# Evaluating the Efficacy of the E-Immigration System in the Provision of Immigration Services in Tanzania

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## ABSTRACT

*In 2017, the Tanzania Immigration Services Department (TISD) launched the e-immigration system to streamline service delivery, minimize processing times, enhance customer satisfaction, and strengthen security measures. This study assesses the effectiveness of the e-immigration system in Tanzania, with a particular focus on its impact on service delivery and areas for improvement to enhance the customer experience. Conducted at the Kurasini Immigration Office and Julius Nyerere International Airport in Dar es Salaam, the research employed a mixed-methods approach, integrating quantitative and qualitative techniques. A sample of 247 participants was selected through a combination of purposive non-probability and randomized probability sampling methods. Data collection tools included structured questionnaires, direct observation, and semi-structured interviews. The gathered data were analyzed using SPSS and Microsoft Excel to generate statistical descriptions for interpretation and presentation of findings. The study uncovered significant challenges limiting the system's effectiveness, such as unstable internet connections, unreliable system performance, inadequate infrastructure, and insufficient training for staff. Additional obstacles included concerns about data security, lack of feedback mechanisms, infrequent system updates, and accessibility issues. The research proposed enhancing the user interface to improve accessibility and usability and recommended that the government invest in comprehensive training programs for immigration officers to ensure they can effectively operate the system and deliver high-quality services to users.*

**Keywords**: Customer Experience, E-Immigration System, Service Delivery, System Efficacy

## I. INTRODUCTION

Globally, the transition to e-governance has transformed border administration and the effectiveness of citizen services, especially in the area of immigration. Leading the way in the adoption of electronic immigration systems, European and Asian nations have seen notable improvements in processing speed and security. Efthymiou (2021) highlights Estonia's digital-first strategy, which includes e-residency and other e-governance programs that enable smooth communication between citizens and government agencies. Singapore has also established a fully integrated e-immigration infrastructure that uses real-time data sharing across many government databases to streamline residency permits, visa applications, and border control (Khan & Efthymiou, 2021). These illustrations show how technology may improve security and customer service in immigration procedures. But striking a balance between cutting-edge technology and strong security protocols is still difficult.

By using technology to streamline the issuing of residency permits and visas, nations such as Rwanda and Kenya have achieved notable strides in e-immigration in Africa. An important component of Rwanda's larger e-governance agenda is its e-visa service, which is well-known for its easy-to-use interface and quick processing times (African Development Bank, 2021). Kenya has used online visa applications and e-passports to improve border security and expedite travel (Musa & Juma, 2022). Notwithstanding these developments, a number of African countries still have obstacles, such as inadequate technology infrastructure, which prevents the complete adoption of e-immigration programs. The inability of government agencies to have interconnected systems prevents them from reaching their full potential.

E-immigration systems are becoming more and more acknowledged as strategically significant in East Africa, as seen by the East African Community's (EAC) attempts to standardize immigration laws among its member nations. Significant advancements have been made in Rwanda, Uganda, Kenya, and Tanzania, according to a 2014 East African Report, with Rwanda setting the standard for system coherence and integration (TID, 2021). Uganda's dedication to modernizing immigration services is seen in the introduction of e-passports, e-visas, and improved border management systems (Mwenda & Ndugu, 2020). Despite implementing comparable systems, Tanzania still has issues with scalability and interoperability (Kipingu & Shayo, 2021). Immigration services' potential influence in the



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region is limited by their lack of connection with other important government platforms, like national ID and tax systems.

Tanzania is implementing e-immigration systems at the national level with the intention of improving national security and modernizing service delivery. The implementation of e-passports and e-visas marked a substantial shift from the manual, paper-based procedures that were common in the 1990s (Mbilinyi & Werema, 2018). Although these systems have increased processing times and efficiency, local research indicates that their efficacy is limited by issues with infrastructure and uneven implementation (Honade et al., 2018).One major problem that prevents the complete implementation of a safe and efficient immigration procedure is the absence of integration with vital systems like revenue collection and citizen registration (TID, 2024). To improve Tanzania's e-immigration system and its compatibility with other digital services, these deficiencies must be filled by additional study and alignment with international best practices.

