitates information sharing among government agencies, thereby improving decision-making and policy implementation.

In Nigeria, the implementation of e-governance has expanded through initiatives such as electronic tax systems, online company registration, digital passport applications, biometric voter registration, and the National Identity Management System. Although these initiatives have contributed to improving public administration, their effectiveness remains limited by challenges such as inadequate digital infrastructure, inconsistent electricity supply, poor internet connectivity, cybersecurity threats, and limited digital literacy among both public servants and citizens.

Overall, the concepts discussed in this section demonstrate that technology, administrative governance, national security, terrorism, and electronic governance are closely interconnected. The effective integration of technological innovations into public administration can significantly improve governance, strengthen national security, and enhance the government's capacity to prevent and respond to terrorism and other emerging security threats in Nigeria.

2.2 Theoretical Framework

This study is anchored on Systems Theory, developed by the Austrian biologist Ludwig von Bertalanffy in the 1940s. Although the theory originated in the field of biology, it has been widely applied in public administration, political science, management, and security studies because of its emphasis on the interdependence of different components within a system. Systems Theory views an organization or society as a collection of interconnected parts that work together to achieve common goals. The effectiveness of the entire system depends on the efficiency, coordination, and interaction of its various components.

According to Systems Theory, every system consists of inputs, processes, outputs, feedback, and the environment within which it operates. Inputs refer to the resources available to the system, such as personnel, finance, technology, information, and institutional policies. These inputs undergo various processes through administrative and operational activities to produce outputs, which represent the desired goals or outcomes. Feedback provides information about the effectiveness of the outputs and enables the system to make necessary adjustments for improved performance. The environment also influences the system by creating opportunities and challenges that affect its operations.

In the context of administrative governance, government institutions constitute a complex system made up of ministries, departments, agencies, policymakers, civil servants, and regulatory bodies. These institutions depend on effective coordination, communication, and information sharing to deliver quality public services. The introduction of technological innovations, such as electronic governance platforms, digital databases, artificial intelligence, biometric identification systems, and cloud computing, strengthens the interaction among these institutions by improving data management, reducing bureaucratic delays, enhancing transparency, and supporting evidence-based decision-making.

Similarly, national security in Nigeria can be viewed as a system involving the Armed Forces, the Nigeria Police Force, intelligence agencies, the Nigeria Immigration Service, the Nigeria Customs Service, the Nigeria Security and Civil Defence Corps, and other relevant security institutions. These agencies must work collaboratively to protect the country's territorial integrity and safeguard citizens from internal and external threats. Effective coordination among these institutions depends largely on timely information sharing, efficient communication, and the integration of modern technologies.

The application of Systems Theory to this study highlights the importance of technology as an integrating mechanism that enhances collaboration among government institutions and security agencies. Technological tools such as smart border surveillance systems, drones, biometric identification technologies, geographic information systems, artificial intelligence, cybersecurity infrastructure, and integrated intelligence databases improve the flow of information, strengthen coordination, and facilitate rapid responses to emerging security threats. Consequently, technology enhances the overall performance of the governance and security systems by improving administrative efficiency and national security outcomes.

Despite its relevance, Systems Theory has been criticized for its broad and general nature. Critics argue that the theory does not adequately explain the influence of political interests, corruption, institutional weaknesses, leadership failures, and socio-economic inequalities on the performance of organizations and public institutions. Others contend that the theory assumes a level of cooperation and coordination that may not always exist in practice, particularly in developing countries where institutional fragmentation and resource constraints are common.

Nevertheless, Systems Theory remains highly appropriate for this study because it emphasizes the interconnectedness of governance institutions and security agencies and demonstrates how technology can strengthen coordination, information sharing, and institutional effectiveness. The theory provides a useful framework for understanding how technological innovations can improve administrative governance, enhance national security, and support Nigeria's efforts to combat terrorism and other emerging security challenges through an integrated and coordinated approach.

