

The Effectiveness of the “Sentuh Tanahku” App in The “Sertifikatku” Service at The Cirebon City Land Agency

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Abstract. The goal of this study is to assess and investigate the effectiveness of the Sentuh Tanahku application's implementation as a form of e-governance transformation in the Cirebon City Land Office's Sertifikatku service. This study employs a qualitative methodology, gathering data via document analysis, in-depth interviews with relevant informants, and field observations. Effectiveness was measured using five dimensions of organizational effectiveness: resources, funding, facilities and infrastructure, quality and quantity, and time. According to the study's findings, this application has effectively reduced public wait times at physical service counters and improved information transparency by utilizing an online queuing system. However, its implementation has not yet achieved maximum efficacy due to a number of challenges. In terms of resources, users low levels of digital literacy, especially among the elderly, lead to a high reliance on staff assistance at the service. Significant problems with digital infrastructure also exist, including errors in the system, poor synchronization of document movement data (slow status updates), and problems with verification codes (OTPs) not getting to email inboxes. In addition to lowering service quality, rigid complaint responses in the form of automated replies (robot templates) ultimately waste the public's time by requiring manual checks. In conclusion, this digital innovation greatly promotes transparency in land administration; however, in order to achieve the goal of effective public service, it urgently needs more dependable server infrastructure maintenance from the federal government and the thorough implementation of digital literacy education programs at the local level.

Keywords: E-Governance; Effectiveness; Sentuh Tanahku

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INTRODUCTION

In order to achieve efficient, open, and citizen-centered governance, public administration is strategically important. Public administration, as a system for managing public affairs, is responsible for making sure that all citizens can receive timely, accurate, and accountable services from the government. Caiden in the book (Dr. William Djani, n.d.) explains that efforts by individuals and groups in society to organize collectively in order to resolve public issues and accomplish shared goals are reflected in public administration. Concurrently, in their book Nigro and Nigro (Dr. William Djani, n.d.) emphasizes that public administration encompasses all government actions, particularly those of executive branch, in managing public affairs and providing public services. Public administration thus reflects the responsibility of government officials to provide high quality service and their ability to adapt to social and technological developments in order to achieve the community's wellbeing. As highlighted (Muliawaty &

Framesthi, 2020) good public administration services are the main thing in running a quality government.

The principles of good governance, including transparency, accountability, participation, effectiveness, and the rule of law, are increasingly supported by the utilization of information technology through e-governance. Good governance principles are amplified through responsible digital practices (Srinivas, n.d.). The implementation of e-government is widely regarded as an important means of strengthening public trust, expanding access to information, and enhancing the effectiveness of public services, as stated by (Dwiatmodjo Budi Setyarto, Alimuddin, Mulyaningsih, 2025) governments around the world are increasingly adopting e-government solutions to improve public services, strengthen public trust, and simplify administrative processes. E-government initiatives are now central to modern public administration, providing more efficient, transparent, and accessible services in response to the tech-savvy population's demands for government efficiency akin to the private sector (Assegaf, 2022). One public service sector that has experienced considerable digital transformation is land administration, which has long been characterized by complex and time-consuming bureaucratic procedures. To address these issues, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) introduced the "Sentuh Tanahku" application to enable the public to access land-related information digitally without having to visit land offices directly. The application was introduced through Circular Letter No. 13/SE/XII/2017 and further supported by Regulation of the Minister of ATR/BPN No. 19 of 2020 concerning Electronic Land Information Services.

The Sentuh Tanahku application was created in 2017 with the goal of enhancing land services' accountability, transparency, and efficiency through a number of functions, such as queue management, certificate verification, and document processing status tracking (Muhammad Rizki Maulana, 2025). The "Sertifikatku" feature, which enables residents to independently track the status of their land certificates, is especially supported by the application at the Cirebon City Land Office. The advantages and difficulties of putting the application into practice have been emphasized in earlier research. While (Amdar, 2023) reported that low public utilization indicates that socialization efforts remain suboptimal despite satisfactory communication between land offices and users, research by (Ah, Raudah, and Urahmah 2023) found that older land certificates could not always be identified through the land parcel feature.

