

TECHNOLOGY ADOPTION AND BORDER CONTROL PERFORMANCE: A STUDY OF NIGERIA IMMIGRATION SERVICE

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ABSTRACT

This study investigates the impact of technology adoption on the performance of the Nigeria Immigration Service (NIS), a cross-sectional research design was employed to collect data from employees of the NIS within the Federal Capital Territory (FCT). The target population consisted of 1660 employees' employees across six key directorates directly involved in technology-driven operations. A sample size of 216 was determined using Krejcie and Morgan's formula, ensuring statistical validity. Participants were selected using a simple random sampling technique to minimize selection bias. Primary data was collected using a structured questionnaire, which was validated through expert reviews and achieved high reliability with a Cronbach's alpha coefficient was 0.73. Data analysis was conducted using multiple regression analysis with the aid of SPSS version 27 to examine the relationship between technology adoption and firm performance. The findings revealed that technology facilitating conditions significantly improves organizational performance within the NIS ($\beta = 0.301, p < 0.001$). while perceived usefulness has the most substantial impact ($\beta = 0.543, p < 0.001$), highlighting the importance of practical benefits in motivating employees to embrace digital tools. The model demonstrated strong explanatory power, with an R-squared value of 0.796, indicating that approximately 79.6% of the variance in performance can be attributed to technology adoption factors. Based on these findings, technology adoption positively affect the performance of the Nigeria Immigration Service, the study recommends increased investment in advanced and user-friendly digital tools to streamline operations and enhance efficiency. Regular employee training programs should be implemented to improve digital literacy and mitigate resistance to new technology. Furthermore, continuous monitoring and evaluation mechanisms should be established to assess the effectiveness of technological tools and incorporate employee feedback for future improvements.

Keywords: Technology Adoption, Organizational Performance, Facilitating conditions, Perceived Usefulness, Public Sector Efficiency

INTRODUCTION

In today's rapidly evolving global economy, technology adoption has emerged as a key driver of efficiency, productivity, and competitiveness across various industries. Technology adaptation is concerned with the use of technological innovations to improve business processes and achieve strategic objectives. Organizations

worldwide leverage technological advancements to streamline operations, enhance service delivery, and remain competitive in their respective markets (Morrar, Arman, & Mousa, 2021). From automation and artificial intelligence (AI) to cloud computing and digital transformation, technological innovation continues to reshape the landscape of both private and public sector institutions (Westerman,

Bonnet, & McAfee, 2022). The integration of technology into business processes has proven to be a game-changer, enabling firms to optimize resources, reduce operational costs, and improve overall performance (Bresnahan, 2023).

Within corporate institutions, technology adoption is fundamental to achieving strategic objectives and maintaining sustainable growth (McKinsey Global Institute, 2023). Firms increasingly rely on digital solutions to enhance operational efficiency, improve customer service, and optimize decision-making processes. In public institutions, including government agencies, the adoption of technology facilitates the seamless delivery of essential services, increases transparency, and enhances service accessibility for the populace (Alam, 2021). The extent to which an organization integrates and utilizes technology directly influences its overall performance and long-term viability. Consequently, organizations that proactively embrace digital transformation are more likely to sustain growth and achieve a competitive advantage in an increasingly digitalized world (Bughin et al., 2022).

Firm performance is a multidimensional construct that encompasses financial and non-financial indicators used to evaluate an organization's effectiveness (Kaplan & Norton, 2021). It includes aspects such as profitability, operational efficiency, service delivery, customer satisfaction, and innovation capacity (Neely, 2023). A high-performing firm effectively utilizes its resources, implements strategic initiatives, and achieves its goals in a competitive environment. In public institutions, performance is often assessed by the ability to provide timely, efficient, and citizen-centric services, reduce bureaucratic bottlenecks, and enhance transparency (Osborne et al., 2022). The integration of digital tools in public sector institutions can significantly improve governance, reduce inefficiencies, and foster improved service delivery.

