DIJEFA: Dinasti International Journal of Economics, Finance & Accounting
E-ISSN: 2721-303X
P-ISSN: 2721-3021
https://dinastipub.org/DIJEFA dinasti.info@gmail.com +62 811 7404 455

DOI: https://doi.org/10.38035/dijefa.v6i5.5334
https://creativecommons.org/licenses/by/4.0/
Received: 06 August 2025 | **Revised:** 27 September 2025 | **Accepted:** 10 October 2025

Analysis of the Effectiveness of the Online Single Submission (OSS) System at the Investment and One-Stop Integrated Services Agency (DPMPTSP) of West Java Province

Pijar Indah Puspita Dewi[1*], Heni Nurani Hartikayanti[2]
[1]Jenderal Achmad Yani University, Cimahi, Indonesia, puspitapjr@gmail.com
[2]Jenderal Achmad Yani University, Cimahi, Indonesia, heni.nurani@lecture.unjani.ac.id

[*]Corresponding Author: puspitapjr@gmail.com[1]

Abstract: This study aims to analyze the effectiveness of the Online Single Submission (OSS) system implementation in business licensing services at the Investment and One-Stop Integrated Services Agency (DPMPTSP) of West Java Province. The OSS system was introduced as a digitalization effort to improve efficiency, transparency, and ease of doing business. However, business actors' compliance with submitting the Investment Activity Report (LKPM) remains low. Of the 26,947 companies with Business Identification Numbers (NIB) in West Java, only 37.9% submitted LKPM. This research uses a descriptive qualitative approach through interviews, observations, and document studies. The findings reveal that the quality of the OSS system, information, and services is relatively good; however, technical issues and users' lack of understanding remain major obstacles. Intensive socialization, user training, and improvements in system infrastructure are key recommendations to enhance OSS effectiveness and encourage investment growth in the region. These findings offer practical insights for improving the management of information systems for licensing at the regional government level.

Keywords: Online Single Submission (OSS), effectiveness, business licensing, LKPM, information system.

INTRODUCTION

Investment is one of the key drivers of national economic growth. In Indonesia, the government has introduced several strategic policies to foster a conducive investment climate. A significant effort in this regard is the digitalization of administrative processes, particularly in business licensing and investment reporting, to enhance efficiency, transparency, and overall service quality. The use of digital technologies has become a cornerstone of e-government development, aiming to reduce bureaucratic barriers that often hinder business operations and investment realization.

To support these initiatives, the Indonesian government launched the Online Single Submission (OSS) system, an integrated electronic platform designed to simplify the business

licensing process. Through OSS, entrepreneurs and investors can manage multiple permits and licenses under a single digital platform. The system also facilitates the submission of Investment Activity Reports (Laporan Kegiatan Penanaman Modal or LKPM), which are mandatory for all business entities operating in Indonesia. The implementation of OSS is regulated by Government Regulation (PP) No. 24 of 2018 concerning Integrated Electronic Business Licensing Services, which was later updated by PP No. 5 of 2021 on Risk-Based Business Licensing.

At the regional level, the Provincial Government of West Java has implemented the OSS system since 2019 as part of its strategy to improve investment services and enhance regional economic performance. West Java remains one of the provinces with the highest investment realization figures. According to data from the West Java Investment and One-Stop Integrated Services Agency (DPMPTSP), the province recorded an investment realization of IDR 184.89 trillion in the third quarter of 2024, solidifying its position as a leading industrial and investment hub in Indonesia.

However, despite this impressive investment growth, the compliance rate of LKPM submissions remains below expectations. Data from the Investment Coordinating Board (BKPM) indicates that only 37.9% of companies in West Java with a Business Identification Number (NIB) had submitted their LKPM reports as of October 2024, leaving 62.1% non-compliant. This low compliance rate underscores potential weaknesses in OSS implementation, including technical system issues, insufficient user understanding, and a lack of effective socialization and guidance.

To better understand the overall trend, Table 1 presents the data on LKPM submissions and total investment realization for the last five years (2020–2024):

Table 1. LKPM Reports and Investment Realization (2020–2024)

Year	Total Investment (Rp)	Total LKPM Reports	Total Workers
2020	120.43 trillion	20,02	113,426
2021	136.13 trillion	31,804	109,331
2022	174.58 trillion	36,49	183,383
2023	210.61 trillion	94,469	253,424
2024	251.14 trillion	158,708	383,707

Source: Processed from BKPM data (2020–2024).

