

## Precision National Driver License: Digital Application of Indonesian National Police as a Model of Public Service Transformation

Hasna Satriannisa<sup>1</sup>, Maura Pemelie Walidain<sup>2</sup>

<sup>1</sup> Department of Government Affairs and Administration, Universitas Muhammadiyah Yogyakarta, Indonesia

<sup>2</sup> Faculty of Law, Universitas Gadjah Mada, Indonesia

Corresponding Author: [hasna.s.isip22@mail.umy.ac.id](mailto:hasna.s.isip22@mail.umy.ac.id)

### Article Info



### Article History;

**Received:**

2024-05-19

**Revised:**

2024-09-23

**Accepted:**

2024-09-25

**Published:**

2024-09-26

**Abstract:** This article examines the adoption of the digital Surat Izin Mengemudi Nasional Presisi (SINAR) application by the Traffic Corps of the Indonesian National Police as a paradigm for the modernization of public services. SINAR comprises e-Tilang, Traffic Management System (TMS), and SIM data input applications, which are designed to enhance traffic management and law enforcement. These applications streamline the ticketing process, enhance precision, and simplify the overall procedure. Furthermore, the National Police provides an internet-based portal for the submission of applications for international driver's licenses, which streamlines the application procedure. The implementation of these digital applications has greatly enhanced the operating efficiency and effectiveness of the National Police Traffic Corps while ensuring road safety and public satisfaction.

**Keywords:** SINAR; Digital Application; Traffic Management Systems.

## INTRODUCTION

Public services are crucial for community well-being and the government's role in providing services to citizens. As society becomes more complex and dynamic, the need to transform public services has become essential to keep up with technological advancements. This transformation involves reorganizing policies, processes, and the cultural framework of government organizations. The transformation of public services aims to prioritize the interests of society and accelerate adaptation to technological developments and the demands of the times (Prabawati, 2023). In the era of globalization, governments worldwide are under pressure to enhance efficiency, responsiveness, and transparency in delivering public services. Public service transformation is a methodical and cohesive effort to address the intricacies of government responsibilities, involving modifications in service provision, enhanced administration, and the use of innovation. The implementation of information technology is a crucial factor in the reform of public services, as digitalization has created new possibilities for enhancing accessibility, efficiency, and service quality. Big data, artificial intelligence, and other technologies can help governments make data-driven decisions, forecast individuals' requirements, and deliver more tailored services.

Policy changes are essential for fostering an environment conducive to positive transformation and allowing room for innovation. Enhancing collaboration among government entities and engaging civil society is crucial for establishing a well-connected and competitive

public service ecosystem. Organizational culture is also crucial to the transformation of public services. Shifting from focusing on tasks to achieving results, improving organizational competence and openness, and enhancing public involvement in decision-making processes are essential for evaluating the effectiveness of public services. Public service transformation serves not only as a bureaucratic tactic but also as a forward-thinking measure to construct a more encompassing and attuned nation. An outstanding innovation in the Republic of Indonesia's (RI) Police Traffic Corps is the implementation of the digital application "SINAR." SINAR is a digital application used by the Traffic Corps of the Indonesian National Police (Polri) to provide a more flexible and transparent service for issuing driver's licenses (Sisilianingsih, 2019).

Digital technology needs to be used immediately to improve the efficiency and effectiveness of public services and better serve the community. An innovative digital application called SINAR (Navigation Information System and Traffic Engineering) has been developed by the Indonesian National Police Traffic Corps (Korlantas Polri). SINAR serves as a solution to the constraints facing the traffic corps and represents significant progress in modernizing public services in the police sector. Empirical studies by Princess (2023) highlight that SINAR can have a positive impact on optimizing traffic management, reducing congestion, and improving response to traffic accidents. Research (Frinaldi, 2023) explains the application of e-government to public services in Indonesia, focusing on the form, the largest proportion of indicators, and the challenges faced. By summarizing the findings of these two literature reviews, it can be concluded that the transformation of public services through the digital application of the Indonesian Police Traffic Corps (SINAR) provides great potential to improve the efficiency and effectiveness of public services. In addition, the literature also has similarities in the discussion of this writing.