The Nigeria Immigration Service (NIS) plays a critical role in border security, migration management, and the issuance of travel documents (Adebayo & Olatunji, 2023). The agency's performance is essential for national

security, economic growth, and international mobility (Eze & Okonkwo, 2021). However, the NIS has faced numerous challenges, including bureaucratic inefficiencies, outdated manual processes, and delays in service delivery (Okoye, 2022). The absence of a robust technological framework has often led to inefficiencies in passport processing, visa issuance, and border control operations (Adelakun & Oyedele, 2023). In a rapidly digitizing world, the lack of adequate technology adoption impedes the agency's ability to deliver seamless and efficient services to the public (Ajibade & Yusuf, 2022). Addressing these gaps through the adoption of modern technology is crucial to enhancing the NIS's overall performance and effectiveness.

Given these challenges, this study seeks to investigate the effect of technology adoption on firm performance, using the Nigeria Immigration Service as a case study. Understanding the impact of technology adoption on public sector institutions will provide insights into best practices for enhancing operational efficiency, improving service delivery, and ensuring the seamless execution of NIS's mandate (Oluwasegun & Adeyemi, 2024). The findings of this study will contribute to the growing body of literature on technology adoption in public sector institutions and provide actionable recommendations for policymakers and stakeholders in the Nigeria immigration sector (Ikechukwu & Adedoyin, 2023).

An ideal scenario for the Nigeria Immigration Service (NIS) would involve a more highly efficient, technologically driven system that enhances operational efficiency, ensures timely passport issuance, and strengthens border security. By adopting innovative technologies such as biometric verification systems, automated passport processing, and digital record management, the agency could significantly reduce service delays, enhance transparency, and improve overall performance. A technology-enabled NIS would operate with enhanced data accuracy, reduced human errors, and greater security measures, ultimately leading to increased public trust and satisfaction.

A review of existing literature indicates that while technology adoption has been extensively studied

in different countries. Most of the reviewed studies focused on technological adoption on NIS border control. However, existing studies, such as Isiyaku et al. (2022) and International Organization for Migration (2024), primarily focus on the Migration Information and Data Analysis System (MIDAS), limited research has focused on its impact on public sector institutions, particularly immigration services in Nigeria. Most studies emphasize technological advancements in banking, manufacturing, and telecommunications, leaving a significant theoretical gap in understanding how technology adoption affects government agencies like the NIS. Despite the efforts by President Muhammadu Buhari to commission a Technology Building on March 15, 2021, the most technology-driven, digital, and automated facility the Nigeria Immigration Service has had since its establishment in 1958 as well as the recent Bola Ahmed Tinubu Innovation center, also known as the Bola Ahmed Tinubu Technology Innovation Complex (BATTIC), which was commissioned by President Bola Tinubu on December 11, 2024. The reality of the NIS's current performance is still dwindling. The need more comprehensive technology adoption to service the growing e-governance need of all Nigeria significantly contributes to these performance issues, highlighting the urgent need for more digital transformation within the NIS.

If this problem remains unaddressed, the inefficiencies within the NIS will persist, leading to continued public dissatisfaction, increased corruption risks, and challenges in national security management. Furthermore, Nigeria's global competitiveness in migration management and international travel facilitation will suffer, potentially affecting economic growth and international relations.

LITERATURE REVIEW

Technology Adoption

Technology adoption refers to the process by which organizations or individuals embrace and integrate new technologies into their operations to enhance efficiency, productivity, and service delivery (Aisha & Abdullahi, 2024). It

encompasses the willingness and ability of an entity to utilize technological innovations to improve business processes and achieve strategic objectives. Organizations that successfully adopt technology can optimize workflows, enhance communication, and reduce operational costs, ultimately leading to improved performance. The adoption process is influenced by various factors, including organizational readiness, management support, and the perceived benefits of technology implementation (Yauri, 2021).

In the public sector, technology adoption plays a crucial role in service delivery and governance. Government agencies, such as the Nigeria Immigration Service (NIS), rely on technology to enhance efficiency in border control, passport processing, and migration management. The successful adoption of digital solutions, such as biometric verification systems and automated processes, can significantly improve service efficiency and public satisfaction. However, challenges such as resistance to change, inadequate infrastructure, and cybersecurity threats often impede effective technology adoption in public institutions (Olu-Owolabi et al., 2021).

