

Enhancing Public Service Accessibility: The Role and Impact of Single Identity Number (SIN) E-KTP and SIM Integration

^a Shinwan Fadhil; ^b Hayat; ^c Andi Tenri Sompia; ^d Suyeno

^{a,b,d} Faculty of Administrative Sciences, Universitas Islam Malang, Malang City, Indonesia

^c Faculty of Social and Political Science, Universitas Lambung Mangkurat, South Kalimantan, Indonesia

ABSTRAK

Penyelenggaraan pelayanan publik pada pemerintah Indonesia sering kali mengalami kendala pada transparansi, ketepatan waktu, dan efektifitas dalam pelayanan publik. Sehingga inovasi pelayan publik berbasis teknologi sangat diperlukan untuk mendukung kemajuan tersebut. Tujuan penulisan ini adalah untuk menganalisis dan mengidentifikasi integrasi E-KTP dan SIM dalam mewujudkan SIN untuk meningkatkan aksesibilitas pelayanan publik. Selain membahas mengenai integrasi kedua identitas tersebut, tulisan ini juga menjelaskan mengenai manfaat yang diterima masyarakat dari adanya pengembangan teknologi tersebut. Manfaat yang didapat apabila integrasi E-KTP dan SIM dapat terwujud: efisiensi dan kesederhanaan, kemudahan akses layanan, peningkatan mobilitas, dan penghematan biaya. Penelitian ini dilakukan menggunakan pendekatan kualitatif dengan metode kualitatif deskriptif dengan pengumpulan data dan melakukan perbandingan dengan negara lain. Berdasarkan hasil penelitian yang telah dilakukan menunjukkan bahwa penerapan E-KTP dan SIM menjadi SIN sangat membantu dan bermanfaat bagi masyarakat karena dapat meningkatkan kepercayaan masyarakat, efisiensi dan efektifitas dalam pelayanan publik di Indonesia.

ABSTRACT

The implementation of public services in the Indonesian government often experiences obstacles in transparency, timeliness, and effectiveness in public services. So that technology-based public service innovation is needed to support this progress. The purpose of this paper is to analyze and identify the integration of E-KTP and SIM in realizing SIN to improve public service accessibility. In addition to discussing the integration of the two identities, this paper also explains the benefits received by the community from the development of these technologies. The benefits obtained if the integration of E-KTP and SIM can be realized: efficiency and simplicity, easy access to services, increased mobility, and cost savings. This research was conducted using a qualitative approach with descriptive qualitative methods by collecting data and making comparisons with other countries. Based on the results of the research that has been conducted, it shows that the application of E-KTP and SIM into SIN is very helpful and beneficial for the community because it can increase public trust, efficiency and effectiveness in public services in Indonesia.

ARTICLE HISTORY

Submitted: 01 08 2023

Revised: 07 09 2023

Accepted: 07 09 2023

Published: 07 09 2023

KATA KUNCI

Aksesibilitas; Pelayanan Publik; Single Identity Number

KEYWORDS

Accessibility; Public Service; Single Identity Number

INTRODUCTION

Based on the regulation of the Republic of Indonesia no. 25 of 2009, concerning public services, it has been explained that a state is obliged to fulfill the rights and needs of citizens in the form of administration, goods, and services (Aliffina Nurhariska, Hayat, 2023). Public service according to Sadu Wasisto in (Hardiyansyah, 2018) refers to the delivery of services to the community, whether by the government or the private sector, can be either paid or unpaid, in order to fulfill the needs and interests of the community. Meanwhile, according to Hayat (2017), public service

is the provision of services provided to citizens in a good and professional manner, both in the form of goods, and services, and administratively as part of what is managed. The purpose of holding this public service is to increase convenience, satisfaction and meet the basic needs of the community or the public.

State Civil Apparatus (ASN) must pay attention to the principles of public service in providing services. Following the mandate of regulation no. 25 of 2009 concerning public services refers to velocity, simplicity, affordability, professionalism, and openness. Therefore, civil servants may provide innovation in the provision of public services. According to Rosenfeld (Simon Sumanjoyo Hutagalung & Dedy Hermawan, 2018) innovation refers to the transformation of knowledge into new products, processes, or results and services, the act of using something new. Meanwhile, the definition of service innovation (Hayat, 2020) leads to a form of bureaucratic reform in Indonesia which is a process of strengthening the system and bureaucratic order for better and better quality. This innovation aims to improve civil servants' performance to provide the maximum quality of public services to the community. To bridge those matters in providing public services, civil servants it is essential to be mindful of public service standards. This service standard has been regulated by (the Ministry of Administrative Reform of the Republic of Indonesia, 2003) which the standards for public service encompass Service Procedures, Timeframe for Completion, Service Charges, Service Offerings, Infrastructure and Facilities., and the Competence of Service Provider Officers. The existence of these regulations is purposed to realize the implementation of excellent public services.

