

IMPLEMENTATION OF THE FOREIGNER REPORTING APPLICATION (APOA) TO SUPPORT IMMIGRATION LAW ENFORCEMENT IN ADDRESSING OVERSTAY CASES IN INDONESIA



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ABSTRACT

The increasing number of foreign nationals overstaying their visas in Indonesia has heightened the need for effective immigration monitoring and digital governance mechanisms. This study examines the implementation of the APOA (Foreigners Reporting Application), developed by the Directorate General of Immigration, as a digital platform for accommodation providers to support immigration surveillance and improve monitoring efficiency. Using a qualitative research approach, data were collected through document analysis, immigration reports, and a comprehensive literature review. SWOT analysis was employed to evaluate the system's implementation and formulate optimization strategies. The findings indicate that APOA has enhanced digital-based supervision of foreign nationals by improving reporting efficiency and supporting immigration control processes. However, its effectiveness remains constrained by technical limitations, low compliance among accommodation providers, and insufficient integration across institutional databases. The study identifies strategic priorities for optimization, including strengthening digital infrastructure, expanding stakeholder outreach and training, improving inter-agency data integration, and enhancing surveillance and monitoring mechanisms. These findings contribute to the literature on digital public administration and immigration governance by demonstrating how integrated digital reporting systems can support more effective migration management in emerging economies while highlighting the institutional challenges that must be addressed to maximize their effectiveness.

Keywords: *APOA; Overstay; Immigration Surveillance; Digital Transformation; SWOT*

INTRODUCTION

The phenomenon of globalization and increasing cross-border mobility has had a direct impact on the number of foreign nationals entering and leaving Indonesia. On the one hand, the influx of foreign tourists and workers makes a significant contribution to the economy (Budiman & Nabella, 2020). On the other hand, these dynamics pose serious challenges for immigration management, particularly in handling cases of overstay.

Official data from the Directorate General of Immigration under the Ministry of Immigration and Correctional Affairs shows a drastic increase in this issue. Throughout 2025, the Directorate General of Immigration handled 9,843 foreign nationals with immigration violations, a 114% increase compared to 4,593 cases in 2024. Of this total, 9,770 cases involved Immigration Administrative Actions (TAK) and 73 cases underwent *pro justitia* proceedings. Overstay cases accounted for a significant portion of immigration violations, alongside the misuse of residence permits, which is the most common violation. Even in limited-scale law enforcement operations such as Operation Wirawaspada in December 2025, which apprehended 220 foreign nationals, overstaying ranked second with 32 cases (14.5% of the total), trailing the misuse of residence permits with 92 cases (Press Release from the Directorate General of Immigration, 2025).

In response to this growing issue, the Directorate General of Immigration launched the Foreigner Reporting Application (APOA), a digital platform that requires owners or managers of lodging facilities to report the presence of foreign guests in real time. This policy is based on Law No. 6 of 2011 on Immigration, as amended by Law No. 63 of 2024, specifically Article 72(2), which regulates the reporting obligations for accommodation operators. As of March 2025, APOA had recorded 78,077 foreign guests across 4,657 registered accommodations throughout Indonesia (Directorate General of Immigration, 2025). However, this figure remains far below its full potential, given that thousands of informal accommodations remain unregistered in the system.

The gap between the technical potential of APOA and its actual implementation in the field is the primary focus of this study. To date, academic studies on digital transformation in the field of immigration in Indonesia have been limited to the technical aspects of the application, without critically examining the structural, institutional, and social barriers that affect its effectiveness.

Several previous studies have examined the implementation of APOA in Indonesia. Purwanto (2019) concluded that APOA facilitates the monitoring of foreign nationals, though his study was limited to a single immigration office in Bengkulu. Mustari and Jannah (2021) found that APOA facilitates collaboration between immigration monitoring teams and accommodation owners in South Sulawesi, but their focus remained on evaluating the outreach program rather than implementation barriers. Simarmata, Ryanindityo, and Mulyawan (2025) used SWOT analysis to examine immigration monitoring in Medan, identifying personnel and budget constraints as the main barriers. However, no previous study has combined Edward III's policy implementation theory with SWOT analysis at the national level. These studies are also limited to specific regions, do not focus specifically on overstay cases, and do not use the latest data from 2024-2025.

