



The Influence of Public Service Quality Through OSS RBA on Citizen Satisfaction: the Role of Trust As a Mediating Variable

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ABSTRACT

This research seeks to examine how the quality of public services via the Online Single Submission Risk-Based Approach (OSS RBA) system influences citizen satisfaction, incorporating trust as a mediating factor. The population studied consists of the residents of Bengkalis Regency who use OSS RBA for processing Business and Trade Permits, with a sample size of 140 respondents. Data collection was conducted through a questionnaire distributed via Google Form. The data analysis technique used was Structural Equation Modelling (SEM) with the help of WarpPLS 7.0 software for data processing. The findings of the research indicate that the quality of public services positively and significantly influences citizen satisfaction (T-statistic = 20.206; P-value = 0.000). Moreover, the quality of service positively and significantly influences user trust (T-statistic = 15.395; P-value = 0.000). Furthermore, trust has been proven to have a effect on citizen satisfaction (T-statistic = 7.951; P-values = 0.000). Therefore, It can be inferred that trust serves as a mediator that enhances the connection among service quality and user satisfaction. This study provides important implications for the management of technology-based public services to improve service quality and build trust, which can enhance citizen satisfaction with the OSS RBA services in Bengkalis.

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Introduction

The digital era demands continuous improvements in public service quality to meet the increasingly complex needs of society. One of Indonesia's key initiatives in this regard is the execution of the Online Single Submission Risk-Based approach (OSS RBA). This electronic licensing system simplifies the business permitting process, enhances transparency, and expedites procedures. OSS RBA adopts a risk-based approach, categorizing licenses and oversight based on their risk levels. This method allows the government to allocate resources efficiently, focusing on high-risk sectors while facilitating low-risk enterprises. With its integrated, technology-driven system, OSS RBA aims to reduce bureaucracy, ensure legal certainty, and create a more favorable investment climate.



Despite its potential, the implementation of OSS RBA still faces various challenges, including technical issues such as limited accessibility, slow system response, and insufficient guidance for users. Non-technical barriers, such as bureaucratic complexity and low public trust in the system, further hinder its effectiveness. Trust, as a mediating factor, plays a critical role in enhancing public satisfaction with the service. A high level of trust enables users to tolerate system shortcomings, while low trust amplifies dissatisfaction. Therefore, strengthening public trust is essential for achieving high-quality public services and improving user satisfaction with OSS RBA.

The rapid advancement of the digital era requires governments to continuously improve public service quality to meet society's growing and complex needs. In Indonesia, one notable effort to achieve this is the execution of the system therefore an electronic licensing system designed to simplify the business permitting process. OSS RBA replaces time-consuming, manual procedures with an integrated, risk-based digital system, aiming to enhance efficiency, transparency, and accountability. By categorizing licenses and oversight based on risk levels, this system allows the government to focus resources on high-risk sectors while granting automatic approvals for low-risk activities. Through this approach, OSS RBA not only simplifies business licensing but also strengthens legal certainty and fosters a more conducive investment environment.

The issues arising in the implementation of public service, such as OSS RBA can be observed from several aspects based on data. First, there is a lack of public understanding of the OSS RBA system, particularly among small and medium-sized business owners. This has resulted in the suboptimal use of the service to support community business activities. Second, although OSS RBA is designed to provide convenience, data indicates persistent complaints about the quality of the service, such as limited accessibility, inconsistent processing speed, and inaccuracies in the information received by users (Anggunsuri & Zahara, 2023).

Despite these advancements, several challenges remain in the implementation of OSS RBA. Technical issues, such as system access difficulties, slow response times, and inadequate user guidance, have been significant barriers for many, especially small and medium enterprises (SMEs). Furthermore, non-technical factors, including complicated bureaucracy and low public trust in the system, have diminished the effectiveness of OSS RBA in achieving its objectives. While the system was designed to streamline processes and enhance public service quality, the gap between user expectations and the system's actual performance has resulted in dissatisfaction among some segments of society.

Public trust emerges as a critical factor in bridging this gap. Trust serves as a mediating variable that directly impacts user satisfaction. When trust in the OSS RBA system is high, users are more likely to overlook minor flaws and feel satisfied with the service. Conversely, low trust amplifies user frustrations and reduces overall satisfaction, even if service quality improves. Strengthening public trust requires not only addressing technical and procedural challenges but also ensuring greater transparency, responsiveness, and effective communication about the system's benefits and functionalities.



Given its role in promoting economic growth, OSS RBA is particularly significant in Indonesia's effort to attract investments. By improving the licensing process, the system has encouraged a higher volume of business registrations and investments. However, data from several regions, including Bengkalis Regency, indicate persistent issues with technical errors, incomplete information, and accessibility challenges, which have led to a rise in public complaints over the years. To fully realize its potential, OSS RBA requires ongoing refinement, particularly in addressing user concerns and building public confidence in the system. A strong emphasis on user satisfaction and trust will ensure that OSS RBA delivers on its promise of streamlined licensing and improved public services.

