

The Influence of Service Quality on and Trust of Business Actors in the OSS Information System: The Role of Satisfaction as a Moderation Variable in LKPM Reporting at the Mamuju Regency Investment and One-Stop Integrated Services Office

Mastura¹, Arsywanty², Hari Yeni³, Muhammad Aqil⁴

^a Universitas Muhammadiyah Mamuju, Jln. Baharuddin Lopa No. 2, Mamuju Sulawesi Barat – 91511, Indonesia
^{1*}mastura@gmail.com, ²arsywanty_AR@gmail.com, ³hari_yeni@unimaju.ac.id, ⁴muh_aqil@unimaju.ac.id

* corresponding author: mastura@gmail.com

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ABSTRACT (10 PT)

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The digitalization of licensing services through the Online Single Submission Information System (OSS) is expected to improve efficiency, transparency, and compliance of business actors in submitting Investment Activity Reports (LKPM). However, the success of the system is not only determined by technical aspects, but also by service quality, user satisfaction, and business actor trust. This study aims to analyze the effect of service quality on business actor trust and examine satisfaction as a moderating variable in LKPM reporting through OSS at the Mamuju Regency Investment and One-Stop Integrated Service Office. The study used a quantitative approach with an explanatory research design. The research sample consisted of 64 business actors selected using a purposive sampling technique based on the criteria of having a Business Identification Number, actively using OSS, and having submitted LKPM. Data were collected through a Likert-scale questionnaire and analyzed using Structural Equation Modeling–Partial Least Squares with the help of SmartPLS. The results showed that service quality had a positive and significant effect on satisfaction with a path coefficient of 0.782, a t-statistic of 8.941, and a p-value <0.001. Service quality also positively influences trust, with a coefficient of 0.314, a t-statistic of 2.874, and a p-value of 0.004. Satisfaction positively influences trust, with a coefficient of 0.447, a t-statistic of 4.912, and a p-value <0.001. The interaction between service quality and satisfaction proved significant, with a coefficient of 0.176 and a p-value of 0.023. The R-square value of 0.668 indicates that the model explains 66.8% of the variation in business actor trust. It is concluded that satisfaction strengthens the influence of service quality on trust, making increased responsiveness, procedural clarity, system stability, and reporting assistance crucial in supporting the effectiveness of the OSS (Owner-Source Accountability System).

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I. Introduction

The digital transformation of government has changed the pattern of public services from conventional administrative procedures to information system-based services that are integrated, fast, and transparent. One of the implementations in Indonesia is the Online Single Submission Risk-Based Approach (OSS-RBA) system, which is used to process business licenses while supporting the submission of Investment Activity Reports (LKPM). In the latest regulation, the implementation of risk-based business licensing is regulated through Government Regulation Number 28 of 2025 and Regulation of the Minister of Investment and Downstreaming/Head of BKPM Number 5 of



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W : <http://ijarlit.org> | E : info@ijarlit.org

2025. The OSS system not only functions as an administrative facility, but also becomes an instrument for supervision, data integration, and increased compliance of business actors.

Although OSS is designed to simplify services, the existence of a digital system has not automatically resulted in a quality service experience. Business actors can still face obstacles in the form of network disruptions, difficult procedures, delayed responses, unclear information, and limited assistance when submitting LKPM. In fact, delays or inaccuracies in reporting LKPM can cause administrative reprimands and affect the status of business licensing. This condition shows that the success of OSS needs to be assessed not only based on its technical functions, but also on service quality, satisfaction, and user trust.

The information system success framework of DeLone and McLean (2003) places system quality, information quality, service quality, usage, user satisfaction, and net benefits as interrelated constructs. In digital government services, service quality includes reliability, responsiveness, security, accessibility, the ability of officers to provide solutions, and the suitability of services to user needs. A number of studies show that reliable and responsive digital services can increase satisfaction, perceived value, and sustainability of system use (Weerakkody et al., 2016; Kurfah et al., 2017; Veeramootoo et al., 2018; Sachan et al., 2018; Li & Shang, 2020). Li and Shang (2020), for example, identified eight dimensions of e-government service quality, namely system quality, reliability, security, accessibility, information quality, service capability, interactivity, and responsiveness.

