

Implementation of Electronic Land Service System on the Effectiveness of Land Deed Officials in South Jakarta

Alifa¹⁾ & Amad Sudiro²⁾

¹⁾ Faculty of Law, Universitas Tarumanagara, Indonesia, E-mail: alifa.217232026@stu.untar.ac.id

²⁾ Faculty of Law, Universitas Tarumanagara, Indonesia, E-mail: ahmads@fh.untar.ac.id

Abstract. *The development of information technology in the land sector has encouraged the birth of a digitalization policy for services by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) through the implementation of the Electronic Land Service System. This innovation is intended to increase transparency, speed, and accuracy in the land administration process, especially for Land Deed Officials (PPAT) who are at the forefront of land rights transfer services. This study aims to examine the influence of the Electronic Land Service System on the effectiveness of PPAT work in the South Jakarta Administrative City area. The study uses an empirical approach with quantitative and qualitative methods, where data is obtained through distributing questionnaires and interviews with active PPATs. The results of the analysis show that the implementation of the Electronic Land Service System has a positive impact on work time efficiency, document accuracy, and increased service satisfaction. However, a number of obstacles were still found, such as lack of technical training and limited system accessibility under certain conditions. Based on these findings, optimization of digital infrastructure and increased user capacity are needed so that the Electronic Land Service System can run more optimally and sustainably in supporting PPAT performance and quality public services.*

Keywords: *Digitalization; Electronic; Land; Public; Services.*

1. Introduction

The land system in Indonesia is formed based on the principles of public law that places the state as the land owner and the community as the land rights holder. In this case, the Land Deed Making Officer, hereinafter referred to as (PPAT), plays an important role as the executor of part of the state's authority in land rights transfer matters, with the main task of making authentic deeds that serve as the basis for registering rights at the Land Office. The duties and authorities of the PPAT are clearly regulated in Government Regulation Number 24 of 2016 concerning Amendments to PP Number 37 of 1998 concerning the Regulation of the PPAT Position, and refers to the main provisions of Law Number 5 of 1960 concerning Basic Agrarian Principles, hereinafter referred to as (UUPA).

Along with the development of information technology, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency hereinafter referred to as (ATR/BPN) introduced the Electronic Land Service System as a form of modernization of public services in the land sector. The legal basis for this system is stated in ATR/BPN Regulation Number 5 of 2020 concerning Electronic Land Services, which stipulates that various types of services including transfer of rights, roya, certificate checking, and registration of land rights can be done online. This system is expected to be able to encourage acceleration of services, improve administrative accuracy, and minimize maladministration practices.

For PPAT, the presence of the Electronic Land Service System brings significant changes in the implementation of tasks. The process that was previously carried out manually is now replaced by digital system integration, so that PPAT must adapt to new procedures that require accuracy in filling in data, uploading electronic documents, and understanding of network-based verification systems. As a result, the responsibility of PPAT in maintaining the validity and authenticity of legal documents becomes increasingly complex because it does not only rely on legal technical skills, but also on an understanding of the electronic system used by ATR/BPN.

In practice, the implementation of the Electronic Land Service System has not been fully optimal. In several areas, including South Jakarta, various obstacles were found such as lack of socialization, technical obstacles, and unpreparedness of human resources in operating the system. This raises problems in terms of the effectiveness of PPAT work, both in terms of time efficiency and service accuracy. In addition, there are concerns about legal protection for the role of PPAT if there is a system error or non-compliance with procedures in the use of digital services.

Based on these problems, this study aims to examine the effect of the implementation of the Electronic Land Service System on the effectiveness of the work of PPAT in South Jakarta, by considering the provisions of applicable laws and regulations, professional responsibility, and guarantees of legal certainty in the implementation of electronic land services. The discussion in this study includes how the responsibility of PPAT in the digitalization of land services, how the implementation of the Electronic Land Service System by PPAT land deed officials in the South Jakarta area and the identification of obstacles and solutions that can be attempted so that the system runs optimally and sustainably. The results of the study are expected to contribute to strengthening the land law system that is adaptive to technological developments, as well as emphasizing the position and legal protection for PPAT in the era of electronic services.

2. Research Methods

The research method applied in this study is a normative legal approach supported by an empirical approach. The normative legal approach focuses on the analysis of laws and regulations, legal principles, doctrines of legal experts, and legal norms related to the

implementation of the Electronic Land Service System and the role of Land Deed Officials (PPAT) in the land administration process in South Jakarta.