Therefore, there is a research gap due to the lack of a national-level analysis that integrates a systematic policy implementation framework with strategic planning tools specifically designed to address cases of overstaying. This study aims to fill this gap by integrating policy implementation analysis using Edward III's (1980) theory and SWOT analysis by Albert Humphrey to generate context-specific optimization recommendations for the implementation of the APOA across Indonesia.

Against this backdrop, this study examines the implementation of the Foreigner Reporting Application (APOA) in supporting immigration surveillance of overstay cases in Indonesia, as well as strategies to optimize its use through a SWOT analysis. This study was conducted to evaluate the implementation of APOA within the foreigner surveillance system and to formulate strategies to strengthen digital-based immigration surveillance so that it operates more effectively. The uniqueness of this study lies in several aspects. First, this study combines Edward III's public policy implementation theory with SWOT analysis in examining the APOA as a digital immigration surveillance system that has not been extensively studied academically. Second, this study uses the latest empirical data from the Directorate General of Immigration for the years 2024–2025, thereby accurately depicting the current state of the APOA's implementation.

Third, this study specifically focuses on the relationship between overstay cases and the effectiveness of the digital reporting system, a topic that has not been extensively discussed in immigration research in Indonesia to date. Fourth, unlike previous regional studies, this study provides a national-level analysis that integrates four dimensions of policy implementation (communication, resources, disposition, and bureaucratic structure) with strategic optimization strategies.

LITERATURE REVIEW

Policy Implementation Theory

Policy implementation is a crucial stage that determines whether public policies can achieve their objectives (Erinaldi et al., 2025). Edward III (1980) identified four variables that influence the success of implementation: communication, resources, disposition, and bureaucratic structure. In the context of APOA, these four variables are relevant: communication pertains to the dissemination of reporting obligations to accommodation operators; resources encompass technological infrastructure and users' digital capacity; disposition relates to operators' compliance; and bureaucratic structure concerns coordination between the Directorate General of Immigration, the Tourism Office, and other relevant agencies.

The Concept of Overstay in Immigration Law

Overstay is an immigration violation that occurs when a foreign national remains in Indonesian territory after their residence permit has expired (Muhlisa & Roisah, 2020). Under the Immigration Law, foreign nationals who overstay for less than 60 days are subject to a fine of Rp 1,000,000 per day, while an overstay exceeding 60 days may result in deportation and a re-entry ban. Overstaying can be intentional or unintentional (inadvertent overstay) due to administrative negligence. If not detected early, overstaying has the potential to lead to more serious immigration violations, such as the misuse of a residence permit for illegal activities.

Digitalization of Immigration Oversight

Digital transformation in immigration governance is a global trend accelerated by the COVID-19 pandemic and advancements in information technology. The concept of e-government in the field of immigration encompasses the automation of licensing processes, the digitization of border crossing data, and the monitoring of foreign nationals' presence through digital platforms (Rachmad, et al., 2024). In Indonesia, APOA is part of the SIMKIM (Immigration Management Information System) ecosystem, which also includes DASMON (Monitoring Dashboard), FRIS (Immigration Facial Recognition System), CEKAL Online, SIPP (Passenger Profile System), APGAKUM (E-Law Enforcement

Application), and Persons of Interest (Rahman, 2020) . Integration among modules within this ecosystem is key to the effectiveness of comprehensive monitoring.

SWOT Analysis in Public Policy

SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) has long been used as a strategic planning tool in public policy (Marilyn M. & Judy, 2010). In the context of evaluating technology-based government programs, SWOT enables the identification of internal factors (system strengths and weaknesses) as well as external factors (opportunities and threats from the implementation environment), which are then formulated into SO strategies (using strengths to capitalize on opportunities), ST strategies (using strengths to address threats), WO (minimizing weaknesses through opportunities), and WT (simultaneously reducing weaknesses and threats) (Sari et al., 2024).

METHOD

This study employs a descriptive qualitative approach. Data collection was conducted using three techniques:

1. A documentary review of regulations, press releases, and official reports from the Directorate General of Immigration
2. Analysis of secondary statistical data from publications of the Ministry of Immigration and Corrections for the years 2024–2025
3. A literature review of relevant scientific journals and policy articles. Data analysis was conducted using the Miles and Huberman interactive analysis model (data reduction, data presentation, and drawing conclusions). To answer the second research question, a SWOT analysis was used.

