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Implementation of the National Online Samsat System (e-Samsat) in Palopo's Digital Era

Ni Gusti Ayu Wiradani *
Informatics and Computer Management, AMIK Ibnu Khaldun Palopo, 91923 Indonesia
wnigustiayu@gmail.com
**Corresponding author*

Puput Flora Arifuddin
Informatics and Computer Management, AMIK Ibnu Khaldun Palopo, 91923 Indonesia
florapuput2@gmail.com

Nur Ilman
Informatics and Computer Management, AMIK Ibnu Khaldun Palopo, 91923 Indonesia
nurilmansyah@gmail.com

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Abstract— This article discusses the implementation of the National Online One-Stop Single Administration System (e-Samsat) as part of the digital transformation of public services in Palopo City. The main focus of this research is to evaluate the effectiveness of e-Samsatservices in improving the administrative efficiency of Motor Vehicle Tax (PKB) payments and encouraging taxpayer compliance. The e-Samsat service is expected to be a solution to the constraints in the conventional system, such as long queues, complex bureaucracy, and time constraints. This research uses a mixed method approach through field observations, in-depth interviews with Samsat employees and taxpayers, and a quantitative survey measuring user satisfaction with six aspects of the service: ease of use, payment methods, system efficiency, innovation, security, and infrastructure. The results showed that the majority of respondents felt helped by the existence of e-Samsat, especially in terms of ease of access and time flexibility. However, the system is not fully optimized as there are still stages that require physical presence, such as the five-year STNK validation. In addition, obstacles such as low digital literacy, lack of socialization, and technical disruptions such as unstable connections also affect the effectiveness of this system. The data shows that the level of taxpayer compliance fluctuates from year to year, with an improving trend in 2023-2024 as the number of vehicle units paying taxes online increases. This study concludes that the successful implementation of e-Samsat depends not only on the availability of technology, but also on infrastructure readiness, supporting policies, and active community involvement. Therefore, a system strengthening strategy is needed through improving digital infrastructure, public education, and inter-agency collaboration so that e-Samsat can function more effectively and sustainably in supporting the optimization of regional revenue and technology-based development.

Keywords— E-Samsat, Tax Digitalization, Digital Public Services, Taxpayer Compliance, Motor Vehicle Tax (PKB), Samsat Palopo, Digital Transformation

I. INTRODUCTION

Taxes are one of the main sources of state revenue used to finance public expenditures in the context of government administration. The success of national development is highly dependent on resources obtained from taxes (Rahayu, et al., 2023). The classification of taxes based on the institution of collection in Indonesia can be divided into 2 (two), namely Central Taxes and Local TaxesOne type of local tax that contributes greatly to Local Original Revenue (PAD) is Motor Vehicle Tax (PKB). This tax is used to finance various development activities, such as improving road infrastructure, improving transportation services, and other public services. (Fitriani, T., 2020).

Public services play an important role in ensuring that people have convenience and comfort when dealing with the government. As the main function of government, public services must be carried out fairly and prioritize the public interest (Defrian, D., Sururi, A., & Hasanah, B., 2021). One of these services is the PKB payment process. The government has an obligation to provide a system that makes it easier for people to fulfill their obligations to pay vehicle taxes. This is where the role of the One-Stop Manunggal Administration System (Samsat) Joint Office becomes important as an integrated service place that facilitates the processing of motor vehicle documents.

Samsat is a service unit that involves the Regional Revenue Agency, the Indonesian National Police, and PT Jasa Raharja. These three institutions work together in providing motor vehicle administration services to the community. In Palopo City, Samsat is present as a Technical Implementation Unit (UPT) that provides vehicle tax payment services, BPKB and STNK management, document validation, traffic accident insurance from Jasa Raharja, and vehicle license plate issuance (Pramandani, et al., 2019). With this integrated service system, people can take care of all motor vehicle needs in one place more practically and efficiently.