This study aims to understand how land digitalization regulations and the implementation of the Electronic Land Service System affect the effectiveness of PPAT work as part of the national land administration system. Through an analysis of the Law, Government Regulations, and technical regulations from the Ministry of ATR/BPN, the study examines the legal basis and working mechanisms of PPAT in the context of electronic land services. In addition, an empirical approach is used to collect primary data through observation, interviews, and surveys with PPAT and related stakeholders in the South Jakarta area to obtain a real picture of the implementation of the Electronic Land Service System and its impact on the productivity and quality of PPAT services. By combining normative and empirical legal approaches, this study is expected to provide a comprehensive picture of the influence of digitalization of land services on the effectiveness of PPAT work and provide policy recommendations for improving electronic-based land services in Indonesia.

3. Results and Discussion

3.1. Responsibilities of Land Deed Officials in the digitalization of land services

The development of information technology has driven a significant transformation in the land service system in Indonesia. The digitization of land services is an effort to increase transparency, accuracy, and efficiency in the management of land data that was previously done manually. In this context, the responsibilities of the Land Deed Making Officer (PPAT) have undergone a fairly substantial expansion, along with its strategic role as the main actor in the preparation of authentic deeds related to land rights and mortgage rights.

One crucial aspect of the responsibility of PPAT in the digital era is to ensure the validity and accuracy of the data contained in the deed. The accuracy of the data greatly determines the legality and legal validity of the deed made, especially when the information is uploaded and becomes part of the national digital land system. Errors in data input can cause legal disputes that have serious implications for legal certainty and the protection of community rights. Therefore, PPAT is required to conduct a thorough verification of the documents submitted by the parties, and ensure that all information listed is in accordance with the provisions of applicable laws and regulations (Priadnyani,2022).

The responsibility of PPAT also includes an educational role in bridging the community with an electronic-based land system, such as the Electronic Mortgage Rights service. In practice, the community still experiences obstacles in understanding digital service procedures. Therefore, PPAT is expected not only to be an administrative implementer, but also to play an active role in providing adequate understanding to the community regarding registration procedures, required documents, and the benefits that can be obtained from these electronic services. The

involvement of PPAT in this educational aspect can increase the community's legal literacy and accelerate the transition to an information technology-based land system (Sagari,2022).

In addition, commitment to regulatory compliance is another important dimension of PPAT's responsibility in the digital era. Rapid policy changes in the land sector, especially through technical regulations such as the Regulation of the Minister of ATR/BPN No. 5 of 2020, require PPAT to continue to follow the latest legal developments. Non-compliance or delays in adjusting practices to new regulations can lead to procedural inconsistencies and reduce the credibility of services. Therefore, PPAT needs to integrate the principles of prudence and professionalism in every step of its services (Shinta,2023).

Furthermore, data security management is a responsibility that cannot be ignored. In a digital system, information regarding legal subjects and objects of land is stored in an electronic database that is vulnerable to misuse if not regulated with a strong protection system. PPAT has the responsibility to maintain the confidentiality, integrity, and accessibility of data from threats from unauthorized third parties. The implementation of an adequate digital security system is not only important to protect individual interests, but also to maintain public trust in the national land system (Sri Widyawati,2024).

Along with the demands of professionalism in the digital world, PPATs are also required to continue to improve their technological capacity and competence. Digital literacy is the main prerequisite for PPATs to be able to understand, operate, and optimize electronic-based land systems. Continuous training and participation in capacity building programs are strategic means to strengthen PPATs' readiness to respond to the challenges of the digital era. This competence is not only needed for technical purposes, but also to provide legal services that are adaptive to changes in regulations and systems that occur (Mohamad, 2021).

Overall, the responsibility of PPAT in the process of digitizing land services is not only limited to administrative implementation, but also includes legal, social, and technological aspects. The success of digital transformation in the land sector is highly dependent on the capacity of PPAT in carrying out its functions professionally, accountably, and oriented towards legal certainty. Thus, PPAT plays a key role in realizing a more modern, transparent, and inclusive national land system for all levels of society (Agung, 2024).

3.2. Implementation of the Electronic Land Service System by land deed officials in the South Jakarta area

The implementation of the Electronic Land Service System by Land Deed Officials (PPAT) in the South Jakarta area is part of the government's strategic initiative to accelerate the modernization of public services, especially in the land sector. This step was taken to address the challenges of bureaucratic reform and to encourage efficiency, transparency, and accessibility in the land administration process. This digitalization is in line with the national policy of integrating information technology into public services in order to create a more adaptive, responsive, and accountable land system.