Excellent service according to Firmansyah (Permatasari, 2022) refers to a good and satisfying service that fulfills the demands or requirements of the community excellently; so that people get something that exceeds their expectations. Providing excellent service has implications for public trust in the government and being able to participate in programs and public policies implemented by the government, especially in the application of SIN. Therefore, with the existence of SIN, the needs of the community will be facilitated, both in terms of service and administration. The implementation of SIN (single identity number) may overcome convoluted administration. The community needs one identity number in the form of a NIK for various requirements. The application of SIN can be utilized by various government agencies, for example, such as the National Police (of the Republic of Indonesia) to issue SIM (Driving License). The integration model for E-KTP and SIM is straightforward in the administrative process for the community so it will be very effective in its implementation this can lead to an enhancement in the quality of public services.

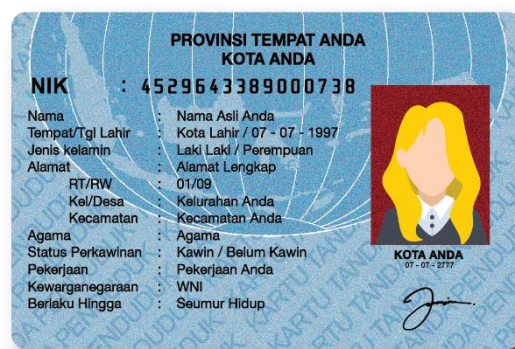
Practically, the effectiveness of using Pre-determined resources, facilities, and infrastructure are allocated to produce various goods and services for the activities undertaken (Abdiansyah et al., 2019). According to Duncan (Farida, 2020) effectiveness refers to a measure that states how far the target or goal has been achieved. Efficiency represents success in terms of whether the target has been achieved or not. This effectiveness is also tied to the expected results with actual results. An example of a successful SIN policy is the integration of NIK to NPWP (tax registration number). This is conducted to facilitate tax payments and optimize state tax revenues. Apart from that, the importance of integrating a SIM into a single identity number also has the benefit of being used as proof of identity because a SIM and a KTP have many similarities in terms of contents which include; Photo, full name, blood type, domicile address, date of birth, occupation and gender. These similarities can be seen in figure 1 and 2 below:

Figure 1.
Driving License (SIM)



Source: www.pngtree.com/sony-feo_35417124?type=1 (2022) (15 July 2023, 07:11 PM)

Figure 2.
Elektronik ID Card (E-KTP)



Source: www.pngtree.com/agus-alfian_9037539?type=1 (2023) (15 July 2023, 07:27 PM)

The present existence of E-KTP has significantly eased various processes due to the changes it has undergone. Notably, the chip capacity has been expanded from 8 Kb to 32 Kb, and there have been adjustments in population data elements and information displayed on the physical E-KTP. The chip now accommodates a diverse range of data, including NPWP, medical records, criminal records, BPJS numbers, driver's license (SIM), and more. Furthermore, the implementation of SIN is specified in Minister of Finance Regulation Number 112/PMK.03/2022 as a means to achieve the objectives set by Law Number 23 concerning Financial Administration. The utilization of NIK in SIN implementation aims to simplify Indonesia's bureaucracy, which is compounded by individuals having to manage multiple identities, thus contributing to its complexity. SIN is expected to tackle and alleviate this issue. Moreover, the integration of E-KTP and SIM into SIN yields various benefits, such as streamlining bureaucracy, reducing costs and time for both the government and the public, and serving as a realization of the goals set by Presidential Regulation (PERPRES) Number 39 of 2019 regarding the One Data Indonesia policy. This policy aims to create high-quality data that is easily accessible and shareable among central and regional government institutions. Through the implementation of SIN, the population data managed by the Ministry of Home Affairs (Kemendagri) can be harnessed for all public service purposes. For example, it can be utilized to monitor compliance with motor vehicle tax payments. By using the NIK, authorities can identify individuals who have not paid their motor vehicle taxes, ascertain the type of vehicles they own, check the due dates for tax payments,

and more.

