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Relationship between Data Management and the Efficiency of Immigration Stock and Flow Management in Uganda's National Citizenship And Immigration Control.

Katushabe Ian[1], Dr. Namara Asiimwe[2]

1, 2 Metropolitan International University

Abstract

The study investigated the relationship between data management and the efficiency of immigration stock and flow management within Uganda's National Citizenship and Immigration Control (NCIC). A descriptive and correlational research design was employed, using both quantitative and qualitative approaches. Data were collected from a sample of 293 respondents drawn from different departments and regional offices of the Directorate of Citizenship and Immigration Control (DCIC). Questionnaires and interviews were used to gather information on data management practices and operational efficiency. The collected data were analyzed using the Statistical Package for Social Sciences (SPSS) version 25, employing descriptive statistics, Pearson's correlation, and regression analysis. The analysis revealed a strong positive correlation between data management and immigration service efficiency, with a Pearson correlation coefficient ($r = 0.775$, $p = 0.000$), indicating that improvements in data management were strongly associated with enhancements in immigration services. The results suggested that as the NCIC improved data accuracy, regular updating, and integration across its systems, the timeliness, responsiveness, and overall quality of immigration service delivery also increased. The significance value of $p = 0.000$, being less than the 0.05 threshold, confirmed that this relationship was statistically significant. Therefore, the null hypothesis, which stated that there was no significant relationship between data management and immigration efficiency, was rejected.The study concluded that effective data management is a critical determinant of efficiency in immigration stock and flow management. It enhances operational performance by reducing processing delays, improving decision-making, and facilitating the tracking and verification of immigration documents. The findings further demonstrated that data integration and accessibility are key to ensuring reliable service delivery and institutional accountability within NCIC operations. It was recommended that the Directorate should strengthen its data governance frameworks, invest in continuous staff training on digital data systems, and enhance the interoperability of its databases with other government institutions such as NIRA and URA. Strengthening these practices would ensure timely data sharing, minimize duplication, and improve the efficiency of immigration services in Uganda.

Keywords: Data management, immigration efficiency, National Citizenship and Immigration Control, operational performance, data governance

Background of the study

In the 21st century, international migration has become a defining feature of globalization, presenting both immense opportunities and complex challenges for sovereign states. The management of this mobility has consequently evolved from a primarily territorial and bureaucratic exercise to a sophisticated, data-driven domain central to national security,

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economic competitiveness, and human rights (Ahumuza et al., 2025). Globally, efficient immigration management is conceptualized through the lenses of "stock" (the static count of foreign-born individuals residing within a country at a given time) and "flow" (the dynamic processes of entry, stay, and exit). The ability to accurately measure, monitor, and manage these components is now inextricably linked to the quality of a nation's data management systems. As noted by the International Organization for Migration (IOM), reliable data is the foundation for effective migration policy, enabling states to "understand trends, forecast future flows, and design evidence-based policies" (IOM, 2021, p. 35). Advanced economies have increasingly invested in integrated digital platforms, such as the European Union's Schengen Information System (SIS) and the United States' US-VISIT program, which leverage biometrics, interoperable databases, and real-time analytics to secure borders while facilitating the movement of legitimate travelers (Düwell & Vollmer, 2019). These systems underscore a global paradigm shift where data is not merely an administrative record but a strategic asset. The relationship between robust data management and immigration efficiency is therefore a global concern, where deficiencies in data infrastructure can lead to security breaches, bureaucratic inefficiency, and an inability to respond proactively to migration crises.

