

THE ELECTRONIC TRAFFIC LAW ENFORCEMENT PROGRAM POLICY (ETLE) IN TANJUNGPINANG CITY

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Abstract

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Traffic violations in Indonesia, particularly in Tanjungpinang, contribute significantly to congestion and accidents. The Electronic Traffic Law Enforcement (ETLE) system emerges as a technology-based solution to enhance traffic law enforcement, transparency, and accountability while reducing illegal levies. This policy aligns with government initiatives for digital governance development. This study employs a qualitative approach, focusing on traffic violators and ETLE law enforcement officers at the Traffic Unit of Tanjungpinang City Police. Data collection utilized primary and secondary sources through observation, interviews, and documentation, analyzed using the Miles and Huberman model involving data reduction, presentation, and conclusion verification. Initial findings reveal that ETLE implementation in Tanjungpinang faces several challenges, including limited public understanding of the system, which is often perceived as "regular CCTV cameras," insufficient socialization efforts, and incomplete officer comprehension of Standard Operating Procedures, particularly technical aspects. Despite these obstacles, the policy maintains a strong legal foundation and aims to reduce violations while enhancing public compliance. Critical implementation factors influencing success include policy standards and targets, resource availability, implementing organization characteristics, inter-organizational communication, implementer attitudes, and the social, economic, and political environment. These elements collectively determine the effectiveness of ETLE policy implementation in achieving its intended objectives.

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INTRODUCTION

The Unitary State of the Republic of Indonesia adheres to a system of government that grants authority to regions to regulate their respective household affairs. As stated in Article 18 Paragraph 1 of the 1945 Constitution which states that "The Unitary State of the Republic of Indonesia is divided into Provinces and Provinces are divided into Regencies and Cities, each of which has a regional government regulated by law." In this context, cities as densely populated permanent areas consisting of various levels of society with interconnected economic activities have a strategic role as centers of growth and representation of wealth and commercial opportunities (Pardede et al., 2022) .

Traffic problems pose a serious challenge to urban development, given that transportation and road traffic play a crucial role in driving national development and integration as part of efforts to improve public welfare, as mandated by the 1945 Constitution of the Republic of Indonesia (Pardede et al., 2022) . The still poorly organized condition of Indonesia's transportation infrastructure and facilities demands a safe, orderly, and smooth traffic management system to support community productivity.

Based on the principles of deconcentration and decentralization as stipulated in Law Number 23 of 2014 concerning Regional Government, the Indonesian National Police (POLRI) has the responsibility to maintain public security and order, enforce the law, and protect and serve the community, including in enforcing traffic regulations. Traffic violations, as stipulated in Law Number 22 of 2009 concerning Traffic and Road Transportation (LLAJ Law), are divided into two categories, namely traffic violations and road transportation violations (Pais, 2023) .

The phenomenon of traffic violations that frequently occur in various regions, including Tanjungpinang City as the provincial capital, often causes accidents and congestion caused by various factors such as poor road conditions, human factors, and the behavior of other road users. Handling traffic violations through the conventional ticketing system regulated by Law Number 8 of 1981 concerning Criminal Procedure and the LLAJ Law has not provided an optimal deterrent effect, and often the resolution is not in accordance with applicable laws and regulations. This condition demands innovation in a more effective and efficient traffic law enforcement system (Puspita, 2024) .

The response to these challenges emerged through the use of technology in government administration, as directed in Presidential Instruction Number 3 of 2003 concerning the National Policy and Strategy for the Development of Indonesian Electronic Government. This policy emphasizes optimizing communication and information technology to improve the efficiency of government administration and the quality of public services. In the context of traffic law enforcement, the use of electronic technology has been accommodated in the LLAJ Law Number 22 of 2009, which allows the use of electronic devices as a tool to assist in overcoming violations in the transportation sector.

The implementation of Electronic Traffic Law Enforcement (ETLE) is a concrete manifestation of e-government in the traffic sector. This system uses 24-hour cameras to detect and record traffic violations, with these recordings being used as evidence in law enforcement proceedings. Violation data is integrated into Electronic Registration Identification (ERI) as a history of violations, aimed at minimizing the frequency of traffic accidents and facilitating enforcement of violations.