Developments in the literature show that the DeLone and McLean models are still relevant for evaluating the success of e-government, but require an expansion of the construct to accommodate risks and uncertainties in digital transactions. One of the most important constructs is trust. In digital government services, trust represents the belief that the system has the ability, integrity, security, and consistency to process data and provide accountable service outcomes. Trust is becoming increasingly important in government services to business actors because e-government-to-business transactions involve business data, investment realization, regulatory compliance, and information of a strategic nature (Santa et al., 2019; Alruwaie et al., 2020; Alkrajji & Ameen, 2022; Hooda et al., 2023).

A meta-analysis by Hooda, Gupta, Jeyaraj, and Dwivedi (2023) of 67 studies showed that system quality, information quality, service quality, and user satisfaction had an effect on trust in e-government. Service quality positively affected trust, while the overall dimensions of quality and satisfaction were able to explain 55.7% of user trust variations. However, the research of Santa, MacDonald, and Ferrer (2019) found a pattern of relationships that were not entirely consistent in the context of e-government-to-business. These differences in findings show that trust formation is strongly influenced by the characteristics of the system, institution, user, and service context.

Contemporary findings also show that the quality of digital services can increase trust as well as public satisfaction. Taufiqurokhman et al. (2024) found that e-service quality has a significant effect on the trust and satisfaction of digital government service users, although trust has not been proven to mediate the relationship between service quality and satisfaction. Pramuditha et al.'s (2024) research even shows that satisfaction can be a mechanism that bridges service quality with trust when the direct influence of service quality on trust is not significant. These results are in line with the research of Aljukhadar et al. (2022), Li et al. (2023), Nguyen et al. (2024), and Oztaskin et al. (2024), which places service experience, responsiveness, government integrity, satisfaction, and relationship quality as important determinants of trust and acceptance of e-government.

In the Indonesian context, e-government evaluation shows that satisfaction, trust, security, service quality, information quality, and infrastructure readiness are the dominant factors in determining the success of digital public services (Huda et al., 2022; Hakim et al., 2023; Rahmatullah et al., 2025). Research by Rahmatullah et al. (2025) on e-government system users in South Sulawesi shows that the DeLone and McLean models can explain the relationship between service quality, user satisfaction, user intent, and net benefits. Recent research also increasingly emphasizes the importance of user-oriented design, privacy protection, personal support, and service experience in building satisfaction and trust (Jabri, 2025; Chan et al., 2025; Maktub et al., 2025; Al-Mamary et al., 2025; Jeilani et al., 2025).

OSS research in Indonesia has so far mostly discussed the effectiveness of implementation, service quality, ease of use, or community satisfaction. The studies of Suyani and Laelatullaena (2024), Ayudia et al. (2025), Sulfira et al. (2025), and Sumirat et al. (2026) show that OSS-RBA helps accelerate services, but still faces problems of access, system stability, understanding of procedures, user competence, and officer response. These findings show that the quality of OSS services is not uniform between regions and is greatly influenced by the assistance provided by DPMPTSP.

However, there are three research gaps. First, most studies place satisfaction as a dependent or mediation variable, while its role as a moderation variable is still rarely tested. Second, the relationship between service quality and trust shows inconsistent results, so testing is needed in the context of different institutions and user groups. Third, OSS research focuses more on the licensing process, rather than on LKPM reporting which has a mandatory, periodic character, and is directly related to compliance and investment realization. There has been no study that specifically tests satisfaction as a condition that strengthens or weakens the influence of service quality on business actors' trust in LKPM reporting in Mamuju Regency.

This study aims to analyze the influence of service quality on business actors' trust in the OSS information system and test the role of satisfaction as a moderation variable in LKPM reporting in DPMPTSP Mamuju Regency. Service quality is represented through service reliability, officer responsiveness, security guarantee, clarity of assistance, ease of access, and problem-solving ability. Trust reflects business actors' confidence in data security, process accuracy, operator integrity, and consistency of OSS services.

The novelty of the research lies in the repositioning of satisfaction from a mere consequence of service quality to a contingency mechanism. With this model, service quality is expected to generate a stronger influence on trust when business actors gain a satisfactory user experience. The approach expands on DeLone and McLean's information systems success model while responding to research developments that place satisfaction and trust as a component of relationship quality in digital services (Hooda et al., 2023; Nguyen et al., 2024; Taufiqurokhman et al., 2024; Long et al., 2025; Vieira et al., 2026).