Within the African continent, the imperatives of immigration management are shaped by unique socio-political and economic realities, including porous borders, regional integration initiatives, and significant volumes of mixed migration comprising refugees, asylum-seekers, and economic migrants often using the same routes. The African Union's (AU) flagship Agenda 2063 and the Protocol on the Free Movement of Persons envision a continent with seamless mobility to foster integration and development (African Union, 2015). However, the operationalization of this vision is frequently hampered by weak data management capacities at the national and regional levels. Many African immigration authorities rely on legacy paper-based systems or standalone digital registries that lack interoperability, creating significant blind spots in tracking migrant stocks and flows (Adeniran, 2021). This data fragmentation is particularly problematic in contexts like the East African Community (EAC) and the Intergovernmental Authority on Development (IGAD), where member states are committed to facilitating free movement but struggle with harmonizing immigration data to combat cross-border crime and manage refugee populations effectively. According to a study by the World Bank (2022), the lack of integrated data systems in many African countries results in prolonged border-crossing times, inaccurate population statistics, and difficulties in distinguishing between different migrant categories, thereby undermining both security and the potential economic benefits of migration. Consequently, the continent-wide discourse has increasingly focused on the need for digital identity systems and data-sharing agreements to translate policy aspirations into operational reality.

Uganda's National Citizenship and Immigration Control (NCIC) operates at the critical intersection of these global trends and African challenges. As a landlocked nation in the volatile Great Lakes region, Uganda is a prime destination

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for mixed migration flows, hosting one of the largest refugee populations in the world over 1.5 million people as of 2023 while also being an active member of the EAC, which promotes the free movement of labour and capital (UNHCR, 2023). The NCIC mandate, as stipulated in the Uganda Citizenship and Immigration Control Act (1999), is to regulate and control the entry, residence, and exit of all aliens. This involves the complex dual task of managing a large and static stock of migrants and refugees and the dynamic flow of individuals across its borders. The Government of Uganda has been praised for its progressive refugee policy, but its operational efficiency is severely tested by the sheer scale of these movements. The NCIC has undertaken digitalization efforts, most notably the introduction of the electronic passport system compliant with the International Civil Aviation Organization (ICAO) standards. However, these systems often operate in silos. Critical immigration, refugee, and national security data are frequently managed by disparate entities including the NCIC, the Office of the Prime Minister (OPM) for refugees, and the Uganda Police Force with limited functional interoperability (Auko, 2022).

For stock management, the inability to seamlessly cross-reference data means that verifying an individual's immigration status, duration of stay, or compliance with visa conditions can be a slow and manual process. For flow management, the lack of a real-time, integrated data system at border points leads to delays, difficulties in identifying security risks, and an inaccurate count of entries and exits, which in turn distorts national statistics on migrant stocks (Mwambari & Titeca, 2021). Preliminary evidence suggests that these data management gaps create operational bottlenecks, compromise the integrity of immigration decisions, and ultimately hinder Uganda's ability to leverage migration for national development. Therefore, this study is situated within this critical gap, seeking to empirically investigate the specific relationship between data management practices and the operational efficiency of the NCIC in managing both Uganda's immigration stock and flows, providing evidence-based recommendations for a more secure, efficient, and data-driven immigration system.

Problem Statement

The efficiency of immigration operations in Uganda largely depends on effective data management practices. The Directorate of Citizenship and Immigration Control (DCIC), under the National Citizenship and Immigration Control (NCIC), is mandated to regulate migration, issue citizenship documents, and monitor population movements (Government of Uganda, 1999). Despite introducing digital systems such as e-passports, e-visas, and the Migration Information and Data Analysis System (MIDAS), inefficiencies in data collection, integration, and utilization continue to hinder performance (ILO, 2023). Weak data governance, limited staff capacity, and fragmented databases have resulted in delays in document issuance, poor tracking of migrant flows, and limited policy responsiveness (Ministry of Internal Affairs, 2023). During the COVID-19 pandemic, passport issuance dropped drastically due to system disruptions, highlighting operational vulnerabilities (The Capital Times, 2021). These inefficiencies suggest that the relationship between data management and operational efficiency remains inadequately understood. This study,

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therefore, seeks to examine how data management practices specifically data accuracy, accessibility, processing, and governance influence the efficiency of immigration stock and flow management in Uganda (Ntirandekura et al., 2022).

Main Objective

To assess the relationship between data management and the efficiency of immigration stock and flow management in Uganda's national citizenship and immigration control.