This transformation not only enhances the efficiency of the service process but also fosters transparency, responsibility, and receptiveness to community needs. SINAR, an acronym for Navigation and Record Information System, embodies the essence of delivering enhanced services and establishing connections with community requirements. This application employs digital technology to streamline administrative procedures, enhance accessibility, and promote transparency in all interactions between the traffic police and the public. This transformation aligns with the vision of a traffic police force that is contemporary, adaptable, and at the forefront of technological utilization. We will outline the specific measures that have been implemented to develop public services that are more efficient and tailored to the needs of the community, starting from the background and the rationale for transformation and highlighting the positive outcomes generated in the delivery of these services.

## **RESEARCH METHOD**

This writing is a type of qualitative analysis. The qualitative method describes a topic study using a case investigation (Yilmaz, 2013). This paper uses qualitative methods with a case study approach. Qualitative research with a case study approach makes it easier for researchers to analyze more deeply related analyses related to digital-based public service transformation. The research method can draw insights from various reputable sources. For instance, work on developing a digital service transformation framework for the public sector through theoretical and empirical approaches. can guide the theoretical underpinning of the research. This framework can help structure the study's conceptual foundation and guide the analysis of the

digital transformation process. This writing refers to secondary data obtained from scientific articles and various other mass media following the topic of study. There are four stages of analysis carried out, namely: 1) search for data following the research topic; 2) reduce data to select data tailored to the research focus; 3) write down the results of mapping and sorting data that focus on writing problems; and 4) describe conclusions from the research findings obtained.

## **RESULTS AND DISCUSSION**

Lindgren & Veenstra (2018) emphasize the importance of multiple change and redesign processes, including organizational, regulatory, and institutional aspects, to sustain transformation and public value. This suggests that implementing the Precision National Driver License initiative should involve not only technological changes but also legal and procedural adaptations within the Indonesian National Police. (Iyamu et al., 2021) highlight the role of digital transformation in ensuring equitable and high-quality public services, which resonates with the objective of the Precision National Driver License initiative to enhance service delivery. By creating interconnected digital platforms and services tailored to public needs, the Indonesian National Police can improve the accessibility and quality of driver's license services. Seepma et al. (2020) discuss the design of digital public service supply chains, emphasizing the need to reconcile public elements with supply chain aspects. Applying this concept to the Precision National Driver License initiative would involve streamlining the digital processes involved in issuing driver licenses while ensuring transparency and efficiency in the service supply chain.

Drawing from Filgueiras et al. (2019), the digital transformation in public service delivery is viewed as an institutional change process within public organizations. This perspective suggests that the Indonesian National Police should consider the role of agents, contextual factors, and decision-making processes in digitizing driver's license services to align with broader organizational goals. By integrating insights from these references, the analysis of the Precision National Driver License initiative as a model of public service transformation can focus on the need for comprehensive organizational changes, the importance of equitable service delivery, the optimization of service supply chains, and the institutional implications of digital transformation in the public sector.

### **Transparency and Accountability**

Transparency and accountability in this context can be improved through digital applications and have several supporting theories. There are three theories: agency theory, accountability theory, and good governance theory. In an organization, agency theory means the concept of the relationship between principals and agents. Aims to increase transparency, accountability, and efficiency in the relationship between principals and agents in the private and government sectors. In the context of digital transformation, this theory is related to the use of information and communication technology. Digital transformation can also help bring relationships closer with faster, more accountable, and more transparent access and reduce the asymmetry of information. Therefore, the SINAR application provided by the Indonesian Police aims to simplify, expand, and clarify existing information for the public. The next theory is the theory of accountability, which refers to a sense of responsibility for actions and decisions for each individual and organization. The third theory is good governance. The theory explains the right way to manage human resources to have skills in effective use of technology.

Transparency and accountability are fundamental principles in the context of the Precision National Driver License initiative, aimed at digitally transforming public service delivery within the Indonesian National Police. These concepts are crucial for ensuring the effectiveness, efficiency, and trustworthiness of the services provided to the public. From a theoretical perspective, transparency is recognized as a key element in enhancing public accountability (Biondi & Lapsley, 2014). Transparency ensures that information is readily available to the public, fostering openness and trust in the processes and decisions made by public institutions. In the case of the Precision National Driver License initiative, transparency can be achieved through clear communication of the digital application process, requirements, and outcomes to the public. Moreover, the literature emphasizes that transparency is vital for improving accountability in public service delivery (Janssen et al., 2017). By making data and processes transparent, the Indonesian National Police can be held accountable for the services they provide through the digital application of driver's licenses.