However, rather than particularly analyzing how well the program provides transparency regarding certificate status, document processing, and service queue information, prior research has typically concentrated on the deployment of e-government in land administration. Due to

delayed status updates, low digital literacy, and technical limitations, empirical findings show that users still have trouble obtaining current information. This illustrates a discrepancy between the Sentuh Tanahku application's actual field implementation and its planned goals.

Researchers haven't given much attention to particular assessments of its application in managing files, processing certificates, and supplying queue information. The larger digital transformation of land administration has typically been the sole focus of prior research. As a result, there is still very little knowledge about how well the app works to provide transparency about service queues and document status. However, the public needs to be aware of these factors in order to ensure that the timing and phases of bureaucratic services are clear. Indonesia seeks to overcome long-standing problems such as bureaucratic inefficiency and limited public access to land information (Wahyu Abdi Negara Mohadi, Abrar Saleng, 2026). Empirical evidence indicates that local communities still struggle to understand information about file progress or queue schedules via the app. This situation demonstrates a mismatch between the initial plan for Sentuh Tanahku's implementation and the technical challenges faced by the general public. A specialized study is needed to ascertain whether the Sentuh Tanahku application at the Cirebon City Land Office is effective in offering certainty regarding information on certificates, documents, and service queues.

The urgency of this research lies in the need to ascertain how much the use of digital innovations, particularly the Sentuh Tanahku app, can contribute to the implementation of good governance principles in the provision of land services at the local level. Theoretically, this study should make a substantial contribution to the field of public administration science, particularly by exploring the effectiveness of e-governance implementation as a tool to enhance accountability, transparency, and public service efficacy. Additionally, this study aims to increase understanding of how information technology facilitates contemporary, adaptable, and community focused governance.

Practically speaking, this study can be used by the government to evaluate the Sentuh Tanahky application's implementation, particularly by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) and the Cirebon City Land Office. The research findings are expected to provide useful policy recommendations to improve the quality of digital based land services, increase public trust in land institutions, and accelerate the shift to an accountable and transparent public service system. Additionally, this study benefits the public by raising digital literacy and awareness, which makes citizen government participation and interaction more successful and efficient.

The goal of this study is to ascertain how effectively the Sentuh Tanahku app is used in the city of Cirebon to provide information regarding the transparency of land service queue information, the clarity of the document processing workflow, and the status of land certificates. This study aims to assess the app's ability to provide the public with accurate and understandable information about the steps involved in processing land certificates, the status of documents currently undergoing processing, and the queue system related to land office procedures and service times. Furthermore, this study attempts to pinpoint different barriers that impact the efficacy of the Sertifikatku service via the Sentuh Tanahku application, whether they are related to the application's technical features, the preparedness of human resources, or the public's comprehension of using digital services. It is hoped that this study will provide a more thorough understanding of the Sentuh Tanahku application's role in enhancing the certainty and transparency of land certificate services. It will also serve as a foundation for developing suggestions for enhancements to digital based land services that are better suited to the needs of the general public.

This theoretical review is also supported by a legal review that serves as the regulatory serves as the foundation for the research in order to produce a comprehensive analysis. This legal basis includes (Undang-Undang (UU) Nomor 25 Tahun 2009 Tentang Pelayanan Publik, 2009), (Undang-Undang (UU) Nomor 14 Tahun 2008 Tentang Keterbukaan Informasi Publik, 2008), (Presidential Instruction (Inpres) No. 3 of 2003 on the National Policy and Strategy for E-Government Development 2003), Also (Presidential Regulation (Perpres) No. 95 of 2018 on the 2018 Electronic-Based Government System).

METHODS

The usefulness of the Sentuh Tanahku application in offering transparency regarding certificate status, document processing workflows, and land service queue systems at the Cirebon City Land Office was investigated in this study using a descriptive qualitative method. Because it allows researchers to comprehend service providers' and users' experiences with digital land services, the qualitative approach was used. In addition to observations and documentation carried out between November 2025 and July 2026, data were gathered through interviews with ATR/BPN staff, members of the public, and notaries. Purposive sampling was used to choose informants based on standards pertinent to the study's goals (Sugiyono, 2020). The Miles and Huberman interactive model, which includes data gathering, data reduction, data presentation, and conclusion drawing, was used for data analysis (Sugiyono, 2020).