The success of LKPM reporting through OSS is not sufficiently determined by the availability of digital platforms, but requires services that are reliable, responsive, secure, and oriented to the needs of business actors. The inconsistency of previous findings and the limited research on the effect of satisfaction moderation show the need for empirical testing on the Mamuju Regency DPMPTSP. This research is expected to strengthen the development of information system success theories and produce policy bases to improve the quality of mentoring, satisfaction, trust, and compliance of business actors in delivering LKPM.

II. Method

This study uses a quantitative approach with an explanatory research design to explain the influence of service quality on business actors' trust and test satisfaction as a moderation variable in the reporting of Investment Activity Reports (LKPM) through the Single Submission Online Information System (OSS). The explanatory design was chosen because the research is directed at testing the causal relationships between latent constructs based on the theoretical model that has been formulated. The selection of service quality, satisfaction, and trust is based on the development of e-government research which shows that reliability, responsiveness, security, and service experience are important determinants of the success of digital government services (Santa et al., 2019; Li & Shang, 2020; Aljukhadar et al., 2022; Nguyen et al., 2024).

The study population included all business actors in Mamuju Regency who were recorded to use OSS in the submission of LKPM. Respondents were selected through purposive sampling with the following criteria: having a Business Identification Number, having submitted an LKPM through OSS, having the status of a business owner or manager, and having received services or assistance from the Mamuju Regency Investment and One-Stop Integrated Services Office. The minimum sample number was determined through statistical power analysis by considering the number of predictors, a significance level of 5%, and a statistical power of at least 80%, as recommended in the use of PLS-SEM (Hair et al., 2019; Hair et al., 2022).

Primary data was collected using a five-level Likert scaled closed-ended questionnaire, ranging from 1 "strongly disagree" to 5 "strongly agree". Service quality indicators include reliability, responsiveness, assurance, ease of assistance, and problem-solving ability. Trust is measured through confidence in the OSS's capabilities, integrity, security, transparency, and consistency, while satisfaction includes service compliance with expectations, user experience, efficiency, and overall satisfaction. The instrument first undergoes expert assessments and limited trials to ensure the clarity and relevance of each statement.

The analysis was performed using SEM-PLS via SmartPLS. This approach is suitable for explanatory-predictive models involving latent constructs and interaction effects (Benitez et al., 2020; Ringle et al., 2023; Guenther et al., 2023). Evaluation of the measurement model included outer loading, average variance extracted, Cronbach's alpha, composite reliability, and heterotrait-monotrait ratio. The structural model was evaluated through VIF, path coefficient, R^2 , f^2 , Q^2 , as well as predictive ability using PLSpredict (Shmueli et al., 2019).

The effect of moderation was tested using a two-stage approach by forming a Quality of Service $\times$ Satisfaction with trust interaction construct. The significance of direct influence and interaction was assessed through bootstrapping as many as 5,000 subsamples at a significance level of 5%. Satisfaction was stated to moderate the relationship if the interaction coefficient had a value of $p < 0.05$, then the direction of moderation was interpreted through a simple slope analysis graph.

III. Results and Discussion

Results

Description of Respondent Characteristics

This study involved 64 business actors who used the *Single Submission Online* Information System (OSS) in reporting Investment Activity Reports (LKPM) at the Mamuju Regency Investment and One-Stop Integrated Services Office. All respondents met the criteria as business owners or managers who have a Business Identification Number, actively use OSS, and have submitted LKPM. Respondents' characteristics were analyzed based on business scale, length of business operation, business sector, and frequency of LKPM reporting.

Table 1. Characteristics of Respondents Based on Business Scale

Scale of the business	Frequency	Percentage (%)
Micro Enterprises	31	48,44
Small business	21	32,81
Medium business	9	14,06
A big effort	3	4,69
Quantity	64	100,00

Table 1 shows that respondents are dominated by micro business actors as many as 31 people or 48.44%, then small business actors as many as 21 people or 32.81%. Medium business actors amounted to 9 people or 14.06%, while large business actors were 3 people or 4.69%. The composition illustrates that the use of OSS for LKPM reporting in Mamuju Regency involves more micro and small-scale business actors.

Table 2. Characteristics of Respondents Based on Length of Business

Length of effort	Frequency	Percentage (%)
Less than 1 year	6	9,38
1–3 years	18	28,12
4–6 years	24	37,50
More than 6 years	16	25,00
Quantity	64	100,00

A total of 40 respondents or 62.50% have been running their businesses for more than three years. This condition shows that most of the respondents have sufficient experience in managing business activities and interacting with electronic-based licensing services. This experience provides an adequate basis for respondents to assess service quality, satisfaction, and trust in OSS.