While investment realization has shown consistent growth, the data highlights that LKPM reporting does not fully reflect the number of active businesses. These challenges are consistent with findings from previous studies. Rosidi & Kusbandrijo (2024) noted that while OSS has significantly improved licensing efficiency and transparency, issues such as limited user literacy and technical glitches continue to hamper optimal system performance. Similarly, Syafrial et al. (2021) and Aliya et al. (2024) emphasize that comprehensive socialization efforts and improved digital infrastructure are essential to increasing compliance rates and overall system effectiveness.

The low compliance rate in LKPM submissions suggests potential inefficiencies and undermines the objectives of OSS. A key concern is the possibility of underreported investment activities, which may distort official statistics and impair government planning and policy evaluation. It also reflects a broader challenge in public sector digital transformation—namely, ensuring that technological innovation is accompanied by adequate user education, system reliability, and institutional support.

Further investigation into the underlying causes of this issue reveals several contributing factors. Interviews with officials at the West Java DPMPTSP highlight recurring problems such

as user errors in data entry, incomplete application submissions, and frequent system downtime or technical errors that result in data not being recorded properly. These issues compromise the integrity of the OSS system and contribute to the perception that the platform is unreliable or too complex for certain user groups. Moreover, it is important to recognize that the data collected and analyzed from the OSS platform primarily reflects medium to large enterprises. Micro and small enterprises (UMK) are often excluded from official LKPM compliance statistics, as they are either not legally required to submit reports or face barriers in doing so. These barriers include limited knowledge of reporting procedures, lack of accounting systems, and administrative burdens that exceed the operational capacity of small businesses.

As a result, the LKPM data released by the government may not provide a complete picture of the investment landscape, particularly at the grassroots level. In addition to technical and operational challenges, the successful implementation of OSS depends on policy alignment between central and local governments. Studies have shown that discrepancies in regulations and lack of harmonization can create confusion among users and undermine the effectiveness of national systems. In the case of West Java, although the provincial government has made substantial efforts to integrate OSS into its investment framework, further improvements are needed in terms of regulatory clarity, user training, and system support.

Previous studies on OSS implementation in various regions have revealed similar patterns. Research conducted in Bandung, Surabaya, and Jambi, for instance, found that while OSS significantly improves licensing efficiency and transparency, several obstacles persist. These include inadequate human resources, lack of public awareness, insufficient system infrastructure, and misalignment between local and national policies. These findings underscore the importance of a holistic approach to system implementation that includes not only technological innovation but also human capacity development, policy coherence, and user-centered design.

Given the importance of OSS in the investment ecosystem and its potential to improve administrative governance, it is crucial to examine the system's implementation and identify the factors that influence its effectiveness. This study seeks to fill that gap by focusing on the effectiveness of OSS in the context of the West Java DPMPTSP. The research aims to assess how well the system functions in supporting business licensing processes, what challenges are encountered by both government officials and business users, and what solutions can be proposed to enhance system performance.

METHODS

This study employs a qualitative descriptive approach to explore the implementation and effectiveness of the Online Single Submission (OSS) system within the Investment and One-Stop Integrated Services Agency (DPMPTSP) of West Java Province. The purpose of using this approach is to obtain a comprehensive and in-depth understanding of how OSS operates in practice, especially in terms of service delivery, administrative efficiency, and the challenges encountered by both users and implementing agencies.

The qualitative method is particularly suitable for this research because it allows the researcher to examine real-life phenomena in their natural context. The OSS system, as a digital public service innovation, involves various actors including government staff, business users, and system developers. Therefore, understanding their experiences, perceptions, and interactions with the system is essential for assessing its practical effectiveness. The descriptive aspect of the study is intended to systematically portray the current condition of OSS implementation without manipulating variables or testing hypotheses.

This research was conducted through several stages: (1) preparation, which included problem identification, literature review, and research design; (2) data collection through

interviews, observations, and document analysis; (3) data reduction and coding to organize findings systematically; and (4) conclusion drawing and verification to ensure validity.

Data for this study were gathered using multiple techniques to ensure depth, accuracy, and triangulation. These techniques included in-depth interviews, direct observation, and document analysis. The interviews were conducted with 6 key informants: 3 officials from the West Java DPMPTSP (including staff from the OSS division and LKPM reporting unit) and 3 business users who had direct experience with the OSS system. These informants were selected using purposive sampling to ensure representation from both government and user perspectives.

Interview questions focused on core aspects such as system usability, technical issues, user support, reporting obligations (particularly LKPM), and suggestions for system improvement. In addition to interviews, observations were made on-site at DPMPTSP offices and OSS helpdesk facilities. These observations aimed to capture the actual procedures and workflow, the interaction between officers and users, and any potential bottlenecks in service delivery. Observational data complemented the interview findings by providing context and behavioral insights. The third source of data came from document review.