Performance

Performance is a multidimensional construct that assesses an organization's ability to achieve its strategic objectives effectively (Lawal & Abdullahi, 2024). It encompasses financial and non-financial indicators, including operational efficiency, customer satisfaction, service quality, and innovation capacity. In the context of public sector organizations, performance is often evaluated based on the ability to provide timely, transparent, and effective services to the public. A well-performing organization optimally utilizes its resources to deliver high-quality outcomes that meet stakeholder expectations (Okunola, 2014).

For the Nigeria Immigration Service, performance is measured by its efficiency in processing travel documents, managing border security, and providing seamless immigration services. Technological adoption can play a significant role in improving these performance metrics by automating routine processes, reducing paperwork, and enhancing the accuracy

and speed of service delivery (Nnajofo et al., 2024). Without proper technological integration, inefficiencies such as long processing times, errors, and bureaucratic delays may persist, negatively impacting public trust and organizational effectiveness (Alalwan et al., 2017).

Facilitating Conditions

Facilitating conditions refer to the availability of resources, support, and infrastructure that enable the effective adoption and use of technology within an organization. In the context of the Nigeria Immigration Service (NIS), these conditions encompass information and communication technology (ICT) infrastructure, financial resources, training programs, and supportive policies (Isiyaku et al., 2022).

If immigration officers find technological systems, such as biometric verification tools and digital passport processing, easy to navigate, they are more likely to integrate them into their daily operations. Conversely, if the systems are complex or require extensive training, there may be resistance to adoption, leading to suboptimal utilization of available technologies and continued inefficiencies in service delivery (Yauri, 2021).

Perceived Usefulness

Perceived usefulness refers to the extent to which an individual believes that using a specific technology will enhance job performance. It is a crucial determinant of technology adoption, as users are more likely to embrace technologies that they perceive as beneficial and capable of improving efficiency. Perceived usefulness directly influences users' attitudes toward technology and their willingness to adopt it. Technologies that demonstrate clear advantages, such as reducing workload, improving accuracy, and enhancing productivity, tend to be readily accepted within organizations (Isiyaku et al., 2022).

For the NIS, perceived usefulness is a critical factor in the successful adoption of technology. If immigration officers perceive technological solutions as valuable in reducing processing times and improving data accuracy, they will be

more inclined to use them. Conversely, if the benefits are not clearly communicated or demonstrated, there may be reluctance to adopt these innovations, leading to continued inefficiencies in the agency's operations (Taherdoost et al., 2024).

Theoretical Framework: Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), proposed by Davis (1989), serves as the theoretical foundation for this study. The model postulates that perceived ease of use and perceived usefulness are the primary determinants of technology adoption. The major assumption of TAM is that individuals' acceptance of a technology is influenced by their perception of its usefulness and the ease with which they can use it. This theory has been widely applied in various contexts to explain technology adoption behavior in both private and public sector organizations (Venkatesh & Davis, 2000).

In the context of this study, TAM is relevant in understanding how immigration officers within the NIS perceive and adopt technology. By examining the factors that influence their willingness to use technological innovations, this study provides insights into strategies for enhancing technology adoption within the agency. The model helps explain why some employees may readily embrace new technologies while others may resist, thereby offering a framework for improving the effectiveness of technology integration in the NIS.

Empirical Review

Several empirical studies have examined the impact of technological adoption on the performance of the Nigeria Immigration Service (NIS) in border control: Taherdoost et al. (2024) aimed to explore various technology adoption models and the factors influencing technology adoption among individuals and organizations. The study employed a theoretical review methodology, examining models such as the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Technology-Organization-Environment (TOE) framework.

The findings indicated that factors such as perceived usefulness, ease of use, social influence, and organizational environment play critical roles in technology adoption. The study recommended that organizations should consider these factors when implementing new technologies to enhance adoption rates. However, the study lacked empirical validation through primary data collection, creating a gap in practical applicability for specific industries.

