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Technological Innovation and The Performance of National Identity Management Commission In Nigeria

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Abstract
The National Identity Management Commission (NIMC) in Nigeria has undergone significant operational and performance modifications due to technological advancements. An investigation has been conducted to analyze the influence of technological advancements on the performance of the National Identity Management Commission in Nigeria. The study's objectives focused on evaluating the impact of implementation on the Commission's performance and determining the influence of value creation on its performance. A survey research approach was employed, with a sample of 576 NIMC employees in Nigeria selected from six states representing distinct geo-political zones: Kogi, Lagos, Adamawa, Kano, Enugu, and Rivers. Data collection from participants was facilitated through a questionnaire as the primary data collection method. The analytical methods utilized in the study included descriptive and multiple regression analyses to evaluate the formulated hypotheses. The research findings indicate that effective implementation and value creation have significantly enhanced the NIMC's performance, leading to increased citizen satisfaction, improved service delivery, and overall national development enhancement. The study's conclusion emphasizes that the integration of advanced technologies has notably improved data collection, management, and security, resulting in a more dependable and effective national identity system. Innovations such as biometric verification, digital platforms, and mobile registration units have amplified accessibility, reduced fraud, and improved service provision. It is advisable for the NIMC to consistently invest in cutting-edge technologies, such as artificial intelligence, machine learning, and blockchain, in order to enhance the accuracy, security, and efficiency of identity management processes.

Keyword: Technology, Innovation, Implementation, Value Creation, National, Identity, Management, Commission, Nigeria

Introduction

In recent years, technological innovation has become a pivotal force in enhancing the efficiency and effectiveness of governmental institutions worldwide. One such institution undergoing significant transformation due to technological advancements is the National Identity Management Commission (NIMC) in Nigeria. Established to oversee the creation and management of a national identity system, NIMC plays a crucial role in the country's governance and socio-economic development. The implementation of cutting-edge technologies has been pivotal in reshaping how the commission operates, manages data, and delivers services. Technological innovation in identity management encompasses a range of advancements, including biometrics, digital databases, and secures data transmission systems (Ali, 2022). These technologies are instrumental in improving the accuracy and reliability of national identity

systems, ensuring that citizens' information is securely captured, stored and processed. For NIMC, leveraging such technologies can lead to enhanced operational efficiency, reduced processing times, and improved service delivery to the Nigerian populace (Ghajiga & Warlimont, 2020).

The National Identity Management Commission (NIMC) in Nigeria faces significant challenges in achieving its mandate due to issues related to technological innovation. Despite the critical role of the NIMC in providing a reliable and secure identity management system for the country, there are concerns about its performance in terms of efficiency, accuracy, and accessibility. Key problems include outdated technological infrastructure, inadequate integration of advanced technologies, and limited digital literacy among the population. (Monye & Koker, 2022) These challenges hinder the NIMC's ability to effectively manage and protect national identity data, leading to inefficiencies and potential security vulnerabilities (Ohiani, 2020). Addressing these issues through targeted technological innovations is essential for improving the overall performance and reliability of the NIMC in Nigeria.

The following questions were raised to address below objectives

i. To what extent does implementation of data integrity and accuracy enhances the performance of National Identity Management Commission in Nigeria?
ii. To what extent does value Creation enhance the performance of National Identity Management Commission in Nigeria

The main objective of the study is to investigate the technological innovation and the performance of National Identity Management Commission in Nigeria.

The specific objectives were to:

i. Assess the influence of implementation of data integrity and accuracy on the performance of National Identity Management Commission in Nigeria
ii. Ascertain the effect of value Creation on the performance of National Identity Management Commission in Nigeria

The following null hypotheses were formulated for the study;

HO_3: Implementation has no significant effect on the performance of National Identity Management Commission in Nigeria

HO_4: Value Creation has no significant effect on the performance of National Identity Management Commission in Nigeria