RESULTS AND DISCUSSION

The Sentuh Tanahku app at the Cirebon City Land Office provides convenience and transparency for the public, particularly in independently monitoring the land certification process. Because this system is directly integrated with internal document management, employees are expected to understand and operate the existing features without special formal training. Furthermore, the online queue feature contributes to a more orderly service by providing applicants with certainty about their schedule and queue number. Through verified accounts using their National Identification Number (NIK), the public can track each stage of the document process, from registration to certificate completion, and be ready for collection.

The implementation of this technology still faces technical and accessibility challenges, particularly for elderly users. In the field, status updates for document processing in the app are often delayed and do not reflect the actual situation at the service counter. Users also frequently experience login difficulties due to automatic system logouts, failed password recovery attempts, and problems sending OTP verification codes to emails. Furthermore, the WhatsApp-based complaint service is considered less than effective, providing only automated responses in the form of template messages without concrete solutions.

Resources

In a study on the effectiveness of digital services at the Cirebon City Land Office, researchers referred to the ideas of Sondang P. Siagian (Sondang, 2008). Siagian's theory, which holds that a program's effectiveness is based on how well its supporting resources are optimized. According to Siagian, resources include both tangible and intangible potential that is strategically important for accomplishing organizational objectives. Ministerial Regulation ATR/BPN No. provides guidance for the legal application of this theory. Ministerial Regulation ATR/BPN No. 19 of 2020 on Electronic Land Information Services. 3 of 2023 pertaining to electronic document provisions. File management, queue systems, and the display of certificate information can all be done in an integrated way by synchronizing the Sentuh Tanahku application's resources with these rules. This seeks to evaluate the degree to which this digital transformation can maximize and offer legal certainty.

According to observations and interviews with Land Consultation Staff, who were key informants on January 23, 2026, the organization has not yet given staff members any formal training or orientation on how to use the application. To provide services to the public, employees are expected to independently learn the features and functions of the system. Although formal training has not yet been provided, the current capacity and number of staff are considered

adequate to support the optimization of digital land services at the office. Furthermore, data also indicates that the public, who act as application users, are the primary source of human resource challenges. Low digital literacy is a major barrier to app use, especially for older users, as a result many community members rely on the assistance of children or younger relatives to oversee and manage the land certificate application process. They often encounter technical challenges like forgetting passwords due to limited device operation skills. Furthermore, usage errors like accidentally deleting apps or logging out of accounts are common, ultimately making it difficult for users to access their accounts independently.

Professionals who frequently work with government agencies, like notaries, have also expressed interest in the evaluation of human resources aspects. Based on observations and interviews with notaries who use the Sentuh Tanahku app on February 10, 2026, institutional users generally have no trouble using the app. Key conclusions from these informants emphasize the need for more public education and outreach to more equitably disseminate information about the app's use among all age groups. The Cirebon City Land Office is expected to actively contribute to the public's overall improvement of digital literacy so that all user groups can independently and effectively utilize these digital services.

Funds

The execution of a program or activity is largely dependent on funding. According to Sondang P. Siagian, the sustainability of an activity depends on the availability of adequate funding for the activity. A specific sum of money, either in cash or non-cash form, that is used to satisfy various operational needs is commonly referred to as funding. According to a key informant from the Land Affairs Consular Staff, local land offices are not responsible for managing all funding allocations for maintenance, system repairs, and the development of new application features; instead, PUSDATIN (Pusat Data dan Informasi) at the central level is. Because they are not aware of the details of the available budget or the financial constraints that the central office may face to maintain the application's stability, the Cirebon City Land Office consequently lacks financial independence. Because of this, local authorities must wait for central office follow-up in the event of technical disruptions or errors with the application in the field rather than using independent funding to speed up local system repairs. In this instance, the Cirebon City Land Office only acts as a user and does not oversee the application's technical or financial aspects.

The economic impact of this app's implementation has been substantial, especially in terms of increasing service users' operational cost efficiency. Sentuh Tanahku, according to a Land Office employee, lessens the need for people to repeatedly visit the Land Office to find out the

status of their files. In an interview on Thursday, January 29, 2026, supporting informant members of the public who use the Sentuh Tanahku app also mentioned that the app has been very beneficial in cutting costs, especially those related to fuel and transportation. These savings are occasionally applied to other costs, like internet data usage, as well as the possible loss of productive time if applicants still need to come into the office because of app technical difficulties.