Through the implementation of the Electronic Land Service System, PPAT is given the authority to prepare and issue authentic deeds electronically, including deeds of sale and purchase and deeds of mortgage rights. This marks a significant shift from the conventional system based on physical documents to a digital system that relies on connectivity and electronic databases. With this system, processes that previously required physical presence and a long time can now be done online, speeding up the registration procedure and minimizing the potential for administrative errors. In addition, the use of this technology shows that land information management is starting to be directed towards developing a nationally integrated system (Priadnyani,2022).

In the context of its implementation, PPAT bears great responsibility in ensuring that all information and documents entered into the Electronic Land Service System are correct, accurate, and legally valid. Data validity is an important element that determines the success of the implementation of this system. Therefore, each PPAT must carry out a strict verification process on documents submitted by the community before inputting data into the system. Accuracy in preparing deeds and caution in checking the legality of documents are preventive efforts to prevent legal defects in the land administration process (Kristianti,2021).

The responsibility of PPAT is not only limited to administrative and technical aspects, but also includes educational functions for the community. PPAT needs to provide an understanding to the public regarding the benefits and workings of the Electronic Land Service System, so that the public can easily access and utilize this service. Through socialization activities such as seminars, workshops, or counseling, PPAT acts as a facilitator who bridges technical regulations and the information needs of the community. This approach is important to reduce data input errors and build public trust in the digital land service system (Aufima,2020).

In the implementation of the Electronic Land Service System, PPAT is also required to always follow the development of laws and regulations governing the electronic service system. Various regulations, such as the Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 5 of 2020 concerning Electronic Land Services and the Regulation of the Minister of ATR/BPN Number 1 of 2021 concerning Electronic Certificates, are normative references that PPAT must comply with in every digital transaction. This requires PPAT to continue updating their competencies so they can adapt to regulatory changes and developments in information technology (Masnah,2021).

On the other hand, personal data protection and information security are important aspects in the implementation of the Electronic Land Service System. PPAT is responsible for maintaining the confidentiality and security of all legal information related to land rights. The use of a secure, encrypted digital system with strict access control is absolutely necessary to prevent data misuse by unauthorized parties. Successfully maintaining data integrity will contribute greatly to building a credible and trusted land system in the eyes of the public (Prasetyo,2023).

Overall, the implementation of the Electronic Land Service System by PPAT in South Jakarta reflects the spirit of legal and administrative reform in the land sector. This innovation has a positive impact on service efficiency, improving the quality of public services, and legal certainty for land rights owners. The sustainability of this system is largely determined by the readiness of PPAT in carrying out its role professionally, adaptive regulatory support, and increasing digital literacy of the community as a whole (Muhammad,2023).

3.3. The implementation of the Electronic Land Service System affects the effectiveness of work by land deed officials in South Jakarta

The implementation of the Electronic Land Service System by Land Deed Officials (PPAT) in the South Jakarta area has had a significant impact on increasing the effectiveness of the work of these officials. This service system was developed to simplify and improve the quality of land services through a digitalization process, which replaces conventional procedures that were previously manual. The following are several aspects that explain how the implementation of this electronic land service affects the effectiveness of the work of PPATs in the area.

1. Process Speed Improvement

One of the most direct impacts of the implementation of the Electronic Land Service System is the increased speed in processing land documents. Previously, the process of submitting and registering land rights involving PPAT could take days to weeks due to the large number of physical documents that had to be processed. With an electronic system, all processes can be done online, which reduces waiting time and allows PPAT to complete more applications in a shorter time (Esther,2023).

2. Reduction of Administrative Errors

Digitalization One of the most obvious benefits of implementing electronic land services is the acceleration in processing land documents. Previously, the submission and registration of land rights involving PPAT took days or even weeks, due to the large number of physical documents that had to be handled manually. By using an electronic system, the entire process can be completed online, reducing waiting times and allowing PPAT to process more applications in a shorter time (Laili,2023).

3. Transparency and Accountability

The implementation of electronic land services also contributes to increasing transparency in every stage of the process carried out by PPAT. Every activity and submission can be easily tracked, thus reducing the potential for corruption and collusion. This also increases public trust in land services, because they can access information on the status of applications directly and in real time. PPAT acts as an integrity guard by ensuring that all documents processed are sourced from valid and accountable data (Chairunnisa,2023).