In this article, the author identifies several critical issues in the provision of public services in the Indonesian government. Specifically, this writing focuses on problems related to transparency, timeliness, and effectiveness in public services, which often pose challenges. To address these constraints and support progress in the delivery of public services, the author sets several important objectives. The primary goal of this writing is to analyze and identify the potential integration of the Single Identity Number (SIN) of E-KTP and SIM in enhancing public service accessibility. The author also intends to elucidate the benefits that the public can experience as a result of this technological development. By identifying these problem formulations and objectives, the author hopes to provide a deeper insight into the role of SIN in transforming public services in Indonesia and the benefits that can be gained by the public through the implementation of E-KTP and SIM integration.

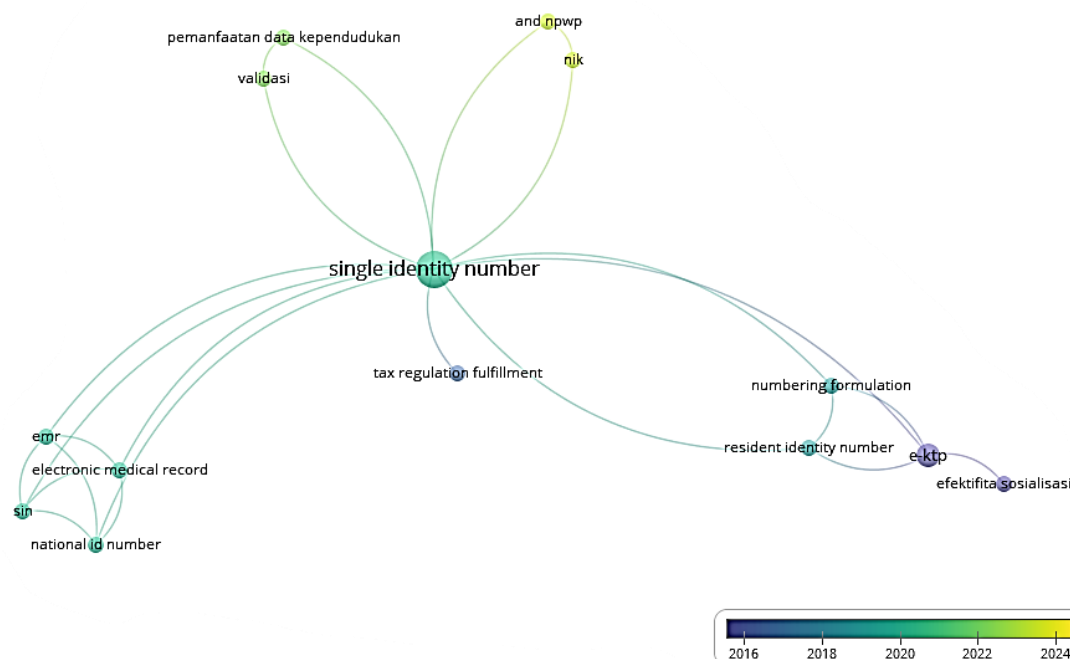
In this article, the author investigates the role of integrating the Single Identity Number (SIN) E-KTP and SIM in improving the accessibility of public services in Indonesia. The author analyzes the primary challenges in public service delivery, explores the benefits of this integration, and concludes that SIN has significant potential to enhance the efficiency and effectiveness of public services and build public trust.

Literature Review

The research refers to several previous studies that are relevant to the topic of discussion as a source of reference and comparison of current research. The following are some of the previous studies that have been carried out; first, the application of a Single Identity Number on an Identity Card (E-KTP) in the Era of The Industrial Revolution 4.0 (Kurniasih, D, A Feryandi, L Nurmayanti, 2021). In this study, according to a survey conducted by the community, many people agree that the existence of a single identity number and the presence of a single identity number can minimize government spending budgets. This research focuses on the E-KTP which is used as a single identity number, in the future the single identity number will contain Personal Data (E-KTP), SIM, NPWP, BPJS, and ATM cards. Second, the Governance Network in the Implementation of Population Data Utilization Policies to Create a Single Identity Number (Rahma Ridha Rofita & Eko Prasajo, 2022).

This research was conducted at the Directorate General of Population and Civil Registration of the Ministry of Home Affairs (Ditjen Dukcapil). This research focuses on Permendagri 102 of 2019 and Presidential Decree 39 of 2019 concerning One Data Indonesia, the policy of utilizing population data is an important point in realizing a single identity number. Third, the application of the Single Identity Number System after the Enactment of NIK Regulations becomes NPWP (Citra Alfa Esi Pabeta et al., 2023). In this study, according to a survey conducted by the community, many people agree with the existence of a single identity number, especially NIK, to become NPWP. This research has the potential to increase the effectiveness of processing individual identity data in an integrated manner and improve data accuracy due to the application of NIK to NPWP.