Relevant documents included system user guides, internal reports from DPMPTSP, statistical data from the OSS dashboard, and official government regulations. These materials were analyzed to understand the regulatory framework, administrative processes, and performance indicators related to OSS and LKPM compliance. To ensure the credibility and reliability of the data, triangulation was applied. This involved cross-checking findings from different sources and comparing interview responses with documented facts and field observations.

Data validation also involved member-checking, where certain findings were reviewed and confirmed by the original informants. The data analysis process followed the interactive model developed by Miles and Huberman, consisting of three main steps: data reduction, data display, and conclusion drawing. In data reduction, the researcher selected, categorized, and summarized relevant information. Data display involved organizing the information in tables and descriptive narratives to facilitate pattern identification.

Lastly, conclusions were drawn based on emerging themes and linked back to the research objectives. Overall, this method allowed the researcher to explore not only how the OSS system is implemented, but also why certain issues persist and what improvements are needed. By combining various data sources and techniques, this study aimed to produce a well-rounded and contextually grounded analysis of OSS effectiveness in West Java.

RESULTS AND DISCUSSION

The implementation of the Online Single Submission (OSS) system at the Investment and One-Stop Integrated Services Agency (DPMPTSP) of West Java Province reflects significant progress in digitizing the investment licensing process. However, based on interviews, observations, and document reviews, several obstacles hinder optimal system functionality. These findings are in line with the D&M IS Success Model (DeLone & McLean, 2003), particularly in the areas of system quality, information quality, and service quality, which are critical determinants of system effectiveness.

Firstly, from interviews with DPMPTSP officials and technical staff, it was discovered that while the OSS platform is designed to streamline licensing processes, its performance often deteriorates during peak reporting periods. Staff reported system slowdowns and submission failures, especially at the end of each quarter. This indicates issues in system quality, as described by DeLone & McLean, where technical stability and reliability are essential for continued use and user satisfaction. These disruptions also mirror findings from Robby &

Tarwini (2019) in Bekasi and Gunawan et al. (2023) in Badung, which highlight frequent system errors and user frustration due to lack of system responsiveness.

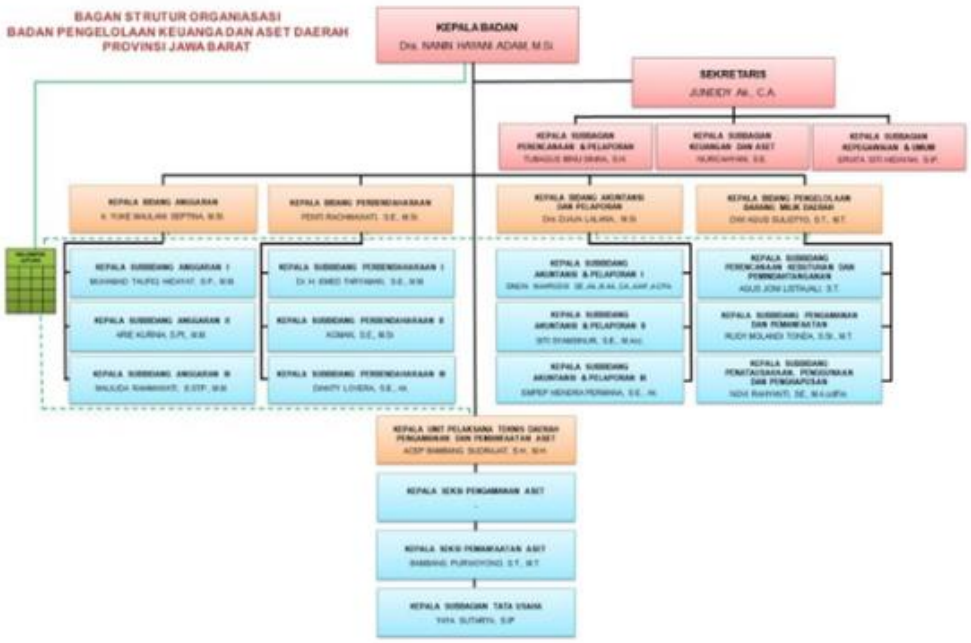
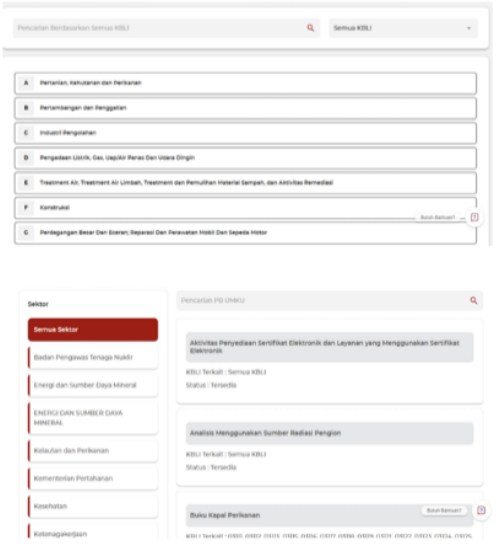