Review of Related Literature

Concept of Technology Innovation

Technological innovation involves the systematic application of scientific knowledge to create new or improved products, processes, or services this process focuses on practical implementation and problem-solving to meet specific technical challenges or enhance existing systems, it comprises several stages, each critical to ensuring that the innovation is effective and valuable (Adeyemi, 2023). The innovation process begins with identifying specific technical challenges or areas for improvement, this involves analyzing current systems, understanding their limitations and pinpointing opportunities where scientific and engineering advancements can make a significant impact. Once the challenges are identified, extensive research is conducted to explore potential solutions; this stage involves investigating new scientific principles, emerging technologies and engineering methodologies. Collaboration among researchers, engineers and scientists is crucial to generate innovative ideas and approaches. During this phase, initial concepts are developed into detailed designs, engineers and designers work together to create blueprints, models and simulations of the proposed solutions this stage emphasizes practicality, feasibility and efficiency to ensure that the designs can be effectively implemented (Uchechukwu et al., 2016).

Technological innovations, particularly the adoption of biometric technology, have streamlined the identity registration and verification processes, this has led to increased efficiency and speed in providing identity

services, citizens can obtain their National Identification Numbers (NIN) and National ID cards more quickly, enhancing their overall experience. Innovations such as biometric data collection (fingerprint and facial recognition) have significantly improved the accuracy and security of identity data. Biometric technology reduces the risk of fraudulent identity registrations and identity theft, safeguarding citizens' personal information.(Oyedeji, 2018). Biometric technology has significantly simplified and expedited the process of identity registration and verification. Traditional methods, often reliant on paper documentation and manual checks, are time-consuming and prone to errors. In contrast, biometrics uses unique physical characteristics such as fingerprints, facial features, and iris patterns to quickly and accurately identify individuals (Theophilus, 2023).

The use of biometric systems has drastically reduced the time required for citizens to obtain their National Identification Numbers (NIN) and National ID cards. Automated biometric data collection and processing allow for rapid enrollment and verification, minimizing wait times and enhancing the overall user experience, this increased efficiency benefits both the service providers and the citizens. The convenience and speed of biometric systems improve the overall experience for citizens, quick and seamless identity verification processes mean that individuals can access services and complete transactions more efficiently, reducing frustration and increasing satisfaction. Biometric data collection methods, such as fingerprint scanning and facial recognition, offer a high degree of accuracy in identity verification. Unlike traditional methods that rely on documents that can be forged or altered, biometric characteristics are unique to each individual and difficult to replicate, ensuring a more reliable verification process (Ibrahem et al., 2018).

The adoption of biometric technology extends beyond national ID programs. It is widely used in various sectors, including banking, healthcare, border control, and law enforcement. In banking, biometrics enables secure and quick access to accounts and transactions. In healthcare, they ensure accurate patient identification and secure access to medical records. At borders, biometric systems streamline immigration processes and enhance security (Maduka, 2016). As biometric technology continues to evolve, new innovations and applications are emerging. Advancements such as multi-modal biometrics, which combine multiple biometric traits (e.g., fingerprint, face, and iris) for even higher accuracy and security, are being developed. Additionally, the integration of biometric technology with artificial intelligence and machine learning can further enhance its capabilities and efficiency (Olawale, 2021).

Implementation of data integrity and accuracy and the performance of National Identity Management Commission in Nigeria

For any national identity system, public trust is paramount; citizens are more likely to participate in identity enrollment when they trust that their data will be handled responsibly and protected from errors or unauthorized changes. Accurate and integrity-assured data helps NIMC establish credibility, ensuring that citizens have confidence that their personal information is safe, up-to-date, and accessible. Implementing data integrity and accuracy is critical for the performance of the National Identity Management Commission (NIMC) in Nigeria, as it directly influences the commission's ability to manage, authenticate, and safeguard citizens' identities. (Jacob & Ndubuisi, 2020). Effective implementation ensures that the information stored within NIMC's databases is consistent, complete, and unaltered, by maintaining high standards of data integrity; NIMC can streamline its processes, minimizing the need for manual verification and corrections. This significantly reduces processing time for citizen identity verifications, making the services faster and more efficient. (Monye & Koker, 2022). Accurate data is essential for data-driven decision-making and policy formulation. With reliable data, NIMC can provide accurate reports to government agencies and stakeholders, which are crucial for planning resource allocations, implementing policies, and monitoring national security concerns. (Faboye, 2022).