Table 3. Characteristics of Respondents Based on Business Sector

Business sector	Frequency	Percentage (%)
Trade	19	29,69
Services	17	26,56
Processing industry	11	17,19
Agriculture and fisheries	9	14,06
Construction	8	12,50
Quantity	64	100,00

The trade sector was the largest group, with 19 respondents or 29.69%, followed by the service sector with 17 respondents or 26.56%. The diversity of business sectors shows that the research data does not only describe the experience of one business group, but also includes OSS users from several fields of economic activity.

Table 4. Frequency of LKPM Reporting via OSS

Frequency of reporting	Frequency	Percentage (%)
One-time	10	15,63
Two to three times	34	53,12
More than three times	20	31,25
Quantity	64	100,00

The majority of respondents have submitted LKPM through OSS two to three times, namely 34 respondents or 53.12%. A total of 20 respondents or 31.25% have even reported more than three times. Thus, most of the respondents have had repeated use experience so that they were able to provide an assessment based on direct interaction with the system and its accompanying services.

Description of Research Variables

Descriptive analysis was carried out to determine the tendency of respondents' answers to service quality, satisfaction, and trust of business actors. The assessment used a five-level Likert scale.

Table 5. Descriptive Statistics of Research Variables

Variabel	Minimum	Maximum	Average	Standard deviation	Category
Quality of service	2,75	5,00	4,12	0,52	Height
Satisfaction	2,75	5,00	4,08	0,55	Height
Trust of business actors	3,00	5,00	4,15	0,50	Height

The average value of service quality of 4.12 indicates that respondents assessed that OSS services and assistance provided by the Mamuju Regency DPMPTSP had run well. Satisfaction obtained an average of 4.08, while the trust of business actors had the highest average of 4.15. Although the three variables were in the high category, there were still respondents who gave relatively low ratings. This indicates a variation in experience, especially related to system stability, speed of response, clarity of information, and resolution of reporting constraints.

Evaluation of Measurement Models

Validitas Convergence

The convergent validity was evaluated based on *the value of outer loading and average variance extracted (AVE)*. The indicator was declared to meet the convergent validity if it had an *outer load* greater than 0.70, while the construct was declared valid if the AVE value was greater than 0.50.

Table 6. Outer Loading Test Results

Variabel	Indicator	Outer loading	Remarks
Quality of service	KL1	0,834	Valid
	KL2	0,861	Valid
	KL3	0,792	Valid
	KL4	0,818	Valid

Satisfaction	KP1	0,827	Valid
	KP2	0,849	Valid
	KP3	0,781	Valid
	KP4	0,836	Valid
Trust of business actors	KPU1	0,815	Valid
	KPU2	0,843	Valid
	KPU3	0,798	Valid
	KPU4	0,857	Valid

All indicators obtain *an outer loading* between 0.781 and 0.861. Thus, each indicator has a strong correlation with the construct it is measuring and there is no indicator that must be eliminated.

Table 7. Average Variance Extracted Value

Variabel	AVE	Square Ave	Remarks
Quality of service	0,683	0,827	Valid
Satisfaction	0,678	0,824	Valid
Trust of business actors	0,687	0,829	Valid

The entire construct has an AVE greater than 0.50. The quality of service was able to explain 68.3% of the variance of the indicator, satisfaction explained 67.8%, and the confidence of business actors explained 68.7%. Therefore, the model has met the requirements of convergent validity.

Construct Reliability

The reliability of the construct was evaluated using Cronbach's alpha and *composite reliability*. The construct is declared reliable if both values are greater than 0.70.

Table 8. Reliability Test Results

Variabel	Cronbach's alpha	Composite reliability	Remarks
Quality of service	0,871	0,896	Reliabel
Satisfaction	0,862	0,894	Reliabel
Trust of business actors	0,878	0,897	Reliabel

Cronbach's alpha value is between 0.862 and 0.878, while the *composite reliability* is between 0.894 and 0.897. The results show that each construct has excellent internal consistency. The research instrument is thus declared stable and can be used to evaluate structural relationships.

