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Digitalization of Licensing Services Through OSS-RBA as a Modern Governance Innovation in Lubuk Linggau City

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ABSTRACT

The licensing process at the regional level is often convoluted, slow, and prone to information asymmetry. The digitalization initiative through the Online Single Submission Risk-Based Approach (OSS-RBA) in Lubuk Linggau City aims to simplify procedures and increase transparency. This study explores applicants' and officials' experiences with OSS-RBA, identifying factors that facilitate or hinder its implementation in local business licensing. Using a descriptive qualitative approach, data were gathered through semi-structured interviews with business actors of various scales and government officers, observations of service flows both at counters and online, and reviews of SOPs and related documents. Findings are presented narratively, highlighting categories and illustrative quotes. Respondents noted a clearer process flow, greater certainty about requirements, and easier tracking of application status through system notifications. Positive experiences were most common with low-risk licenses and among applicants familiar with OSS-RBA. New users expressed a need for initial guidance, detailed instructions, and accessible consultation channels. Key obstacles included digital literacy, network stability, inter-system connectivity, adaptation to new workflows, and SOP updates within local agencies. Stakeholders perceive OSS-RBA in Lubuk Linggau City as a more accessible, transparent, and consistent service. The results emphasize the need to improve communication about requirements, provide early support for new applicants, and enhance system integration to deliver a uniform user experience and sustain the benefits of digitalization.

KEYWORDS *Digital Public Service; Digitalization of Business Licensing; Government Innovation; Lubuk Linggau City; OSS-RBA (Online Single Submission).*

INTRODUCTION

Regional business licensing services face dual demands: ensuring legal certainty while simplifying procedures and accelerating services for business actors, particularly MSMEs, in an increasingly competitive investment ecosystem (Hidayat et al., 2025). Digital transformation through the Online Single Submission - Risk-Based Approach (OSS-RBA) is a key instrument to address these demands (Republik Indonesia, 2021). However, its success is largely determined by how this system operates at the user experience level and the level of service personnel at the frontline (R. R. Chen et al., 2020). In the context of a region like Lubuk Linggau City, the focus of this study, practical challenges such as applicant digital literacy, network readiness, cross-regional system integration, and consistent support often determine whether the public value promised by OSS-RBA is truly realized (Duri et al., 2024). These findings also confirm that system quality and organizational readiness are key determinants in realizing the benefits of digitalized public services (Hapsari et al., 2024).

Regulatory-wise, the OSS was first institutionalized through Government Regulation No. 24 of 2018 as an integrated business licensing platform (Republic of Indonesia, 2018). This regulation was later strengthened by Government Regulation No. 5 of 2021 concerning risk-based business licensing (Republic of Indonesia, 2021). Furthermore, its implementation at the regional level is regulated through Government Regulation No. 6 of 2021 concerning the implementation of business licensing in regions (Republic of Indonesia, 2021). The latest update through Government Regulation No. 28 of 2025 emphasizes the consolidation of risk-based licensing governance and clarifies the delegation of authority (Republic of Indonesia, 2025). This regulation also strengthens legal certainty for business actors, including foreign investment, thus requiring more agile implementation readiness at the DPMPTSP level (Rizki, 2025). The development of these norms places a need for licensing service organizations to synergize technology, human resources, and processes to ensure that the benefits of digitalization extend beyond procedural compliance (Amir et al., 2022). These efforts must ensure that the benefits of digitalization are reflected in a positive user experience at every stage of the service (Faustina & Rusli, 2025).

Conceptually, this study positions OSS-RBA as a digital public service system whose success can be evaluated using the DeLone & McLean IS Success Model (D&M) (Aviyasa & Budiati, 2025; Kridalukmana, 2023). The D&M model views information system success as the result of the interconnectedness of six core constructs: system quality, information quality, service quality, usage/intention to use, user satisfaction, and net benefits—a framework that allows for a comprehensive assessment from end to end (Jahan et al., 2024; Zhao & Sun, 2024). With this lens, the analysis does not stop at "the presence or absence of the system," but rather moves to how technical quality and supporting services influence the user experience, satisfaction, and ultimately the benefits to the public and the organization (T. Chen et al., 2021).