Data validity was ensured through source triangulation, namely by comparing data from official government sources, trusted media, and academic literature. The limitations of this study are its reliance on secondary data and the absence of in-depth interviews with direct stakeholders, thus necessitating further research using field methods.

RESULTS AND DISCUSSION

Profile and Architecture of the APOA System

APOA (Foreign National Reporting Application) is a web-based digital platform developed by the Directorate General of Immigration as the primary tool pursuant to Article 72(2) of Law No. 6 of 2011 on Immigration in conjunction with Law No. 63 of 2024, which requires owners or managers of lodging facilities to provide data regarding foreign nationals staying at their facilities to immigration officers for monitoring purposes. The APOA workflow consists of five stages:

1. The lodging operator logs in using a registered account
2. Prepare the passports of the foreign nationals to be registered
3. Use the check-in feature by taking a photo of the passport directly or uploading a photo of the passport (manual check-in)
4. Verify the data read by the system and save it
5. Foreign national data is stored in the system and can be accessed by immigration officers in real-time

A process that previously took 10–15 minutes can now be completed in 30 seconds thanks to Optical Character Recognition (OCR) technology on passports. A check-out feature is also available to record the departure of foreign nationals from the accommodation facility (Dewi et al., 2025)

Table 1
APOA Implementation Data as of March 2025

| Indicator | Unit | Value |
|---|--------|--------|
| Accommodations Registered in APOA | Units | 4,657 |
| Total Recorded Foreign Guest Data | People | 78,077 |
| Active Check-ins | People | 23,835 |
| Recorded check-outs People | People | 54,242 |
| Foreign nationals from Australia (the largest number) | People | 13,104 |
| Foreign nationals from China | People | 12,493 |
| Foreign nationals from India | People | 5,688 |
| Foreign nationals from Singapore | People | 4,491 |
| Province with the highest number (Bali) | People | 47,772 |

Source: Directorate General of Immigration, 2025

Table 1 shows that the implementation of the APOA has achieved significant quantitative results. The dominance of Bali Province, with 47,772 people (61.2% of the total), reflects the concentration of foreign tourists in this major destination. However, this figure must be interpreted critically, as the 4,657 registered accommodations represent only a small fraction of the total accommodations in Indonesia, given that thousands of informal accommodations such as boarding houses, rental homes, and homestays remain unregistered in the APOA.

Trends in Overstay Cases and Monitoring Challenges

A 114% surge in immigration enforcement actions from 2024 to 2025 suggests two non-mutually exclusive possibilities: a genuine increase in violations, and/or an enhanced detection capacity of the Directorate General of Immigration due to digitalization. Comparative data on immigration administrative actions for the January–April 2024 period (1,610 foreign nationals) compared to January–April 2025 (2,201 foreign nationals) reinforces the narrative of a sustained increase throughout the year.

Table 2
Comparison of Immigration Administrative Actions 2024–2025

| Period / Indicator | 2024 | 2025 |
|---|-------|---------|
| Total TAK | 4,520 | 9,770 |
| For Justice | 73 | 73 |
| Total Number of Foreign Nationals Experiencing Problems | 4,593 | 9,843 |
| TAK January–April (periodic) | 1,610 | 2,201 |
| Growth (January – April) | - | +36.71% |
| Annual Total Growth | - | +114% |

Source: Directorate General of Immigration, 2025

In law enforcement operations by the Directorate General of Immigration, overstaying a residence permit consistently ranks as the second-largest violation after

misuse of residence permits. According to a report by RRI’s online news (2025), the “Wirawaspada” operation in July 2025 recorded 29 cases of overstaying among 294 foreign nationals suspected of violations, while the operation in December 2025 recorded 32 cases among 220 foreign nationals, while an operation in the Jakarta metropolitan area identified 20 cases of overstaying among 196 detained foreign nationals. The consistency of these proportions indicates that overstaying is a structural problem that has not been systematically addressed.