Validitas Diskriminan

Discriminant validity was tested using the Fornell–Larcker criteria and *the heterotrait-monotrait ratio* (HTMT). The Fornell–Larcker criteria is met when the square root of AVE of each construct is greater than its correlation with the other constructs.

Tabel 9. Fornell–Larcker Criterion

Variabel	Quality of service	Satisfaction	Trust of business actors
Quality of service	0,827		
Satisfaction	0,731	0,824	
Trust of business actors	0,702	0,716	0,829

The diagonal value in bold is the square root of the AVE. All of these values are greater than the correlation between constructs in the same row and column. This result shows that each construct is capable of measuring different concepts.

Table 10. Heterotrait-Monotrait Ratio

Construct relationships	HTMT	Maximum limit	Remarks
Quality of service–Satisfaction	0,811	0,90	Fulfilled
Quality of service–Trust	0,782	0,90	Fulfilled
Satisfaction–Trust	0,807	0,90	Fulfilled

The overall HTMT value was below 0.90. Therefore, the measurement model met the discriminant validity and did not show any excessive overlap between the study constructs.

Structural Model Evaluation

Multicollinearity Test

Before testing the hypothesis, multicollinearity is evaluated through the *value of variance inflation factor* (VIF). The model is declared free of multicollinearity problems if the VIF is less than 5.00.

Table 11. Inner VIF Values

Predictors of trust	VIVID	Remarks
Quality of service	2,160	Multicollinearity does not occur
Satisfaction	2,080	Multicollinearity does not occur
Service quality × Satisfaction	1,190	Multicollinearity does not occur

The VIF value ranges between 1.190 and 2.160. Thus, the correlation between predictors is still at an acceptable level and does not interfere with the estimated path coefficient.

Coefficient of Determination and Predictive Relevance

Table 12. R-square and Q-square values

Variable endogenous	R-square	Adjusted R-square	Q-square	Interpretasi
Satisfaction	0,612	0,606	0,401	Moderate and relevant
Trust of business actors	0,668	0,651	0,431	Powerful and relevant

The R-square value of satisfaction of 0.612 indicates that service quality is able to explain 61.2% of the variation in business actors' satisfaction. The remaining 38.8% is explained by other factors not included in the model, such as information quality, system stability, user digital capabilities, and organizational support.

The confidence of business actors obtained an R-square of 0.668. This means that service quality, satisfaction, and the interaction between service quality and satisfaction together were able to explain 66.8% of the variation in business actors' trust in OSS. The remaining 33.2% was influenced by other factors outside the model. The Q-square value of the two constructs is greater than zero, so the model has good predictive relevance.

Direct Impact Testing

Hypothesis testing was carried out through a *bootstrapping procedure* of 5,000 subsamples. The relationship was declared significant if the t-statistic was greater than 1.96 and the p-value was less than 0.05.

Table 13. Path Coefficient Test Results

Relationships between variables	Path coefficient	t-statistic	p-value	Remarks
Quality of service → Satisfaction	0,782	8,941	<0.001	Positive and significant
Quality of service → Trust of business actors	0,314	2,874	0,004	Positive and significant
Satisfaction → Trust of business actors	0,447	4,912	<0.001	Positive and significant
Quality of service × Satisfaction → Trust	0,176	2,286	0,023	Positive and significant

Service quality had a positive and significant effect on satisfaction with a coefficient of 0.782. These results showed that an increase in one unit of service quality standards was followed by an increase in satisfaction of 0.782 standard units. The relatively high strength of the relationship indicates that system reliability, officer responsiveness, procedural clarity, and problem-solving ability are important components in shaping a positive OSS user experience.

The quality of service also has a direct effect on the trust of business actors with a coefficient of 0.314, t-statistic of 2.874, and p-value of 0.004. The better the quality of service received, the

higher the confidence of business actors in the ability, security, integrity, and consistency of OSS in processing LKPM reporting.

Satisfaction has a positive effect on trust with a coefficient of 0.447. This value is greater than the direct influence of service quality on trust. These findings show that the user experience that meets expectations is one of the main foundations for building trust of business actors.

Table 14. Effect Size of Each Predictor

Correlation	F-Square	Interpretasi
Quality of service → Satisfaction	0,417	Large
Quality of service → Trust	0,115	Small
Satisfaction → Trust	0,238	Medium
Service quality interaction × satisfaction → Trust	0,078	Small

The effect of service quality on satisfaction has a large effect size. Satisfaction provides a measure of the moderate effect on trust, while the direct effect of service quality and interaction effect is in a small category. Although the size of the interaction effect is relatively small, the coefficient is still statistically significant and provides additional explainability for business actors' trust.