Value Creation and the performance of National Identity Management Commission in Nigeria

Value creation refers to the process of improving the worth of a product, service, or organization by enhancing its utility, benefits, or overall impact. By creating value through improved systems and processes, NIMC can offer better service delivery to citizens. This includes faster and more reliable issuance of national IDs, better customer service and efficient handling of queries and issues. Value creation leads to higher satisfaction among users, which can enhance the overall perception of the Commission, it often involves optimizing processes and leveraging technology (Oyekale, 2017). For NIMC, this can mean automating administrative tasks, improving data management systems and streamlining workflow, as a result, the Commission can operate more efficiently, reduce operational costs and improve the speed and accuracy of services. Creating value through advanced data protection measures can enhance the security and privacy of personal information managed by NIMC; this includes implementing robust encryption, secure access controls, and regular security audits, improved data security builds public trust and reduces the risk of identity theft and fraud (Ukeje et al., 2020). When NIMC successfully creates value by providing reliable, efficient, and secure services, it fosters greater public trust. Citizens are more likely to engage with and utilize the national ID system if they perceive it as valuable and trustworthy, this increased adoption leads to higher participation rates and broader usage of the national ID system (Anifowose et al., 2018).

The Impact of Technological Innovation on National Identity Management Commission in Nigeria

Technological innovation has the potential to significantly impact the performance of the National Identity Management Commission (NIMC) in Nigeria across various dimensions (Faboye, 2022).

Efficiency in Enrollment Processes: Technological innovations such as biometric identification systems (e.g., fingerprint, iris scanning) and digital registration platforms can streamline the enrollment processes at NIMC; this reduces the time and resources required for capturing and verifying identity information, leading to faster issuance of national identification numbers (NINs) and cards.

Enhanced Accuracy and Security: Advanced technologies improve the accuracy and security of identity data managed by NIMC. Biometric authentication methods reduce the likelihood of identity fraud and duplication. Secure databases and encryption technologies protect personal information, ensuring compliance with data protection regulations and enhancing public trust.

Increased Coverage and Accessibility: Technological innovations enable NIMC to extend its services to remote and underserved areas. Mobile registration units equipped with biometric devices can reach populations that previously had limited access to identity services. Digital platforms for registration and verification facilitate easier interaction with citizens, including online and mobile channels.

Improved Service Delivery: By leveraging technology, NIMC can improve overall service delivery to citizens. Automated processes reduce administrative bottlenecks, allowing staff to focus on higher-value tasks such as customer support and quality assurance. Integration with other government agencies and service providers enables seamless verification of identities for various purposes, such as voting, healthcare access, and financial services.

Cost Efficiency: While initial investments in technology may be significant, the long-term operational costs can decrease due to efficiencies gained. Automated processes reduce the need for manual data entry and paperwork, minimizing operational expenses and improving budget allocation for other critical areas of identity management.

Performance Measurement of National Identity Management Commission in Nigeria

The performance indicators of the National Identity Management Commission (NIMC) in Nigeria typically include:

Enrollment Rates: This measure the percentage of the population enrolled in the National Identity Database relative to the total population. Higher enrollment rates indicate broader coverage and effectiveness in reaching citizens.

Issuance of National Identification Numbers (NIN): The number of NINs issued shows progress in assigning unique identification numbers to individuals, which is crucial for various government services and identity verification.

Integration with Government Services: The extent to which NIMC's infrastructure is integrated with other government services (e.g., voter registration, healthcare, education) can indicate efficiency and accessibility of identity verification processes.

Infrastructure Development: Investments in infrastructure, such as enrollment centers and digital infrastructure for data management and security reflect NIMC's capacity to handle increasing demands and ensure data protection.

Service Accessibility and Turnaround Time: Metrics related to the accessibility of NIMC services (e.g., availability of enrollment centers) and the time it takes for citizens to obtain their NINs and related services.

Public Awareness and Education: Indicators measuring public awareness campaigns and education efforts aimed at encouraging citizens to enroll and understand the benefits of having a national identity number.