Along with the development of the digital era, public service transformation is a must to improve efficiency, transparency, and public satisfaction (Yusuf, et al., 2020). One of them is the development of the National Online Samsat System (e-Samsat). This system allows people to pay PKB online, without having to come directly to the

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Samsat office. This step is part of the digital transformation also carried out in other countries, such as the MyEG system in Malaysia and Vahan in India, which have shown positive results in improving the efficiency of public services. This comparison shows that Indonesia is not walking alone in the digital transformation of public services, and e-Samsat has the potential to emulate good practices from other countries.

The implementation of e-Samsat aims to increase the effectiveness of tax payments and public awareness of the importance of fulfilling tax obligations. Through this system, PKB payment and STNK validation can now be done online. This policy is in line with Presidential Regulation No. 5/2015 Article 22 Paragraph 1 on the Implementation of the One-Stop Single Administration System, which supports the improvement of service quality at the SAMSAT Office through the development of the National Online Samsat system. Aprilianti, A. A. (2021). By implementing e-Samsat, taxpayers can make payments with a more practical online system. This modern taxation system based on e-Samsat was created in order to increase motor vehicle tax revenue in a region.

According to Winasari, A. (2020), the implementation of e-Samsat has the potential to increase public tax compliance. In addition, research by Pradhani & Sari (2022) shows that the implementation of information technology in the tax service system is closely related to the level of public trust and compliance with taxes. However, in the field, there are still various challenges. Technology infrastructure is uneven, especially in certain areas. People's digital literacy is also not high enough. In addition, coordination between related agencies in managing data and services is also still an obstacle. As a result, the system that should provide convenience has not been able to be used optimally by all levels of society (Pratiwi, I., & Irawan, A. 2019).

Since 2018, e-Samsat has been used in Palopo City. People can access this service through various methods, such as BPD mobile banking or retail outlets. Although this system is considered a step forward, its implementation has not been optimal. One example of an obstacle is that taxpayers still have to come to the Samsat office for STNK validation. This reduces the effectiveness of the online system, which should be fully usable from home. When compared to regions such as DKI Jakarta and Jawa Timur, Palopo's e-Samsat is still lagging behind in terms of convenience and completeness of digital features.

According to Saragih, A. H., Hendrawan, A., & Susilawati, N. (2019), the ideal e-Samsatservice should allow taxpayers to pay taxes anytime and from anywhere without the need to be physically present. However, in reality in Palopo, some procedures still require direct presence at the office. This shows that the main goal of service digitization has not been fully achieved (Zubaidah, E., & Lubis, E. F., 2021). The persistence of the need to come in person also shows that the system built has not solved the old obstacles in vehicle tax services.

In addition to system limitations, Palopo City also faces the problem of high vehicle tax arrears. In fact, revenue from motor vehicle tax is one of the main sources that contribute greatly to Regional Original Revenue (PAD) (Abdullah, M., Nurnaluri, S., & Kamal, A. Y. 2020). According to data, many taxpayers still do not pay taxes on time, and some even choose to use brokers because they feel the process is easier (Mamangkey, M., Liando, D., & Kimbal, M., 2019). This shows that the payment system, including e-Samsat, has not been able to build full trust from the public, especially in terms of convenience and practicality of services.

Seeing this reality, it is important to evaluate the effectiveness of e-Samsat in Palopo City in supporting public services and increasing local revenue. This research was conducted to find out how e-Samsat is implemented, what are the challenges faced, and how this system can be improved to really provide benefits. By comparing with practices in other regions and countries, this research is expected to provide input for policy makers in improving e-Samsat services and encouraging people to pay more taxes.

II. LITERATURE REVIEW

A. Tax

According to Law Number 28 of 2007 Article 1 Number 1, Tax is an obligation that must be fulfilled by individuals or legal entities to the state based on legal rules, is compelling, without providing direct rewards, and is used to meet state needs in order to achieve people's welfare.

According to Dewi, I. G. A. M. R. (2019) tax can be interpreted as a unilateral obligation imposed on taxpayers by the government based on applicable general provisions, without direct reciprocity, and is used to finance overall state expenditure.