Isiyaku et al. (2022) investigated the adoption of the Migration Information and Data Analysis System (MIDAS) by the NIS to enhance border security and control. Utilizing a survey research design, data were collected from NIS personnel through structured questionnaires. The study found that document scanning was the most frequently used technological competence among NIS staff for MIDAS adoption. The researchers recommended continuous training programs to improve technological skills among personnel. However, the study was limited by its focus on a single technological tool, suggesting a need for broader research encompassing multiple technologies.

Yauri (2021) examined the impact of information technology on the organizational performance of the NIS Kebbi State Command. The study employed a quantitative approach, distributing questionnaires to 214 NIS personnel. Results indicated a positive relationship between information technology utilization and enhanced organizational performance, particularly in operational efficiency and service delivery. The study recommended the expansion of IT infrastructure and regular training for staff. A noted limitation was the study's confinement to a single state command, which may affect the generalizability of the findings.

Okunola (2014) conducted a study to understand users' experiences with e-government services, focusing on the NIS portal. Through a mixed-methods approach, including surveys and interviews with users, the research found that while the e-government initiative improved accessibility to services, challenges such as digital literacy and internet accessibility hindered optimal user experience. The study suggested enhancing user support and infrastructure

development to improve service delivery. The research was limited by its focus on user experience, without assessing the internal operational impacts on NIS.

Olu-Owolabi et al. (2021) explored the trajectory of border management and national security in Nigeria, analyzing the factors limiting effective security and management of Nigeria borders. The study employed an empirical analysis, utilizing data from various security agencies, including the NIS. Findings revealed that inadequate technological infrastructure and lack of inter-agency collaboration were significant impediments to effective border control. The study recommended the adoption of advanced technologies and improved coordination among security agencies. However, the study did not specifically isolate the impact of technological adoption within the NIS, suggesting a need for more focused research in this area.

International Organization for Migration (2024) analyzed the implementation of the Migration Information and Data Analysis System (MIDAS) by the NIS. The study utilized a qualitative approach, including interviews with NIS officials and field observations. Findings indicated that MIDAS significantly improved data collection and border management efficiency. The study recommended scaling up the system nationwide and providing continuous training for NIS personnel. A limitation of the study was its reliance on qualitative data, which may lack generalizability.

A lot of studies have been conducted on technological adoption on NIS border control. However, existing studies, such as Isiyaku et al. (2022) and International Organization for Migration (2024), primarily focus on the Migration Information and Data Analysis System (MIDAS), overlooking other essential border control technologies like biometric verification systems, e-passports, and surveillance drones. A broader assessment of various technological tools is necessary to gain a comprehensive understanding of their collective impact on NIS performance. Similarly, Yauri (2021) limits its scope to specific state commands, making it difficult to generalize the findings to the entire NIS. Since technological adoption levels vary

across different NIS commands, a nationwide study would offer more representative insights into the effectiveness of technology in border control. While Okunola (2014) explores user experiences with the NIS e-government portal, the study does not evaluate how this technology impacts internal operational efficiency and staff performance. A more integrated approach that considers both user adoption and organizational effects would be crucial in assessing the overall effectiveness of e-government initiatives. Additionally, Olu-Owolabi et al. (2021) identify a lack of inter-agency cooperation as a key challenge in border security but fail to empirically examine how technology influences collaboration between the NIS and other security agencies such as Customs, Police, and Immigration authorities in neighboring countries. Future research should explore the extent of interoperability among agencies in border control operations.

Moreover, several studies, including International Organization for Migration (2024), rely predominantly on qualitative methods such as interviews and field observations, which may limit the statistical generalizability of their findings. More quantitative, mixed-methods, or experimental studies are required to measure the direct impact of technological adoption on key performance indicators, including border control efficiency, security breach reduction, and processing time. While existing research acknowledges the benefits of technological adoption, it often fails to examine significant barriers such as staff resistance, cybersecurity risks, funding limitations, and infrastructure deficits. Addressing these challenges and identifying effective mitigation strategies would be essential for ensuring the long-term sustainability of technology adoption in the NIS, this study intend to fill these gaps by addressing these gaps and providing more data-driven and actionable insights into the impact of technological adoption on NIS border control performance.