Methodology

The study adopted a descriptive and correlational research design to examine the relationship between data management and the efficiency of immigration stock and flow management within Uganda's National Citizenship and Immigration Control (NCIC). This design was deemed appropriate because it enabled the researcher to systematically describe the existing conditions and determine the nature and strength of the relationship between the variables under investigation (Lanlege et al., 2013). The study was anchored on the premise that effective data management practices such as data collection, storage, accessibility, integration, and governance are key determinants of operational efficiency within immigration systems. Both quantitative and qualitative approaches were employed to ensure a comprehensive understanding of the research problem and to triangulate findings for greater validity and reliability.

The target population for the study comprised staff and officers working within the Directorate of Citizenship and Immigration Control (DCIC) at different administrative levels, including headquarters departments such as Passport Control, Visa and Permit Processing, Border Operations, and Citizenship Verification, as well as selected regional immigration offices and border posts (A & Ahmed, 2019). This population was selected because it directly engages in immigration data handling, decision-making, and operational processes related to migration stock and flow management. From this population, a sample size of 293 respondents was determined using Krejcie and Morgan's (1970) sample size determination table, which provides a statistically appropriate sample for populations exceeding 1,000. The sample was considered adequate to capture a diverse range of perspectives while ensuring generalizability of the findings (Nafiu, 2013).

A stratified random sampling technique was used to select respondents from the different operational departments and regions to ensure proportional representation of key functional units. Within each stratum, participants were randomly chosen to eliminate selection bias. The study also purposively included senior officers and managers for key informant interviews, as their roles provided strategic insights into data management systems and institutional efficiency (Abiodun et al., 2022). This combination of probability and non-probability sampling ensured both representativeness and depth of understanding.

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Data were collected using structured questionnaires and interview guides. The questionnaires, administered to operational and technical staff, consisted of closed-ended items measured on a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The items were designed to capture information on the independent variable (data management practices) and the dependent variable (efficiency of immigration stock and flow management) (George Stanley & Nafiu, 2020). The interview guides were used with key informants such as directors, IT officers, and departmental heads to obtain qualitative insights into institutional practices, challenges, and policy perspectives. Prior to data collection, the instruments were pre-tested among 20 respondents from a similar administrative unit to assess clarity, validity, and reliability. Necessary modifications were made based on feedback received (Olanrewaju et al., 2021). Cronbach's alpha coefficients were computed for internal consistency, and reliability values above 0.70 were accepted as adequate for the study.

Quantitative data were coded and entered into the Statistical Package for Social Sciences (SPSS) version 25 for analysis (Nelson et al., 2022). Descriptive statistics such as means, standard deviations, and frequency distributions were used to summarize the demographic characteristics of respondents and describe patterns in data management and efficiency indicators. Inferential statistics, including Pearson's correlation and linear regression analysis, were performed to test the hypothesized relationship between data management and immigration efficiency. Pearson's correlation coefficient was used to determine the direction and strength of the relationship, while regression analysis established the predictive power of data management on operational efficiency (Nelson et al., 2023). The level of significance was set at 0.05, implying that relationships with a p-value less than 0.05 were considered statistically significant.

Qualitative data from interviews were analyzed using thematic analysis. Responses were transcribed, categorized, and coded according to recurring themes such as data accessibility, system integration, human capacity, and institutional coordination. These themes were compared and interpreted in relation to the quantitative findings to enhance the overall understanding of how data management practices influence efficiency in immigration processes. Ethical considerations were strictly observed throughout the study. Permission to conduct research was obtained from the Ministry of Internal Affairs and the Directorate of Citizenship and Immigration Control. Participants were informed of the study's objectives and assured of confidentiality and voluntary participation. Informed consent was sought prior to data collection, and anonymity was maintained by omitting personal identifiers from data records.