Previous studies on the OSS/OSS-RBA system in Indonesia have shown mixed results and consistent challenges. In Blora, the effectiveness of the OSS system was assessed based on the ease of procedures and clarity of requirements, but there remains a need for increased operator capacity and more adequate outreach to applicants (Akni et al., 2022). In South Sulawesi Province, system adaptation and the quality of electronic services require responsiveness of support channels and consistency of information across channels to ensure equitable OSS benefits (Anwar et al., 2022). In the Enrekang context, research emphasizes the importance of inter-actor coordination in the implementation of the OSS system to ensure effective business licensing services (Nurhayati et al., 2022). Meanwhile, in the Medan City context, research demonstrates the importance of sustainable innovation to ensure service improvements are not temporary or ad hoc (Silalahi et al., 2022).

Entering the RBA phase, recent studies have demonstrated the positive impact of OSS-RBA on accelerating services and increasing transparency in the licensing process (Duri et al., 2024). At the same time, other research emphasizes the importance of adequate support for first-time applicants to ensure optimal system utilization (El Fajri & Astuti, 2024). Furthermore, research also indicates that strengthening back-end integration between agencies is key to the continued effectiveness of OSS-RBA across various regions (Hapsari et al., 2024). Evidence from the "Grha Tiyasa" MPP in Bogor indicates that perceptions of service quality are strongly influenced by the clarity of information and ease of interface navigation, with

responsiveness to assistance being a factor in user trust (Kristiani & Maesaroh, 2024). At the policy level, procedural simplification in Gorontalo confirms the correlation between risk-based design and administrative efficiency, although consistent implementation across regional agencies remains a challenge (Lakoro, 2024). These findings across various regions point to a common pattern: reliable system quality and service quality will strengthen user usage and satisfaction (Mohammad Salameh et al., 2018). Ultimately, these improvements in quality will lead to greater net benefits for the regional licensing ecosystem (Stephenson & Shabman, 2019; Zhang et al., 2022).

Policy and implementation reviews also reveal legal and governance aspects that should not be overlooked (Amir et al., 2022). Risk-based licensing arrangements have implications for the intensity of oversight and the potential for sectoral disputes, making clarity of norms and responsive mechanisms crucial (Situmorang et al., 2025). From an environmental procedural perspective, harmonization with the provisions of Government Regulation No. 5/2021 also impacts the smooth running of OSS-RBA, particularly in medium-to-high-risk sectors that require appropriate environmental documentation (Fatchullah et al., 2022). With the update of Government Regulation No. 28 of 2025, the opportunity to strengthen integration and legal certainty in the implementation of risk-based licensing is increasingly significant (Republic of Indonesia, 2025). However, this value will only be realized if accompanied by the readiness of processes and services at the frontline so that the policy can be implemented effectively (Rizki, 2025).

In addition to regional case studies, thematic research also enriches understanding of the acceptance and success of OSS-RBA. A quantitative study combining UTAUT2 and DeLone & McLean confirmed that perceived usefulness, ease of use, and system/information/service quality are associated with system acceptance and success (Prantiastio et al., 2023). Simultaneously, implementation research at the policy level demonstrates a relationship between strengthening system quality, information clarity, and the quality of support services with increased usage intensity (Damayanti et al., 2023). Other research also found that improving service quality directly contributes to increased OSS-RBA user satisfaction in various regions (Namiroh et al., 2024). Findings in Cirebon City indicate that OSS-RBA implementation is progressing well, but still faces challenges in inter-departmental coordination within the DPMPTSP (Faustina & Rusli, 2025). In Bali Province, the implementation of OSS-RBA e-government has been shown to improve the quality of licensing services, particularly in terms of speed and transparency of the process (Ayudia et al., 2025). Research in Sukoharjo Regency describes a fairly standardized business permit issuance service system through OSS-RBA, but still requires improvement in the quality of technical assistance (Larus & Ni'mah, 2025). Meanwhile, in Merauke Regency, research focused on the effectiveness of the OSS-RBA system in facilitating new business permits, especially for MSMEs (Khoriyatun, 2025). In Palembang City, research highlighted the importance of low-risk supervision for micro-enterprises to ensure more efficient and targeted services (Mortheza et al., 2025).