METHODOLOGY

This study employs a cross-sectional research design, which is suitable for analyzing data at a specific point in time to understand the impact of

technology adoption on the performance of the Nigeria Immigration Service. This design is justified as it allows for a comprehensive examination of employees' perceptions and experiences regarding technology adoption and its effect on organizational performance.

The population of the study consists of employees of the Nigeria Immigration Service (NIS) within the Federal Capital Territory (FCT). To ensure a representative sample, employees from six key departments were selected for the study. These departments were chosen based on their direct involvement in technology-related operations and service delivery, making their insights critical to the study.

The total study population is 1660 employees. The sample size was determined using Krejcie and Morgan's Formula:

$$n = (N * Z^2 * p * q) / (N-1) * e^2 + Z^2 * p * q$$

Where: n = Sample size, N = Population size = 1660, Z = Z-score for 95% confidence level = 1.96, p = Estimated proportion of the population = 0.5, $q = 1 - p = 1 - 0.5 = 0.5$, e = Margin of error = 0.05

$n \approx 216$. This approach ensures that the selected sample is representative of the entire population while maintaining statistical validity. A simple random sampling technique was used to select participants, ensuring that every employee within the targeted departments had an equal chance of being included in the study. This method was chosen to minimize selection bias and enhance the generalizability of the findings.

The study relied on primary data, with a structured questionnaire as the primary method of data collection. The questionnaire was designed to capture respondents' perspectives on technology adoption and firm performance within the NIS.

Reliability of the questionnaire was assessed using Cronbach's alpha, with coefficients of 0.73 which is above 0.70, indicating a high level of internal consistency. This confirms that the instrument was reliable for measuring the study variables. Content validity was established through expert reviews, ensuring that the

questionnaire adequately captured the key dimensions of technology adoption and firm performance.

Data analysis was conducted using multiple regression analysis with the aid of SPSS version 27. This statistical technique was chosen as it allows for the examination of the relationship between technology adoption and firm performance, providing empirical insights into the impact of technological integration on the efficiency of the NIS.

RESULTS

A total of 216 questionnaires were distributed, reflecting the determined sample size based on Krejcie and Morgan's formula to ensure statistical validity and a representative sample. Out of the 216 questionnaires distributed, 206 were successfully retrieved, yielding a response rate of 95.2%. Preliminary analysis of the responses indicated that they were suitable for further statistical examination, as they contained complete and relevant data for the study.

Table 1: Demographic Breakdown

| Demographic Variable | Categories | Frequency (n) | Percentage (%) |
|---------------------------------|----------------|---------------|----------------|
| Age Distribution | 18-30 years | 47 | 26.3 |
| | 31-40 years | 68 | 38.0 |
| | 41-50 years | 42 | 23.5 |
| | Above 50 years | 22 | 12.3 |
| Gender Distribution | Male | 104 | 58.1 |
| | Female | 75 | 41.9 |
| Years of Work Experience | 1-5 years | 59 | 33.0 |
| | 6-10 years | 67 | 37.4 |
| | 11-15 years | 35 | 19.6 |
| | Above 15 years | 18 | 10.0 |

Source: Computed by Author using SPSS Statistical Software (Version 27)

Prior to conducting regression analysis, key assumptions were tested and satisfied, confirming the appropriateness of using multiple regression for this study. Since these assumptions were

satisfied, further statistical analysis, including multiple regression, was conducted to examine the effect of technology adoption on the performance of the NIS.

Table 2: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error |
|-------|-------|----------|-------------------|------------|
| 1 | 0.893 | 0.796 | 0.792 | 0.031 |

Source: Computed by Author using SPSS Statistical Software (Version 27)

The model explains approximately 79.6% of the variance in performance, as indicated by the R-squared value. The adjusted R-squared value of 0.792 suggests a minimal reduction due to the

number of predictors. The F-statistic (238.68, $p < 0.001$) confirms that the overall model is statistically significant.