4. Facilitating Access for the Community

The existence of electronic land services also provides easy access for the public in managing land documents. Residents in South Jakarta can access this service without having to come directly to the land office, so they can save time and travel costs. Through online applications and portals, PPAT is able to offer services that are easier to use (user-friendly), so that more people are encouraged to use these facilities (Masri,2023).

5. Development of Digital Competence of PPAT

The implementation of electronic-based land services requires PPAT to have adequate digital skills and abilities. Therefore, a number of PPATs have undergone special training in order to understand and operate the digital system effectively. This increase in digital competence not only has an impact on increasing work productivity, but also prepares PPATs to adapt to technological changes that continue to develop in the current digital era (Adelina,2020).

6. Adaptation to Regulatory Requirements

The implementation of electronic land services also requires PPAT to always understand and comply with the latest regulations stipulated in the Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency. Adjustments to these regulations make PPAT more responsive to policy changes so that their duties can be carried out more efficiently and in accordance with applicable legal provisions. Compliance with these rules is very important to maintain the legitimacy and validity of the land rights registration process (Alvi,2023).

3.4. Obstacles faced by land deed officials in implementing the Electronic Land Service System in the South Jakarta area

The implementation of electronic-based land services by Land Deed Officials (PPAT) in the South Jakarta area faces various challenges that must be overcome in order to achieve effectiveness and efficiency in providing land services. One of the main obstacles is the limited technological infrastructure owned by several PPAT offices. Although electronic land services are designed to facilitate access and speed up the administrative process, not all PPAT offices in South Jakarta have adequate hardware and software to run this system optimally. This condition causes the document processing process to run slowly because the equipment has not been updated or the system installation is not optimal. Therefore, it is necessary to improve the quality of information technology infrastructure and supporting facilities from the government so that electronic land services can run smoothly and efficiently (Nanik,2023).

In addition, another significant obstacle is the lack of understanding and digital skills among PPATs themselves. Although the purpose of electronic land services is to simplify the work

process, some PPATs have not fully mastered the use of this system, so their performance is not optimal. It is important to provide intensive training and socialization on how to operate the electronic service so that all officers can understand and utilize the system's functions optimally. Without adequate understanding, the risk of data input errors and other administrative errors will increase, which ultimately reduces work effectiveness (Prasetyo,2023).

Furthermore, regulations governing electronic land services are also an obstacle in the implementation process. Inconsistencies or overlapping regulations can cause confusion among PPATs regarding the procedures that must be followed. For example, conflicting regulations regarding land registration procedures make it difficult for PPATs to carry out administrative processes efficiently. Therefore, consolidation and simplification of regulations are needed to be more coherent and support the implementation of electronic land services optimally (Rina,2024).

The low level of digital literacy in the community is also an obstacle in itself. People who are not used to using electronic systems often have difficulty accessing land services online. This condition makes people prefer to use conventional methods that are relatively longer, thus impacting the effectiveness of the expected service. To overcome this, it is necessary to hold education and training programs for the community so that they are more prepared and comfortable in utilizing the electronic services that have been provided.

In addition to external factors, internal obstacles in the form of resistance to changes from manual methods to electronic services are also felt by some PPATs. Those who have long used conventional working methods may feel reluctant or less confident in adopting the new technology. This attitude of resistance can hinder the adaptation process and reduce the effectiveness of the use of electronic-based land service systems. Therefore, good change management is needed to build trust and encourage PPATs to be more open and proactive in accepting technological innovations (Muhammad,2021).

4. Conclusion

The digitalization of land services in Indonesia, especially through the role of Land Deed Officials (PPAT), has brought about significant changes in land administration governance. PPAT is not only responsible for preparing accurate and legally valid deeds, but also plays an important role in maintaining data validity, information security, and providing education to the public regarding electronic land services. The implementation of an electronic-based land service system, such as that implemented in the South Jakarta area, accelerates the administrative process, increases transparency, and facilitates public access to managing land documents. In addition, the implementation of this system also encourages an increase in the digital competence of PPAT and demands rapid adaptation to ever-evolving regulations. However, various obstacles are still faced in the implementation of this system, including limited technological infrastructure, low digital literacy among both PPAT and the community,

and confusing regulatory inconsistencies. Internal obstacles in the form of resistance to changes in conventional work methods are also a challenge in optimizing the use of electronic services. Therefore, to achieve the effectiveness and sustainability of digital transformation in the land sector, comprehensive support from various parties is needed.

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