### 1.1 Statement of the Problem

The Tanzanian Immigration Services Department (TISD) is responsible for border control, resident permits, passports, and visas. Manual and somewhat automated procedures were used to provide these services prior to the implementation of the e-immigration system. In order to satisfy the increasing demand from both domestic and international consumers, this conventional method encountered many difficulties (Komba, Kimaro, & Hossain, 2020). Numerous errors, long processing times, and general inefficiencies were caused by the dependence on paper-based systems and little automation, which increased client discontent and complaints (Habibu et al., 2019).

In response to these challenges, the Tanzanian government introduced the e-immigration system, which aims to enhance and modernize the provision of immigration services. The system includes resident permits, e-passports, e-visas, and improved border control and management tools (TID, 2021). The efficiency of the system in greatly enhancing Tanzania's immigration service delivery has not been fully assessed, despite these developments. Therefore, the purpose of this study was to evaluate how well the e-immigration system provides immigration services.

### 1.2 Research Objective

The objective of the study was to evaluate the efficacy of the e-immigration system in improving immigration service delivery by assessing its performance, examining the challenges it faces, and identifying areas of weaknesses for enhancement.

### 1.3 Research Question

The study seeks to answer the following question: Does the e-immigration system perform as expected, and what are the challenges and areas of weakness that need to be addressed to enhance its effectiveness?

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

The Information Systems Success Model, a pertinent theory, provided support for the study's topic.

#### 2.1.1 The Information Systems Success Model

The Information Systems Success Model is a well-known framework for evaluating the efficacy of information systems (IS), first created in 1992 by William H. DeLone and Ephraim R. McLean. This approach gives an organized way to measure the performance and organizational impact of IS and identifies important factors that are necessary for assessing its success. It draws attention to the connections between six important factors: net system benefits, user satisfaction, system usage intentions, information quality, and system and service quality. A component that was missing from the original model, service quality, was added by DeLone and McLean in 2002.



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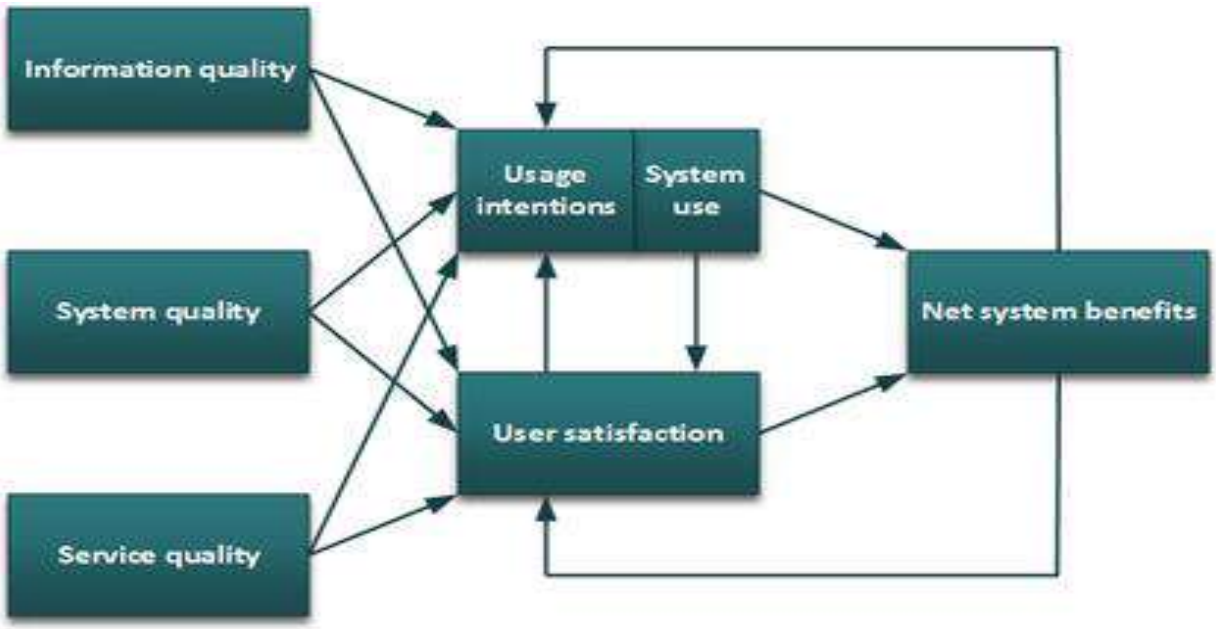