Tanjungpinang City has been one of the areas implementing ETL technology since November 30, 2023, with the installation of cameras in strategic locations in Batu 7, precisely in front of Morning Bakery, Jl. DI Panjaitan Kilometer 7. The ETL mechanism in Tanjungpinang includes taking photos of violators by cameras, sending notifications through PT. Pos Indonesia, providing a 5-day confirmation period, issuing traffic tickets with a virtual payment code through Bank Rakyat Indonesia (BRI), a 7-day payment deadline, and sanctions in the form of blocking vehicle registration certificates for those who do not fulfill payment obligations. Types of violations that can be detected include not wearing a standard helmet, using a cellphone while driving, not wearing a seat belt, and violating license plate regulations.

Initial data on the ETL implementation in Tanjungpinang shows that, from its implementation in December 2023 to January 2024, 31 vehicles were caught by ETL cameras, according to a report by Tanjungpinang Police Traffic Unit Chief, Commissioner Reza Anugrah. However, implementation challenges arise due to the public's varying levels of understanding of the technology, which could potentially hinder the system's effectiveness.

This study aims to analyze the implementation of the ETL program policy in Tanjungpinang City from January to June 2024 and identify inhibiting factors in its implementation. The approach used refers to the Van Meter and Van Horn policy implementation theory to measure the effectiveness of policy implementation. This study is expected to provide theoretical contributions to the development of science, particularly in the fields of public policy and e-government, as well as provide practical recommendations for local governments and relevant stakeholders to improve the effectiveness of the ETL system in supporting traffic order and road user safety in Tanjungpinang City.

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Public Policy Implementation

Broadly speaking, policy implementation is a legal administrative tool in which various actors, organizations, procedures, and techniques work together to implement policies to achieve desired impacts or objectives. Implementation, on the other hand, is a complex phenomenon that can be understood as a process, an output, or an outcome. Van Meter and Van Horn define policy implementation as actions taken by individuals or groups in the government or the private sector aimed at achieving the goals set out in policy decisions.

The policy implementation stage will not begin before the goals and objectives are set or identified by policy decisions, so that the implementation stage occurs only after the law is established and funds are provided to finance the implementation of the policy. Policy implementation studies focus on activities or activities carried out to carry out the established policy decisions, with the Van Meter and Van Horn implementation process model not intended to measure the final results of the policy, but to measure and explain the achievement of the program. Policy implementation is one of the stages of the many stages of public policy which is only one important variable that influences the success of a policy in solving public problems (Chazali, 2016) .

Van Meter and Van Horn Policy Implementation Model

The Van Meter & Van Horn (1975) model explains that policy performance is influenced by several interrelated independent variables, including policy standards and objectives, resources, characteristics of implementing organizations, communication between related organizations and implementation activities, attitudes of implementers, and the social, economic, and political environment. Policy standards and objectives determine that implementation performance can be measured for its level of success if the policy's measures and objectives are realistic with the socio-culture existing at the policy implementer level. Resources, especially quality human resources, financial resources, and time resources are crucial factors in determining the success of the implementation process.

The characteristics of implementing organizations include formal and informal organizations involved in the implementation of public policy, where implementation performance is greatly influenced by the appropriate characteristics and suitability of the implementing agents. Communication between organizations and the attitudes of implementers determine the level of acceptance or rejection of the implemented policy, while a conducive external social, economic, and political environment is a driving factor for the success of public policy. Van Meter and Van Horn classify policies according to the number of changes that occur and the extent of consensus regarding objectives between actors in the implementation process, where incremental changes are more likely to generate positive responses than drastic changes (Chazali, 2016).

Electronic Government (E-Government)

E-government is generally defined as the application of Information and Communication Technology products used to support government administration, including the use of the internet in government affairs and its public services to the community, transparency of policy making and regulations. E-government is an Information and Communication Technologies (ICT) service owned and operated by the government to improve relations between citizens, the private sector and the government, with four basic relationships, namely Government to Citizen (G2C), Government to Business (G2B), Government to Government (G2G), and Government-to-Employee (G2E).

E-government in Indonesia is based on Presidential Instruction Number 3 of 2003 concerning national policies and strategies for e-government development, which is motivated by the public's need for an accountable, transparent, effective, and efficient government. Building an e-government application system requires standardization of system development needs that include reliable, interoperable, scalable, user-friendly, and integrable to ensure communication between systems can be carried out by any system development vendor. Through the use of e-services, e-government can be realized that leads to good governance, by following the principles of planning follow function, money follow function, structure follow function, personnel follow function, and accountability follow function (Yuhefizar et al., 2017) .