B. Tax sanctions

Tax sanctions act as an enforcement tool for compliance with the tax rules set by law. With sanctions, taxpayers are encouraged to comply with applicable regulations and avoid violations. In addition, sanctions also have an educative function, namely encouraging public awareness so as not to ignore the obligation to pay taxes, including motor vehicle taxes. Kusuma, K. C., & Yushita, A. N. (2017)

C. Motor Vehicle Tax

Motor Vehicle Tax (PKB) is a type of tax imposed on the ownership or control of motor vehicles, both by individuals and entities. Based on Law of the Republic of Indonesia No. 28/2009 on Regional Taxes and Levies, the management of PKB is under the authority of the provincial government (Hidayati, M. 2016). The main targets of PKB are those who own or control motor vehicles, both individuals and organizations (Manan, A., & Hidayati, S. 2020).

D. Implementation of e-Samsat

e-Samsat is an electronic (online) payment system for Motor Vehicle Tax (PKB), which can be done anytime. You can make payments through BPD Mobile Banking,

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Indomaret, Gopay and other types of payments, which aim to make it easier for people to pay taxes online.

There are 4 types of e-Samsat payment method, which is an electronic motor vehicle tax (PKB) payment system.

1. Mobile Banking / Internet Banking: You can make payments through banking applications on smartphones or websites of cooperating banks, such as BPD Bank. This makes it easier for users because it can be done from home.
2. Retail Outlets: Payment can be made at places like Indomaret, which have also cooperated with the e-Samsat system. Simply show your identity and vehicle data.
3. Digital Wallet: The system also supports payment through digital wallet applications such as GoPay. This provides flexibility and convenience, especially for users of online transportation applications.
4. ATM: The e-Samsat service can also be accessed through designated bank ATMs. Users only need to enter data such as NIK, vehicle police number, and the code provided.

E. Public service

Service can be defined as a series of activities carried out sequentially by individuals, groups, or institutions with the aim of helping to meet the needs of others or society at large. Dompak, et al., (2018) Meanwhile, according to Law Number 25 of 2009, public services are activities in order to fulfill the needs of all citizens for goods, services, and administrative services organized by public service provider agencies.

III. METHODS

This research uses a mixed method approach, which combines qualitative and quantitative methods to get a more complete picture of the effectiveness of e-Samsat services in Palopo City. This method was chosen so that researchers can obtain data based on direct user experience, as well as measure satisfaction and level of service utilization numerically.

The research was conducted at UPT Samsat Palopo City, which is located at Andi Kambo Street No. 2, Palopo City, South Sulawesi. This location was chosen because it is the center of e-Samsat services in the region and has been running this system since 2018.

A. Data collection

1. Interview: Conducted with Samsat employees to find out the process and constraints of e-Samsat and e-Samsat users.
2. Observation: Researchers directly observed the service process and community interaction during the internship period.
3. Online survey: Distributed through Google Form to e-Samsat service users to determine the level of satisfaction and ease of use.

B. Data analysis was done descriptively.

1. Qualitative data from interviews and observations were grouped by theme (effectiveness, constraints, and satisfaction).
2. Quantitative data from the survey was processed in the form of tables and graphs.

Data validation used triangulation, i.e., matching the results of interviews, surveys and observations. Researchers also compared the findings with annual data from Samsat (payments & arrears) and supported by previous literature.

IV. RESULTS AND DISCUSSION

Based on the results of an interview conducted on March 2, 2025, with Bintang Banawa, S.E., as an employee of the UPT SAMSAT Palopo City, information was obtained that the community in Palopo gave a relatively good response to the implementation of e-Samsat since it was launched in 2018. He stated that e-Samsat has helped taxpayers, especially those who have limited time to come directly to the Samsat office.

The e-Samsat system provides a practical solution in motor vehicle tax payments because it allows the process to be carried out without having to face long queues and complicated manual procedures. Speed and flexibility are the main values of this system, making it very suitable to be implemented in the midst of demands for modern public service efficiency (Wardani, D. K. 2020).