This transparency can help build public trust and confidence in the system. Accountability involves the responsibility of public institutions to answer for their actions and decisions (O'Regan et al., 2021). By combining transparency with "intelligent" accountability, the Indonesian National Police can demonstrate a commitment to responsiveness and responsibility in implementing the Precision National Driver License initiative. This form of accountability ensures that the organization is responsive to the needs and expectations of stakeholders. Furthermore, the integration of digital technologies in public service delivery, as observed in the Precision National Driver License initiative, necessitates a focus on accountability and transparency (Agostino et al., 2021). Digital data collection and utilization must be transparent to enhance accountability and ensure that the information is used ethically and effectively in decision-making processes. Transparency and accountability are essential for the successful implementation of the Precision National Driver License initiative. By incorporating these principles into the digital application process, the Indonesian National Police can enhance public trust, improve service delivery, and demonstrate a commitment to responsible governance.

### **Ensuring The Availability of Options for Choosing Appropriate Levels of Quality And Quantity**

To ensure the availability of options for choosing appropriate levels of quality and quantity related to the Precision National Driver License initiative within the Indonesian National Police as a model of public service transformation, it is essential to consider various factors and references that shed light on this aspect. Firstly, the study (Filimonau & Naumova, 2020) on the application of blockchain technology in hospitality operations highlights the importance of effective enforcement practices by national and international governments to prevent breaches in law regulations. This emphasizes the significance of regulatory frameworks and enforcement mechanisms to ensure the quality and quantity of services provided through digital applications like the Precision National Driver License.

Moreover, the research (Arwanto, 2022) on public satisfaction with digital transformation in public services during the COVID-19 pandemic in Indonesia underscores the transformative impact of digital licensing systems. By merging multiple public service sectors into a unified digital platform, options for choosing appropriate levels of quality and quantity can be enhanced, offering users a streamlined and efficient service experience. Theories that support

this second principle includes economic theory, management, and consumer behavior. Economic theory in the context of digital transformation is related to changes in information technology that ultimately affect the economic and business sectors. Furthermore, in management theory, digital transformation theory supports approaches to integrating digital technology. In addition, management theory can develop process development, new products, and increased efficiency. The third theory is the theory of consumer behavior. In the case of implementing digital applications as a form of public service transformation, it can help to understand and design services that are more appropriate in the digital era.

### **Multiple Stakeholders Participating in System Design**

The first theory that supports the stakeholder theory. In the context of implementing digital as an improvement in public services, it aims to improve services that are more responsive. Therefore, in this theory, the government, society, and the private sector have an important role simultaneously. The second theory is resource-based institutionalism. The third theory is the theory of sustainability; in this context, the government continues to adapt in the digital era to create the best service.

### **Inclusiveness**

The implementation of digital transformation in public services can increase digital inclusion. Here are three theories that support inclusivity: First, the theory of effective and efficient public service governance. The theory realizes the transformation of public services through OGI and builds effective, efficient, and high-performance public services. The next theory is digital inclusion, which emphasizes that all people have access to digital technology. The transformation of public services in this theory must ensure the interests of the community and must be followed by a change in mindset in the community, not just changing services to online. The third is social inclusion theory, which is a concept that emphasizes social inclusion and ensures that all people have equal opportunities in the economic, social, and political sectors. For example, people who have geographical limitations can still access it without having to come to the service office.

### **Appropriate Allocation of Responsibilities**

Three theories support the appropriate and responsible allocation of resources in the application of digital applications as a form of public service transformation. The first is the theory of customer value, which is a theory that focuses on customer and community satisfaction and can increase the value received when using the service. Next is the theory of collaboration and customer cooperation. Digital applications in public services can make use of the latest collaboration technologies that develop effective communication, such as shared workspaces that are connected to the internet and cloud-based. Furthermore, the third is the theory of customer-based organization, which is a management approach that makes the customer the center of all activities.

### **Availability of Corrective Actions**

Several theories support this 6th principle, including the theory of e-government. The theory aims to improve the quality and responsiveness of public services through information and communication technology. Furthermore, the second is the theory of technological innovation, which explains the use of technology from the monitoring process to the entire series until the release of the public service value index. The third theory is the theory of user satisfaction. This theory can be related to the government's efforts to provide quality, fast, and measurable services to the community.