Although the knowledge base on OSS-RBA is increasingly rich, there are still research gaps that need to be filled. First, there are not many descriptive qualitative studies that systematically map the relationship between system quality, information quality, and service quality on usage, satisfaction, and net benefits using DeLone & McLean as a single analytical

framework; many studies still assess the effectiveness of administrative parameters or regulatory compliance alone. Second, the literature integrating the updates to Government Regulation No. 28 of 2025 into empirical analysis at the regional level is still limited, so that recent implementation lessons are not fully reflected in existing studies. Third, user and apparatus experiences are often studied partially, even though the interaction between the two at the counter and in the front-end/back-end systems contributes to service quality and satisfaction. Fourth, contextual studies for under-documented regions such as Lubuk Linggau City are still rare, so the opportunity for empirical contributions is quite large.

Although the knowledge base on OSS-RBA is increasingly rich, several research gaps remain. First, limited qualitative studies systematically map the comprehensive relationship between all six DeLone & McLean constructs (system quality, information quality, service quality, usage, satisfaction, and net benefits) within a single analytical framework; many studies assess only administrative effectiveness or regulatory compliance in isolation. Second, empirical literature integrating Government Regulation No. 28 of 2025 into regional-level analysis remains scarce, leaving recent implementation lessons underrepresented in existing research. Third, user and apparatus experiences are often examined separately, despite their interactive contribution to service quality and satisfaction at service counters and within front-end/back-end systems. Fourth, contextual studies of under-documented regions such as Lubuk Linggau City are rare, presenting significant opportunities for empirical contribution.

Addressing these gaps, this study aims to evaluate OSS-RBA implementation in Lubuk Linggau City using the DeLone & McLean IS Success Model as a comprehensive, structured, and experience-oriented analytical lens. The analysis is expected to demonstrate the value chain from technical and service quality through user experience and satisfaction to net benefits for both users and organizations.

In line with these objectives, this study addresses four research questions: (1) How are the system quality, information quality, and service quality of OSS-RBA in Lubuk Linggau City perceived by applicants and officials? (2) How is the user experience and level of user satisfaction with OSS-RBA in Lubuk Linggau City? (3) What net benefits are perceived from OSS-RBA implementation, and what factors serve as enablers and barriers? (4) How do these empirical findings resonate with Government Regulation No. 28 of 2025 to formulate service improvement recommendations?

Correspondingly, the research objectives are: (1) to describe the system quality, information quality, and service quality of OSS-RBA based on experiences of applicants and officials; (2) to describe usage patterns and user satisfaction levels; (3) to identify net benefits and driving/inhibiting factors; and (4) to develop operational policy recommendations aligned with PP No. 28 of 2025 for improving service quality and public value.

This research contributes theoretically by applying DeLone & McLean as the sole evaluation lens in the OSS-RBA regional context, enriching literature that often separates information systems and public policy perspectives. Empirically, it provides detailed qualitative narratives of applicant and official experiences in the relatively unexplored Lubuk Linggau City context, incorporating analysis of PP No. 28 of 2025 impacts on processes and services. Practically, it produces a thematic map and DeLone & McLean construct-based recommendations—such as improving information quality, strengthening service channels,

and interventions for stability/integration—that can be operationalized by DPMPTSP for both quick wins and medium-term improvements.

METHOD

This study uses a descriptive qualitative approach because its primary focus is to describe the experiences and perceptions of applicants and officials regarding the implementation of the *Online Single Submission – Risk Based Approach* (OSS-RBA) system in Lubuk Linggau City without conducting hypothesis testing or statistical analysis. This approach allows researchers to interpret phenomena in depth based on narratives and social context, rather than simply numbers (Sandelowski). This approach also aligns with Patton's view that qualitative research aims to understand the meaning of actors' experiences within a particular social context.

A qualitative descriptive approach was chosen because OSS-RBA at the regional level is a public service innovation that involves the interaction between humans and technology. Evaluation of this system requires an understanding of not only technical aspects but also social, organizational, and user behavioral factors. Therefore, this study emphasizes processes, experiences, and perceptions as the primary data to describe the effectiveness of OSS-RBA implementation in the regions (Miles).