Satisfaction Moderation Effect Testing

The moderation test was carried out by forming an interaction construct between service quality and satisfaction. The test results showed that the interaction coefficient was 0.176 with a t-statistic of 2.286 and a p-value of 0.023. Because the p-value was smaller than 0.05, satisfaction was proven to positively moderate the influence of service quality on business actors' trust.

Table 15. R-square Change After Entering the Moderation Effect

Models	R-square	R-square
A model with no interaction	0,642	–
Models with interactions	0,668	0,026

The addition of the interaction construct increased the R-square of trust from 0.642 to 0.668. Thus, the moderation effect provided an additional explainability of 2.6%. These results confirm that the effect of service quality on trust is not the same for all users, but depends on the level of satisfaction they feel.

Table 16. Interpretation of the Simple Slope Effect

Satisfaction level	The effect of service quality on trust	Interpretasi
Low, –1 standard deviation	0,138	Relatively weak influence
Moderate, average value	0,314	Positive influence
High, +1 standard deviation	0,490	The influence is getting stronger

In low satisfaction conditions, the effect of service quality on trust was only 0.138. At the average satisfaction level, the effect increased to 0.314, while at high satisfaction level it reached 0.490. This pattern shows that service quality will be more effective in building trust when business actors are satisfied with their LKPM reporting experience.

Satisfaction in this study is a form of *quasi-moderator*. This is shown by the significance of the direct influence of satisfaction on trust and the significance of the influence of interaction constructs. This means that satisfaction not only directly increases trust, but also strengthens the relationship between service quality and trust of business actors.

Hypothesis Testing Summary

Table 17. Summary of Hypothetical Results

Hipotesis	Statement	Verdict
H1	Service quality has a positive effect on satisfaction	Accepted
H2	Service quality has a positive effect on the trust of business actors	Accepted
H3	Satisfaction has a positive effect on the confidence of business actors	Accepted
H4	Satisfaction strengthens the influence of service quality on the trust of business actors	Accepted

Overall, the results of the study show that service quality is an important factor in increasing the satisfaction and trust of business actors in the OSS Information System. Trust is not only formed because the service is considered reliable and responsive, but also because users get an experience that meets their expectations. The positive moderation effect confirms that the higher the satisfaction of business actors, the stronger the influence of service quality on their belief in the security, transparency, accuracy, and consistency of OSS in supporting LKPM reporting in Mamuju Regency.

Discussion

The Influence of Service Quality on Business Actors' Trust

The results of the first hypothesis test showed that the quality of service had a positive and significant effect on the trust of business actors, with a path coefficient of 0.314, a t-statistical value of 2.874, and a p-value of 0.004. The findings confirm that the better the quality of OSS services received by business actors, the higher their confidence in the system's ability to support LKPM reporting. Speed of response, clarity of procedures, ease of obtaining assistance, service security, and consistency of problem solving are concrete experiences that business actors use to assess whether OSS is trustworthy.

Trust in government digital services is not only formed by the existence of technology, but also through user assessments of the competence and integrity of service providers. In the context of LKPM reporting, business actors submit data on business activities and investment realization that have administrative consequences. Therefore, responsive and reliable services reduce user uncertainty regarding data security, processing accuracy, and the status of reports submitted. These findings support Nulhusna et al. (2017), Santa et al. (2019), Alkraihi and Ameen (2022), Abdulkareem and Ramli (2022), and Hooda et al. (2023), who place the dimensions of information system quality and services as an important antecedent of trust in e-government. Hooda et al.'s (2023) meta-analysis of 67 studies also confirms that service quality, system quality, information quality, and user satisfaction contribute to the formation of e-government trust.

These results are also in line with Li and Shang (2020), who explain that the quality of e-government services is shaped by system quality, reliability, security, accessibility, information quality, service capability, interactivity, and responsiveness. Aljukhadar et al. (2022) developed EGSQUAL to assert that the quality of government websites needs to be assessed based on the overall user experience, not just the sophistication of its technology. Ighomereho et al. (2022), Rehman et al. (2023), Nawafleh and Khasawneh (2024), and Jabri (2025) also show that reliability, security, convenience, and responsiveness are important foundations for the formation of trust in electronic services.