**Figure 1**
*DeLone and McLean's IS Success Model*
Source: DeLone and McLean's (2002)

One important factor in assessing information systems is information quality, which is the standard of information that a system can produce, store, or provide. It has a direct impact on user satisfaction and intention to use the system, which in turn affects the advantages the system offers to the company and its users (Al-Rahmi et al., 2021). Similarly, by mediating links between usage intentions and user satisfaction, system quality—another well-known indicator for evaluating information systems—indirectly supports the system's capacity to provide benefits (Alshammari & Alshammari, 2024). A crucial evaluation criterion that goes beyond information and system quality is the level of service that information systems offer.

Because it influences both the user experience and the system's overall efficacy, the relationship between service quality and user satisfaction is intricate yet crucial (Alduaij et al., 2024). The Information Systems Success Model is a rather linear approach that might oversimplify the dynamics at work, even as it highlights how information quality, system quality, and service quality affect user intentions and actual usage. This link is frequently more complex, for example, even while it is thought that increased system utilization improves user satisfaction, which in turn influences future usage intentions (Al-Rahmi et al., 2021).This connection may be broken by elements including contextual barriers, user expectations, and inadequate training. For instance, despite the system's technical prowess, poor service quality might cause customer annoyance, which lowers satisfaction and decreases their desire to utilize it further.

Furthermore, because user perceptions are influenced by external circumstances, it is not always true that user satisfaction and net system benefits are directly associated (Lin et al., 2022). A discrepancy between perceived benefits and actual results may arise, for example, when consumers are happy with a system's functionality but unhappy with the support offered. This discrepancy raises concerns about the system's worth to the company and its consumers. Although the IS Success Model offers a basic framework, it is important to evaluate how its components interact with one another, acknowledging that user satisfaction and net benefits are influenced by a number of contextual and dynamic factors that transcend the model's simple cause-and-effect presumptions (DeLone & McLean, 2002).

In actuality, the approach helps stakeholders to recognize and resolve technical issues with systems like the e-immigration system. Reports of sluggish processing times, for instance, can lead to infrastructure improvements that improve system performance. Building trust in the system's outputs requires ensuring data reliability through timeliness, relevance, and accuracy. Furthermore, concentrating on the caliber of support services speeds up the process of resolving consumer problems. Patterns and areas in need of improvement can be identified by examining stakeholder interactions with the system. Targeted improvements can be driven by information about user intentions, such as those obtained from surveys. Specific enhancements can increase user experience and satisfaction if usability issues discourage users. In the end, the e-immigration system's advantages help policymakers make more informed decisions about future technological investments and improvements by helping them better understand how it affects immigration procedures.



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### 2.2 Empirical Review

The implementation of e-immigration systems around the world has frequently been motivated more by security concerns than by a desire to improve the provision of public services (Kipingu, 2020). This trend has been thoroughly investigated by empirical study. Increasing terrorist and fraud risks have compelled governments to use biometric technology to fortify national border security, according to Habibu et al. (2019). Nonetheless, their research presents serious privacy issues, especially with regard to the inappropriate management and possible abuse of private information. They point out that threats that the technologies are intended to fight are similar to the risks posed by vulnerabilities like counterfeiting and brute force attacks. Policymakers and security professionals must take into account how the use of biometric technologies may affect civil liberties and privacy. Therefore, public faith in the technology and the perceived skill of people in charge of it are key factors in the acceptability of biometric passports.