2.3 Empirical Review

Several empirical studies have examined the role of technology in improving administrative governance and strengthening national security in Nigeria and other developing countries. These studies provide valuable insights into the opportunities and challenges associated with the adoption of technological innovations in public administration and security management.

Ugwueze, Onuoha, and Nwagwu (2016) examined the relationship between electronic governance and national security in Nigeria. Using a qualitative research approach based on documentary evidence, the authors found that the adoption of electronic governance has the potential to improve transparency, accountability, and efficiency in public administration. The study further revealed

that digital governance enhances information management and supports security agencies through improved communication and intelligence sharing. However, the researchers observed that poor infrastructure, corruption, inadequate funding, and weak institutional capacity have limited the successful implementation of e-governance initiatives in Nigeria. They recommended sustained investment in digital infrastructure and institutional reforms to improve governance and national security.

Kamsalem (2023) investigated the prospects and challenges of electronic governance in Nigeria's public sector. The study adopted a qualitative approach and relied on secondary data obtained from government publications and scholarly literature. The findings indicated that e-governance has significantly improved public service delivery by reducing bureaucratic delays, promoting transparency, and increasing citizens' access to government services. Despite these achievements, the study identified inadequate internet connectivity, inconsistent electricity supply, limited digital literacy, and resistance to organizational change as major obstacles to the effective implementation of electronic governance. The study recommended increased investment in digital infrastructure, staff training, and policy reforms to strengthen e-governance in Nigeria.

Oloyede (2024) examined the contribution of electronic governance to public service delivery in Nigeria. Using documentary analysis, the study found that digital technologies have improved administrative efficiency through electronic record management, online service delivery, digital payment systems, and automated administrative procedures. The research concluded that technology has significantly reduced administrative bottlenecks and enhanced transparency in government operations. However, the study emphasized that the sustainability of these achievements depends on continuous investment in technological infrastructure, cybersecurity, and human capacity development.

Ujara, Ifaloye, and Ekong (2020) explored the role of electronic surveillance technologies in counter-terrorism operations in Nigeria. The study revealed that surveillance technologies such as closed-circuit television (CCTV), drones, biometric identification systems, and geographic information systems have improved intelligence gathering, border monitoring, and crime detection in countries where they are effectively deployed. Nevertheless, the researchers observed that Nigeria's security agencies continue to experience operational challenges arising from inadequate technological infrastructure, poor maintenance culture, and insufficient funding. The study

recommended stronger government commitment to technological modernization and improved collaboration among security agencies.

Oseni (2024) investigated the barriers affecting the adoption of electronic services in Nigeria's public sector. The study found that although digital technologies have the capacity to improve administrative governance and service delivery, their implementation remains constrained by poor internet infrastructure, cybersecurity risks, inadequate technical expertise, insufficient financial resources, and institutional resistance to technological change. The author argued that addressing these barriers would significantly improve the effectiveness of electronic governance and strengthen public confidence in government institutions.

Nkwede and colleagues (2026) examined the relationship between technological innovation and national security in Nigeria. The researchers found that emerging technologies such as artificial intelligence, biometric identification systems, integrated intelligence databases, and smart border surveillance technologies have enhanced intelligence gathering, crime detection, border management, and inter-agency collaboration in countries that have successfully adopted them. However, the study noted that Nigeria's progress in technological integration remains relatively slow due to weak policy implementation, inadequate funding, limited technical expertise, and poor institutional coordination. The authors recommended comprehensive policy reforms, continuous staff training, and increased investment in digital infrastructure to strengthen technology-driven governance and national security.

The reviewed studies collectively demonstrate that technological innovations have become indispensable tools for improving administrative governance and strengthening national security. They consistently show that technologies such as electronic governance platforms, artificial intelligence, biometric identification systems, surveillance technologies, and integrated digital databases contribute significantly to transparency, accountability, intelligence gathering, border management, and efficient public service delivery. At the same time, the studies identify common challenges, including inadequate funding, poor infrastructure, corruption, cybersecurity threats, weak institutional coordination, and limited technical capacity.