The interview results also show that although generally helpful, e-Samsat has not fully met users' expectations. According to Rahmat, one taxpayer, the experience of using e-Samsat has been quite good, especially in terms of the speed of payment through BPD Bank's mobile banking. However, he regrets that the STNK validation process still requires him to come directly to the Samsat office, which means the system has not been completely digitized.

The same thing was expressed by Ratnawati, who was initially hesitant to use the e-Samsat service because she was not used to the online system. But after trying payment through internet banking, she found the process easy and fast. She received a digital proof of payment, but still had to manually validate the STNK at the office. For him, although online services reduce queues, e-Samsat is still not optimal because it has not touched the entire administrative process.

A positive experience also came from Indah, who learned about e-Samsa through a friend's recommendation and chose to use a digital wallet like GoPay. She considers this system very practical because it can be used without having to leave the house. This shows that the segment of users who are already familiar with digital services responds positively to this innovation.

However, the e-Samsat service in Palopo can currently only be used for annual PKB payments. This means that for five-year tax arrangements involving license plate and STNK changes, taxpayers must still attend the Samsat office in person. In addition, this service

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only applies to vehicles in active status and not in data or ownership blocking.

Payment through e-Samsat can also only be made starting from 40 days before the due date. This system cannot be used if the arrears period exceeds one year, so there are still limitations in terms of service coverage.

In this study, one of the parts studied is the perception of the community as users of e-Samsa services in Palopo City. The perception is measured based on six main aspects of service, namely payment methods, general satisfaction factors, ease of use, system efficiency, service innovation, and security and infrastructure. This assessment was obtained through a survey conducted to motor vehicle taxpayers who have used e-Samsat.

Table 1. Implementation of e-Samsat Samsat Palopo and User Satisfaction

Aspects of e-Samsat Implementation	Description	User Satisfaction
Payment Methods	Motor vehicle tax payments can be made through the designated Banking BPD.	Users are satisfied because of the ease of access, but still need validation at the Samsatoffice.
Satisfaction Factor	Factors affecting user satisfaction include content, accuracy, format, ease of use, and timeliness.	Each variable scored 4 out of 5, indicating a good level of satisfaction but still requires improvement.
Ease of Use	The system allows people to pay taxes from home without going to the office.	Users are satisfied because this convenience reduces the time and effort required to pay taxes.
System Efficiency	The e-Samsat system is designed to improve efficiency and accuracy in the vehicle tax administration process.	Despite satisfaction, some users felt there was a need for improvement in network stability to increase satisfaction.
Service Innovation	The e-Samsa service innovation aims to increase motor vehicle tax revenue with fast and smooth online transactions.	Usage is generally satisfied with this innovation, but more intensive socialization is needed to improve public understanding.
Security and Infrastructure	System security and technology infrastructure are the main challenges in implementing e-Samsat	User satisfaction can increase if security and infrastructure are improved, reducing user concerns.

Based on Table 1, it can be seen that ease of use is the aspect most valued by e-Samsat users in Palopo City. This shows that people highly appreciate the flexibility and ease of access offered by this system. However, there are still weaknesses in the security and infrastructure aspects, where users consider the system is not fully secure and stable. The efficiency and service innovation factors also received a good response, although there are still notes on the need to increase socialization and education to the community so that the utilization of the system becomes more optimal. In general, e-Samsat is seen as a positive progress in public services, but it still requires strengthening in technical aspects and user trust.

To clarify the distribution of user satisfaction with the six aspects of e-Samsa services previously described, the data is visualized in the form of a bar graph. This visualization provides a concise overview of which aspects get the highest scores and which ones need to be improved.