In addition to developing efficient metrics to gauge the caliber of public services, Sigwejo and Pather (2016) emphasize the significance of closely monitoring and evaluating government ICT projects. Their study combined important criteria for assessing e-government services into a framework for user satisfaction. Although certain issues still exist, Yahaya et al. (2023) found that information and communication technology (ICT) has improved service delivery in the Nigeria Immigration Service. In order to improve service delivery throughout the Nigerian public sector, they advise the government to invest more in ICT development.

The immigration department of Abeid Amani Karume International Airport's performance management was also impacted by staff motivation, human resource capacity, and technology infrastructure, according to Khamis and Hemed (2023). Their results show that infrastructure and employee motivation greatly enhance performance management, but human resource capacity has a detrimental effect on its efficacy.

According to Kipingu and Shayo (2021), e-immigration systems have greatly enhanced immigration services by cutting the processing times for passports and travel documents by four days, providing more convenience and financial savings than traditional systems. Nevertheless, obstacles like inadequate digital literacy, erroneous data, inadequate feedback systems, and network problems restrict the efficacy of the system. To improve service satisfaction, they suggest remedies including applicant support centers, strong feedback mechanisms, digital literacy campaigns, and in-depth research. Similar findings were made by Oisso (2023), who discovered a strong positive link between performance improvement and computerized system training. But latency degrades performance, highlighting the necessity for public agencies to update their systems to improve operational effectiveness

Gregory (2023) assessed how e-services affected the caliber of immigration services in Tanzania's Kilimanjaro area. The study took into account various aspects, including cost-effectiveness, efficiency, transparency, user satisfaction, and service reliability. The results indicate that while e-immigration has improved security and service delivery, more funding is needed to strengthen digital service delivery. Effective service delivery in developing nations is significantly hampered by the absence of integration across e-government services, according to Yakuba et al. (2024). Information silos are produced when there is no electronic data flow, which lowers productivity and teamwork, according to their survey. To overcome these problems, they suggest a structure that consists of unified communication networks, standardized e-government project plans, and an extensive service catalog.

The expanding conversation over immigration and socioeconomic development in both rich and developing nations is examined by Dinbabo et al. (2018). They suggest resolving perceived inequalities in e-immigration services as well as institutional inconsistencies. Numerous advantages of e-immigration portals are highlighted by Honade et al. (2018), such as applicant identification, electronic signature collection, and simple document retrieval. They highlight the possibilities of RFID technology, which enables wireless information exchange and saves synchronized data, including names, nationalities, digital photos, and identification numbers. Smart cards provide extra portability and efficiency by storing payment information and biometric information. To promote e-passports, lessen paperwork, and save time, the study suggests making full use of smart card techniques.

## III. METHODOLOGY

### 3.1 Research Design

A mixed methods research methodology was used in this study, combining quantitative and qualitative techniques to guarantee a full and in-depth analysis of the results. Together with in-depth participant subjective viewpoints, this combination made it possible to analyze numerical data patterns. Mixed techniques are useful for triangulating data, which improves the validity of study findings (Creswell, 2015). This design was especially suitable for answering the study's intricate research questions and goals, which centered on institutional procedures and human behavior at Julius Nyerere International Airport and the Temeke Immigration Office.

### 3.2 Population of the Study

The population of the study was the staff of Julius Nyerere International Airport and the Temeke Immigration Office. This group included employees from many departments and levels, offering a wide range of viewpoints on



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immigration procedures. Choosing a well-defined population allows researchers to gather useful data for generalization, claims Kothari (2012). The selection of these organizations was based on their crucial function in overseeing immigration operations, which makes them indispensable for assessing the effectiveness of administrative processes.

### 3.3 Sample Size

In order to guarantee representativeness, a combination of purposive and probability sampling techniques was used to choose the study's sample size, which included 247 respondents. Yamane's (1967) formula for finite populations served as a guide for determining the sample size, guaranteeing sufficient statistical power for the investigation. According to Bryman (2016), this sample size achieved statistical reliability while preserving data gathering practicality.