The research location was the Investment and One-Stop Integrated Services Agency (DPMPTSP) of Lubuk Linggau City, South Sumatra. This location was selected purposively because DPMPTSP is the primary implementing agency for OSS-RBA-based licensing services and is at the forefront of implementing licensing digitalization policies in the region. Furthermore, Lubuk Linggau City is among those striving to improve the investment climate and public services through digital innovation.

The research was conducted from July to September 2025, encompassing the preparation, data collection, verification, analysis, and reporting stages. This period was chosen because it was the post-implementation period of Government Regulation No. 28 of 2025, allowing researchers to assess the initial effects of the regulatory update on OSS-RBA implementation in the field.

Informants were selected using purposive sampling, based on relevance and direct involvement in the implementation of OSS-RBA. The number of informants was determined based on the principle of data saturation, meaning data collection was stopped when the information obtained was repetitive and no longer yielded new findings (Miles).

The informant criteria are as follows:

A. Business actors of various scales (micro, small, medium) who have used OSS-RBA at least once in processing permits.
B. DPMPTSP officers on duty at the OSS-RBA counter (front office) and data verification section (*back office*).
C. Structural officials in the licensing sector who understand the OSS-RBA implementation policy in Lubuk Linggau City.

A total of 15 informants were interviewed, consisting of 9 business owners, 4 OSS-RBA implementing staff, and 2 structural officials. This proportion was chosen to balance the perspectives of service users and service providers.

Table 1. Composition of Research Informants

No	Informant Category	Informant Code	Amount
1	Businessmen	PU1-PU9	9
2	State Apparatus	AP1-AP4	4
3	Structural Officials	PS1-PS2	2
	Total		**15**

The research utilizes a multi-source data approach, consisting of primary data from semi-structured interviews, field observations, and direct experience notes during the licensing service process, as well as secondary data from policy documents, technical guidelines, standard operating procedures (SOP), and agency performance reports. This method is crucial for ensuring triangulation validity, as recommended by Lincoln and Guba, to prevent the findings from being biased by relying on just a single type of data source.

This research employed a multi-method data collection strategy, utilizing semi-structured interviews as the primary method to allow for flexible, in-depth exploration of informants' experiences (Braun & Clarke), with questions guided by the six constructs of the DeLone & McLean IS Success Model. This was supplemented by participatory observation of service areas and digital channels to record user interactions and system usage, thereby validating the correspondence between recounted experiences and actual behavior (Patton, 2015). Furthermore, documentation—including a review of government regulations, service reports, and system screenshots—was used to understand the administrative and procedural context of the system's implementation (Republic of Indonesia, 2021; Republic of Indonesia, 2025).

The main research instrument is the researcher himself as a data collector and analyzer. In addition, auxiliary instruments are used in the form of:

A. Interview guide,
B. Field notes format,
C. Thematic analysis matrix based on D&M constructs,
D. Digital recording device and transcription processing application.

The presence of researchers in the field is as moderate participants, meaning that researchers are not directly involved in services but interact to understand the dynamics between actors.

Data analysis was conducted using the interactive model by Miles, Huberman, and Saldaña, which involved three concurrent stages: data reduction through transcribing interviews and selecting key information aligned with the research constructs, data display by organizing the condensed data into matrices and thematic tables to illustrate relationships between categories, and conclusion drawing by interpreting patterns and relationships within the data. This process was further guided by the Thematic Analysis approach (Braun & Clarke), which structured the analysis through the steps of data familiarization, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final narrative report.

To maintain the validity and reliability of qualitative research, researchers use four trustworthiness criteria from Lincoln and Guba:

A. Credibility: carried out through triangulation of sources (applicant, apparatus, documents), member checking, and confirmation of results to the main informant.
B. Transferability: detailed contextual descriptions of the location, informant characteristics, and OSS-RBA procedures are provided so that the research can be used as a reference in other areas.
C. Dependability: researchers create an audit trail in the form of records of methodological decisions, codes, and changes in themes during the analysis.
D. Confirmability: carried out by including evidence in the form of direct quotes from informants and official document results.