### **Digital Government Policy Framework**

#### **Digital by Design**

The OECD Digital Government Policy Framework (DGPF) advocates the "digital by design" approach, which means using all the benefits of digital technologies from the start when making policies. This method facilitates a smooth and long-lasting digital transformation in the public sector by changing the way business is conducted and modeled. It makes sure that "digital" isn't just seen as a technical subject but as something that must be used to change the way the government works. The "digital by design" dimension aims to set the stage for incorporating other key aspects of a digital government into digital projects and initiatives across sectors and lines. Governments also need to be aware of how technology is changing and what skills are needed, even if they don't prioritize technology. The OECD's "digital by design" approach and SINAR, the RI Police Traffic Corps Digital Application, both utilize digital technologies to rethink and re-engineer public processes. The OECD's "digital by design" approach fits with the need for governments to embrace digital transformation and use new and existing technologies to make public services more efficient and effective. The "digital by design" principle supports the goals of digital applications like SINAR because it stresses how digital technologies can change the way the government works.

#### **Government as a Platform**

Indonesian Traffic Corps uses the SINAR digital app, which is like the government's platform approach. The government made this app as part of efforts to digitize public services, especially in the traffic sector. People can renew their SIM cards online with this app, so they don't have to go to a SIM service unit (Satpas). Besides that, the SINAR app lets people pay their vehicle taxes online, so they don't have to go to the local Samsat office. The use of technology and digitization in public services is exemplified by the SINAR app, which allows people to pay their vehicle taxes online instead of visiting the local Samsat office. This is part of the government's platform approach, which means that digital services can be used instead of or in addition to traditional services (P. Renato, 2021). The government's approach as a platform is related to the digital app SINAR: RI Traffic Corps, as it aims to enhance public services, particularly in the traffic area, using technology and digitization. This app lets people access services for renewing SIM cards and making online payments for vehicle taxes, making it easier and faster to meet their tax obligations.

#### **Open by Default**

The "Open by Default" approach connects to the digital use of SINAR (National Archives Information System) and the National Police Traffic Corps (KLR). These all work to make public services more open, efficient, and smooth, and they also make monitoring and supervision easier.

Below are some important points to remember about the approach: (1) Openness: The SINAR and KLR apps help make public services more open, like online SIM A and SIM C renewals, which cuts down on the need for manual services and complaints. The use of digital technology in the SINAR and KLR applications makes monitoring and supervision more effective. For example, the creation of digital platforms that use the newest and most cutting-edge technology makes this possible. (2) Smoothness: The SINAR and KLR apps make monitoring and supervising easier, and they let users do different things online without having to go to an office or other place (Gafar, 2023). (3) Meeting the government's duties: Open by-Default approach lets the government meet its duties to the people, for example by making it easier to pay taxes and renew STNK online through the SIGNAL app. (4) Business Growth: The open-by-default approach also helps with business growth. For example, it makes it easier to register and identify vehicles, and it makes it easier for people to do research and come up with new technologies. In this situation, open by-default approach is very helpful for making public services better, making supervision and monitoring easier, and letting people do many things online without having to go to certain places or offices.

## **CONCLUSION**

The Indonesian National Police (RI) Police Traffic Corps has implemented the digital application "SINAR" to improve public services. SINAR streamlines administrative procedures, enhances accessibility, and promotes transparency in interactions between traffic police and the public. This transformation aligns with the Agile Governance Theory, emphasizing transparency and accountability. The application uses big data, artificial intelligence, and other technologies to help governments make data-driven decisions and deliver tailored services. The implementation of SINAR has enhanced service efficiency, and fostered transparency, responsibility, and receptiveness to community needs. The OECD Digital Government Policy Framework advocates for a "digital by design" approach, involving multiple stakeholders in system design. The Indonesian Traffic Corps uses SINAR and KLR apps to make public services more open, efficient, and smooth. The "Open by Default" approach connects to the digital use of SINAR and KLR apps, making monitoring and supervision easier.