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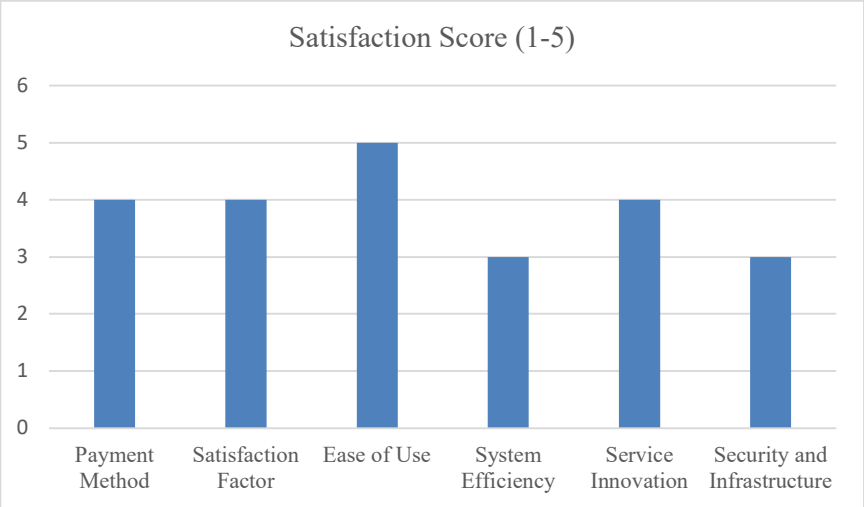

Figure 1. User Satisfaction Level with Implementation Aspects of e-Samsat Palopo

The results of figure 1 show that the Ease-of-Use aspect gets the highest score, which is 5 out of a scale of 5. This means that people are greatly helped by the ease of access to e-Samsa services, especially because they can pay vehicle taxes without having to queue at the Samsa office.

1. Payment Methods (Score: 4)
   Users give a high rating to the diversity of payment methods available, such as mobile banking, digital wallets, ATMs, and retail outlets such as Indomaret. This accessibility provides flexibility for users from various backgrounds, both those who are tech-savvy and those who are not familiar with digital systems.
2. Satisfaction Factor (Score: 4)
   This score indicates that in general, e-Samsa services have met public expectations in terms of information content, data accuracy, display format, and process speed. However, there is still room for improvement, especially in terms of consistency of service quality and delivery of technical information to users.
3. Ease of Use (Score: 5)
   This aspect obtained the highest score. This shows that the majority of users feel that e-Samsat is very helpful in paying motor vehicle taxes. With the online service, people no longer need to queue at the Samsa office and can make payments from anywhere. This feature is considered the main added value of the digital system as it provides convenience and saves users' time.
4. System Efficiency (Score: 3)
   Some users report interruptions in system access, such as unstable networks and delays in the data input process. These technical issues have an impact on the assessment of system efficiency. Therefore, improvements are needed on the digital infrastructure side so that the user experience becomes better and smoother.
5. Service Innovation (Score: 4)
   The use of a digital system in tax payment is an innovative step that is quite appreciated by the community. However, this innovation has not been fully utilized by all levels of society due to limited socialization and training. This shows that good technology will not be effective if it is not accompanied by adequate education and promotion.
6. Security and Infrastructure (Score: 3)
   The level of satisfaction in this aspect is still relatively low. Many users are concerned about the security of their personal data in online systems, especially with the increasing cases of data leaks. In addition, limited digital infrastructure in some areas is also an obstacle that causes the transaction process to not always run smoothly.

The results of this graph indicate that although the implementation of e-Samsat has provided significant convenience for users, the system is not yet fully optimized. Ease of use is the main strength of this service, but to ensure sustainability and increase user satisfaction, improvements need to be made to system and infrastructure aspects, such as improving network stability, automatic validation, and user data security.

The gap between perceived user satisfaction and payment realization is also evident from year-on-year data, which shows that increased satisfaction is not always directly proportional to the level of taxpayer compliance. This shows that in addition to user satisfaction, there are other external factors such as uneven socialization, low digital literacy, and people's habits that are still accustomed to making conventional payments, which also affect the overall effectiveness of the e-Samsat system.

Data on motor vehicle tax payments through e-Samsat for the last five years provides an overview of the level of public compliance in utilizing this system. The following table presents the number of vehicle units recorded, the number of units making payments, and the percentage of compliance each year.