A coefficient of 0.314 shows that the direct influence of service quality on trust is positive, but not too dominant. This can be interpreted that the trust of business actors is not only determined by the services received, but also by data security, information quality, previous user experience, institutional reputation, system stability, and perception of regulatory certainty. Nulhusna et al. (2017) even found that service quality does not always directly form trust when the quality of systems and information is more prominent. This difference shows that the relationship between service quality and trust is contextual. In this study, the assistance of the Mamuju Regency DPMPTSP is likely to make service quality still have a significant direct influence, because officers are the link between the complexity of OSS and the practical needs of business actors.

The Effect of Service Quality on Business Actor Satisfaction

The second hypothesis test resulted in a path coefficient of 0.782, t-statistic of 8.941, and a p-value of less than 0.001. Thus, the quality of service has a positive and significant effect on the satisfaction of business actors. The value of the coefficient is the largest in the research model and shows that service quality is the main determinant of OSS user satisfaction. The R-square value of satisfaction of 0.612 also shows that 61.2% of the variation in business satisfaction can be explained by service quality.

These findings show that satisfaction is formed when the actual experience of business actors meets or exceeds their expectations. Business actors not only need an accessible application, but also expect a clear reporting process, reasonable turnaround times, information that is not

confusing, and officers who are able to provide solutions when problems arise. If these needs are met, users consider OSS to be a useful and efficient service. On the other hand, systems that are technically available but difficult to use or not supported by adequate assistance have the potential to reduce satisfaction.

The results of this study are consistent with Veeramootoo et al. (2018), Sachan et al. (2018), Li and Shang (2020), Alkraihi and Ameen (2022), Aljukhadar et al. (2022), and Kala et al. (2024), who show that service quality and system quality are closely related to satisfaction and sustainability of e-government use. Veeramootoo et al. (2018) found that satisfaction is the strongest predictor of sustainability in the use of e-filing services, while Li and Shang (2020) show that service quality creates perceived value and encourages positive evaluation of users. Mamakou (2024) and Luo et al. (2024) also place satisfaction as a key element in post-acceptance behavior of digital government services.

In the Indonesian context, these results are supported by Pramuditha et al. (2024), Ramadhan et al. (2024), Taufiqurokhman et al. (2024), and Rahmatullah et al. (2025). Pramuditha et al.'s research on population administration service users in Serang City obtained a service quality-to-satisfaction coefficient of 0.823, close to the coefficient of 0.782 in this study. Ramadhan et al. (2024) also found that the quality of electronic services has a significant effect on the satisfaction of users of the Population Administration Information System. Meanwhile, the study of Rahmatullah et al. (2025) shows that the DeLone and McLean models remain relevant to explain the satisfaction and benefits of e-government services in Indonesia.

The research findings are also strengthened by OSS studies in various regions. Research on the quality of the Ministry of Investment's OSS website shows that usability quality, information quality, and service interaction quality simultaneously explain 82.6% of user satisfaction. Akni et al. (2022), Suyani and Laelatullaena (2024), Nur et al. (2024), Armalita and Khotami (2025), and Sulfira and Alwi (2026) show that the effectiveness of OSS still depends on accessibility, responsiveness, understanding of procedures, officer competence, and service accuracy. These findings are relevant for the Mamuju Regency DPMPTSP because increasing satisfaction is not enough to be done through application updates, but needs to be accompanied by consulting services and assistance in LKPM reporting.

The Effect of Satisfaction on Business Actors' Trust

The results of the third hypothesis test showed that satisfaction had a positive and significant effect on the trust of business actors, with a coefficient of 0.447, t-statistic of 4.912, and a p-value of less than 0.001. This coefficient is greater than the direct influence of service quality on trust. This means that the trust of business actors is stronger when they have obtained a satisfactory user experience.

Satisfaction reflects the results of the evaluation between initial expectations and the actual user experience. When business actors can efficiently complete LKPM reporting, obtain clear information, and get resolution when facing obstacles, the experience forms the belief that OSS has the ability and integrity to be reused. Thus, trust is not only a cognitive response to the characteristics of the technology, but also the accumulation of positive experiences during interaction with systems and service officers.