Methods

The research conducted is a quantitative study with a causal research design. According to Anwar Sanusi (2016), a causal research design is structured to examine the potential cause-and-effect relationships between variables. This design is deemed suitable for this study as it aims to identify which variables act as independent variables (causes) and which as dependent variables (effects), as well as to understand the relationships between them. The method used for data collection in this research was via questionnaires. The questions provided to respondents consisted of both open-ended and closed-ended types. In closed-ended questions, respondents were asked to select answers from a set of predetermined alternatives, while in open-ended questions, respondents were encouraged to elaborate on their answers based on their perceptions or experiences.

The sample size for this research was established according to the analysis model used, namely Structural Equation Modeling (SEM). For SEM using the maximum likelihood estimation (MLE) method, an appropriate sample size ranges from 100 to 200 samples (Ghozali, 2008). Hair et al. (2017) suggest that a representative sample size can be calculated based on the number of indicators multiplied by a factor of 5 to 10. In this study, the sample size was calculated as follows, Sample size = Number of Indicators x 10 = 14 x 10 = 140. Based on this calculation, the minimum required sample size for this study was determined to be 140 respondents.

Result

Analysis of Respondent Characteristics

Table 1. Gender

Jenis Kelamin	Persentase	Jumlah
Laki-laki	48,6 %	68
Perempuan	51,43%	72
Total	100%	140

According to the Table provided, it is possible to be seen that 77 respondents are female, accounting for 51.43%, while the remaining 72 respondents are male, making up 48.6%.



Table 2. Age Category

Umur	Persentase	Jumlah
17 – 25 Tahun	52%	74
26 – 35 Tahun	39,2%	55
46 – 55 Tahun	8,8%	11
Total	100%	140

According to the Table provided, the respondents are in 17-25, accounting for 52%. Meanwhile, 39.2% are in the 26-35 age group, and 8.8% are in the 46-55 age group.

Table 3. Occupation

Pekerjaan	Persentase	Jumlah
PNS	8%	11
Pegawai Swasta	26%	36
Pengusaha	12%	17
Ibu rumah tangga	1%	2
Wiraswasta	15%	21
Lainnya	38%	53
Total	100%	140

According to the Table provided,, it can be finished that the largest group of respondents is in other occupations, such as MSME workers and freelancers, making up 38%. The second-largest group is private sector employees at 26%, followed by entrepreneurs at 15%, business owners at 12%, civil servants at 8%, and finally housewives at 1%.

Quantitative Analysis

Convergent Validity

It is known that each indicator variable in the study has an outer loading > 0.7 . According to Chin, as cited by Imam Ghazali, a value of outer loading greater than 0.7 is considered very good for meeting the requirements of convergent validity.

Discriminant Validity

The indicators tested for discriminant validity are valid, as each has a value than the recommended threshold of ≥ 0.7 . Additionally, each indicator's loading on its respective latent variable is higher than on other latent variables, ensuring it effectively distinguishes between them.

Table 4. Composite reliability

Variable	Composite reliability	Criteria	Evidence
Citizen Satisfaction	0.978	$>0,6$	Reliable
Service Quality	0.969	$>0,6$	Reliable
Trust	0.967	$>0,6$	Reliable



Based on the Table, all latent variables have composite reliability values above 0.6, indicating good internal consistency. This shows that the indicators within each latent variable are highly correlated and reliable in representing the latent variable.

Table 5. Average variance extracted (AVE)

Variable	Average Variance Extracted (AVE)	Criteria	Evidence
Trust	0.788	> 0.5	Valid
Citizen Satisfaction	0.720	> 0.5	Valid
Service Quality	0.691	> 0.5	Valid

Based on Table 4.11 above, all latent variables have AVE values ≥ 0.5 . Therefore, It can be said that every variable possesses strong validity.

Table 6. Cronbach's Alpha

Variable	Cronbach's Alpha	Criteria	evidence
Citizen Satisfaction	0.977	> 0.7	Valid
Service Quality	0.968	> 0.7	Valid
Trust	0.966	> 0.7	Valid

According to the information shown in Table 4.12 above, it is evident that the Cronbach's alpha values for each research variable exceed 0.7. Consequently, this finding suggests that every research variable satisfies the Cronbach's alpha criteria and possesses a strong degree of reliability.

Table 7. R square

Variable	R-square	R-square adjusted
Citizen Satisfaction	0.905	0.904
Trust	0.636	0.633

The coefficient of determination (R^2) indicates the extent to which the independent variables account for the variance in the dependent variable.. In this research, R^2 for Citizen Satisfaction, influenced by Trust and Service Quality, is 90.5%, meaning that these factors explain most of the variation in Citizen Satisfaction. For Trust, Service Quality explains 63.6% of the variance, indicating a strong relationship. However, the remaining variation in both Trust (37.4%) and Citizen Satisfaction (9.5%) is influenced by other factors, suggesting that additional elements could impact these variables.