Data Security and Privacy Measures: Measures and audits of data security protocols and privacy protections implemented by NIMC to safeguard citizens' personal information.

Compliance and Regulatory Adherence: Adherence to regulatory frameworks and standards set by national laws and international best practices in identity management.

Challenges of Technological Innovation toward the performance of National identity Management Commission

Technological innovation holds great promise for enhancing the performance of the National Identity Management Commission (NIMC) in Nigeria. However, several challenges need to be addressed for these innovations to be effectively implemented and sustained (Ogochukwu, 2021):

Infrastructure Limitations: Nigeria faces significant challenges in terms of technological infrastructure, especially in rural and underserved areas; Limited access to electricity, internet connectivity, and reliable telecommunications networks can hinder the deployment and operation of advanced technology solutions by NIMC, this could result in unequal access to identity services across different regions of the country.

Data Privacy and Security Concerns: Protecting the privacy and security of personal data is paramount in identity management. Technological innovations, such as biometric databases and digital platforms, increase the risk of data breaches, identity theft, and unauthorized access if not properly secured. Concerns about data privacy and security can erode public trust in NIMC's identity management systems.

Financial Constraints: Implementing and maintaining technological innovations often require substantial financial resources, this includes investments in hardware, software, infrastructure upgrades and ongoing maintenance costs. Limited financial resources may delay the adoption of advanced technologies by NIMC or restrict the scale of deployment; this could lead to slower progress in improving service delivery and achieving operational efficiencies.

Skills and Capacity Building: Effective utilization of technological innovations requires skilled personnel capable of managing and maintaining complex systems, there may be gaps in technical expertise and capacity within NIMC and its partner organizations. This could lead to operational inefficiencies, errors in data management, and challenges in providing technical support to users.

Integration with Existing Systems: NIMC's identity management systems need to integrate seamlessly with other government agencies, private sector entities, and service providers. Legacy systems and disparate databases pose integration challenges. Incomplete integration can lead to duplication of efforts, inconsistencies in data, and delays in identity verification processes.

Theoretical Framework

Resource-Based Theory

The Resource-Based View (RBV) of the Firm was initially postulated by Edith Penrose in 1959. The theory suggests that competitive advantage stems from valuable, rare and inimitable internal resources. For NIMC, this means focusing on leveraging its existing resources such as its expertise in biometric technology, data management systems, and regulatory frameworks for identity management. RBV emphasizes the importance of investing in technological capabilities that are difficult for competitors to replicate (Ayeni, 2020). NIMC should prioritize investment in state-of-the-art biometric systems, secure databases, and digital identity platforms to enhance its technological infrastructure and stay ahead in the field of identity management (Jacob et al., 2021).

RBV underscores the significance of human capital in driving innovation and performance. NIMC can invest in training programs to develop the skills of its workforce in areas such as data analytics, cybersecurity, and emerging technologies, ensuring that it has the necessary expertise to implement and manage innovative identity management solutions. RBV highlights the strategic importance of alliances and partnerships in accessing external resources and capabilities. NIMC can collaborate with technology firms, research institutions, and government agencies to access expertise, technologies, and funding for technological innovation projects, thereby strengthening its position in the identity management sector (Akinnuwesi et al., 2020).

RBV suggests that sustainable competitive advantage arises from possessing resources and capabilities that are valuable, rare, and difficult to imitate. By continuously investing in its technological capabilities, human capital, and strategic partnerships, NIMC can create a unique and difficult-to-replicate system for identity management, leading to superior performance and market leadership. RBV emphasizes the importance of performance measurement systems that capture the contribution of internal resources to organizational performance. NIMC should develop metrics to assess the effectiveness of its technological innovation efforts, such as the adoption rate of digital identity services, accuracy of biometric authentication, and efficiency of data management processes, to ensure that its investments in technology are yielding desired results (Onifade et al., 2015).