Table 3
Distribution of Types of Immigration Violations in Operation Wirawaspada 2025

| Type of Violation | July 2025 (n=294) | Dec 2025 (n=220) | Average % |
|-------------------------------------|----------------------|---------------------|-----------|
| Misuse of Residence Permits | 148 | 92 | 48.1% |
| Overstaying | 29 | 32 | 11.8% |
| Unable to present documents | 34 | 34 | 13.3% |
| Invalid address / change of address | 25 | - | - |
| Fictitious sponsor/investor | 8 | - | - |
| Other | 50 | 62 | - |

Source: Directorate General of Immigration (2025)

The relevance of APOA in detecting overstay violations lies in its ability to provide digital records of foreign nationals’ presence at accommodations. When a foreign national’s check-in data is recorded in APOA but a check-out does not occur within a reasonable timeframe, the system can trigger an alert for immigration officers to conduct on-site verification. It is this data-anomaly-based early detection mechanism that, in theory, can help identify cases of overstay before they become protracted.

SWOT Analysis of APOA Implementation

Based on an analysis of APOA implementation data, the following SWOT matrix has been compiled to document the internal factors (strengths and weaknesses) and external factors (opportunities and threats) that affect its effectiveness.

Table 4
SWOT Matrix for the Implementation of APOA in Monitoring Stays Exceeding the Time Limit

| | STRENGTHS (S) | WEAKNESSES (W) |
|-------------------|--|---|
| OPPORTUNITIES (O) | S-O Strategy: Expand APOA’s coverage to informal housing using proven OCR capabilities; integrate APOA data with DASMON to create a real-time dashboard for monitoring overstay cases. | W-O Strategy: Leverage the national digital momentum to allocate budget for server upgrades and develop APOA Mobile Lite for small accommodations with a simple UX. |
| THREATS (T) | S-T Strategy: Use APOA data for an early warning system for overstays; enhance data encryption and application cybersecurity; strengthen cross-agency intelligence collaboration. | W-T Strategy: Implement an automated tiered sanctions system (4 levels), form a joint monitoring task force between Immigration, Tourism, and the National Police, and create a national integrated accommodation database. |

Source: Researcher Analysis, 2026

Strengths

The implementation of APOA offers several internal advantages. First, the strong legal foundation established under Law No. 6 of 2011, together with Law No. 63 of 2024, provides full legitimacy for the reporting obligations imposed on accommodation operators. Second, the integration of APOA into the broader SIMKIM ecosystem enables cross-module data synergy, thereby facilitating seamless coordination between border crossing records, visa applications, travel bans, and passenger profile systems. Third, the passport OCR technology in this application has drastically improved reporting efficiency, reducing the time required to register foreign guests from approximately 15 minutes to just 30 seconds. Fourth, real-time data accessibility allows immigration officers across Indonesia to instantly monitor the whereabouts of foreign guests, thereby improving response times to urgent situations such as potential overstay cases. Fifth, the analytics feature, which maps the concentration of foreign nationals by province, facilitates prioritizing surveillance efforts in high-density areas.

Weaknesses

Despite its strengths, APOA also faces a number of significant internal weaknesses. Its server infrastructure remains unstable and prone to errors when usage peaks, undermining user trust and system reliability. The lack of an offline mode severely hinders operations in areas with poor or unstable internet connections, leaving many remote tourist destinations underserved. Additionally, the lack of automatic integration with hotel Property Management Systems creates a double-entry burden for accommodation managers, who must manually input data into both systems. Coverage of informal accommodations, including boarding houses and rental homes, remains very low despite this segment having the highest risk for overstay cases. Furthermore, digital literacy among small accommodation managers is highly uneven, and direct outreach efforts and training from immigration authorities are still insufficient to bridge this gap.

Opportunities

Several external opportunities can be leveraged to enhance the effectiveness of the APOA. The government's digital transformation agenda, which prioritizes e-government initiatives, provides strong regulatory and budgetary support for the further development of the application. The high penetration of smartphones across Indonesia facilitates the potential adoption of mobile-based reporting applications, thereby simplifying compliance for small accommodation operators. Post-pandemic growth in the tourism sector has increased the volume of foreign nationals entering the country, thereby heightening the need for more advanced and reliable monitoring systems. New policies requiring in-person photos and interviews at immigration offices for residence permit extensions, as stipulated in Circular Letter No. IMI-417.GR.01.01 of 2025, strengthen the national biometric database, which has the potential to be integrated with the APOA for more accurate verification of foreign guests. Finally, there is significant potential for ASEAN cooperation in cross-border immigration information sharing, which could enhance regional efforts to track foreign nationals overstaying in multiple countries.