The Sentuh Tanahku app has reduced public spending, especially in transportation and operating expenses, according to an analysis of funding indicators. Citizens no longer have to physically visit land offices on a regular basis to check on the status of their cases, which results in these cost savings. As a result, there is less need for actual travel, which lowers daily transportation costs. A new pattern of efficiency is also produced by the use of digital systems, whereby some physical costs are transferred to digital ones, like internet data plans. Applicants can still benefit from using the app in terms of time and labor efficiency. Regional land offices gain additional advantages from national budget management that is centralized. Without having to worry about the cost of system development or upkeep, regional offices can concentrate on providing services.

Facilities and Infrastructure

The tools or equipment directly utilized in carrying out an activity are referred to as facilities. Infrastructure, on the other hand, primarily refers to the auxiliary facilities that are present at the site of the activity. The availability of infrastructure and resources is essential to the successful completion of tasks since an activity cannot function at its best without both. The main infrastructure supporting the Sentuh Tanahku application's operation is the infrastructure and facilities for its implementation at the Cirebon City Land Office. This application was created to support technology-based services, according to a key informant who was interviewed on Friday, January 23, 2026. The system enables candidates to use their personal devices to independently track the status of their files. The availability of this tracking feature signifies a change in the way services are delivered, moving away from in-person counter visits and toward digital monitoring services. Even though the digital infrastructure is supposed to operate at its best, there are still a lot of technical obstacles to overcome before it can be put into practice. Systemic flaws were discovered on January 29, 2026, through interviews with Sentuh Tanahku app users. Both informants expressed disappointment upon learning that the application could not accurately update the status of their application files. The status of the actual documents being processed at the service counter was often not reflected in information about the application stages for several weeks. The public became increasingly irritated when users of the digital service attempted to

obtain clarification through the online complaint channel. Users of the agency's Whatsapp messaging service only receive an automated response asking them to wait without giving any more details. This response doesn't provide a specific solution or technical information regarding the reason why the file's application progress is stalling. Because of this system failure, applicants are ultimately compelled to physically visit the Land Office to obtain the most recent information on the file's status from service personnel.

To improve the dependability of the facilities and technology infrastructure in use, the Cirebon City Land Office must immediately create a systematic improvement plan. In order to synchronize data updates on the application server with modifications to physical files in the field, local-level agencies must improve coordination and technical reporting to the Data and Information Center (PUSDATIN). In order to provide the public with more accurate responses that correspond with the status of their files, it is also necessary to develop integration between the WhatsApp automated response system and the operational service database. It is anticipated that enhancing the infrastructure and facilities will optimize the application's use as a useful service tool, eliminating the need for the public to physically visit the office to check the status.

Quality and Quantity

According to Sondang (2008), quality reflects the degree to which something is considered good or poor based on particular standards, whereas quantity refers to measurable and observable amounts. The Sentuh Tanahku application's growing usage can be used to assess both the caliber of services provided and the degree to which the application serves as a community information platform. This app allows the public to follow every stage of the document processing process in real time, from registration to the delivery of the final product. The accuracy of the data presented depends on the integration of internal systems, which ensures that every step of the process is openly and methodically documented. The services provided by this digital platform are intended to reduce information gaps and provide legal certainty throughout the certification process. The public offered a critical assessment of the consistency in the quality of service directly provided to Sentuh Tanahku app users. They stated that the app's high-quality information gives them a sense of security because they can check the status of their files without relying on verbal information, which is sometimes untrustworthy. Complaints still arise when there is a discrepancy between the app's notifications and the real status of the documents at the service counter. It is believed that this discrepancy will undermine public trust in the system's dependability if it is not promptly fixed with more responsive data updates.

In an interview conducted on Tuesday, February 2026, the notary stated that the online queue feature has greatly aided in better controlling the volume of visitors to the land office. The effectiveness of this feature is evident in the fact that there are fewer people in the waiting area and that it is known how many slots will be available that day. The app has worked to meet more contemporary and quantifiable public service standards, as evidenced by the breadth of these features.