Empirical Review

Mario et al, (2023), study delve into the correlation between collaborative innovation and the financial success of small and medium-sized enterprises (SMEs) in Portugal's IT sector. They explore how absorptive capacity, along with intellectual capital comprising human, organizational, and social aspects, mediates and moderates this relationship. Gathering data from 308 employees and managers, they utilized close-ended questionnaires and adapted to the pandemic's constraints by incorporating online surveys. Employing a simple random sampling technique, they analyzed the data using PLS-SEM methodology. Their findings reveal a positive and significant link between collaborative innovation and financial performance among IT firms in Portugal. Additionally, absorptive capacity emerges as a crucial mediator in this relationship, while intellectual capital's moderating influence bolsters the connection between collaborative innovation and absorptive capacity.

Nwani & Odiri,(2023), investigated how strategy implementation affects the performance of deposit money banks in Nigeria, focusing on top and middle management at Zenith Bank Plc, Access Bank, Guaranty Trust Bank, First Bank Plc, and United Bank of Africa Plc headquarters. Using a descriptive research design, they surveyed 252 individuals, with 205 respondents. Data was collected via questionnaires, and simple regression analysis was employed. Their findings indicated a significant statistical correlation between strategy implementation and prompt service delivery, customer satisfaction, corporate social responsibility, and employee engagement. They recommend that managers and stakeholders prioritize prompt service delivery, social responsibility, employee engagement, and customer satisfaction to thrive in the competitive business landscape.

Fernandes et al. (2022) conducted quantitative research to explore the mediating role of collaborative professionals between transformational leadership and job satisfaction. Their study involved a sample size of 93 individuals, determined by saturation. Smart-PLS analysis was utilized for data analysis. The findings revealed a significant positive effect of transformational leadership on professional collaboration, which in turn positively influenced job satisfaction. Additionally, the study identified a significant positive effect of the mediating role of professional collaboration between transformational leadership and job satisfaction. The insights from this research are intended to inform school leaders, suggesting improvements in implementing leadership values such as stimulation, inspiration, motivation, and individual consideration in school programs.

Obialo & Akinjo (2021) explore the impact of three distinct sources of idea generation on business expansion within the Ibadan North Local Government Area of Oyo State, Nigeria. Their study involved a purposive sampling of 195 entrepreneurs, comprising 71 males (36%) and 124 females (64%), predominantly involved in ventures requiring creativity. Utilizing descriptive statistics and regression analysis, the researchers found that individual, corporate, and customer-centered ideation significantly influenced the growth trajectories of the surveyed entrepreneurs. Accordingly, these entrepreneurs actively sought inspiration from these diverse sources. The findings underscore the importance of fostering awareness regarding the value of ideational skills among both existing and aspiring entrepreneurs, as well as their employees, through targeted training initiatives. Such efforts are seen as essential for fostering sustained creativity and innovation within Nigerian enterprises. Furthermore, the study advocates for governmental and policy interventions aimed at incentivizing and facilitating business growth through the promotion and support of ideational prowess.

Oba-Adenuga & Modupe,(2018) investigated the impact of Ideation Creative Thinking Technique (ICTT) Training on the Creative Problem-Solving Skills (CPSS) of teaching personnel in Ogun State, Nigeria. The study utilized a pre-test, post-test, control, experimental design with a total of 80 participants, evenly distributed between male and female public teachers. These teachers were randomly selected from public secondary schools in the Sagamu and Ijebu-Igbo local government area headquarters within Ogun East Senatorial District. The treatment group underwent 45 minutes of instruction and training per week for eight weeks, while the control group received similar engagement over the same period. Data collection utilized the "Problem Solving Inventory" (PSI), an instrument developed by the researchers. The PSI was administered as a pre-test before the training and as a post-test immediately after the eight-week training period. One hypothesis was tested, and data analysis was conducted using the t-test statistical tool with a significance level of 0.05. The results revealed a significant effect of the training package on the participants (SD= 2.17; Std error = .13; $p < 0.05$). Based on these findings, it is recommended that the insights from this study be utilized to enhance the creativity and professional development of teaching personnel in Ogun State, Nigeria, through retraining and capacity-building initiatives based on the Ideation Creative Thinking Technique.

Gap in Literature

Despite the significant strides in technological advancements and their potential to enhance public sector performance, there remains a noticeable gap in the literature concerning the specific impact of technological innovation on the performance of the National Identity Management Commission (NIMC) in Nigeria.