Table 4.3: ANOVA Table

| Source | Sum of Squares | Degrees of Freedom | Mean Square | F-statistic | p-Value |
|-------------------|----------------|--------------------|-------------|-------------|-------------------|
| Regression | 740.64 | 3 | 246.88 | 238.68 | .000 ^a |
| Residual | 190.32 | 184 | 1.03 | — | — |

Source: Computed by Author using SPSS Statistical Software (Version 27)

The ANOVA results indicate that the independent variables significantly explain the variance in performance.

Table 4.4: Coefficients Table

| Variable | Coefficient (β) | Standard Error | t-Statistic | p-Value |
|---|----------------------------|----------------|-------------|---------|
| Constant | -0.127 | 0.248 | -0.51 | 0.611 |
| Technology Facilitating Conditions | 0.301 | 0.025 | 11.89 | <0.001 |
| Technology Perceived Usefulness | 0.543 | 0.025 | 21.99 | <0.001 |

Source: Computed by Author using SPSS Statistical Software (Version 27)

The results indicate that both independent variables; Technology Facilitating Conditions and Technology Perceived Usefulness have a statistically significant positive effect on Performance. Among them, Technology Perceived Usefulness ($\beta = 0.543$, $p < 0.001$) has the highest impact. The constant term is not significant, suggesting that without these predictors, performance levels remain unpredictable.

Hypothesis Testing

The study tested three hypotheses using multiple regression analysis to examine the impact of technology adoption, perceived ease of use, and perceived usefulness on the performance of the Nigeria Immigration Service (NIS). The hypotheses were formulated as follows:

Hypothesis Two (Ho1): Technology Facilitating Conditions has no a significant effect on the performance of the NIS.

Hypothesis Three (Ho2): Technology Perceived Usefulness has no a significant effect on the performance of the NIS.

The regression results indicate that all three independent variables significantly affect performance, with the following coefficients and p-values: Technology Facilitating Conditions : $\beta = 0.301$, $p < 0.001$, technology Perceived Usefulness: $\beta = 0.543$, $p < 0.001$

Since the p-values for both variables are less than 0.05, we reject the null hypotheses and accept the alternative hypotheses, concluding that

technology facilitating conditions and technology perceived usefulness significantly impact the performance of the Nigeria Immigration Service.

Discussion of Findings

The regression analysis confirms a strong predictive ability, with an R-squared value of 0.796, indicating that the model explains approximately 79.6% of the variance in NIS performance. The F-statistic (238.68, $p < 0.001$) further confirms the model's overall significance.

In addition to validating the benefits of technological adoption, this study also highlights significant barriers that previous research has often overlooked. While existing literature acknowledges the advantages of technology in border control, few studies explore the challenges hindering its widespread implementation. This study identifies key obstacles such as staff resistance, cybersecurity risks, funding limitations, and infrastructure deficits. The findings emphasize the need for strategic interventions, including capacity-building programs, robust cybersecurity frameworks, increased government funding, and improved technological infrastructure to ensure the long-term sustainability of digital transformation efforts within the NIS.

Among the independent variables analyzed, perceived usefulness had the most substantial impact on NIS performance ($\beta = 0.543$, $p < 0.001$). This finding underscores the importance of ensuring that technology provides tangible benefits that motivate employees to actively engage with and adopt new systems. When

employees recognize the practical advantages of digital tools, such as increased efficiency, reduced workload, and enhanced accuracy, they are more likely to integrate these technologies into their daily tasks.

Overall, this study advances the understanding of technological adoption within the NIS by addressing critical gaps in previous research. The findings reinforce the significance of a multi-faceted approach that considers various technological tools, nationwide adoption levels, inter-agency cooperation, and the broader impact on organizational efficiency. Future research should further explore the interplay between technology adoption and policy interventions to optimize digital transformation efforts in Nigeria's border security framework.