Threat

External threats continue to pose challenges to the implementation of the APOA. Evolving patterns of immigration violations, including the use of false identities and fictitious sponsors, make it increasingly difficult for automated systems to detect fraudulent

reporting. The presence of foreign nationals in the illegal accommodation ecosystem residences operating entirely outside the official registration system means that many individuals intending to stay beyond their authorized time can completely evade APOA reporting obligations. The potential for data breaches and cyberattacks on immigration databases poses a serious threat, as a single security incident could compromise sensitive information on foreign guests and erode public trust in the system. Resistance from accommodation operators to reporting obligations driven by perceptions of administrative burdens and a lack of direct benefits continues to hinder full compliance. Finally, fragmented coordination among immigration, tourism, and law enforcement agencies weakens follow-up actions on anomalies detected by APOA, meaning that even though cases of overstay have been identified, they may not be addressed promptly or effectively.

Analysis of APOA Implementation Using Edward III's Policy Implementation Theory

To comprehensively evaluate the implementation of the Foreign National Reporting Application (APOA) as a policy instrument to support immigration enforcement against overstay cases, this study employs Edward III's (1980) policy implementation framework. According to Edward III, the success of policy implementation is determined by four key factors: communication, resources, disposition (attitude), and bureaucratic structure. The following analysis applies these four dimensions to the context of the APOA policy.

a. Strengthening Technology Infrastructure (Short-Term Strategy)

Increasing server capacity and fixing bugs are urgent priorities. Without application stability, accommodation managers' trust in the system will continue to decline. Adding an offline mode feature with automatic synchronization when the connection is restored will significantly expand reach to remote areas. The most transformative development is the integration of an API with major hotel PMS systems, so that guest data is automatically synchronized to APOA without duplicate entries. Investments in data security through end-to-end encryption and multi-layered authentication systems are also non-negotiable.

b. Communication

Communication refers to the clarity, consistency, and adequacy of information dissemination regarding policy objectives and procedures to all relevant stakeholders. In the context of APOA, effective communication is crucial to ensure that accommodation managers understand their legal obligations to report foreign guests.

Analysis indicates that communication regarding APOA has been fairly effective, though still insufficient in some aspects. The Directorate General of Immigration has issued official press releases and conducted outreach activities in major tourist destinations such as Bali, Jakarta, and Batam. However, these communication strategies have not adequately reached informal accommodation providers, including boarding houses, homestays, and rental villas. As noted in Section 4.1, thousands of informal accommodations remain unregistered in APOA, indicating that messages regarding reporting obligations have not been effectively communicated to this high-risk segment.

Additionally, technical guidelines on using APOA features such as the check-in process, passport OCR functionality, and check-out procedures have not been distributed evenly. Many small accommodation operators report confusion regarding data entry procedures, particularly when encountering system errors or passport readability issues. This communication gap directly contributes to low compliance rates and creates blind spots in overstay detection.

To improve communication, the Directorate General should use multilingual outreach materials (Indonesian, English, Mandarin, and other relevant languages), leverage social media platforms and hospitality association networks, and conduct on-site training sessions targeting informal accommodation clusters.

c. Resources

Resources include adequate technological infrastructure, human resources, financial allocation, and the facilities necessary to implement policies effectively. For APOA, resources include server capacity, application stability, digital devices for accommodation managers, internet connectivity, and trained immigration personnel.

The findings indicate significant resource constraints. First, the technological infrastructure remains unstable, with application errors and server outages occurring during peak usage periods. This erodes user trust and hinders consistent reporting. Second, the lack of an offline mode prevents the use of APOA in areas with poor internet connectivity, including many remote tourist destinations. Third, automatic integration with hotel Property Management Systems (PMS) is not yet available, forcing accommodation managers to perform double data entry a resource inefficiency that increases compliance costs.

Human resource limitations also exist. Many small accommodation managers have limited digital literacy, yet specialized training programs and technical support channels lack sufficient staff. Additionally, immigration officers in the field lack adequate mobile devices and real-time access to the APOA dashboard during inspections, thereby reducing their ability to verify foreign guest data on-site.