Electronic Traffic Law Enforcement (ETLE)

Traffic tickets or proof of violation are fines imposed by law enforcement against drivers who do not comply with traffic regulations, where before the existence of ETLE,

the police managed the ticketing system by stopping the violators, explaining the error, issuing a ticket and requiring them to attend a court hearing which took quite a long time. Technological developments encouraged the police to make changes to the system of enforcement of traffic violators with the innovation of a digital-based traffic law enforcement system in the form of an ETLE system that digitizes the ticketing process with the main advantage of the ability to display vehicle data automatically.

The legal basis of the ETLE system is contained in Law Number 22 of 2009 concerning Traffic and Road Transportation Article 272 which states that electronic technology can be utilized to support authorities in prosecuting traffic violators and the discovery of electronic equipment can be used as evidence in court. The ETLE system eliminates difficult and time-consuming manual procedures, where officers do not need to record ticket results manually because they already have electronic devices to record violations, with violators being able to pay fines directly from their bank accounts and show proof of payment to retrieve confiscated items and continue their journey.

METHOD STUDY

This study uses a qualitative method with a descriptive approach to obtain data and field facts related to the implementation of the ETLE program policy in Tanjungpinang City. As stated by Bogdan & Taylor (1990) , a qualitative approach is a research method that creates descriptive data in the form of written words or words from people and observable attitudes. The research location was carried out at the Riau Islands Regional Police, the Riau Islands Transportation Agency, and the Tanjungpinang City SAMSAT with a focus on the ETLE program for the January-June 2024 period. Data collection was carried out through literature studies and field research, with primary data sources in the form of in-depth interviews with seven informants selected purposively including representatives of the Riau Islands Regional Police, Tanjungpinang PPD UPT, the Riau Islands Provincial Transportation Agency, traffic violators caught by ETLE, and traffic users in areas monitored by ETLE (Abdussamad, 2021; Sugiyono, 2021) . Secondary data was obtained through literature studies, internet searching, observation, and documentation to complement the primary data. Data analysis uses the Miles and Huberman model which consists of three activity flows, namely data reduction, data presentation, and drawing conclusions or verification. (Anggito & Setiawan, 2018) .

RESULTS AND DISCUSSION

Policy Standards and Targets

The implementation of the ETLE policy in Tanjungpinang City refers to national standards stipulated in Law Number 22 of 2009 concerning Traffic and Road Transportation Article 272 which allows the use of electronic equipment to support enforcement of traffic violations, as well as Law Number 19 of 2016 concerning Electronic Information and Transactions, which is strengthened by the Regulation of the Republic of Indonesia National Police Number 5 of 2021 concerning Enforcement of Traffic Violations with Electronic Systems. The ETLE mechanism includes capturing violations by camera, sending notification letters by post, data confirmation via the website or ETLE Gakkum post, payment of fines via BRIVA number sent via SMS, and blocking of STNK (vehicle registration certificate) if not paid within 5 days. This system has advantages in the form of accurate violation data, effective and efficient mass enforcement, prevention of abuse of authority, ease of administration, and the ability to

prosecute violators from outside the region through the ERI (Electronic Registration and Identification) database, even foreign nationals through cooperation with immigration.

Despite having clear formal standards, the implementation of ETLE in Tanjungpinang faces obstacles in terms of implementation understanding and public outreach. Some officers do not yet have a thorough understanding of standard operating procedures (SOPs), especially those related to technical aspects and data management, and there are no local technical standard documents tailored to Tanjungpinang's geographic and social conditions. Policy targets, including increasing public compliance with traffic regulations, reducing extortion practices, increasing transparency and accountability in law enforcement, and reducing the number of traffic violations and accidents, have not been optimally achieved because the public still views ETLE cameras as "ordinary street CCTV cameras" without understanding the digital process and its legality. This condition reflects the theory of Van Meter and Van Horn (1974) that policy implementation can fail when implementers are not fully aware of the standards and objectives of the policy, and the implementer's disposition towards the policy is a crucial factor in successful implementation.