Figure 1. Organizational Structure of the Investment and One-Stop Integrated Services Agency (DPMPTSP) of West Java Province

Secondly, interviews with business actors revealed a widespread lack of understanding regarding OSS features, particularly the legal obligation to submit LKPM (Investment Activity Reports). Many micro and small business operators believe that securing an NIB alone fulfills all regulatory requirements. This misconception contributes to a low LKPM reporting compliance rate of 37.9%, as seen in the data from BKPM. This aligns with the findings of Syafrial et al. (2021) and Suyani & Laelatullaena (2024), which indicate inadequate user education and low digital literacy as persistent challenges in OSS adoption.



Source: OSS, 2024

Figure 2. OSS Fiture

Additionally, the system lacks real-time feedback and validation, allowing incomplete or incorrect reports to be submitted without warnings. This failure in information quality undermines user trust and causes further delays, consistent with the observations of Rosidi & Kusbandrijo (2024), who note the need for better system-user interaction mechanisms in Surabaya. Common errors such as missing employment data or zero-value investments indicate a gap in user support and highlight the system's service quality limitations.



Source: DPMPTSP, 2024.

Figure 3. Socializing of OSS

Observations at OSS service centers further confirmed that the system often requires manual intervention, contradicting the goal of autonomous digital service. Staff frequently assist users directly due to system errors, reflecting limited technical support at the regional level. DPMPTSP personnel also disclosed their inability to troubleshoot or improve the system directly, as full control remains centralized under BKPM. This finding is in line with Dawud et al. (2020), who emphasize the lack of regulatory harmony and authority decentralization as a key implementation barrier.

From the document analysis, a stark discrepancy was found between NIB issuance and LKPM reporting. In 2024, over 1.1 million NIBs were issued in West Java, but less than 50,000 LKPM reports were received, equating to a compliance rate of around 4%. This gap echoes concerns raised by Halefina et al. (2024) regarding the disconnect between system adoption and actual reporting behavior in Bangkalan. This suggests that while OSS enables formal registration, it fails to ensure follow-through on reporting obligations due to inadequate system integration and follow-up mechanisms.

Tabel 2. Recapitulation of NIB Applications in West Java Province in 2024

Description	Total
Total NIB Applications (Jan–Dec 2024)	1,136,108 applications
Increase compared to Q4 2023	124.65%
Increase compared to Q3 2024	70.09%

The data also highlight the limitations of current socialization efforts. While DPMPTSP conducts outreach programs, these are primarily aimed at large enterprises and urban-based associations. Micro and small enterprises in peripheral areas remain largely uninformed, with limited access to sector-specific or literacy-adjusted training. This is consistent with findings by Prameswari Arifin (2022), who found that literacy gaps and lack of tailored training were key factors behind reporting failures in Jombang.

In conclusion, although OSS introduces digital reform, its current implementation in West Java still reflects several deficiencies. These include weaknesses in system architecture, user understanding, service responsiveness, and institutional coordination. The evidence confirms the relevance of DeLone & McLean’s model as a framework to evaluate OSS performance, especially in the dimensions of system use, user satisfaction, and net benefits.

Improvements in user training, infrastructure, and decentralization of system control are essential for optimizing OSS's role in investment governance.

CONCLUSION

The study concludes that while the Online Single Submission (OSS) system has marked a substantial step toward the digitalization of investment licensing services in West Java, its current effectiveness is still constrained by several critical issues. Although the system offers structural improvements in licensing administration, it faces significant challenges related to system quality, information quality, and service delivery, key dimensions in the DeLone and McLean IS Success Model. Technical issues such as system slowdowns during peak periods, the lack of real-time validation, and dependence on manual support at regional offices hinder user satisfaction and operational efficiency.

Furthermore, the low compliance rate of LKPM submissions, despite a significant rise in NIB registrations, indicates a gap in user understanding, particularly among micro and small enterprises. This finding is consistent with prior studies that emphasize the need for comprehensive, targeted socialization and literacy-sensitive training programs. The limited scope of existing socialization efforts and the centralized control of OSS operations have also prevented local agencies from effectively responding to user needs and system issues.