This study upholds the ethics of social research as stated by Patton (2015), namely respecting privacy, maintaining data confidentiality, and obtaining informed consent from all participants. Informant identities are disguised with codes such as "PU1" (Business Actor 1) or "AP2" (Apparatus 2). Digital data is stored securely using encrypted media. Furthermore, before data collection, the researcher obtained official permission from the DPMPTSP of Lubuk Linggau City and submitted a letter of willingness to participate to each informant.

The DeLone & McLean IS Success Model served as the main conceptual framework guiding the interpretation of the research findings, with each construct translated into observable operational indicators such as system quality (stability of the OSS-RBA system, integration between agencies, and ease of access), information quality (clarity of permit information, transparency of status, and completeness of guidelines), service quality (responsiveness of officers, availability of help channels, and empathetic attitude), use/intention to use (frequency of OSS-RBA use, ease of navigation, and applicant motivation), user satisfaction (satisfaction with speed, clarity of process, and ease of communication), and net benefits (time efficiency, cost reduction, increased transparency, and public trust in digital services). The analysis was conducted narratively rather than numerically to explore how system and service quality influence user experience and perceived benefits (DeLone & McLean; Petter).

The study acknowledges several limitations, including the small number of informants limited to one area, respondents' difficulty recalling detailed experiences due to time gaps, and data collection restricted to working hours, which excluded users accessing OSS-RBA outside office times; however, these were mitigated through data triangulation and the inclusion of diverse informants. The research process followed four stages: (1) pre-field activities such as literature review, preparation of interview guides, and obtaining research permits; (2) fieldwork involving interviews, observations, documentation, and reflective note-taking; (3) analysis through transcription, coding, and theme formulation; and (4) reporting via thematic analysis using the D&M framework. Through this methodology, the study aims to provide a comprehensive empirical description of the OSS-RBA system's quality, information, and services in Lubuk Linggau City, and to explain the interrelation between technical aspects and human experiences in realizing digital government innovation.

RESULTS AND DISCUSSION

Online Single Submission – Risk-Based Approach (OSS-RBA) system in Lubuk Linggau City demonstrates a complex dynamic between system technical readiness, information quality, and service response. In this analysis, the six dimensions of the DeLone & McLean IS

Success Model serve as the primary framework for interpreting the field results comprehensively.

1. **System Quality**

In general, informants described the quality of the OSS-RBA system in Lubuk Linggau City as having improved compared to the previous version (OSS 1.1), particularly in terms of access speed and network stability. However, most business owners still complained about technical glitches and inconsistent authentication processes.

One of the business actors (PU1) said:

"Sometimes it's smooth in the morning, but it's a bit of a challenge in the afternoon. Sometimes uploading documents takes so long that you have to log in twice."

This constraint demonstrates that system quality is still influenced by network infrastructure factors, not solely the performance of the central application. This aligns with DeLone and McLean's view that system quality encompasses reliability, speed, and integration between systems. In the context of regional OSS-RBA, local network factors and server capacity also determine user experience.

From the apparatus' perspective, technical issues emerged in the form of delays in synchronization between the central OSS and regional systems. A verification apparatus (AP2) stated:

"Sometimes the permit status on the central OSS system shows 'completed,' but the regional dashboard hasn't automatically synced. So we still have to manually confirm with the central office via WhatsApp."

This condition indicates that system interoperability *between* the central and regional governments is still suboptimal. As emphasized by Petter, the success of a public information system depends heavily on the system's ability to provide consistent data across institutions.

Several business informants (PU3, PU5) also appreciated the ease of navigation and the new interface. They found the OSS-RBA interface simpler and easier to fill out. One applicant (PU3) said:

"The interface is cleaner now, and the instructions are clear. I used to be confused about where to start, but now I just follow the flow."

However, technical issues such as session timeouts and auto-logouts are still considered annoying. Overly strict security features can sometimes actually degrade the user experience. This phenomenon reinforces the concept of *the usability–security trade-off* , where overly secure systems can compromise user experience (Petter).

The apparatus (AP4) added that DPMPTSP had attempted to mitigate this by providing assistance computers at the service counter:

"If applicants have trouble logging in or encounter errors, we'll help them here using their account. Sometimes the network at home is unstable."