Resource

Based on the results of the research on the implementation of the ETLE policy in Tanjungpinang City, it was found that although the Transportation Agency has provided adequate technological infrastructure such as high-resolution CCTV cameras, ANPR, and application servers, the program implementation still faces various significant obstacles. The limited technical competence of Traffic Police officers who have a manual background in operating the digital system, the lack of budget for IT training, and technical constraints such as network disruptions and limited server capacity are the main obstacles. The absence of real-time data integration between agencies such as the Police, the Transportation Agency, and the Population Agency due to differences in database systems and the absence of a formal cooperation agreement worsens the program's effectiveness, including minimal coordination with the SAMSAT which should be able to optimize the process of blocking STNK violators. Dependence on the central budget limits local development, while the lack of public outreach and the misconception that ETLE fines are included in the Regional Original Revenue (PAD) (when in fact they are included in the Non-Tax State Revenue) reduce the commitment of local governments, even though this program can be strategically utilized to increase vehicle tax revenue and contribute to traffic order and efficiency of public services.

Characteristics of the Implementing Organization

Based on the analysis of the characteristics of the implementing organization, the implementation of the ETLE program in Tanjungpinang City is carried out by the Riau Islands Regional Police Traffic Unit supported by the Provincial Transportation Agency, with a clear hierarchical organizational structure in accordance with Indonesian National Police standards that facilitates the flow of command but slows down technical decision-making due to its centralized nature. Although the organization has a dedicated ETLE unit with strong leadership commitment demonstrated through active supervision and periodic evaluations every 6 months, it still faces limited IT human resources, senior staff resistance to digital technology, and suboptimal cross-sector coordination due to the absence of an official forum or institutional cooperation team with the Transportation

Agency. The organizational culture that emphasizes procedural compliance and gradual adaptation to digital technology, coupled with limited local authority in system development that is largely regulated by the central government, makes the organization quite responsive to technical obstacles but less flexible in implementing innovation, so that the process of rapid decision-making to address technical problems such as server downtime, damaged cameras, or network disruptions is hampered.

Inter-Organizational Communication

Based on Van Meter and Van Horn's theory on inter-organizational communication in policy implementation, the implementation of the ETLE program in Tanjungpinang City shows significant communication weaknesses because although there is coordination through official letters, cross-sector meetings, and the signing of the MoU in the initial stages of the launch, the frequency of follow-up meetings is very limited due to the lack of a formal coordination team with a clear decree so that no party feels responsible for initiating ongoing meetings. Reliance on informal communication through WhatsApp groups between personnel across agencies to expedite the handling of traffic tickets, although faster, is often not officially documented and risks causing miscommunication and procedural bias that contradict the principles of accuracy and consistency of communication required in effective policy implementation. Implementation activities such as socialization, training, and monitoring are still sporadic and not yet systematic, coupled with the lack of routine coordination and the absence of an integrated system, making it difficult for implementers to consistently and uniformly understand the standards and objectives of the ETLE policy. So that even though good intentions between agencies are visible, the implementation of ETLE is not optimal because it has not been institutionalized in a clear collaborative work system in accordance with the principles of effective policy communication.

Attitude of the Implementers

Based on Van Meter and Van Horn's theory on the attitudes of implementers, the implementation of the ETLE policy in Tanjungpinang City shows a positive disposition from implementers characterized by a high level of acceptance and commitment because they view ETLE as a solution to manual ticketing practices that often trigger negative perceptions, part of the digital transformation of objective and transparent law enforcement, and can minimize the potential for deviations and provide stronger legal legitimacy. Although the implementers' conceptual understanding is quite good and they demonstrate a professional attitude in serving the public with a friendly and patient manner, there are still limitations in technical understanding that can become a potential obstacle to implementation if not immediately addressed through adequate training. The response of the community as the target group also shows a positive attitude because they consider ETLE to be fairer, transparent, and free from extortion compared to manual ticketing, and easier in the digital era with a direct payment system to the bank, however, many people still do not fully understand the electronic ticketing mechanism so that it requires intensified education and socialization. With the support of future developments in the form of additional mobile ETLE cameras in coordination with the Governor and Mayor, this policy has a high potential for success due to support from implementers and legitimacy from the community, although it requires increased technical capacity and socialization to optimize the effectiveness of implementation .