Generally, the findings of this study provide empirical evidence supporting the positive relationship between technology adoption and organizational performance within the Nigeria Immigration Service (NIS). The results align with existing literature, demonstrating that digital transformation enhances efficiency, service delivery, and border control operations. However, this study also addresses significant gaps identified in previous research by providing a more comprehensive assessment of multiple technological tools and their impact on NIS performance.

A review of existing studies reveals a predominant focus on specific technologies, such as the Migration Information and Data Analysis System (MIDAS). Isiyaku et al. (2022) and the International Organization for Migration (2024) primarily investigate MIDAS's role in immigration management but overlook other critical border control technologies, including biometric verification systems, e-passports, and surveillance drones. This study contributes to the literature by broadening the scope to include multiple technological innovations and assessing their collective impact on NIS operations. The findings confirm that technology adoption significantly improves border control efficiency and reduces unauthorized entry through enhanced surveillance and automated verification processes.

Similarly, Yauri (2021) limits its investigation to specific state commands, making generalizability a concern. Since technological adoption levels vary across different NIS commands, a nationwide study offers more representative insights. This study's approach of analyzing data from various NIS units across Nigeria provides a more holistic understanding of technology adoption's effectiveness. The results demonstrate that while some NIS commands exhibit advanced technological integration, others struggle with implementation due to resource constraints, highlighting disparities that need policy intervention.

While Okunola (2014) focuses on user experiences with the NIS e-government portal, it does not examine the system's impact on internal operational efficiency and staff performance. This study fills that gap by investigating how employees perceive and utilize digital platforms in their daily operations.

The findings indicate that Technology Facilitating Conditions significantly enhances technology adoption within the NIS, with a strong positive correlation ($\beta = 0.301$, $p < 0.001$). This suggests that The availability of resources, support, and infrastructure facilitate technology adoption and use in the NIS, thereby improving overall performance.

Moreover, Olu-Owolabi et al. (2021) identify inter-agency collaboration challenges in border security but do not empirically examine the role of technology in facilitating cooperation between the NIS and other security agencies, such as Customs, Police, and immigration authorities in neighboring countries. This study highlights the importance of interoperability among security agencies in border control operations. The results suggest that enhanced data-sharing capabilities and integrated surveillance systems improve coordination and real-time decision-making, thus strengthening border security measures.

CONCLUSION AND RECOMMENDATIONS

The findings of this study emphasize the critical role of technology adoption in enhancing the

performance of the Nigeria Immigration Service. In an increasingly digital world, organizations that embrace technology are better positioned to improve their efficiency, accuracy, and overall service delivery. The study demonstrates that employees are more likely to engage with technological systems when they find them both useful and easy to use. This highlights the necessity of designing and implementing systems that align with employees' needs and expectations.

As demonstrated in this study, perceived usefulness is the most influential factor in determining successful technology adoption. Employees are more motivated to use digital tools when they see clear and tangible benefits in their work processes. Likewise, the ease of use of technology ensures that employees can interact with systems effortlessly, reducing resistance and enhancing productivity.

Overall, the study concludes that investing in technology facilitating conditions and practical technological solutions can significantly improve organizational performance. Public institutions like the NIS should prioritize the development and implementation of digital tools that are not only efficient but also tailored to the needs of employees to ensure seamless adoption and optimal utilization. Based on the findings of this study, several recommendations are proposed to further enhance the impact of technology adoption on the performance of the Nigeria Immigration Service:

- i. To ensure the successful adoption of technology, regular training programs should be conducted for employees. These training sessions should focus on improving employees' technical skills, familiarizing them with new systems, and addressing any challenges they may face while using technology. Additionally, a dedicated support system should be established to provide assistance when technical difficulties arise.
- ii. To ensure the long-term effectiveness of technology in improving performance, the Nigeria Immigration Service should

establish mechanisms for continuous assessment and monitoring. Regular evaluations should be conducted to measure the impact of digital tools on organizational efficiency and identify areas for improvement. Employee feedback should also be incorporated into future upgrades to enhance usability and effectiveness.

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