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Table 2. Motor Vehicle Tax Payment through e-Samsat

Year	Number of Units	Units that Pay	Percentage% of Units that Pay
2020	18	17	94.44%
2021	107	81	75.70%
2022	104	48	46.15%
2023	161	115	71.43%
2024	243	190	78.19%

The data contained in table 2 shows data on motor vehicle tax payments in Palopo through the e-Samsat system from 2020-2024. In 2020, the number of units recorded was 18 units, and of these 17 units were not in arrears, resulting in a very high percentage of 94.44%. This indicates that in that year payment compliance was very good, with almost all units paying their obligations on time. This high percentage could be due to the small number of units so that management and monitoring are more optimized.

In 2021, there was a significant jump in the number of units to 107. However, only 81 units did not default, so the percentage dropped to 75.70%. Despite the drastic increase in the number of units, the compliance percentage is still quite good. This shows that despite the increased management burden, most residents remain disciplined in their payments.

In 2022, the number of units decreased slightly to 104, but only 48 were not in arrears. The compliance percentage also dropped dramatically to 46.15%. This decline indicates challenges in management or perhaps external conditions such as the economy affecting residents' ability to pay. This is the lowest point for the last five years and needs special attention.

Entering 2023 and 2024, there was an improvement. In 2023, out of 161 units, 115 units were not in arrears, increasing the percentage to 71.43%. This positive trend continued in 2024, where out of a total of 243 units, 190 units were not in arrears, bringing the percentage up to 78.19%. This increase indicates success in management or a more effective collection strategy, as well as increased awareness of payment obligations.

The existence of the e-Samsat system, designed to facilitate tax payments, has not been fully successful in increasing compliance. The facts show that there are still many taxpayers who are late in fulfilling their payment obligations. Although technology has made access and transactions easier, data shows that taxpayer awareness and service quality still play a major role in supporting the successful implementation of this system.

A. Influence factors of e-Samsat on taxpayer compliance

1. Perceived benefits and ease of use: Although e-Samsat was developed to simplify the tax payment process, study findings indicate that taxpayers' perceptions of the benefits and ease of operation of the system do not significantly impact compliance levels. This suggests that the mere existence of technology is not enough; taxpayers need to perceive concrete added value and efficiency to be encouraged to comply with tax obligations.
2. Facilitating conditions: A key factor that is even more influential is the availability of supporting infrastructure and technical facilities. Studies prove that when access to technology, internet networks and technical assistance are adequately provided, taxpayer compliance rates show a significant increase.
3. Effectiveness and progressive tax: research reveal that the combination of optimal performance of e-Samsat and the simultaneous implementation of progressive tax policies can create a noticeable positive impact on compliance. In other words, the alignment between a reliable digital system and an equitable tax structure is a crucial element in encouraging tax awareness.

Apart from payment, the aspect of arrears is also an important indicator in measuring the effectiveness of the e-Samsat system. The following table presents the number of delinquent units and their percentage of total registered vehicle units over the past six years.

Table 3. Motor Vehicle Tax Arrears through e-Samsat

Year	Number of Units	Delinquent Units	Percentage% of Delinquent Units
2019	2	2	10
2020	18	1	5.56%
2021	107	26	24.30%
2022	104	56	53.85%
2023	161	52	32.2%
2024	243	53	21.81%

The data contained in Table 3 shows data on motor vehicle tax arrears in Palopo through the e-Samsat system from 2019-2024. It can be seen that the number of vehicle units in arrears fluctuates from year to year. In 2019, although there were only 2 vehicles, both were recorded as in arrears, with a percentage of arrears of 10%. In 2020, there was a significant decrease with only 1 out of 18 units in arrears (5.56%).

However, 2021 marked a sharp increase, with 26 out of 107 units in arrears (24.30%). This increase continued in 2022, when the percentage of arrears jumped to 53.85% (56 out of 104 units). Although the following years saw slight improvements, the data shows that in 2023 there were still 52 units out of 161 in arrears (32.2%) and in 2024 there were 53 out of 243 units (21.81%). This shows that although the number of vehicles has increased, the challenge in reducing arrears is still considerable.