Figure 3.
Overlay Visualization with VOSviewer



Source: Processed by the researcher 2023

Based on the results of previous research that has been conducted before, this study has similarities in public services based on a single identity number. People may access various kinds of services and conveniences with only one identity number or National Identity Number (NIK). In addition, this research also has similarities in providing effectiveness and efficiency because people only need to take care of one card for the rest of their lives. On the other hand, this study has differences from previous studies. These differences include creating a single identity number by integrating the E-KTP and SIM. This is done to make it easier for people to have a driving license or SIM into a card that is valid for life like an E-KTP. Therefore, with the integration of the E-KTP and SIM into a single identity number, excellent service can be realized. Based on the findings presented in Figure 3, the concept of Single Identity Number (SIN) E-KTP and SIM in Improving Accessibility of Public Services has not been addressed or explored in any previous studies.

RESEARCH METHODS

The research method applied in this research is descriptive qualitative with a case study approach. According to Zainal (Gunawan Undang, et al., 2023), this is conducted to generalize and express phenomena clearly and accurately in social problems. The research will employ the case study approach to gain insights into the implementation of the Single Identity Number (SIN) in Estonia, and the facilitation of driver's license issuance in the State of Mexico. The study will rely on qualitative primary data, specifically literature reviews from various articles related to the Single Identity Number (SIN). This method aims to understand the real-world application of these systems and their implications, while secondary data was obtained from books and trusted sources from the internet. The stages in this research include: (1) Identifying phenomena and problems based on theoretical sources and previous research. (2) Formulating research objectives. (3) Collecting, discussion, and analysis of data with descriptive qualitative methods. (4) Formulating of conclusions. The focus of this research is to improve public services based on

a single identity number by integrating E-KTP and SIM. Therefore, the existence of a single identity number is expected to increase the convenience of the community in accessing public services.

The selection of case studies involving the implementation of the Single Identity Number (SIN) in Estonia and the facilitation of SIM issuance in the State of Mexico is based on several crucial considerations that make these cases relevant and representative in examining the implementation of SIN: First, Implementation Success: Estonia is known as one of the countries that has been highly successful in implementing an electronic identification system similar to SIN. Their success in implementing this technology can provide valuable insights into the potential and challenges associated with SIN. Second, Implementation in Countries of Different Scales: The cases of Estonia and Mexico represent countries of different scales, from a small nation to one with a large population. This allows the research to examine various aspects of SIN implementation, including its scalability in managing individual identities at different population levels. Third, Different Legal and Policy Contexts: Estonia and Mexico have different legal, policy, and cultural contexts regarding identification and SIM issuance. Choosing these cases enables the research to understand how these differences affect the implementation of SIN and its impact on public services. Fourth, Significant Technological Advancements: Both countries have experienced significant technological advancements in identification and public services. Therefore, these cases can provide an overview of how recent technologies have influenced the implementation of SIN.

By selecting these cases, the research can explore practical experiences in implementing SIN in various contexts, compare different approaches, and identify valuable lessons that can be applied in the context of implementing SIN elsewhere.

RESULTS AND DISCUSSIONS

E-KTP and SIM Integrated

E-KTP or electronic identity card refers to an official identification card equipped with a chip that functions to store personal data and is issued by the Ministry of Home Affairs which is valid in Indonesia. The e-KTP contains a very important NIK because it can be used for various public services such as: Creating a bank account, making an NPWP, making insurance, and making a SIM. To get an E-KTP, Indonesian citizens and foreign nationals living in Indonesia must have this card and be at least 17 years old. Meanwhile, a SIM (Driving License) is a certificate a registration and identity document issued by the National Police is provided to individuals who fulfill the criteria set by administrative regulations, possess good physical and mental health, and have a comprehensive understanding of traffic regulations, and has the experience required to drive a motorized vehicle, and is at least 17 years old. Ownership of a SIM is regulated in Law Number 22 of (2009) concerning Road Traffic and Transportation Article 77 (1) which reads "Every person who drives a Motorized Vehicle on the Road is required to have a Driving license by the type of Motorized Vehicle being driven." SIM functions and acts as proof of one's identity, certificate of driving requirements, and as a means of community service.