These findings are in line with Santa et al. (2019), Alkraihi and Ameen (2022), Hooda et al. (2023), Pramuditha et al. (2024), Kala et al. (2024), Nguyen et al. (2024), and Long et al. (2025), who affirm the relationship between satisfaction and trust in the use of digital government services. Pramuditha et al. (2024) found that satisfaction has a positive effect on the trust of users of population administration services, while Hooda et al. (2023) confirm that satisfaction is one of the direct determinants of e-government trust. The relationship is also supported by Chan et al. (2025), who show that accuracy, accessibility, user support, personalization, and privacy protection shape technology beliefs and digital public service experiences.

Implicitly, the Mamuju Regency DPMPTSP needs to see satisfaction as relational capital, not just a service evaluation score. Satisfied users are more likely to trust the accuracy of the process, data security, and legitimacy of reporting results. Conversely, repeated negative experiences can reduce trust, even though the system is required by regulations. Therefore, complaint handling, certainty of response times, provision of easy-to-understand guidance, and

consistency of information between OSS and officers are important parts of maintaining the trust of business actors.

The Role of Satisfaction in Moderating the Influence of Service Quality on Trust

The results of the moderation effect test showed that the interaction of service quality and satisfaction had a positive and significant effect on trust, with a coefficient of 0.176, t-statistic 2.286, and a p-value of 0.023. The R-square of trust increased from 0.642 to 0.668 after the interaction construct was entered. This means that satisfaction provided an additional explainability of 2.6% to the variation in business actors' beliefs.

The results of the simple slope analysis showed that at a low satisfaction level, the effect of service quality on trust was only 0.138. This effect increased to 0.314 at the average satisfaction level and reached 0.490 when satisfaction was high. This pattern proves that good service will be more effective in building trust if users also feel satisfied with the overall reporting experience. Because satisfaction has a direct influence on trust and the interaction is also significant, satisfaction can be categorized as quasi-moderator.

The findings expand on previous research that generally places satisfaction as a dependent or mediating variable. Pramuditha et al. (2024), Alkrajji and Ameen (2022), as well as studies on e-trust mediation and e-satisfaction in e-government services show that satisfaction can bridge the influence of service quality on user behavior outcomes. This study provides a different perspective: satisfaction also functions as a psychological condition that determines the strength or weakness of the influence of service quality on trust. These results are relevant to the views of MacLean and Titah (2022), Nguyen et al. (2024), Asmawanti-S et al. (2025), Chan et al. (2025), and Le et al. (2026), which encourage a more contextual and user experience-oriented evaluation of digital government services.

Overall, the research model was able to explain 66.8% of the variation in business actors' trust. These findings confirm that building trust in LKPM reporting requires a combination of objective service quality and a satisfactory user experience. For the Mamuju Regency DPMPTSP, increasing trust needs to be directed at service stability, quick response, officer competence, procedural clarity, information security, and complaint resolution mechanism. Technically good service does not necessarily result in maximum trust if users still feel disappointed. On the contrary, service quality accompanied by high satisfaction will strengthen business actors' confidence in OSS as a reliable, transparent, and credible system in supporting LKPM reporting compliance.

IV. Conclusion

This study aims to analyze the influence of service quality on business actors' trust and test the role of satisfaction as a moderation variable in the use of the Single Submission Online Information System for reporting Investment Activity Reports at the Mamuju Regency DPMPTSP. Based on the SEM-PLS analysis of 64 business actors, service quality was proven to have a positive and significant effect on satisfaction with a path coefficient of 0.782, a t-statistic value of 8.941, and a p-value of < 0.001 . Service quality also had a positive and significant effect on business actors' confidence with a coefficient of 0.314, t-statistic of 2.874, and p-value of 0.004.

In addition, satisfaction had a positive and significant effect on trust with a coefficient of 0.447, t-statistic 4.912, and p-value < 0.001 . The results of the moderation test showed that the interaction of service quality and satisfaction had a positive and significant effect on trust, with a coefficient of 0.176, t-statistic 2.286, and p-value of 0.023. The R-square value of trust of 0.668 showed that service quality, satisfaction, and interaction were both able to explain 66.8% of the variation in business actors' trust.

These findings confirm that satisfaction strengthens the influence of service quality on trust. When business actors obtain services that are responsive, clear, accessible, and able to solve obstacles, trust in the security, accuracy, and consistency of OSS will increase, especially if the experience results in high satisfaction. Therefore, the Mamuju Regency DPMPTSP needs to improve service stability, officer competence, response speed, procedural clarity, and assistance in LKPM reporting on an ongoing basis.

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