Without addressing these resource shortages, the APOA's potential as an early-detection tool for overstay violations will remain unrealized. Priority investments must include server upgrades, offline synchronization capabilities, PMS integration APIs, and expanded training programs.

d. Attitude (Disposition)

Disposition refers to the commitment, willingness, and attitude of implementing actors toward the policy. In the context of APOA, relevant actors include accommodation managers (willingness to comply) and immigration officers (commitment to law enforcement). Analysis reveals a diverse disposition landscape. Large-scale formal accommodations generally demonstrate a positive attitude toward APOA compliance, recognizing that digital reporting reduces the administrative burden compared to previous manual systems. These facilities often have dedicated staff and view compliance as part of standard operating procedures.

In contrast, many managers of informal accommodations express reluctance or resistance. Perceived compliance costs (time, technical complexity, fear of data entry errors) outweigh perceived benefits, particularly when law enforcement appears inconsistent. The threat of sanctions under Article 117 of the Immigration

Law (up to 3 months' imprisonment or a maximum fine of Rp 25,000,000) is not consistently enforced, thereby reducing the deterrent effect and reinforcing non-compliance.

Among immigration officers, attitudes vary by region. Officers in areas with high tourism, such as Bali, demonstrate a stronger commitment to enforcing the APOA due to the clearly visible concentration of foreign nationals. However, in regions with lower volumes of foreign tourists, monitoring of the APOA is given lower priority, resulting in inconsistent follow-up on data anomalies that may indicate overstay cases.

To improve compliance, the Directorate General should implement a tiered incentive system (e.g., certificates of recognition for compliant accommodations) alongside consistent enforcement of sanctions to demonstrate that non-compliance has tangible consequences.

e. Bureaucratic Structure

Bureaucratic structure refers to coordination mechanisms, standard operating procedures (SOPs), and clear delineation of responsibilities among implementing agencies. For the APOA, this includes coordination between the Directorate General of Immigration, provincial and district immigration offices, the Tourism Office, local governments, the National Police, and other relevant stakeholders.

The analysis identified a fragmented bureaucratic structure as a critical weakness. First, APOA data remains disconnected from the Tourism Office's accommodation licensing database. This fragmentation makes it impossible to systematically identify unregistered accommodations or verify the total number of lodging facilities that should be reporting foreign guests. Second, coordination with the National Police regarding follow-up actions on overstay cases detected by APOA is not governed by formal SOPs, resulting in delays in law enforcement operations.

Third, the absence of a dedicated interagency task force for monitoring foreign nationals means that data from the APOA is not systematically integrated with other monitoring tools within the SIMKIM ecosystem, including DASMON (Monitoring Dashboard), SIPP (Passenger Profile System), and CEKAL Online. Although technical integration exists, operational coordination that who does what, when, and under what authority remains ambiguous.

Fourth, standard operating procedures for handling APOA data anomalies (e.g., a check-in is recorded but there is no check-out after the permit has expired) are not consistently applied across regional immigration offices. Some offices proactively conduct field verifications, while others take no action without additional triggers.

To strengthen the bureaucratic structure, the Directorate General should establish a formal Memorandum of Understanding (MoU) with the Tourism Office and the National Police, develop joint SOPs to follow up on overstay cases, and designate APOA coordination desks in provincial immigration offices.

CONCLUSIONS AND SUGGESTIONS

This study concludes that the implementation of the Foreign National Reporting Application (APOA) has brought measurable progress to Indonesia's digital immigration oversight. As of March 2025, APOA recorded 78,077 reports of foreign guests across 4,657 accommodations, reducing reporting time from 15 minutes to 30 seconds through

OCR technology. However, its effectiveness in reducing overstay cases remains suboptimal.

By applying the Edward III framework, four barriers were identified. First, communication regarding reporting obligations has not reached operators of informal accommodations. Second, resources are inadequate due to unstable servers, the absence of an offline mode, and a lack of PMS integration. Third, compliance among informal operators is poor due to inconsistent enforcement of sanctions. Fourth, the bureaucratic structure is fragmented, with no data integration between immigration and tourism agencies. Additionally, a SWOT analysis revealed internal weaknesses (low coverage of informal accommodations, limited digital literacy) and external threats (evolving patterns of violations, cybersecurity risks), as well as opportunities (e-government support, high smartphone penetration).