This effort reflects a form of local technical compensation, where the limitations of the central system are addressed through manual service strategies at the regional level. This finding aligns with a study by Damayanti et al. (2023), which found that technical coordination between regional and central governments is key to the success of OSS-RBA in the field.

Overall, the system quality dimension in Lubuk Linggau City shows a positive trend in terms of interface and access speed, but still faces challenges in integration and network stability. Therefore, improving digital infrastructure and local bandwidth needs to be a regional policy priority to optimize the public value of the OSS-RBA (Republic of Indonesia, 2025).

2. Information Quality

The quality of information in the OSS-RBA system is a crucial factor in determining perceived service effectiveness, as revealed through interviews showing that while most business owners found the information on the OSS portal comprehensive, there remains a gap between the system's technical language and the terminology commonly understood by the public. One applicant (PU2) stated that the instructions were detailed but often too technical, requiring further explanation from officers, reinforcing DeLone and McLean's argument that information quality depends not only on completeness and accuracy but also on understandability and interpretability. Apparatus officers (AP1) acknowledged frequently acting as intermediaries, translating system terms for applicants unfamiliar with the OSS-RBA language, a finding consistent with Namiroh et al. (2024), who note that information clarity directly affects user satisfaction.

However, inconsistencies between the OSS-RBA website and local printed guides were also identified, as one business owner (PU6) described confusion over differing document requirements, reflecting that information quality is not yet standardized across channels—a concern echoed by Petter, who warned that inconsistent information can erode user trust and hinder adoption. Apparatus officers (AP3) also reported synchronization delays in real-time data updates, causing long queues and underscoring the need for stronger data governance and system integration between central and regional levels, as emphasized by Government Regulation No. 28 of 2025 on cross-ministerial data consolidation. On a positive note, several business owners (PU4, PU7) appreciated the online permit tracking feature, which improved transparency and allowed them to monitor progress without visiting offices, exemplifying DeLone and McLean's principle that transparency is a key indicator of high-quality information systems. Overall, the information quality dimension of OSS-RBA in Lubuk Linggau City can be categorized as good in terms of completeness and transparency but remains weak in consistency and understandability for lay users.

3. Service Quality

Service quality emerged as the most prominent dimension in this study because it directly affects user experience both at service counters and through the online OSS-RBA system. Interview results revealed that most business owners considered the services provided by the Lubuk Linggau City DPMPTSP officers to be responsive and helpful, despite limited human resources. As one respondent (PU5) noted, staff members were quick to assist with technical issues such as document uploads, although long queues occasionally occurred due to a shortage of personnel. This appreciation reflects the human aspect of service quality—responsiveness, reliability, and empathy—as conceptualized in the DeLone & McLean IS Success Model. The officers themselves (AP2) acknowledged human resource limitations, emphasizing their commitment to ensuring all users are served despite capacity constraints, a challenge consistent with Anwar et al. (2022) and Faustina & Rusli (2025),

who highlighted that OSS service success at the regional level depends heavily on staff capacity and commitment.

Meanwhile, several business owners (PU8, PU9) expressed concerns about the lack of diverse online support channels, particularly after office hours, underscoring the importance of developing multi-channel assistance such as chatbots, online helpdesks, and local hotlines—features Petter identified as essential for high-quality digital services. On a positive note, DPMPTSP officers (AP1) actively provided in-person mentoring for applicants, especially MSMEs unfamiliar with OSS-RBA, demonstrating adaptive service delivery in areas with low digital literacy—a practice supported by Wahyudin et al. (2024), who found that hands-on guidance improves the sustainability of OSS-RBA adoption. Empathy also emerged as a key element of service quality, illustrated by officers' patient and supportive interactions, which foster user trust and satisfaction. From an organizational standpoint, DPMPTSP has begun implementing a hybrid service model, combining digital and face-to-face assistance to ensure inclusivity, aligning with Hapsari et al. (2024) on inclusive digital governance that supports users at varying levels of digital readiness. Overall, the quality of OSS-RBA services in Lubuk Linggau City can be categorized as good, characterized by responsive and empathetic officers, though further expansion of online support channels and an increase in trained personnel remain necessary for optimal service delivery.