Moreover, in practice, the function of the E-KTP is still limited to population identification, even though many other data sources can be used in managing population data. This is evidenced by the slow implementation of public services because they question the legitimacy and authenticity of public service documents that process public data, for example, if someone wants to apply for an immigrant card, they must have document data and complete family cards. Likewise the other way around, in obtaining a SIM, you have to fill in the complete population data again. The integration of E-KTP and SIM is a step in the development of SIN. This is because

the E-KTP and SIM are issued by government agencies, and these two identities must be owned by Indonesian citizens. Integration is also a breakthrough to improve bureaucratic reform by making the data management structure between Ministries and Institutions more effective. In management circles, data integration is often referred to as "Enterprise Information Integration" (Amrizal, Tukino, 2016). With the integration of the E-KTP and SIM, the population data and driver data will become SIN. This single data uses one number, generated from NIK. In addition, this integration can simplify complicated administrative arrangements to become efficient. If this integration is successful, it can enable other agencies to integrate their systems so that they can realize SIN, where one identity can be used for all community needs.

Single Identity Number (SIN)

According to Law Number 23 of 2006 on Population Administration, NIK serves as a distinct and inherent identification number for Indonesian citizens. This signifies that SIN has legal recognition since 2006 and is not merely a theoretical concept. The implementation of SIN in Indonesia is supported by the Tax Regulation Harmonization Law (Law Number 7 of 2021, Article 2, Paragraph 1a), as well as Presidential Regulation (PP) 83 of 2021 and Minister of Finance Regulation Number 112/PMK.03/2022. These legal measures demonstrate the integration of NIK with NPWP (Taxpayer Identification Number) to facilitate tax payments. Furthermore, there is a possibility of integrating E-KTP (Electronic Identity Card) and driver's licenses (SIM) in the future.

SIN refers to a unique number attached to an identity card issued to citizens who meet the requirements based on applicable laws and regulations. SIN is a personal identity number when carrying out population transactions, both activities related to government administration and activities related to public services. The ideal SIN is a unique number that is the main reference for other identities, such as a driver's license, BPKB, NPWP, and other population documents. SIN is an unavoidable necessity in the life of an advanced and modern society, as in all developed countries, the existence of NIK is unavoidable. Even though the existence of SIN is very necessary, solid and thorough additional efforts are needed, as well as strong leadership, so that public institutions do not produce their identity documents in different forms. Another data-related issue is data leakage. Reflecting on previous experience, data leaks occurred in government organizations, one of which was BPJS, which was concerned about SIN being implemented. The reason is, if SIN is known all data including financial will be leaked. Regarding data leakage, the government must establish strict regulations to maintain the security of public data. The goal of designing SIN is to build a national data warehouse that can integrate government and private agencies in a safe, private, trusted, and integrated manner (Sutanta, 2011).

The use of NIK in the application of SIN is intended so that the bureaucracy in Indonesia is not complicated and convoluted. This is because many identities must be owned by a citizen which illustrates that the bureaucracy in Indonesia is very convoluted. SIN is expected to overcome this. In obtaining a driver's license in Indonesia, the implementation is very difficult, apart from having to pass the theoretical exam, participants must pass the final exam, namely the driving test. In this test, many participants have to repeat it many times because the driving test is very difficult with many obstacles. If the participant fails the driving test, they will repeat and wait 14 days. This will take a lot of time and money, for this it is hoped that the government, especially the National Police, can revise the driving test so that it will be easier for participants to pass. For example, in Mexico, driving licenses only do a written test or theory, there is no driving test, so participants can easily get a driver's license without a long and convoluted process. If Indonesia can implement this, it will cut the complicated and convoluted bureaucracy. The

solution to this problem is to create a SIN to ensure a validation mechanism and reduce negative impacts related to existing problems in society. This is because at the age of 17 people in Indonesia must have an official identity, especially E-KTP and SIM. These two things are very important, considering that many Indonesian people before the age of 17 use vehicles on the road. So that this causes many accidents on the road. As an illustration, the management of E-KTP and SIM as SIN includes; First, applicants are at least 17 years old and physically and mentally healthy with a doctor's certificate. Second, applicants come to Kelurahan (sub-district office) with documents such as Family Cards (KK). Third, applicants fill out a form in the form of personal data and do a written or theory test about driving on the highway. Fourth, take photos and input fingerprints. Fifth, participants can take the identity card at the time determined by the officer. This process can also be done at home online using a mobile phone and, in the photo, and fingerprint inputting stage the participants can also do it with a mobile phone that has a fingerprint scan, if the participant is unable to do this then the applicant's photo and fingerprint input can go directly to the sub-district. The outcomes can be directly printed, similar to how an E-KTP is printed. Additionally, this information is stored in the *Digital Korlantas POLRI* application as verification of the applicant's possession of a SIM and E-KTP. Therefore, applicants have tangible proof in the form of a physical card and digital evidence accessible on their mobile phones.