Research Gap

Although previous studies have extensively examined electronic governance, public service delivery, and the application of technology in national security, many of them focused on these issues independently. Relatively few studies have provided an integrated assessment of how technological innovations can simultaneously enhance administrative governance and strengthen national security against terrorism in Nigeria. Furthermore, the rapid emergence of advanced technologies such as artificial intelligence, smart border surveillance systems, integrated intelligence databases, and predictive analytics has created new opportunities that require further scholarly attention. This study therefore bridges this gap by providing a comprehensive analysis of the role of technology in improving both administrative governance and national security in Nigeria while proposing practical strategies for addressing the challenges limiting effective technological deployment.

3.0 Findings

The findings of this study are presented according to the specific objectives of the research. They are based on a critical review and analysis of relevant literature, government publications, and policy documents on technology, administrative governance, and national security in Nigeria.

3.1 Technology Enhances Administrative Governance in Nigeria

The study found that technological innovations have significantly improved administrative governance by increasing efficiency, transparency, accountability, and accessibility in public service delivery. The adoption of electronic governance platforms has enabled many government institutions to automate administrative processes, thereby reducing bureaucratic delays and improving the speed of service delivery.

The review also revealed that digital technologies such as electronic document management systems, online tax administration, electronic procurement platforms, digital payment systems, and biometric identity verification have contributed to better record management and reduced opportunities for corruption. These technologies have improved the accuracy of government records, facilitated faster decision-making, and enhanced citizens' access to essential public services.

Furthermore, the study found that technology has strengthened communication and information sharing among ministries, departments, and agencies, thereby improving policy implementation and institutional coordination. Nevertheless, the full benefits of technological innovation have not been realized because many government institutions still face challenges relating to inadequate digital infrastructure, unstable electricity supply, poor internet connectivity, and limited technical expertise.

3.2 Technology Strengthens National Security Against Terrorism

The study further found that technological innovations play a vital role in strengthening national security and combating terrorism in Nigeria. Advanced technologies such as biometric identification systems, artificial intelligence, drones, geographic information systems, satellite surveillance, and integrated intelligence databases have enhanced the capacity of security agencies to monitor criminal activities, gather intelligence, detect suspicious movements, and respond more effectively to security threats.

The findings indicate that biometric technologies have improved identity verification and reduced identity fraud, making it easier to identify criminal suspects and monitor cross-border movements. Similarly, drones and satellite surveillance systems have enhanced the monitoring of remote and difficult-to-access border areas where terrorists and other criminal groups often operate.

In addition, the study found that integrated digital databases facilitate information sharing among security agencies, thereby improving coordination and reducing delays in intelligence dissemination. Artificial intelligence has also demonstrated considerable potential in analysing large volumes of security data, identifying crime patterns, and supporting informed decision-making. These technological innovations collectively contribute to strengthening Nigeria's capacity to prevent terrorist attacks and protect national security.

3.3 Challenges Affecting Technological Adoption in Governance and National Security

Despite the numerous benefits associated with technological innovation, the study found that several challenges continue to hinder its effective adoption in Nigeria. One of the major constraints is inadequate funding, which limits investment in modern digital infrastructure and the maintenance of existing technological systems.

The study also identified poor digital infrastructure, unreliable electricity supply, weak internet connectivity, and insufficient cybersecurity measures as significant barriers to effective technological deployment. These challenges reduce the reliability and efficiency of digital systems across many government institutions.

Furthermore, corruption, policy inconsistency, and weak institutional coordination continue to undermine the implementation of technology-driven governance initiatives. The findings also revealed that many public institutions experience shortages of skilled information technology professionals, while opportunities for continuous staff training remain inadequate. Consequently, some technological facilities are either underutilized or poorly maintained, thereby limiting their effectiveness.