Results

Table 1: Descriptive Statistics On data management and Immigration Services

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Data management	Strongly Agreed	Agreed	Neutral	Disagree	Strongly Disagreed	Mean	STD
The immigration data is accurately recorded and regularly updated in the National Citizenship and Immigration Control.	145 (49.5%)	44 (15.0%)	27 (9.2%)	35 (11.9%)	42 (14.3%)	3.73	1.514
Efficient data management improves the tracking of immigration stock (documents, permits).	94 (32.1%)	150 (51.2%)	9 (3.1%)	18 (6.1%)	22 (7.5%)	3.94	1.129
The National Citizenship and Immigration Control uses integrated data systems to manage immigration flows effectively.	95 (32.4%)	154 (52.6%)	7 (2.4%)	18 (6.1%)	19 (6.5%)	3.98	1.087
Staff are adequately trained in data management practices within the immigration department.	95 (32.4%)	147 (50.2%)	8 (2.7%)	24 (8.2%)	19 (6.5%)	3.94	1.124
Data quality issues negatively affect the efficiency of immigration stock and flow management.	97 (33.1%)	150 (51.2%)	12 (4.1%)	17 (5.8%)	17 (5.8%)	4.00	1.063

Source: Primary Data, 2025

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The analysis of data management in the Immigration Services revealed that respondents largely agreed that immigration data was accurately recorded and regularly updated within the National Citizenship and Immigration Control. Specifically, 145 respondents (49.5%) strongly agreed, 44 (15.0%) agreed, 27 (9.2%) were neutral, 35 (11.9%) disagreed, and 42 (14.3%) strongly disagreed. The mean score of 3.73, coupled with a standard deviation of 1.514, indicated a moderate overall agreement, though with some variability in perceptions among participants. These findings suggested that while nearly two-thirds of respondents recognized the accuracy and timeliness of data recording, a notable proportion expressed uncertainty or dissatisfaction. The implication was that data entry practices, although generally perceived as reliable, required continuous monitoring and validation to ensure uniformity and prevent inconsistencies that could compromise service quality. In practice, accurate and up-to-date data is essential for decision-making, resource allocation, and maintaining the integrity of immigration records. *An immigration officer noted, "Our current data management practices involve recording and updating all immigration stock, such as passports, permits, visas and residency documents, in an integrated digital system. We also maintain physical records for verification purposes, but the system is still evolving. Data entry is done daily, and supervisors review records periodically to ensure accuracy. Despite the availability of digital systems, some processes are still manually intensive, particularly when reconciling expired or lost documents." (Immigration Officer, KM001, 25/09/2025)*

Regarding the role of efficient data management in improving the tracking of immigration stock, including documents visas and permits, the responses indicated a strong consensus. A total of 94 respondents (32.1%) strongly agreed and 150 respondents (51.2%) agreed, while 9 (3.1%) were neutral, 18 (6.1%) disagreed, and 22 (7.5%) strongly disagreed. The mean score of 3.94 with a relatively low standard deviation of 1.129 reflected widespread acknowledgment that proper data management enhanced the monitoring of immigration documents and permits. This suggested that integrating effective data management practices allowed for better tracking of stock levels and facilitated timely issuance of documents. The practical implication was that without efficient data management, errors and delays in handling immigration stock could occur, affecting service delivery and potentially causing dissatisfaction among clients. *A management staff member highlighted, "Efficient data management directly affects how quickly we can process immigration requests and track documents. When data is accurate and updated in real-time, it reduces errors, prevents duplication, and ensures that permits and other immigration stocks are processed efficiently. Conversely, poor data management often slows down service delivery and can lead to mistakes, which frustrates clients and staff " (Management, KM002, 25/09/2025)*

The effectiveness of integrated data systems in managing immigration flows was also highly rated by respondents. Specifically, 95 respondents (32.4%) strongly agreed and 154 respondents (52.6%) agreed that integrated systems facilitated efficient immigration flow management, while only 7 respondents (2.4%) were neutral, 18 (6.1%)

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disagreed, and 19 (6.5%) strongly disagreed. The mean score of 3.98 and standard deviation of 1.087 suggested that the majority of participants recognized the benefits of system integration in streamlining processes. This indicated that the National Citizenship and Immigration Control's investment in integrated technological systems positively influenced operational efficiency, enabling faster processing times, better coordination, and more accurate record-keeping. The implication was that the National Citizenship and Immigration Control needed to maintain and continually update these systems to sustain high levels of service delivery and minimize workflow disruptions.