With these steps, it will be easy for people to get an identity card that has been integrated with a SIM. Therefore, an easy and fast process will make the bureaucracy in Indonesia more efficient and effective. Through the integration of E-KTP and SIM, the government will soon realize SIN which is integrated with the combined data of various government and private organizations. So, with the issuance of SIN by the government, it will be easier for everyone to realize their rights as Indonesian citizens. For example, the Directorate General of Taxes in 2017 launched the One Indonesia Card (Kartin1) where the card aims to support data integration into SIN. It is planned that this card will be integrated with BPJS Health, NPWP, ATM, E-Money, SIM, E-KTP, and other services. Kartin1 can make it easier for its users to access public facilities and can provide benefits through the loyalty program because this card is planned to have several loyalty programs that can provide benefits for its users. According to the Minister of Finance Sri Mulyani regarding Kartin1 "With one card we can get all consistent information. Can help each other, facilitate, and prevent if someone is not obedient. This will create a culture where the government can work more clearly and the public gets clarity." (CRMS INDONESIA, 2017). Kartin1 can be seen in Figure 3 below.

Figure 4.
Kartu Indonesia Satu (Kartin1)



Source: www.kompas.com 2017

Accessibility to Public Services with a Single Identity Number

The integration of E-KTP and SIM as SIN provides many benefits such as creating uncomplicated and convoluted bureaucracy, cutting costs and time for both the government and the public, and the form of implementation of Presidential Regulation (PERPRES) Number 39 of 2019 concerning Indonesia's One Data. The policy the main objective is to generate high-quality data that is readily accessible and can be shared among both central and regional agencies. In developed countries, the population identification process uses data that can be used for many purposes. One of the countries that has succeeded in data integration is Estonia. The country has succeeded in implementing SIN using the term Estonian Identification (ID) or commonly known as e-Identity, which consists of an eleven-digit code, barcode, and chip. E-Identity can be accessed on mobile phones using fingerprints and ID numbers, users can access various services ranging from elections, banking, shopping, tax, health, schools, taxation, police, and many more. This identity is valid from the life of the user until he dies so the user only needs to create an identity once to get these various services forever. Many efficient services can save time for both customers and public officials so accessibility is very high.

According to Vassil (Strielkowski, et al., 2017) digital identification serves as the fundamental pillar of contemporary digital democracy and has been made compulsory for all citizens since 2014. It has been utilized over 80 million times for authentication purposes and more than 35 million times for digital transactions. The key institutional prerequisite for digital identity is a state identification system that distinguishes Estonian citizens, with the population register serving as the primary source of data for personal information (European Union, 2016). If Indonesia can implement E-Government as well as Estonia, the level of accessibility of public services can be easily accessed by the public. The government must make a firm policy regarding SIN in Indonesia. Also, in the process of integrating E-KTP into SIN, it must be prioritized and government agencies must also work together in realizing SIN. Even though the implementation will experience many difficulties, especially in terms of facilities and infrastructure, this is because Indonesia is an archipelagic country.

The implementation of the SIN in Indonesia that happened was the integration of the NIK with the NPWP, this became a basis and illustration in the future that the integration of the E-KTP and SIM can be realized because these two identities are very important in people's lives in Indonesia. The convenience of public services, especially online services, will cut down the convoluted bureaucracy in Indonesia. Apart from that, with SIN, the public can also access various services like the Estonian state, of course by preparing adequate facilities and infrastructure and the resources of public officials who know about technology will make it easier to realize E-Government in Indonesia. The existence of accessibility to public services can also fulfill the rights and needs of every citizen, this is also by Law Number 25 of 2009 concerning Public Services.

The aim of this research is to analyze the role and impact of integrating SIN E-KTP and SIM in improving the accessibility of public services. The concept of efficiency in the provision of public services, where SIN E-KTP and SIM are expected to expedite administrative processes and service delivery. The time required in the document issuance process will significantly decrease upon the realization of the integration of SIN E-KTP and SIM.

CONCLUSIONS

The integration of E-KTP and SIM into SIN could be something that is required by the Indonesian people. This integration is carried out to facilitate public accessibility in accessing public services, with this integration, the costs and time required are relatively less and of course very efficient.

The benefits of integrating E-KTP and SIM for the community can make it easier to receive public services, and the government and the community can interact easily and simply. The benefits of integrating E-KTP and SIM for the government are improving governance or performance and public services, as well as improving communication and data sharing between the government and the community.