3.4 Strategies for Improving Technology Deployment

Based on the reviewed literature, the study found that the effective deployment of technology in administrative governance and national security requires a comprehensive and coordinated approach. Increased government investment in digital infrastructure, including reliable internet services, stable electricity supply, secure data centres, and modern communication facilities, is essential for sustainable technological development.

The findings further indicate that regular capacity building for public servants and security personnel would enhance their ability to utilize emerging technologies effectively. Strengthening cybersecurity policies and improving the protection of government databases are also necessary to safeguard sensitive information against cyber threats.

In addition, the study found that improved collaboration among government institutions, security agencies, private technology firms, and regional organizations would facilitate information sharing, promote innovation, and strengthen national security. Continuous policy review, effective

monitoring mechanisms, and transparent procurement processes were also identified as important measures for ensuring the successful implementation of technology-driven governance initiatives.

Overall, the findings demonstrate that technology has become an indispensable tool for improving administrative governance and strengthening national security in Nigeria. However, the realization of its full potential depends on sustained political commitment, institutional reforms, adequate funding, human capacity development, and the establishment of a robust digital governance framework.

3.5 Discussion of Findings

The findings of this study demonstrate that technology plays a significant role in enhancing administrative governance and strengthening national security in Nigeria. The analysis revealed that the adoption of digital technologies, including electronic governance platforms, biometric identification systems, artificial intelligence, geographic information systems, drones, and integrated intelligence databases, has the potential to improve government efficiency, transparency, accountability, and security operations.

With respect to the first objective, the study found that technology enhances administrative governance by improving the efficiency of public institutions and reducing bureaucratic bottlenecks. The adoption of electronic governance platforms enables government agencies to automate administrative processes, improve record management, and deliver public services more efficiently. This finding is consistent with the study by Ugwueze, Onuoha, and Nwagwu (2016), who reported that electronic governance strengthens accountability, transparency, and administrative efficiency in Nigeria. It also supports the findings of Oloyede (2024), who observed that digital technologies contribute significantly to improved service delivery, efficient documentation, and better policy implementation within public institutions.

Regarding the second objective, the study established that technological innovations contribute substantially to strengthening national security and combating terrorism. Technologies such as biometric identification systems, artificial intelligence, surveillance drones, satellite monitoring, and integrated intelligence databases enhance intelligence gathering, border surveillance, crime detection, and information sharing among security agencies. These findings agree with Ujara, Ifaloye, and Ekong (2020), who concluded that electronic surveillance technologies improve

counter-terrorism operations and strengthen national security by supporting effective monitoring and intelligence collection. Similarly, the findings are consistent with those of Nkwede et al. (2026), who emphasized that modern technological innovations improve inter-agency collaboration and increase the effectiveness of national security operations.

The findings also revealed that the successful deployment of technology in governance and national security is constrained by several challenges. Inadequate funding, poor digital infrastructure, unstable electricity supply, cybersecurity threats, corruption, limited technical expertise, and weak institutional coordination continue to hinder the effective implementation of technology-driven initiatives. This finding corroborates the study conducted by Kamsalem (2023), which identified poor infrastructure, inadequate digital literacy, and weak policy implementation as major barriers to electronic governance in Nigeria. It also aligns with Oseni (2024), who found that inadequate technological infrastructure, insufficient financial resources, and cybersecurity risks remain significant obstacles to digital transformation in the Nigerian public sector.

Furthermore, the study established that overcoming these challenges requires sustained government commitment and strategic investment in digital transformation. Increased funding for technological infrastructure, regular training of public servants and security personnel, stronger cybersecurity frameworks, improved policy implementation, and enhanced collaboration among government institutions were identified as essential measures for maximizing the benefits of technology. These findings support the recommendations of previous scholars, who have consistently argued that successful digital transformation depends not only on the availability of technology but also on effective institutional coordination, political commitment, and continuous capacity development.