This increase and decrease in arrears reflect the obstacles in the implementation of e-Samsat, both in terms of the system and public understanding. Although this system is expected to increase taxpayer compliance by providing easy access and time efficiency, the reality is that not all people can or want to utilize it optimally. This shows that the success of public service technology

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depends not only on the availability of services, but also on public acceptance and understanding of these services.

Factors that influence the low utilization of e-Samsat Wuryanto, et al., (2019) are:

1. The lack of socialization from Samsat to the community, so that most residents do not know the existence and benefits of the National Online Samsat(e-Samsat).
2. Taxpayers who have paid online still have to come to the Samsat office to print the STNK, which makes the process less practical.
3. The mechanism of using e-Samsat, which is perceived as complicated by some people, is also an obstacle. For some users, procedures that are not fully digitalized make them prefer to make tax payments directly at the Samsat office or through informal channels such as using delivery services or calling certain officers.

To get a comprehensive picture of the effectiveness of the e-Samsat system, it is necessary to synthesize data on vehicle tax payments and arrears. The following table presents the percentage of payments and arrears, and the difference between the two as an indicator of the compliance gap.

Table 4. Synthesis of Payment and Arrears Data

Year	% Payment (Table 2)	% Arrears (Table 3)	Gab	Implications
2020	94.44%	5.56%	88.88%	Initial implementation of e-Samsa successful with high compliance
2021	75.70%	24.30%	51.40%	Surge in new users (107 units) increases risk of arrears
2022	46.15%	53.85%	-7.70%	Arrears > Payments, allegedly due to post-pandemic economy
2023	71.43%	32.20%	39.23%	System improvements begin to have an impact
2024	78.19%	21.81%	56.38%	Stabilization of e-Samsa usage

Table 4 shows the mixed impact of service efficiency and technical challenges. On the one hand, the system has increased tax compliance from 46.15% (2022) to 78.19% (2024) while reducing queues at Samsat offices. On the other hand, the requirement for physical verification of STNK after online payment created a digitalization paradox - where people still had to come to the office despite having paid digitally.

when the realization of tax arrears actually exceeded the amount of payments made. This is due to several factors, including a lack of socialization and unstable economic conditions after the pandemic. Less than optimal socialization of the convenient features of e-Samsat, coupled with uneven internet access, contributed to the increase in arrears.

Improvements began to emerge in the following years, with more people understanding how to use e-Samsat, and more paying their taxes on time. The government also expanded payment methods through mobile banking, digital wallets and retail outlets, giving people more options to pay.

This difference shows that while the number of vehicles and access to e-Samsat is increasing, awareness and ease of use still affect compliance. Factors such as lack of socialization, procedures that are not fully digital, and system complexity contribute to arrears.

Overall, the e-Samsat system has helped with the efficiency of tax payments, but it has not been fully matched by taxpayer compliance, so evaluation and service improvements are still needed.

To see Palopo City's position in the national context, a comparison was made with several other regions that have also implemented e-Samsat, namely Yogyakarta, Riau and Bali. This comparison includes technical aspects, service innovation, and the level of user compliance.

Table 5 Comparison of e-Samsat Implementation in Several Regions

Aspect	Palopo	Yogyakarta	Bali	Riau	Source
Year of Implementation	2018	2016	2017	2018	Wardani (2020); Saragih et al. (2019); Zubaidah & Lubis (2021)
Compliance Rate (2020–2024)	78,19% (2024)	±85% (2020)	±86% (2019)	±72% (2021)	Wardani (2020); Saragih et al. (2019); Zubaidah & Lubis (2021)
Tax Arrears	21,81% (2024)	±15%	±14%	±28%	Wardani (2020); Saragih et al. (2019); Zubaidah & Lubis (2021)
Service Access	Mobile, ATM, Gopay, Indomaret	Mobile, Web, Drive Thru	Web, Mobile, Drive Thru	Mobile, ATM	Wardani (2020); Saragih et al. (2019);