Therefore, six recommendations are proposed. First, strengthen communication through multilingual outreach and specialized assistance services targeting informal accommodations. Second, allocate resources for server upgrades, offline modes, PMS integration via API, and mobile devices for field officers. Third, enhance law enforcement through an automated tiered penalty system (warnings, electronic fines, suspension of access, legal proceedings) as well as incentives for compliant operators. Fourth, reform the bureaucratic structure by signing MOUs with tourism agencies and the police, creating an integrated accommodation database, and forming joint task forces in high-risk areas such as Bali and Batam. Fifth, the Immigration Directorate General () should implement automatic notifications via SMS, email, and WhatsApp for residence permit holders 30, 14, 7, and 1 day before their permits expire to reduce unintentional overstays. Sixth, conduct quarterly evaluations with transparent progress reports and annual stakeholder forums.

In conclusion, the digital potential of APOA will only reduce overstay cases if technological investment is accompanied by better communication, consistent law enforcement, and structured interagency coordination. Without comprehensive reforms, oversight blind spots will persist, leaving Indonesia's immigration system vulnerable to overstay violations.

REFERENCES

- Budiman, D., & Nabella, S. D. (2020). Masuknya Warga Negara Asing dalam Perspektif Ekonomi Pertahanan. *Jurnal BENING*, 7(1), 16.
- Dewi, N. P., Prabawati, N. P., & Wirantari, I. D. (2025). Inovasi Pelayanan melalui aplikasi Pelaporan Orang Asing Next Generation (APOA-NG) di Kantor Imigrasi Kelas I Khusus TPI NGurah Rai. *Socio-political Communication and Policy Review*, 2(1).
- Edward III, G. (1980). *Implementing Public Policy* (Vol. 1). (P. L, Éd.) Washington D.C: Congressional Quarterly Press.
- Erinaldi, Marito, G. C., Larasati, N., & Lubis, R. F. (2025). Implementasi Kebijakan Pendidikan Terhadap Kebijakan Publik. *Jurnal Pendidikan Multidisiplin*, 2(11), 214-233.
- Marilyn M., H., & Judy, N. (2010). Exploring SWOT Analysis - Where are we now -. *Journal of Strategy and Management*, 3(3).
- Muhlisa, A. N., & Roisah, K. (2020). Penegakan Hukum Keimigrasian Terhadap Penyalahgunaan Visa Izin Tinggal Kunjungan Lewat Batas Waktu (Overstay) Pada Warga Negara Asing. *Jurnal Pembangunan Hukum Indonesia*, 2(2).

- Mustari, K. A., & Jannah, R. N. (2021). Evaluasi Kegiatan Sosialisasi APOA Versi 2.0 Guna Meningkatkan Kader Pengawasan terhadap Orang Asing di Sulawesi Selatan. *Jurnal Abdimas Imigrasi*, 2(2).
- Purwanto, A. F. (2019). Tinjauan Implementasi Aplikasi Pelaporan Orang Asing (APOA) dalam Pengawasan Keimigrasian Pada Kantor Imigrasi Kelas I TPI Bengkulu. *TEMATICS*, 1(1), 7.
- Rachmad, Y. E., Ilham, R., Manurung, H. E., Judijanto, L., Laksono, R. D., Finasim, & Sa'dianoor. (2024). *Layanan dan Tata Kelola E-Government*. (E. Rianty, Éd.) Yogyakarta, Indonesia: PT. Green Pustaka Indonesia.
- Rahman, N. F. (2020). Tinjauan Kinerja SIMKIM Versi 2.0 Terhadap Pengawasan Keimigrasian Pada Kantor Imigrasi Kelas 2 Non TPI Agam. *Technology Management and Informatics Research Journals*, 3(1).
- Sari, R. Y., Rusdinal, & Anisah. (2024). Analisis SWOT Sebagai Alat Penting dalam Proses Perencanaan Strategis Organisasi Non-Profit. *Jurnal Niara*, 17(1).
- Simarmata, S. P., Ryanindityo, M., & Mulyawan, B. (2025). Strategi Pengawasan Keimigrasian dalam Mencegah Penyalahgunaan Izin Tinggal Keimigrasian di Kantor Imigrasi Kelas I Khusus TPI Medan. *Journal of Administration and International Development*, 5(2).