The findings also validate the Systems Theory adopted for this study. Systems Theory emphasizes that effective governance and national security depend on the interaction and coordination of different institutions within a system. The study demonstrates that technology serves as an integrating mechanism that strengthens communication, information sharing, coordination, and decision-making among ministries, departments, agencies, and security organizations. Consequently, the application of technological innovations improves the overall performance of governance institutions and enhances the country's ability to prevent and respond to terrorism and other emerging security threats.

Overall, the discussion indicates that technology has become an indispensable component of modern governance and national security management. While Nigeria has made notable progress in adopting digital technologies, significant efforts are still required to address infrastructural deficiencies, institutional weaknesses, cybersecurity challenges, and human capacity gaps. Addressing these issues will enable the country to fully harness the transformative potential of technology in promoting effective administrative governance and ensuring sustainable national security.

4.0 Conclusion

This study examined the role of technology in enhancing administrative governance and strengthening national security in Nigeria. The study established that technological innovations have become indispensable tools for improving public administration, promoting transparency and accountability, and strengthening the capacity of security agencies to combat terrorism and other emerging security threats. The findings revealed that technologies such as electronic governance platforms, artificial intelligence, biometric identification systems, geographic information systems, drones, smart border surveillance technologies, and integrated intelligence databases have the potential to improve service delivery, intelligence gathering, inter-agency collaboration, and border security.

The study further found that despite these benefits, the effective deployment of technology in Nigeria continues to be constrained by inadequate funding, poor digital infrastructure, unreliable electricity supply, corruption, cybersecurity vulnerabilities, weak institutional coordination, policy inconsistencies, and limited technical expertise. These challenges have slowed the pace of digital transformation within government institutions and reduced the effectiveness of technology-driven governance and security initiatives.

Based on these findings, the study concludes that technology remains a critical instrument for achieving effective administrative governance and sustainable national security in Nigeria. However, the realization of its full potential depends on sustained government commitment, adequate investment in digital infrastructure, institutional reforms, effective policy implementation, continuous capacity building, and stronger collaboration among relevant

stakeholders. If these measures are effectively implemented, Nigeria will be better positioned to improve governance, strengthen national security, and achieve sustainable national development.

5.0 Recommendations

Based on the findings and conclusion of this study, the following recommendations are proposed:

The Federal Government of Nigeria should increase investment in digital infrastructure by expanding broadband internet access, improving electricity supply, modernizing government information systems, and establishing secure national data centres to support digital governance and national security operations.

Government ministries, departments, and agencies should accelerate the implementation of electronic governance initiatives by fully digitizing administrative procedures, strengthening electronic record management systems, and expanding the delivery of online public services to improve efficiency, transparency, and accountability.

Security agencies should adopt advanced technologies such as artificial intelligence, biometric identification systems, drones, satellite surveillance technologies, geographic information systems, and integrated intelligence databases to enhance intelligence gathering, border management, crime detection, and counter-terrorism operations.

The government should strengthen Nigeria's cybersecurity framework by developing robust cybersecurity policies, improving the protection of government databases and critical national infrastructure, and enhancing institutional capacity to prevent cyber threats and digital attacks.

Regular training and capacity-building programmes should be organized for public servants, information technology professionals, and security personnel to enhance their knowledge and competence in the effective use, maintenance, and management of emerging technologies.

Government institutions should strengthen inter-agency collaboration by establishing integrated digital information-sharing platforms that facilitate timely communication, intelligence exchange, and coordinated decision-making among relevant ministries, departments, agencies, and security organizations.

The government should promote public-private partnerships by collaborating with technology companies, research institutions, and development partners to encourage innovation, facilitate technology transfer, and improve digital governance and security systems.

Nigeria should strengthen regional cooperation with neighbouring West African countries through joint intelligence-sharing mechanisms, coordinated border surveillance, and collaborative counter-terrorism initiatives to address transnational security challenges effectively.

Finally, government agencies should ensure transparency, accountability, and strict monitoring in the procurement, implementation, and maintenance of technological infrastructure to maximize value for public investment and promote sustainable technological development.

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