Implementing SIN will have many advantages for the community because of easy access and not spending a lot of money and time. However, there are problems, namely human resources, both public officials and the general public, that are inadequate. Another problem is that in integrating the E-KTP and SIM into SIN, there is still no policy related to the two agencies, namely POLRI and DISPENDUKAPIL, to integrate the two cards. For this reason, the future is to find alternatives to these problems and be able to realize SIN in Indonesia which can be accessed anywhere and anytime. This is intended so that the integration of the E-KTP and SIM into a SIN can be realized in order to uphold the rights and responsibilities of the community to obtain easy and fast public services.

The conclusion of this study outlines the main findings while providing insights into potential solutions and more detailed recommendations regarding the challenges identified in the implementation of the Single Identity Number (SIN) with cases from Estonia and Mexico. The primary findings of this research indicate that the implementation of SIN holds significant potential for enhancing the efficiency, effectiveness, and public trust in public services. Estonia's success in implementing electronic identification technology, similar to SIN, provides concrete evidence of the benefits of such implementation. Conversely, Mexico also demonstrates how integrated SIM issuance with SIN can improve the accessibility of public services. However, to delve deeper into this conclusion, more detailed recommendations can be elaborated: First, Policy Alignment: The Indonesian government needs to consider effective policy alignment among relevant institutions to support the implementation of SIN. This includes harmonizing laws and regulations related to electronic identification and SIM issuance. Second, Technological Infrastructure Development: Investment in strong and secure technological infrastructure should be a priority. Developing technology platforms capable of handling large data volumes and safeguarding individuals' personal information is crucial. Third, Public Training and Awareness: Public awareness campaigns and training should be conducted to enhance understanding of SIN and how to use it. This will help the public better utilize public services. Fourth, Periodic Evaluation: The government should conduct periodic evaluations of SIN implementation to ensure that efficiency and effectiveness are maintained. These evaluations can also help identify necessary improvements. Fifth, International Cooperation: Indonesia can collaborate with other countries that have successfully implemented SIN for the exchange of experiences and deeper insights.

By taking these steps, the implementation of SIN in Indonesia can become more successful and provide greater benefits to the public, government, and private sector. These recommendations encourage sustained efforts to improve the accessibility and efficiency of public services in the future.

REFERENCES

- Abdiansyah, M. A., Ningrum, S., & Pancasilawan, R. (2019). Efektivitas Dewan Perwakilan Rakyat Republik Indonesia Dalam Menghasilkan Undang-Undang Pada Tahun Sidang 2016-2017. *Jurnal Manajemen Pelayanan Publik*, 03 (01), 16. <https://doi.org/https://doi.org/10.24198/jmpp.v3i1.23465>