While there are studies on the adoption of various technologies in the public sector, there is a lack of comprehensive evaluations specifically focused on how NIMC has adopted and integrated these technologies into its operations, this includes an assessment of the effectiveness and efficiency of these technologies in improving service delivery, reducing fraud and increasing the accessibility of identity management services.

There is limited empirical evidence on how technological innovations have impacted the operational efficiency of NIMC. Studies are needed to measure the extent to which technology has streamlined processes, reduced administrative burdens, and improved the accuracy and reliability of identity data.

The interoperability of NIMC's technological systems with other governmental and private sector databases is another area that requires more exploration. Studies could examine the challenges and successes in achieving seamless integration, which is crucial for the broader use of national identity data in various sectors.

Methodology

Descriptive research design was used by the investigator. This was due to the fact that descriptive research designs seek to investigate the opinions of a certain community regarding current conditions and behaviors. For the purpose of the study, information was gathered from primary and secondary sources. 576 staff of National Identity Management Commission formed the population of the study. Random sampling technique that gives each subject in a population an equal chance of showing up in the selection was used to calculate the sample size. The sample size of this population was determined using Krejcie and Morgan (1970) formula. This technique is used when the population for the study is known. The formula for Krejcie and Morgan is stated as:

x2 N(1-9)d2N-1+ x2P(1-p)

Where;

S = Sample size

X2 = The table value of chi-square for 1 degree of freedom at the desire confidence level (3.841).

N = Population Size

d = the degree of accuracy expressed as a proportion (.05)

Therefore;

S = 3.841576*.51- .5N(1-9)(.05)2576-1+ 3.841* .5(1-.5)

S = 3.841288(.5).0025287+ 3.841*.5(.5)

S = 553.1040.7175+0.96025

S = 553.1041.677.75

S = 329.67 S = 330

Therefore, the sample size for this study is 330

Using the primary and secondary data sources, data was gathered through administering of questionnaires to all the staff of NIMC in the study areas. The entire questions in the questionnaires were structured into 5-points Likert scale questionnaires with five options to choose from. The options answer provided for the questions start with 1 – which stands for “strongly agree”, 2 – which represents “agreed”, 3 – which represents undecided, 4 – which represent strongly disagreed, 5 - stand for “disagreed”. For the analysis, p = 0.05 was chosen as the significant level. The basis for accepting or rejecting each hypothesis is its level of relevance. To evaluate the hypotheses, multiple regression analysis was employed, with assistance from SPSS v.23, a statistical program for the social sciences.

Data Analysis and Discussion

A total of Three Hundred and Thirty (330) questionnaires were administered to the staff of National Identity Management Commission from six states of six geopolitical zones namely, North Central Zone: Kogi, North East Zone: Adamawa, North West Zone: Kano, South East Zone: Enugu, South South Zone: Rivers, South West Zone: Lagos. 316 copies were adequately filled and returned, while 14 copies were not returned. Therefore, 316 copies returned serve as the foundation for the study. Multiple regression analysis was the primary method used to test the hypotheses, and SPSS version 23 was utilized for this purpose.

Testing of Hypotheses

The researcher at this point tests the hypotheses formed earlier in other to accept or reject them and as well as determining the extent of their reliability. In other to achieve this, the researcher used multiple regression analysis method.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851[a]	.724	.722	.47864

a. Predictors: (Constant), Implementation of Data Integrity and Accuracy, Value Creation

The model summary shown in Table 1 indicates an R square value of 0.722, meaning that 72.2% of the variation in the dependent variable (NIMC performance) is explained by the independent variables (implementation of data integrity and accuracy and the value creation). The remaining 27.8% is attributed to other variables not included in the model. This suggests that the regression model is useful for making predictions, as the R square value is close to 1.