4. System Usage (Use)

The level of OSS-RBA usage in Lubuk Linggau City varies depending on user characteristics, where businesses with higher digital literacy—particularly those accustomed to online administrative systems—adapted more easily, while newer users, especially micro-SMEs, faced difficulties understanding the system flow. As one business owner (PU7) noted, familiarity with the old OSS system eased the transition, but beginners often struggled, reflecting a digital competency gap that, according to DeLone & McLean, influences system use alongside system quality and supporting conditions. The DPMPTSP apparatus (AP1) reported that OSS-RBA utilization has increased as a result of government outreach and socialization at the sub-district level, consistent with Wahyudin et al. (2024), who emphasized the importance of mentoring in promoting OSS-RBA adoption among MSMEs.

However, observations revealed that many users do not fully utilize available features—such as permit monitoring and self-verification—preferring in-person visits to confirm information, indicating limited user trust in digital accuracy and reliability, as discussed by Petter. Officers (AP3) acknowledged that applicants often feel more secure through direct interactions, prompting DPMPTSP to develop a hybrid service model combining online and face-to-face assistance, an approach proven effective in enhancing user trust during digital transitions (Hapsari et al., 2024). Despite these challenges, OSS-RBA usage in Lubuk Linggau City has grown significantly, with DPMPTSP data from 2025 showing that 92% of new permits were processed through the system, demonstrating that OSS-RBA has become the default mechanism for business licensing in line with Government Regulation No. 28 of 2025 on national risk-based service integration. Overall,

the usage dimension in Lubuk Linggau can be categorized as high in terms of administrative adoption but still requires improvement in feature utilization and user confidence in the digital system.

5. User Satisfaction

User satisfaction represents the overall experience of using the OSS-RBA system, encompassing perceptions of system usability, information clarity, and staff responsiveness. Interviews revealed that most business actors were satisfied with the convenience of the process but expressed frustration over lengthy data verification times and inconsistent results across agencies. As one respondent (PU4) noted, data entry was simple, but permit issuance often exceeded the stated three-day timeline, highlighting a gap between user expectations and service delivery. In DeLone & McLean's framework, user satisfaction is influenced by system, information, and service quality, meaning that delays in synchronization can significantly reduce satisfaction levels. The apparatus (AP2) clarified that such delays often stemmed from cross-agency verification, where certain environmental data or NIB entries were not automatically synchronized—illustrating that satisfaction depends not only on local DPMPTSP performance but also on inter-agency coordination, a condition Petter describe as inter-organizational dependency. Despite these constraints, most users acknowledged OSS-RBA as a major improvement over previous manual systems, as PU6 noted that what once took months now only requires about a week. Apparatus (AP4) added that satisfaction was higher among applicants who received direct guidance, reinforcing that satisfaction is shaped by social factors such as empathy, communication, and support—an element central to DeLone & McLean's concept of service encounter satisfaction. Observations further indicated that experienced OSS users expressed greater satisfaction, citing the convenience of saved data that simplifies future applications, whereas new users unfamiliar with technical terms or digital verification processes reported lower satisfaction, emphasizing the need for differentiated service strategies. This finding aligns with Kristiani & Maesaroh (2024), who found that user satisfaction is driven by digital literacy, clarity of guidance, and assistance from officials. Overall, the interaction between system quality, information quality, and service quality in Lubuk Linggau City confirms DeLone & McLean's causality model, which posits that higher system and service quality lead to greater user satisfaction within public information systems.

6. Net Benefits

The final dimension, net benefits, describes the tangible impact of OSS-RBA on service efficiency, transparency, and legal certainty in business licensing. Interviews revealed that both business owners and officials believe the system has brought significant benefits, although there is still room for improvement in technical aspects and coordination.

A business actor (PU8) said:

"Now you don't have to commute to the office anymore; you can upload from home. It's also more cost-effective because you don't use an intermediary."

This statement indicates direct benefits in terms of cost and time efficiency. The OSS-RBA has successfully reduced the layered bureaucratic processes that were previously

common in permit processing. This aligns with the findings of Duri et al. (2024), who described the OSS-RBA as an innovation that accelerates service delivery and reduces licensing transaction costs for small businesses.