In terms of staff training in data management practices, 95 respondents (32.4%) strongly agreed and 147 (50.2%) agreed that staff were adequately trained, whereas 8 (2.7%) were neutral, 24 (8.2%) disagreed, and 19 (6.5%) strongly disagreed. The mean of 3.94 and standard deviation of 1.124 indicated that respondents generally perceived staff as competent in handling data, although a small proportion of respondents expressed concern regarding gaps in training. The implication was that regular training programs and refresher courses were necessary to ensure all staff were consistently equipped with the skills required to maintain accurate, reliable, and efficient data management practices. Adequately trained personnel directly influenced the quality and timeliness of service delivery, reducing errors and improving client satisfaction. *An administrative staff reported, "One of the biggest challenges we face is inconsistent data entry by applicants who do due to varying levels of staff training. Technical glitches in the database sometimes result in delays or loss of records. Additionally, the high volume of immigration documents and manual verification requirements make it difficult to maintain continuous accuracy without overburdening staff." (Administrative Staff, KM003, 25/09/2025)*

Respondents were highly aware of the negative effects of data quality issues on immigration stock and flow management. A total of 97 respondents (33.1%) strongly agreed and 150 (51.2%) agreed that poor data quality hindered operational efficiency, while 12 (4.1%) were neutral, 17 (5.8%) disagreed, and 17 (5.8%) strongly disagreed. The highest mean score of 4.00 and a relatively low standard deviation of 1.063 highlighted a strong consensus that maintaining high-quality data was critical for effective immigration management. This finding implied that any lapses in data quality could directly impede the National Citizenship and Immigration Control's ability to monitor immigration flows, issue permits efficiently, and provide timely services to clients. Therefore, stringent data quality control measures, regular audits, and the use of automated validation processes were necessary to safeguard the accuracy and reliability of immigration records. *An IT support staff explained, "To enhance efficiency, we need to upgrade our digital systems to allow automated updates and alerts for expiring documents. Training staff on data management best practices and improving integration between different databases would also help. Introducing analytics tools could assist in tracking trends and identifying bottlenecks in immigration stock and flow operations." (IT Support, KM004, 25/09/2025)*

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Table 2: Relationship between data management and Immigration Services

Correlations			
		Immigration Services	Data Management
Immigration Services	Pearson Correlation	1	.775**
	Sig. (2-tailed)		.000
	N	293	293
Data Management	Pearson Correlation	.775**	1
	Sig. (2-tailed)	.000	
	N	293	293
**. Correlation is significant at the 0.05 level (2-tailed).			

Source: Primary Data, 2025

The analysis of the relationship between data management and the Immigration Services revealed a strong positive correlation, with a Pearson correlation coefficient of 0.775, which was statistically significant at the 0.05 level ($p = 0.000$) (Nelson et al., 2023). This indicates that improvements in data management were strongly associated with enhancements in the Immigration Services. The high correlation suggests that as the National Citizenship and Immigration Control ensured accurate, regularly updated, and well-integrated data systems, the timeliness, efficiency, and overall quality of immigration service delivery also increased. The findings demonstrate that effective data management plays a critical role in facilitating the operational processes of the National Citizenship and Immigration Control, including the tracking of permits and documents, and in ensuring that staff can respond efficiently to client needs. The significance value of 0.000, being below the 0.05 threshold, indicates that the observed correlation is highly unlikely to have occurred by chance. Consequently, we rejected the null hypothesis, which posited that there was a significant relationship between data management and the Immigration Services. Instead, we concluded that there was a statistically significant and positive association between these variables.