## **REFERENCES**

- Agostino, D., Bracci, E., & Steccolini, I. (2021). Accounting and accountability for the digital transformation of public services. *Financial Accountability & Management*, 38(2), 145-151. <https://doi.org/10.1111/faam.12314>
- Aldri Frinaldi. (2023). Systematic Literature Review Inovasi Pelayanan Publik Berbasis Digital. [https://www.researchgate.net/publication/373406367\\_SYSTEMATIC\\_LITERATURE\\_REVIEW\\_INOVASI\\_PELAYANAN\\_PUBLIK\\_BERBASIS\\_DIGITAL](https://www.researchgate.net/publication/373406367_SYSTEMATIC_LITERATURE_REVIEW_INOVASI_PELAYANAN_PUBLIK_BERBASIS_DIGITAL)
- Anggara, S. (2024). The development of digital service transformation framework for the public sector. *Ieee Access*, 1-1. <https://doi.org/10.1109/access.2024.3406571>
- Arwanto, B. (2022). Public satisfaction study on the digital transformation of the public service system during the covid-19 pandemic (2019-2021). *Proceedings of the 1st International Conference on Social Science (ICSS)*, 1(1), 23-28. <https://doi.org/10.59188/icss.v1i1.11>
- Biondi, L. and Lapsley, I. (2014). Accounting, transparency, and governance: the heritage assets problem. *Qualitative Research in Accounting & Management*, 11(2), 146-164. <https://doi.org/10.1108/qram-04-2014-0035>
- Filgueiras, F., Flávio, C., & Palotti, P. (2019). Digital transformation and public service delivery in brazil. *Latin American Policy*, 10(2), 195-219. <https://doi.org/10.1111/lamp.12169>

- Filimonau, V. and Naumova, E. (2020). The blockchain technology and the scope of its application in hospitality operations. *International Journal of Hospitality Management*, 87, 102383. <https://doi.org/10.1016/j.ijhm.2019.102383>
- Gafar. (2023). Bayar Pajak Motor Tanpa Pungli dan Antre, Pakai Aplikasi SIGNAL. <https://www.rri.co.id/daerah/295641/bayar-pajak-motor-tanpa-pungli-dan-antre-pakai-aplikasi-signal>
- Iyamu, I., Xu, A., Gómez-Ramírez, O., Ablona, A., Chang, H., McKee, G., ... & Gilbert, M. (2021). Defining digital public health and the role of digitization, digitalization, and digital transformation: scoping review. *Jmir Public Health and Surveillance*, 7(11), e30399. <https://doi.org/10.2196/30399>
- Janssen, M., Matheus, R., Longo, J., & Weerakkody, V. (2017). Transparency-by-design as a foundation for open government. *Transforming Government: People, Process and Policy*, 11(1), 2-8. <https://doi.org/10.1108/tg-02-2017-0015>
- Latupeirissa, J. (2024). Transforming public service delivery: a comprehensive review of digitization initiatives. *Sustainability*, 16(7), 2818. <https://doi.org/10.3390/su16072818>
- Lindgren, I. and Veenstra, A. (2018). Digital government transformation.. <https://doi.org/10.1145/3209281.3209302>
- O'Regan, B., King, R., & Smith, D. A. (2021). Combining accountability forms: transparency and “intelligent” accountability in a public service organization. *Accounting, Auditing & Accountability Journal*, 35(5), 1287-1315. <https://doi.org/10.1108/aaaj-03-2020-4473>
- P Renato. (2021). Penerapan Teknologi dan Digitalisasi Wujudkan Polri PRESISI. <https://www.dnews.id/2021/05/31/penerapan-teknologi-dan-digitalisasi-wujudkan-polri-presisi/>
- Prabawati. (2023). Transformasi Digital Pelayanan Harus Utamakan Kepentingan Publik. <https://diskominfo.kaltimprov.go.id/pemerintahan/transformasi-digital-pelayanan-harus-utamakan-kepentingan-publik>
- Prihatin, P., Amri, P., & Wicaksono, A. (2023). Public service transformation trough digital-based services during covid-19 pandemic in riau province, indonesia. *Otoritas Jurnal Ilmu Pemerintahan*, 13(1), 111-124. <https://doi.org/10.26618/ojip.v13i1.9861>
- Putri, O. D. (2023). Systematic literature review penerapan e-government pada pelayanan publik di Indonesia. *Sriwijaya University Repository*
- Seepma, A., Blok, C., & Donk, D. (2020). Designing digital public service supply chains: four country-based cases in criminal justice. *Supply Chain Management an International Journal*, 26(3), 418-446. <https://doi.org/10.1108/scm-03-2019-0111>
- Sihombing, T. (2024). Digital technology adoption for village public administration—evidence from Indonesia. *Journal of Infrastructure Policy and Development*, 8(4). <https://doi.org/10.24294/jipd.v8i4.3444>
- Sisilianingsih, S. (2019). Analisis Faktor Transformasi Digital Pelayanan Publik Pemerintah di Era Pandemi. [https://jtiik.ub.ac.id/index.php/jtiik/article/view/7059/pdf\\_1](https://jtiik.ub.ac.id/index.php/jtiik/article/view/7059/pdf_1).