Table 2: Analysis of Variance (ANOVA[a])

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	187.650	2	93.825	409.544	.000[b]
	Residual	71.707	313	.229		
	Total	259.358	315			

a. Dependent Variable: NIMC performance

b. Predictors: (Constant), Implementation of Data Integrity and Accuracy, Value Creation

Table 2 presents an estimated F-value of 409.544 with a significance value of 0.000. This value is less than the P-value threshold of 0.05 ($p<0.05$), suggesting that the explanatory variables significantly influence changes in the dependent variable (NIMC performance). This test indicates that, among the various variables, some explanatory variables have a substantial impact on the dependent variable (NIMC performance).

Table 3: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.296	.079		3.747	.000
	Implementation of Data Integrity and Accuracy	.426	.050	.456	8.585	.000
	Value Creation	.414	.051	.434	8.181	.000

a. Dependent Variable: NIMC performance

The dependent variable in Table 3 is the performance of the National Identity Management Commission (NIMC) in Nigeria, which was assessed as a measure of technological innovation and performance. Implementation of data integrity and accuracy and the value creation are the independent variables, as shown in Table 3. The data indicates positive impact of independent variables on the dependent variable (NIMC performance). The t-test coefficients for implementation of data integrity and accuracy and the value creation are 8.585 and 8.181, respectively. Given that the P-value is 0.000, which is less than the 0.05 threshold ($P<0.05$), these variables are statistically significant at the 5% significance level. Consequently, the null hypotheses are rejected.

4.4 Discussion of Finding

This section deals with the explanations of the results obtained from the analysis of the research questions tested in the previous section and discussion of responses from the administered questionnaires to the sampled population for the study in order to answer the questions raised from the work. Multiple regression analysis was used in analyzing the two hypotheses and required decisions made. In summary, our findings are as follows:

The result of the test in research hypothesis one, using regression analysis at 5% level of significance resulted in our rejecting the null hypothesis (Ho) and accept alternative hypothesis (Hi) which gathered that; the high t-statistic (10.307) suggest a strong positive effect of implementation on the performance of national identity management commission in Nigeria. Implementation of user-friendly online platforms for registration and verification makes services more accessible to the public, reducing the need for physical visits to NIMC offices. Adhering to national and international standards for identity management ensures compliance with regulatory requirements and facilitates interoperability with other systems. This finding supports the view of (Ogochukwu, 2021) who posits that, effective implementation of public awareness campaigns ensures that citizens understand the importance of the national identity system and the processes involved in registration.

In research hypothesis two, the researcher gathered that, value creation through improved processes and technology leads to more efficient service delivery, automated systems reduce processing times for identity verification and issuance, simplified and streamlined procedures enhance the user experience, making it easier for citizens to obtain and manage their identity documents. This finding support the view of (Mohammed & Buba, 2023) who opined that, value creation involves implementing transparent processes that build public trust; clear communication and accountability improve the perception of NIMC among citizens, initiatives that add value, such as awareness campaigns and community engagement, result in higher participation rates and better public cooperation.

Conclusion and Recommendation

Technological innovation has profoundly shaped the performance of the National Identity Management Commission (NIMC) in Nigeria, marking a pivotal shift towards more efficient, secure, and inclusive identity management practices. The adoption of biometric technologies, such as fingerprint and facial recognition systems, has significantly improved the accuracy and reliability of identity verification processes, while also enhancing service delivery and public trust; NIMC's commitment to innovation, evidenced by its collaborations, ideation processes, and effective implementation strategies, has not only streamlined operations but also positioned it at the forefront of identity management in the region. These advancements have mitigated bureaucratic inefficiencies, reduced duplication, and strengthened data security measures, laying a foundation for more robust national identity systems. Looking ahead, sustaining this momentum will require continued investment in technological upgrades, addressing infrastructural challenges, and prioritizing data privacy and security, by doing so, the NIMC can further enhance its capabilities, expand service accessibility, and contribute to broader socio-economic development goals in Nigeria.

The study recommends that, National Identity Commission should;

i. Encourage strategic partnerships with other government agencies, private sector entities, and international organizations to enhance data collection, verification, and management processes. Collaborations can streamline operations, improve resource allocation, and ensure data security and privacy.

ii. Foster a culture of innovation within NIMC by establishing platforms for continuous brainstorming and idea generation. This can lead to the development of new technologies, methodologies, and policies that enhance the efficiency and effectiveness of identity management processes.

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