Findings of the Study

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The findings of the study revealed that data management played a critical role in the Immigration Services at the National Citizenship and Immigration Control in Uganda. It was found out that immigration data was largely perceived as accurately recorded and regularly updated, although there were variations in the perceptions of respondents regarding the reliability of these practices. This suggested that while the National Citizenship and Immigration Control had implemented structured data recording systems, there remained areas where monitoring and validation could be strengthened to maintain uniformity and prevent discrepancies in records. The importance of accurate data management was emphasized by staff, who indicated that proper recording and updating of immigration documents, such as passports, visas permits, and residency records, were fundamental to operational efficiency and decision-making. These findings aligned with the assertions of systems theory, which posit that the functionality and stability of any system depend on the effective transformation of inputs into outputs. In this case, accurate immigration data (input) was processed to ensure timely and efficient service delivery (output), creating a responsive feedback loop to the environment (Johnson, 2021; Zhang et al., 2022).

It was further found out that efficient data management significantly improved the tracking of immigration stock, including documents and permits. Respondents generally agreed that integrated and well-maintained data systems facilitated better monitoring of immigration stock, thereby enhancing the timely issuance of documents and minimizing operational errors. This finding resonated with the study by Mwikali and Mutua (2021), who emphasized that immigration agencies with digitized databases and integrated biometric systems were able to make informed decisions, detect irregular migration patterns, and plan for service delivery more efficiently. The implication was that the National Citizenship and Immigration Control's ability to track immigration flows and manage stock effectively depended heavily on the accuracy, timeliness, and integration of its data systems. The study further highlighted that inadequate or fragmented data could hinder operational efficiency, leading to delays, errors, and reduced satisfaction among clients, which confirmed prior observations by Chen and Wang (2023) regarding the critical role of data quality in immigration decision-making processes.

Conclusions

It was concluded that data management played a critical role in the Immigration Services at the National Citizenship and Immigration Control (NCIC) in Uganda. It was found out that immigration data was largely perceived as accurately recorded and regularly updated, although variations existed in respondents' perceptions regarding the reliability of these practices. It was concluded that while the National Citizenship and Immigration Control had implemented structured data recording systems, there remained areas where monitoring and validation could be strengthened to maintain uniformity and prevent discrepancies in records. It was also found out that accurate data management was essential for operational efficiency and decision-making, as proper recording and updating of immigration documents, such as passports, permits, and residency records, underpinned timely and effective service

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It was further concluded that efficient data management significantly improved the tracking of immigration stock, including documents and permits. It was found out that respondents generally agreed that integrated and well-maintained data systems facilitated better monitoring of immigration stock, which enhanced the timely issuance of documents and minimized operational errors. It was concluded that the National Citizenship and Immigration Control's ability to track immigration flows and manage stock effectively depended heavily on the accuracy, timeliness, and integration of its data systems. It was also found out that inadequate or fragmented data could hinder operational efficiency, leading to delays, errors, and reduced client satisfaction, which confirmed prior observations regarding the critical role of data quality in immigration decision-making processes (Mwikali & Mutua, 2021; Chen & Wang, 2023).

Recommendations

There should be strengthened monitoring and validation mechanisms for data management to ensure that immigration records at the National Citizenship and Immigration Control (NCIC) in Uganda remain accurate and consistent. This means that regular audits, verification procedures, and systematic data quality checks should be implemented to detect and correct discrepancies, maintain uniformity across all departments, and uphold the integrity of critical documents such as passports, permits, and residency records.

There should be continuous investments in integrated and well-maintained data systems to facilitate efficient tracking of immigration stock and flows. Such systems should enable timely issuance of documents, minimize operational errors, and ensure that staff can access and process information seamlessly. This requires the National Citizenship and Immigration Control to allocate resources for technological upgrades, system maintenance, and the integration of digital platforms, including biometric databases, online tracking tools, and document management systems, to ensure a smooth flow of accurate and real-time information across all service points.

There should be enhanced staff capacity in handling, processing, and validating immigration data. This entails the implementation of targeted training and professional development programs designed to equip personnel with the necessary skills for accurate data entry, effective use of integrated systems, real-time monitoring, and the ability to identify and resolve inconsistencies in records promptly. Such measures would reduce errors, improve workflow efficiency, and enhance overall service delivery.