From the apparatus' perspective, the main benefit felt is increased accountability and transparency. The apparatus (AP3) explained:

"Everything is recorded in the system, so if there's a complaint, we can see who processed it, what time it was filed, and what stage it's at."

An audit trail system like this strengthens the principles of good governance and public accountability, as emphasized in Government Regulation No. 28 of 2025, which requires every agency to have a digital track record of the licensing process (Republic of Indonesia, 2025).

However, several business actors (PU5, PU9) stated that some benefits were still not maximized, particularly regarding certainty regarding post-permit follow-up. PU5 stated:

"I've received the permit, but I don't know the next steps. For example, for location permits, where do I go after leaving the OSS?"

This indicates that the system's benefits are not yet fully optimized, as not all users understand the integration across stages in the business cycle. Petter emphasized that net benefits are only fully achieved when the system is not only efficient but also capable of generating clear perceived value for its users.

The apparatus (AP2) added:

"Sometimes users don't proceed because they don't understand the post-permit steps. Even though it's in the OSS menu, they rarely access it."

This again highlights the importance of improving the quality of information and ongoing support, so that the benefits of OSS-RBA do not stop at issuing permits alone.

The net benefits of OSS-RBA in Lubuk Linggau City can be detailed in three main aspects:

1. Administrative efficiency: the permit process is faster, cost-effective, and accessible at any time.
2. Service transparency: users can monitor permit status in real time.
3. Institutional accountability: every step of service is digitally recorded and can be audited.

These findings reinforce DeLone & McLean's view that net benefits are the end result of the interaction between system quality, information, services, and user satisfaction. In the context of digital government, these benefits also contribute to increased public trust and regional competitiveness.

Synthesis and Policy Implications

Based on the six dimensions of analysis, it can be concluded that the implementation of OSS-RBA in Lubuk Linggau City has been running effectively functionally, but still faces obstacles in system integration, information understanding, and sustainability of assistance.

The results of this study align with Government Regulation No. 28 of 2025, which emphasizes the importance of consolidation, standardization, and simplification in implementing risk-based licensing. Regional governments need to follow up on this policy direction through three strategies:

1. Strengthening digital infrastructure to increase the reliability of the OSS-RBA system.
2. Standardize information across channels to reduce user confusion.
3. Increasing the capacity of human resources in digital services and assistance.

Furthermore, an inclusive digital governance approach needs to be continuously implemented to ensure that digitalization does not marginalize low-literacy user groups. The DPMPTSP can develop community-based OSS-RBA training or mobile helpdesks in sub-districts to expand access.

Theoretically, the results of this study strengthen the relevance of DeLone & McLean's (2003) model for evaluating public information systems in Indonesia. Each dimension is proven to be interrelated and contributes to the ultimate benefit. Improving one aspect, such as service quality, can strengthen user satisfaction and net benefits even if the system quality is not yet perfect.

Thus, the OSS-RBA in Lubuk Linggau City can be categorized as a substantially successful digital government innovation, although it still requires structural and technical improvements to achieve long-term sustainability.

CONCLUSION

Evaluation using the DeLone & McLean IS Success Model indicates that the OSS-RBA system in Lubuk Linggau City has been functionally effective, delivering significant net benefits such as increased administrative efficiency, cost savings, and greater transparency in business licensing. Improvements in the system interface, clearer information, and responsive service quality have boosted user adoption and satisfaction, especially among digitally literate business actors. Nonetheless, challenges remain, including unstable network infrastructure, limited inter-agency data synchronization, and uneven digital literacy, which constrain full system optimization. These results highlight that successful digital public service innovation requires not only strong technical system quality but also clear information, capable human resources, and ongoing user support. Future research should include longitudinal studies to evaluate OSS-RBA's sustainability and adaptability amid regulatory and technological shifts; comparative analyses across regions to uncover contextual success factors and systemic barriers; and mixed-method or quantitative studies to examine causal links within DeLone & McLean constructs, particularly the impact of specific service quality improvements on user satisfaction and net benefits. Investigating the integration of emerging technologies like AI-driven helpdesks or blockchain within the OSS-RBA framework could further inform the evolution of digital governance innovation.

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