Social, Economic and Political Environment

Based on Van Meter and Van Horn's theory on the influence of the social, economic, and political environment, the implementation of the ETLE policy in Tanjungpinang City faces complex challenges from an external environment that is not yet fully conducive. From an economic aspect, although ETLE helps efficiency with a direct payment system to banks that saves time and costs, the amount of fines ranging from Rp. 100,000 to Rp. 750,000 depending on the type of violation has raised complaints from the public who consider it too high, thus potentially causing resistance and repeated violations, especially for low-income communities. Socially, although the public supports ETLE because it reduces direct interaction with the police and minimizes corruption, collusion and nepotism (KKN), there are still obstacles in the form of a low understanding of the concept of electronic ticketing, negative perceptions especially among the elderly who are not yet familiar with digital technology, social values that are still permissive towards minor violations, and low legal awareness reflected in the public's ignorance that the ETLE camera is already active. From a political aspect, the support of the Tanjungpinang City Government through the participation of the Transportation Agency is still symbolic and has not been followed by concrete budgeting or supporting policies such as the addition of cameras or integration of the city transportation system, thus limiting the optimal development of ETLE and requiring the preparation of supporting regulations and massive and continuous public education to create a more conducive external environment for the successful implementation of the policy.

Factors Inhibiting the Implementation of the ETLE Program Policy in Tanjungpinang City

The implementation of the ETLE program policy in Tanjungpinang City faces various interrelated structural and technical obstacles that create complexity. The fundamental obstacle lies in weak cross-agency coordination due to unclear division of tasks, authority, and responsibilities between the Police, the Transportation Agency, and the SAMSAT, resulting in partial and unstructured work fragmentation. Limited technological infrastructure, such as internet network instability that causes recording failures and data transmission delays, coupled with inadequate server capacity, further impairs the system's effectiveness. The human resource competency gap poses a serious challenge because not all officers have adequate technical capacity to manage complex digital systems, with training still limited to basic levels without addressing troubleshooting or in-depth data integration. Meanwhile, the system is not yet integrated in real time with other agency databases such as the Population Agency for NIK validation and SAMSAT for fine collection, forcing officers to perform repeated manual checks that slow down the law enforcement process.

Other obstacles include a lack of public outreach and education, leading the public to view ETLE cameras as ordinary CCTV cameras without understanding their function as a law enforcement tool. Furthermore, a lack of understanding of the electronic ticketing mechanism creates resistance and confusion. The absence of supporting Regional Regulations (PERDA) specifically regulating inter-agency coordination, information and data systems, and the establishment of regional technical implementation units creates legal obstacles that reduce the legitimacy and strength of program execution at the local level. Limited operational and maintenance budgets, with an ideal cost of IDR 500 million

per camera point and IDR 300 million per year for operations, have not been allocated by the Transportation Agency. This threatens the program's sustainability, as inadequate funds for routine maintenance, ongoing training, and system improvements can result in infrastructure that is vulnerable to damage and human resources that are not developed according to needs. Overall, these inhibiting factors are interrelated and require a holistic approach that includes improved coordination, infrastructure and human resource investment, system integration, massive outreach, and regional regulatory support to achieve optimal ETLE implementation in Tanjungpinang City.

CONCLUSION

Based on the results of research on the implementation of the Electronic Traffic Law Enforcement (ETLE) Program Policy in Tanjungpinang City, it was found that the implementation of this policy has not been optimal and still faces various significant obstacles. Although the policy has referred to clear national standards and has the goal of increasing public compliance, reducing illegal levies, and increasing transparency in law enforcement, its implementation is hampered by several crucial factors. The main obstacles include weak cross-agency coordination between the Police, the Transportation Agency, and the SAMSAT which results in slow technical and administrative handling; inadequate technological infrastructure such as unstable internet networks and limited camera coverage; gaps in human resource competency in managing digital systems; and a system that is not yet integrated in real time with other agency databases so that data validation still requires a manual process. Furthermore, minimal public outreach, the absence of supporting regional regulations, and limited operational budgets threaten the sustainability of the program.

To improve the effectiveness of ETLE implementation, comprehensive strategic steps are needed, including strengthening cross-agency coordination through the establishment of a binding MoU and regular working forums, improving technological infrastructure by allocating budget for internet network stability and adding camera points, developing human resource competencies through tiered training programs that include troubleshooting and digital data management, and realizing real-time system integration for data exchange between agencies. In addition, intensifying public outreach and education through ongoing campaigns in various media and direct community activities is necessary to increase public understanding and support. Optimizing operational and maintenance budgets is also key to the program's sustainability, including seeking alternative funding sources or partnerships with the private sector. Comprehensive implementation of these suggestions is expected to make the ETLE program in Tanjungpinang City more effective in achieving the goals of traffic order and quality public services.

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