### 3.4 Sampling Technique

The research included a mix of random and purposive sampling techniques. Randomized chance sampling made guaranteed that the general community was adequately represented, while purposeful sample focused on important respondents who had specific expertise and experience in immigration procedures. This strategy reduces selection bias and encourages varied representation, which strengthens the validity of research findings (Saunders et al., 2019).

### 3.5 Data and Data Collection Methods

The study used direct observation, semi-structured interviews, and structured questionnaires to gather primary data. Although semi-structured interviews allowed for a more thorough analysis of important topics and provided insightful qualitative information, structured questionnaires produced quantitative data on respondents' perspectives. By allowing the researchers to see procedures and behaviors in their actual work environments, direct observation enhanced these techniques. Triangulating data using several approaches improves the study's validity and offers a more thorough grasp of the research goals, as stated by Creswell and Plano Clark (2018).

### 3.6 Data Analysis

The study's goals were met by generating both descriptive and inferential statistics through the use of SPSS software for data analysis. The data's correlations and trends were also visually represented using Microsoft Excel. Both basic and complex datasets can be effectively analyzed with SPSS, which is renowned for its adaptability (Pallant, 2020). Thematic analysis was used to examine and code interview transcripts in order to find recurrent themes and patterns in qualitative data. This enhanced the context of the quantitative findings.

## IV. FINDINGS AND DISCUSSION

### 4.1 Response Rate

This study looked at possible ways to improve the e-immigration system. 75 employees and administrators participated in a survey that identified and assessed critical areas of concern, yielding the following results.

**Table 1**

*Demographic Features of Respondents*

| Demographic Variable | Category | Frequency | Percentage (%) |
|---|---|---|---|
| **Gender** | Male | 40 | 53.3 |
| | Female | 35 | 46.7 |
| **Age Group** | 18–30 years | 15 | 20.0 |
| | 31–40 years | 35 | 46.7 |
| | 41–50 years | 20 | 26.7 |
| | 51+ years | 5 | 6.7 |
| **Educational Level** | Secondary education | 10 | 13.3 |
| | Diploma | 20 | 26.7 |
| | Bachelor’s degree | 30 | 40.0 |
| | Postgraduate degree | 15 | 20.0 |
| **Years of Experience** | Less than 5 years | 25 | 33.3 |
| | 5–10 years | 30 | 40.0 |
| | 11–15 years | 15 | 20.0 |
| | More than 15 years | 5 | 6.7 |



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The study participants' demographic profile showed a fairly balanced gender distribution, with 46.7% being female and 53.3% being male. In organizational studies, perceptions of service efficiency can be influenced by gender diversity, therefore this nearly equal representation is significant. Based on Tajfel's (2010) social identity theory, it is possible that disparities in technology acceptability account for gender-based variances in attitudes toward technology-driven procedures, including the e-immigration system. These results are consistent with Venkatesh and Morris's (2000) observation that, although the difference has been closing over time, men exhibit higher rates of technology adoption than women in professional settings. Thus, the gender distribution of this research offers important information about how different genders perceive e-immigration systems.

With 66.7% of the respondents being between the ages of 31 and 50, the age distribution of the sample tended toward younger and middle-aged groups. This age range is important since prior research suggests that younger and middle-aged people are more likely to adopt new technology, such as Rogers' (2003) study on the dissemination of innovations. The age distribution points to a workforce that is well-suited to embracing contemporary technology, such as e-immigration platforms. Morris and Venkatesh (2000) discovered a negative association between age and perceived ease of use in technology-driven services, highlighting the potential difficulties older age groups may have adjusting to such systems.

With 40% of respondents having a bachelor's degree and 20% having a postgraduate degree, the workforce is clearly well educated. This educational foundation is essential to the e-immigration system's efficient operation and optimization. According to Keller and Cernerud (2002), higher education levels are frequently linked to a better understanding and uptake of technical breakthroughs in public sector settings. This also fits with Davis' (1989) Technology Acceptance Model (TAM), which postulates that people with higher levels of education are more likely to find new technologies beneficial, which makes system installation go more smoothly.