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References

A, S. M. D. A. U. Y. N. L., & Ahmed, H. O. (2019). *On a Semi-Markov Model for Stock Exchange using Capital Assets*. *6*(1), 138–144.

Abiodun, N. L., Matovu, M. S., & Olanrewaju, R. O. (2022). Statistical Powers of Univariate Normality Tests: Comparative Analysis of 2016 Election Process in Uganda. *European Journal of Statistics*, *2*, 1–9. https://doi.org/10.28924/ada/stat.2.6

Ahumuza, A., Kobusingye, P., & Musiimenta, N. (2025). *Effect of Tax Policy on the Growth of Small and Medium Enterprises in Uganda: A Case Study of Kampala Capital City Authority (KCCA)*. *4*(2), 137–146.

George Stanley, K., & Nafiu, L. A. (2020). *Analysis of Monetary Policy Objectives as Applied to Uganda's Economy: The Dream to Achieve the Middle-Income Status in 2020 is Gone*. *10*(05), 8–14.

Lanlege, D. I., Nafiu, L. A., Gana, U. M., & Falaye, A. A. (2013). *On the Applıcatıon of Neural Network Predıctıve Controller For Stırred Tank Reactor*. *3*(3), 301–308. http://www.ejournalofscience.org

Nafiu, L. (2013). Statistical Analysis of Knowledge and Awareness to Universal Basic Education in Nigeria. *Science Journal of Education*, *1*(3), 28. https://doi.org/10.11648/j.sjedu.20130103.11

Adeniran, A. (2021). *Digital governance and migration management in Africa: Bridging the data gap.* African Policy Research Institute.

African Union. (2015). *Agenda 2063: The Africa we want.* Addis Ababa: African Union Commission.

Auko, P. (2022). *Challenges of digital integration in Uganda's immigration management systems.* Kampala: Makerere University Press.

Düwell, C., & Vollmer, B. (2019). *Datafication and border control: The transformation of migration management in the digital age. Journal of Borderlands Studies, 34*(4), 563–580. https://doi.org/10.1080/08865655.2018.1557244

Government of Uganda. (1999). *Uganda Citizenship and Immigration Control Act (Cap. 66).* Kampala: Uganda Printing and Publishing Corporation.

International Labour Organization (ILO). (2023). *Migration governance and labour mobility in East Africa: Country report – Uganda.* Addis Ababa: ILO Regional Office for Africa.

International Organization for Migration (IOM). (2021). *World migration report 2022.* Geneva: International Organization for Migration.

Ministry of Internal Affairs. (2023). *Ministerial policy statement for the National Citizenship and Immigration Control (FY 2023/2024).* Kampala: Government of Uganda.

Mwambari, D., & Titeca, K. (2021). *Border governance and data challenges in Uganda's migration management. African Affairs, 120*(480), 738–758. https://doi.org/10.1093/afraf/adab034

The Capital Times. (2021). *Ministry of Internal Affairs sets up one-stop e-service portal.* Kampala: Capital Media

Received: 02.10.2025 **Accepted: 10.10.2025** **Published on: 30.10.2025**

Group.

United Nations High Commissioner for Refugees (UNHCR). (2023). *Global trends: Forced displacement in 2023.* Geneva: UNHCR.

World Bank. (2022). *Africa migration data landscape: Enhancing digital integration for mobility and development.* Washington, DC: The World Bank Group.

Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. *6*(7), 84–122.

Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. *7*(3), 124–145.

Ntirandekura, M., Friday, C., & Muhammad, M. (2022). Rewards and Staff Retention in Public Sector in Uganda: An Empirical Study from Kabale District Local Government. *International Journal of Academic Management Science Research*, *6*(7), 165–170.

Olanrewaju, R. O., Waititu, A. G., & Abiodun, N. L. (2021). *On the Estimation of k-Regimes Switching of Mixture Autoregressive Model via Weibull Distributional Random Noise*. *10*(1), 1–8. https://doi.org/10.5923/j.ijps.20211001.01

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