- Aliffina Nurhariska, Hayat, A. Z. A. (2023). Analysis of Mobile Village Development Innovation in Technology-Based Public Services. *Jurnal Manajemen Pelayanan Publik*, 06 (02), 1. <https://doi.org/http://dx.doi.org/10.24198/jmpp.v6i2.45021>
- Amrizal, Tukino, A. L. (2016). Rekayasa Perangkat Lunak Sistem e-KTP Terintegrasi Birokrasi Umum Di Kota Batam. *Jurnal Nasional Teknologi & Sistem Informasi (TEKNOSI)*, 02 (02), 99. <https://doi.org/https://doi.org/10.25077/TEKNOSI.v2i2.2016.97-108>
- Citra Alfa Esi Pabeta, O. A., Septiani, C., Mike, S., & Carolus Palalangan, A. (2023). PENERAPAN SISTEM SINGLE IDENTITY NUMBER SETELAH PEMBERLAKUAN PERATURAN NIK MENJADI NPWP. *Jurnal Akuntansi, Keuangan Dan Auditing*, 4 (1), 171–182. <https://doi.org/https://doi.org/10.56696/jaka.v4i1.8295>
- CRMS INDONESIA. (2017). MENGENAL SELUK BELUK KARTIN1. <https://click.crmsindonesia.org/kartin1.php>
- Hardiyansyah. (2018). *Kualitas Pelayanan Publik: Konsep, dimensi, Indikator dan Implementasinya*. Gava Media.
- European Union. (2016). *E-government in Estonia*. 1–50. https://joinup.ec.europa.eu/sites/default/files/ckeditor_files/files/eGovernment%0An%0A Estonia - February 2016 - 18_00_v4_00.pdf
- Farida, I. (2020). ANALISIS EFEKTIVITAS SISTEM INFORMASI DAN KOMPUTERISASI HAJI TERPADU (SISKOHA) DALAM PENYELENGGARAAN IBADAH HAJI DI KABUPATEN SUMEDANG [Universitas Sebelas April]. <http://repository.unsop.ac.id/index.php/fisipunsop/article/view/100>
- Gunawan Undang, Deden Suhendar, Heri, Eny Nuryani R, Achdijat Sulaeman, Meiry Akmar Dhina, A. D. (2023). Policy Reformulation Action-Cycle Framework (PRACYF): A Case Study Decentralization and Regional Autonomy Policy in North Sumatra Province. *Jurnal Manajemen Pelayanan Publik*, 06 (02), 7. <https://doi.org/http://dx.doi.org/10.24198/jmpp.v6i2.45021>
- Hayat. (2017). *Manajemen Pelayanan Publik*. Raja Grafindo Persada.
- Hayat. (2020). Paradigma Good Governance Menuju Shared Governance Melalui Reformasi Birokrasi dan Inovasi Pelayanan Publik. *Jurnal Aristo (Social, Politic, Humaniora)*, 08 (01), 1–23. <https://doi.org/10.24269/ars.v8i1.2270>
- Jaringan Dokumentasi dan Informasi Hukum Nasional BPK RI. (2006). *Undang-undang (UU) Nomor 23 Tahun 2006 tentang Administrasi Kependudukan* (p. 4). <https://peraturan.bpk.go.id/Home/Details/40202>
- Jaringan Dokumentasi dan Informasi Hukum Nasional BPK RI. (2009a). *Undang-undang (UU) Nomor 22 Tahun 2009 tentang Lalu Lintas Dan Angkutan Jalan* (p. 42). [https://peraturan.bpk.go.id/Download/27961/UU Nomor 22 Tahun 2009.pdf](https://peraturan.bpk.go.id/Download/27961/UU%20Nomor%2022%20Tahun%202009.pdf)
- Jaringan Dokumentasi dan Informasi Hukum Nasional BPK RI. (2009b). *UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 25 TAHUN 2009 TENTANG PELAYANAN PUBLIK*. <https://peraturan.bpk.go.id/Home/Details/38748/uu-no-25-tahun-2009>
- Kementerian Pendayagunaan Aparatur Negara RI. (2003). *Keputusan Menteri Pendayagunaan Aparatur Negara Nomor: 63/KEP/M.PAN/7/2003 tentang pedoman umum penyelenggaraan pelayanan publik*. <https://perpus.menpan.go.id/opac/detail%02opac?id=2645>
- Kurniasih, D, A Feryandi, L Nurmayanti, P. D. U. (2021). Application of Single Identification Number on an Identity Card (E-KTP) in the Era of the Industrial Revolution 4.0. *International Journal of Research and Applied Technology*, 1 (1), 35–42. <https://doi.org/https://doi.org/10.34010/injuratech.v1i1.5458>
- Permatasari, D. (2022). *Apa itu Pelayanan Prima?* Kementerian Keuangan Republik Indonesia. <https://www.djkn.kemenkeu.go.id/kanwil-sulseltrabar/baca-artikel/15009/Apa-itu->

- Pelayanan-Prima.html#:~:text=Menurut (Firmansyah%2C 2016) pelayanan,mendapatkan sesuatu yang melebihi harapannya.
- Rahma Ridha Rofita & Eko Prasoj. (2022). Governance Networks Dalam Implementasi Kebijakan Pemanfaatan Data Kependudukan Guna Mewujudkan Single Identity Number. *Jurnal Ilmiah Ilmu Administras*, 5 (1), 26–37. <https://doi.org/https://doi.org/10.31334/transparansi.v5i1.2285.g1063>
- Simon Sumanjoyo Hutagalung & Dedy Hermawan. (2018). *Membangun Inovasi Pemerintah Daerah*. Deepublish.
- Strielkowski, W.; Gryshova, I.; Kalyugina, S. (2017). Modern Technologies in Public Administration Management: A Comparison of Estonia, India and United Kingdom. *Journal: Revista Administratie Si Management Public (RAMP)*, 28, 174–185. <https://www.ceeol.com/search/article-detail?id=720037>
- Sutanta, E. (2011). MODEL INTEGRASI DATABASE PENDUDUK INDONESIA DENGAN BERBAGAI SISTEM INFORMASI BERBASIS KOMPUTER. *Jurnal INFORMATIKA*, 05 (02)(ISSN 1978-0524), 542–553.