A relatively youthful workforce was indicated by the fact that 40 percent of respondents had five to ten years of work experience, and 33.3% had less than five years. This distribution makes sense since, according to Avolio et al. (2004), workers with less experience tend to be more flexible and less opposed to innovation. On the other hand, longer-tenured staff members can need more assistance and training in order to completely adopt new technology systems. The combination of somewhat experienced staff members, however, offers a balance between innovation and stability, with more junior staff members providing new insights into the system's operation and more seasoned staff members offering advice throughout implementation.

**Table 2**

*Performance of the e-Immigration System*

| Statement | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|
| The e-immigration system has significantly reduced processing time. | 5 | 10 | 15 | 25 | 20 | 3.53 |
| The system has improved the accuracy of immigration records. | 3 | 7 | 10 | 35 | 20 | 3.77 |
| The system enhances the overall efficiency of immigration services. | 2 | 5 | 12 | 40 | 16 | 3.87 |
| The system allows for better monitoring and tracking of applications. | 4 | 6 | 14 | 30 | 21 | 3.73 |

At a mean score of 3.53, the first statement assessing the e-immigration system's performance emphasizes how much processing times have been shortened. This shows a moderate level of agreement among respondents, indicating that although the system is recognized for accelerating immigration procedures, more work has to be done. Technological systems, including e-governance platforms, are designed to reduce bureaucratic delays, as Davenport (2000) emphasizes. This result indicates some degree of progress in cutting down on manual processes. To fully achieve its potential, the e-immigration system might need more improvements, as Bwalya et al. (2012) stress that maintaining maximum processing efficiency necessitates ongoing system updates and user training.

With a mean score of 3.77, the second statement looks at how the system affects the accuracy of immigration records. Stronger agreement that the approach improves record accuracy is indicated by this score. As Zhou et al. (2011) showed in their study on e-governance systems in Asia, where automation lowers human error and guarantees data integrity, accurate data management is a major benefit of digital systems. This finding further supports Gichoya's (2005) claim that digital technologies in public administration reduce the possibility of human mistake and data manipulation, leading to more accurate immigration records.

The final statement, which has the highest mean score of 3.87, assesses the overall effectiveness of immigration services ascribed to the e-immigration system. The technology has simplified many facets of immigration processes, as evidenced by the strong perception of increased service efficiency. By reducing paperwork, improving data accessibility, and facilitating quicker decision-making, digital governance systems dramatically increase efficiency, according to research by Heeks (2001) and Fountain (2004). The e-immigration system seems to support these conclusions, reiterating Ndou's (2004) finding that the efficiency of e-governance systems is based on their capacity to provide public services more quickly and reliably.



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The last statement evaluates the system's capacity to provide improved application tracking and monitoring; it received an average score of 3.73, suggesting that users have favorable opinions of its tracking features. To promote accountability and openness in immigration procedures, efficient tracking and monitoring are essential. By enabling applicants to trace their requests at every level, e-government systems with real-time tracking tools can increase openness and lower the risk of corruption (Khan et al., 2021). Although additional improvements could raise user satisfaction with its tracking and monitoring features, these results imply that the e-immigration system at the Temeke Immigration Office and Julius Nyerere International Airport offers these benefits.

**Table 3**

*Challenges of the e-Immigration System*

| Statement | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|
| Technical issues with the system frequently disrupt service delivery. | 10 | 15 | 18 | 20 | 12 | 3.00 |
| There is inadequate training for staff on how to use the system. | 8 | 12 | 20 | 22 | 13 | 3.12 |
| The system experiences frequent downtimes. | 9 | 14 | 16 | 24 | 12 | 3.11 |
| Insufficient technical support is available for troubleshooting system issues. | 7 | 12 | 15 | 28 | 13 | 3.23 |

With a mean score of 3.00, the first challenge, "Technical issues with the system frequently disrupt service delivery," indicates that respondents consider these disruptions to be of considerable impact. As noted by Heeks (2003), technological problems can seriously impair the functionality of e-government systems and are frequently caused by a lack of technical capacity and infrastructure in public organizations. The e-immigration system's technical issues might be a reflection of larger structural problems in Tanzania's public sector, like erratic internet connections, power outages, and overloaded servers (Bwalya et al., 2012). Delivery of services is hampered by these issues, which result in delays and lower user satisfaction.