Future improvements to the interactive communication features of the complaint feature are necessary to improve service quality. The results of the interviews showed that the WhatsApp system's automated responses are frequently template-based and incapable of fixing particular technical problems. In order to solve problems like NIK synchronization failures or account verification issues, the public anticipates an improvement in the caliber of human responses behind the digital system. In order to ensure that quantitative improvements in features are accompanied by the dependability of solutions received by all societal segments, it is imperative to strengthen this aspect of interaction quality.

Time

Time is the total amount of time spent in a state, activity, or process. In line with Sondang P. Siagian, one of the most important metrics for determining a program's effectiveness is time. In order to obtain a physical queue number at the registration counter, applicants are no longer required to arrive at the crack of dawn. The public can more precisely and methodically plan their arrival times by using the online queue feature. A notary conducted an interview that verified the queue feature's high efficacy. Because they were spared from lengthy lines that frequently squandered their productive time during working hours, the notary felt greatly assisted. Before visiting the land office, users receive scheduling certainty through notifications about the call order within the app. The Notary stressed, however, that utilizing this app actually does not reduce the amount of time needed to process certificate documents. Processing time is still believed to be significantly impacted by the physical complexity of the files in the field, such as the requirement to manage administrative area expansions or the conversion of analog certificates to electronic certificates.

The public wants to avoid time wastage at all costs, which can occasionally be caused by synchronization issues with the monitoring system. Applicants are compelled to spend more time visiting the land office to personally verify the actual status of the process. Users' initial hope of saving time eventually turns into a double routine because they must perform manual checks on a regular basis.

Implementing strategic initiatives to maximize service efficiency requires simultaneous technological and administrative advancements. The Cirebon City Land Office must quickly address systemic issues by providing a more interactive online help center in order to prevent wasting the public's time on things like verification failures or delays in status updates. Furthermore, this government agency must develop and evaluate more quantifiable standard operating procedures regarding the time it should take to process physical files in the field, particularly when dealing with documents related to territorial expansions or administrative transitions. The combination of enhanced digital tracking system dependability and faster physical processing times is believed to have successfully achieved the application's original goal of significantly reducing the overall service duration.

The Sentuh Tanahku application was developed in 2017 with the intention of improving the accountability, transparency, and efficiency of land services through a variety of functions, such as queue management, certificate verification, and document processing status tracking. The application at the Cirebon City Land Office specifically supports the "Sertifikatku" feature, which allows residents to independently track the status of their land certificates. Previous research has highlighted the benefits and challenges of implementing the application; (Ah, Raudah, and Urahmah, 2023) found that the land parcel feature could not always identify older land certificates, while (Amdar, 2023) reported that low public utilization indicates that socialization efforts remain inadequate communication between land offices and users. These results are in line with the current study's findings, which show that the Cirebon City Land Office's use of the Sentuh Tanahku application has improved accessibility and transparency in land administration services. Nevertheless, there are still several issues, such as delayed status updates, OTP verification errors, low user computer literacy, and the senior population's ongoing dependence on family members or care personnel. This study's results, which are consistent with those of (Amdar, 2023), show that the lack of socialization initiatives has prevented public awareness and application usage from reaching their full potential. The current findings also mirror the technological problems noted by Ah, Raudah, and Urahmah (2023), especially with regard to inconsistent application performance and the accuracy of data supplied by the system. These parallels imply that the Sentuh Tanahku application's difficulties are not specific to the Cirebon City Land Office but rather continue to be a more widespread problem in Indonesia's adoption of digital land administration services.

CONCLUSION

The Cirebon City Land Office's land administration services have become more transparent and accessible thanks to the Sentuh Tanahku application, especially with regard to online queue management and certificate status monitoring. However, several obstacles, such as poor public digital literacy, little socializing efforts, status update delays, problems with OTP authentication, and discrepancies between application data and actual field conditions, have prevented its deployment from reaching its full potential. The program has successfully decreased user wait times and transportation expenses, but because administrative and technological variables still affect processing time, certificate completion has not been considerably hastened. Therefore, to maximize the Sentuh Tanahku application as an efficient, transparent, and citizen-centered digital public service platform, system dependability must be improved, cooperation with PUSDATIN must be strengthened, and digital literacy programs must be expanded (Sondang, 2008; Zulkarnaen, 2014).

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