					Zubaidah & Lubis (2021)
Online STNK Validation	Not yet fully	Already (yearly)	Already (yearly)	Not yet fully	Wardani (2020); Saragih et al. (2019); Zubaidah & Lubis (2021)
Socialization	Limited	Intensive via media	Intensive via community	Less evenly distributed	Wardani (2020); Saragih et al. (2019); Zubaidah & Lubis (2021)
Infrastructure Constraints	Network & human resources	Minimal	Relatively minimal	Network & literacy	Wardani (2020); Saragih et al. (2019); Zubaidah & Lubis (2021)

Based on Table 5, it can be seen that the implementation of e-Samsat in Palopo has some similarities and differences compared to other regions such as Yogyakarta, Bali, and Riau. In terms of compliance, Palopo is still below Yogyakarta and Bali, which have fully implemented online STNK validation and conducted intensive socialization through media and communities. Both Palopo and Riau have not yet implemented online validation in its entirety, and both face obstacles in terms of infrastructure and digital literacy. This shows that the success of e-Samsat is not only influenced by the existence of the system, but also by the quality of socialization, technological infrastructure, and human resource readiness in each region.

To expand this discussion, some international studies provide additional perspectives. For example, the MyEG system in Malaysia emphasizes the importance of user-friendly interfaces, broad service access, and automated validation to improve taxpayer compliance (Chua et al 2021). Estonia has even managed to achieve a motor vehicle tax compliance rate above 95% thanks to a system that is fully integrated with the national database and population system that supports automation.

South Korea and Singapore are examples of developed countries that have succeeded in digitizing public services, including vehicle taxes. South Korea uses a digital system that is integrated with the national transportation and payment systems and emphasizes cybersecurity as the key to public trust in digital services (Park, H. J., & Kim, Y. 2020). Singapore, on the other hand, stands out in its use of cloud-based technology and AI in public services, with a vehicle tax system that is directly linked to insurance data, vehicle inspections, and the identity of vehicle owners. The key to success in Singapore is a data-driven policy approach and high digital literacy among the public (Lim et al 2020).

Countries such as Australia, New Zealand and Canada have strong national digital literacy programs that are directly linked to digital public services, including vehicle tax (Brown et al., 2022). In Palopo, gaps in digital literacy remain a serious challenge, especially among rural and elderly communities. In addition, some studies suggest that the use of multiple payment channels such as mobile banking, kiosk machines, and physical bank payments, as well as the provision of incentives or discounts, play a role in increasing public participation in the digital tax system (Rahayu et al., 2023).

The conclusion of this comparison is that the successful implementation of e-Samsat is not solely determined by technological aspects, but also highly dependent on human factors, education, and supportive government policies. This research contributes to the digital public administration literature by adding a local perspective from a small city like Palopo. The study results show that system convenience is not necessarily the main factor that increases tax compliance, as also found in Winasari, A. (2020) research.

This research contributes to the development of public administration, especially in the context of digitizing tax services in developing regions. Rahayu et al. (2023) also mentioned that trust and consistent socialization are instrumental in improving compliance. Palopo's experience can be an important lesson for other cities with similar conditions. With support from regulations, human resources, technological infrastructure, and community participation, e-Samsa can be further developed as an effective and sustainable system.

V. CONCLUSION

The implementation of e-Samsatin Palopo City is an innovative step in digitizing public services, especially in Motor Vehicle Tax (PKB) payments. The system provides convenience, time flexibility, and reduced queues, which is appreciated by most of the community. However, research shows that the effectiveness of e-Samsathas not been optimal. The STNK validation process that still requires physical presence, limited digital infrastructure, low public literacy, and lack of socialization are the main obstacles.

Data shows that although the number of users and satisfaction levels have increased from year to year, taxpayer compliance still fluctuates. This indicates that the existence of a digital system does not fully guarantee increased compliance without the support of other factors such as education, public trust, and well-integrated policies and technology.

Comparisons with other regions and international practices show that the successful implementation of a digital tax system is strongly influenced by socialization strategies, system convenience, automatic validation, and the readiness of human resources and infrastructure. Thus, for e-Samsatin Palopo to function optimally and sustainably, it requires cross-sectoral synergy, increased

digital literacy of the community, strengthening of technology systems, and public service policy reforms that are inclusive and adaptive to digital developments.

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