"Inadequate training for staff on how to use the system," the second challenge, had a mean score of 3.12, suggesting that inadequate training is a significant obstacle to the system's efficient use. Untrained or inadequately trained employees may find it difficult to navigate and troubleshoot the system, hence training is essential to the success of digital platforms. Gichoya (2005) and Scholl (2004) stress the importance of thorough training programs in preparing employees to use e-government systems efficiently. According to the moderate score, staff members are not fully empowered by the training that is available. Service delivery and system efficiency could be greatly increased by increasing the number and caliber of training sessions.

With an average score of 3.11, the third challenge, "The system experiences frequent downtimes," brought attention to yet another important operational problem. Downtime, when the system is momentarily unavailable, interferes with the provision of services and irritates both employees and users. Since frequent outages undermine public confidence in digital services, Ndou (2004) points out that e-government systems' dependability and steady availability are essential to their success. The e-immigration system may have outages due to server overloads, old hardware, or inadequate maintenance problems that rising economies like Tanzania frequently confront (Gichoya, 2005). Resolving these fundamental problems should improve the system's usability and dependability.

Among the problems, the fourth one, "Insufficient technical support is available for troubleshooting system issues," got the highest mean score (3.23), indicating a little higher level of worry. Minimizing service interruptions and promptly addressing system issues depend on efficient technical help. Many African public institutions have difficulty offering sufficient technical support because of a lack of qualified IT staff and a lack of funds, according to Bwalya et al. (2012). Users may become frustrated and system outages may be prolonged in the case of the e-immigration system due to the absence of easily accessible technical support. Enhancing overall system functionality and resolving problems more quickly could be achieved by fortifying technical support services through the hire of more qualified staff and the provision of prompt response methods.

**Table 4**

*Areas of Weakness and Potential Enhancements*

| Statement | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|
| The system needs upgrades to improve user interface and navigation. | 3 | 5 | 18 | 35 | 14 | 3.69 |
| Additional training and capacity building are necessary for effective system use. | 2 | 5 | 10 | 40 | 18 | 3.93 |
| More investment in infrastructure is required to ensure system reliability. | 4 | 7 | 12 | 32 | 20 | 3.73 |

"The system needs upgrades to improve user interface and navigation," the first flaw noted, obtained a mean score of 3.69, suggesting that respondents moderately agreed that the e-immigration system needed improvements for improved usability. Reducing operational errors and enhancing the overall experience depend heavily on an intuitive user interface. According to Heeks (2002), user-centered design is crucial for e-government systems because it makes



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it easier for residents and employees to interact with technology. In line with research by Moon and Norris (2005), which highlights that user-friendly systems are crucial for raising e-government adoption rates, improving the system's interface may reduce task completion times and user annoyance.

The mean score for the second issue, "Additional training and capacity building are necessary for effective system use," was 3.93, indicating a greater level of agreement with the necessity of further training programs. As Gichoya (2005) noted, inadequate capacity-building initiatives frequently impede the successful deployment of e-government systems in developing nations. This finding highlights a notable deficiency in staff competency. Thorough training reduces errors and technical difficulties during operations while also increasing system efficiency. The respondents' strong agreement emphasizes how vital it is to execute ongoing training initiatives to guarantee users can take full advantage of the system's potential. Scholl (2004) supports this by highlighting the importance of capacity-building initiatives in optimizing the efficacy of digital governance platforms.