Therefore, to enhance the OSS system's effectiveness and achieve its intended governance reforms, improvements must be made in three strategic areas: (1) technical enhancements to ensure system stability and responsive features; (2) decentralized authority that allows regional offices to perform troubleshooting and user support autonomously; and (3) extensive outreach and training programs, especially for smaller enterprises and users with limited digital literacy. Addressing these aspects will help realize the OSS platform's full potential in fostering a more transparent, inclusive, and efficient investment climate at the regional level.

For future research, scholars are encouraged to explore the effectiveness of OSS implementation in other provinces with different investment profiles and regulatory structures to enable comparative analysis. Quantitative studies that assess the correlation between OSS usage and investment realization outcomes could provide additional insight. Furthermore, examining the experiences of micro and small enterprises, particularly those excluded from official LKPM data, can help reveal hidden barriers and support the development of more inclusive digital licensing policies.

REFERENCES

Aliya, F. S. (2024). The effectiveness of OSS implementation in investment utilization at the DPMPTSP performance in Bangkalan. *Evolusi Ekonomix, 6 (2)*, 132-148.

Azismi, &. H. (2025). The effectiveness of DPMPTSP Aceh in increasing regional investment. *J Ekon Aceh, 5 (1)*, 22-36.

Bakri, H. N. (2022). Strategic planning to increase investment at DPMPTSP. *Amkop Manag Account Rev, 8 (3)*, 100-114.

D, P. (t.thn.). Investment Activity Reports (LKPM): Regulatory and implementation review. *10 (2)*, 215-230.

F, M. (2019). The Economics of Money, Banking, and Financial Markets. 12th ed. Boston Pearson.

Gunawan, P. W. (2023). Effectiveness of OSS-based licensing services at DPMPTSP Badung. *Bus Invest Rev, 1 (4)*, 60-72.

Hidayat. (2021). The role of foreign and domestic investment in Indonesia's economic development. *Indones Econ J, 12 (3)*, 38-42.

JM, K. (2021). The General Theory of Employment, Interest, and Money. New York: Harcourt Brace.

Kusbandrijo, R. &. (2024). The effectiveness of online LKPM-OSS program at DPMPTSP Surabaya. *J Res Dev Public Policy (Jarvic), 3 (2)*, 1-15.

Makalunsenge. (2023). DPMPTSP strategy to improve investment in Kotamobagu City. *Local University*.

MB, R. (2018). Steinbart PJ. Accounting Information Systems. 14th ed. Pearson Education.

Noviyanti. (2023). The role of DPMPTSP in improving investment through OSS-RBA in Sidoarjo [Undergraduate thesis]. *Universitas Bhayangkara*.

O'Brien JA, M. G. (2010). Introduction to Information Systems. 14th ed. . New York: McGraw-Hill.

Peraturan Kepala BKPM Nomor 7 Tahun 2018 tentang Laporan Kegiatan Penanaman Modal.

Peraturan Pemerintah Republik Indonesia Nomor 24 Tahun 2018 tentang Pelayanan Perizinan Berusaha Terintegrasi Secara Elektronik.

Peraturan Presiden Republik Indonesia Nomor 10 Tahun 2021 tentang Bidang Usaha Penanaman Modal. (t.thn.).

Pratiwi, N. A. (2020). Performance of DPMPTSP Palembang. *J Adm Publik, 8 (1)*, 77-90.

RJ, B. (2022). Economic Growth. 3rd ed. Cambridge: MIT Press.

S, A. (2002). Information Systems: Foundation of E-Business. New Jersey: Prentice Hall.

Smith. (2019). An Inquiry into the Nature and Causes of the Wealth of Nations. Oxford University Press.

Suharto, &. A. (2020). Licensing reform through OSS. *J Adm Negara, 21 (2)*, 40-50.

Suryana. (2013). Kewirausahaan: Kiat dan Proses Menuju Sukses. Jakarta: Salemba Empat.

Susanto. (2017). Sistem Informasi Akuntansi: Struktur–Pengendalian–Resiko–Pengembangan. Jakarta: Lingga Jaya.

Syafrial, L. &. (2021). Effectiveness of OSS in DPMPTSP Jambi. *J Tanah Pilih, 1 (1)*, 45-61.

Todaro MP, S. S. (2020). Economic Development. 13th ed. Boston Pearson.

Undang-Undang Republik Indonesia Nomor 11 Tahun 2020 tentang Cipta Kerja.

Undang-Undang Republik Indonesia Nomor 25 Tahun 2007 tentang Penanaman Modal.