"More investment in infrastructure is required to ensure system reliability," the third flaw, had an average score of 3.73, indicating that respondents believe that improving infrastructure is essential to increasing the dependability of the system. Sturdy infrastructure is necessary for e-government systems to function well, including dependable servers, consistent internet access, and an unbroken power source. These resources, however, are frequently insufficient in underdeveloped nations such as Tanzania. Underinvestment in infrastructure results in system failures, outages, and decreased efficiency, according to Ndou (2004). Investments in better servers, backup plans, and internet connectivity are necessary to meet these problems. According to Bwalya et al. (2012), fixing infrastructure flaws is essential to the effective implementation and long-term viability of e-government systems in African settings.

**4.2 Discussion**

The survey participants' demographic analysis reveals a fairly balanced gender distribution, with 46.7% of respondents being female and 53.3% being male. This diversity of viewpoints on the efficacy of the e-immigration system is noteworthy. This matters because, as Venkatesh and Morris (2000) pointed out, although the gender gap has been closing recently, males tend to acquire technology at higher rates. Those between the ages of 31 and 50 made up 66.7% of the population, which tended to be younger and middle-aged. According to Rogers' (2003) theory of innovation diffusion, middle-aged professionals are more receptive to embracing new technology. According to Morris and Venkatesh (2000), older people might have a harder time adjusting to these systems.

The majority of responders had advanced degrees; 20% had postgraduate degrees and 40% had bachelor's degrees. The effective adoption and adjustment to the e-immigration system are supported by this educational level. Higher educated people are more likely to view new technology as advantageous, according to Davis' (1989) Technology Acceptance Model (TAM). Additionally, educated workers are better able to adjust to technology advancements in public services, according to Keller and Cernerud (2002). 40% of participants reported having five to ten years of work experience, which suggests a workforce that is both reasonably young and moderately experienced. According to Avolio et al. (2004), younger workers frequently adopt new technologies more readily and offer new perspectives that can facilitate system deployment.

There are moderate to high levels of satisfaction with the performance of the e-immigration system. Although the system has been helpful, there is still room for development, as seen by the mean score of 3.53 given to the statement regarding its capacity to shorten processing times. This is consistent with Davenport's (2000) assertion that technological platforms can eliminate bureaucratic hold-ups. Strong agreement on the system's beneficial effects on data integrity is indicated by its better effectiveness score of 3.77 in increasing the accuracy of immigration records. Similarly, Zhou et al. (2011) discovered in their e-governance study that automated methods improve data accuracy and decrease human error.

Frequently occurring system outages, insufficient training, and technological problems were among the difficulties noted. The mean score for technical concerns was 3.00, indicating that they were considered a moderate disruption to service delivery. According to Heeks (2003), public sector organizations are frequently impacted by technical constraints. Another major problem, with a mean score of 3.12, was inadequate staff training. Gichoya (2005) and Scholl (2004) emphasized that thorough training is essential for enhancing staff proficiency with e-government technologies. Finally, a mean score of 3.73 indicated that improved infrastructure was needed. According to Ndou (2004) and Bwalya et al. (2012), underinvestment in infrastructure poses a serious obstacle to the effective deployment of e-governance platforms in developing countries, highlighting the significance of making investments in better infrastructure to increase system reliability.



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## V. CONCLUSION & RECOMMENDATIONS

### 5.1 Conclusions

Regarding gender, age, education, and work experience, the demographic analysis shows a well-balanced distribution, offering a range of viewpoints on how effective the e-immigration system is. The system's efficiency has significantly increased, according to the results, particularly in terms of speeding up processing and improving data accuracy. However, issues still exist, particularly those pertaining to system outages, insufficient employee training, and technical issues. Younger, better-educated, and somewhat experienced professionals are more likely to accept and adjust to innovations like the e-immigration system, according to the study, which supports previous research on technological adoption. Notwithstanding these advantages, improvement is still possible to improve overall performance and user pleasure.

### 5.2 Recommendations

By investing in more dependable infrastructure, the government can improve the e-immigration system's performance by addressing technological problems like frequent outages. To guarantee that every employee is suitably equipped to operate and maintain the system effectively, extensive training programs must also be put in place. To ensure that the system remains efficient, user-friendly, and able to handle expanding user numbers as adoption rises, continuous monitoring and assessment should also be carried out to identify areas for improvement.

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