Table 8. Inner Structural model test results

Testing	evidence
Determination Coefficient (R-square)	
Citizen Satisfaction	0,905
Trust	0,636
Q2 Predictive relevance	66,86%



$$\begin{aligned}
 Q^2 &= 1 - ((1 - R_{\text{citizen satisfaction}}^2) \cdot (1 - R_{\text{trust}}^2)) \\
 &= Q^2 = 1 - ((1 - 0.905^2) \cdot (1 - 0.636^2)) \\
 &= 1 - 0.331343 \\
 &= 0.668657
 \end{aligned}$$

Goodness of Fit (GoF)

$$\begin{aligned}
 \text{GoF} &= \sqrt{AVE \times R^2} \\
 &= \sqrt{0.733 \times 0.6362} = \sqrt{0.733 \times 0.404} & 0.544 \\
 &= \sqrt{0.296932} \\
 &= 0.544
 \end{aligned}$$

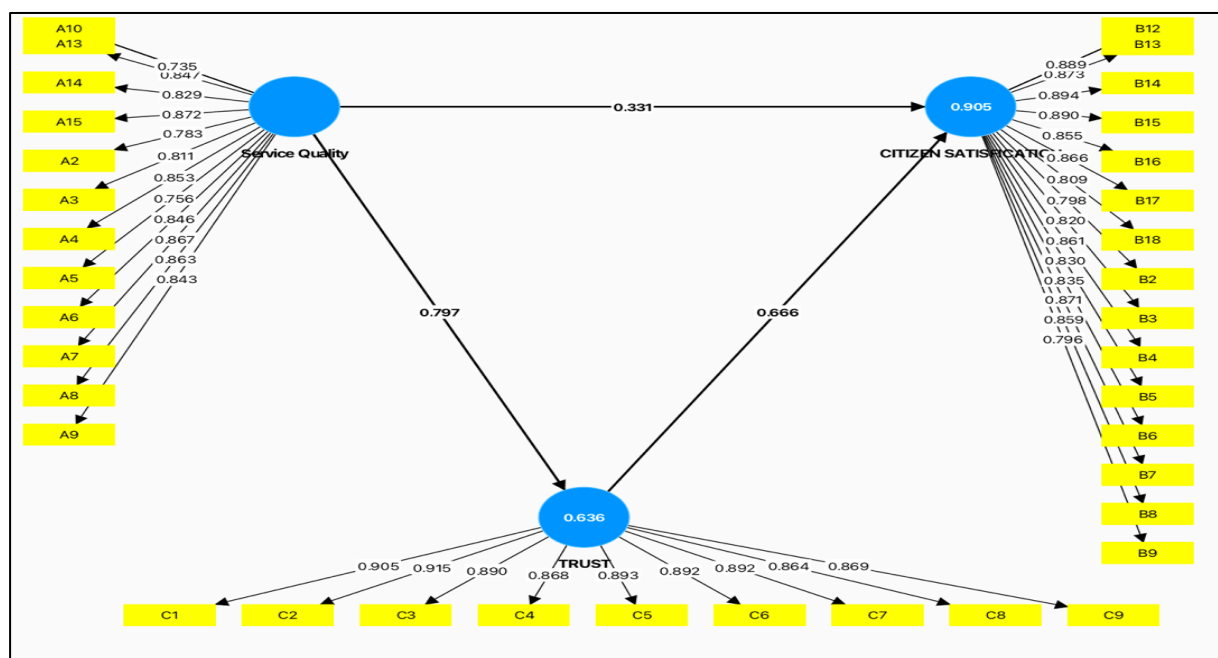


Figure 1. Algorithm result

Q²-square predictive relevance (Q²)

Citizen Satisfaction, influenced by Trust and Service Quality, is explained by 66.86% of the variance, indicating a strong relationship with these two factors. However, 33.14% of the variation is affected by additional factors not represented in the model, suggesting the presence of additional external elements. TQ^2 value, used to assess predictive relevance, indicates that the model has good predictive power, accurately reconstructing observed data and showing high relevance in predicting Citizen Satisfaction and Trust. This highlights that the structural model is not only valid in explaining the relationships between variables but also reliable for predicting outcomes, contributing significantly to understanding the factors affecting Citizen Satisfaction and Trust.

Goodness of Fit (GoF)

It measures how well the structural model fits the observed data. In this study, the GoF value is 0.544, which indicates a strong fit, falling into the large GoF category. This suggests that the model accurately represents the relationships between variables and has high predictive power, making it reliable for further analysis. The large GoF value also shows that the model

aligns well with the data, capturing most of the relevant information and contributing to a better understanding of the analyzed phenomena.

Hypothesis Testing Results

Table 9. *Bootstrapping Result*

Variable	(O)	(M)	(STDEV)	T statistics (O/STDEV)	P value	evidence
Service Quality -> Citizen Satisfaction	0.862	0.865	0.043	20.206	0.000	Diterima
Service Quality -> Trust	0.797	0.800	0.052	15.395	0.000	Diterima
Trust -> Citizen Satisfaction	0.666	0.652	0.084	7.951	0.000	Diterima

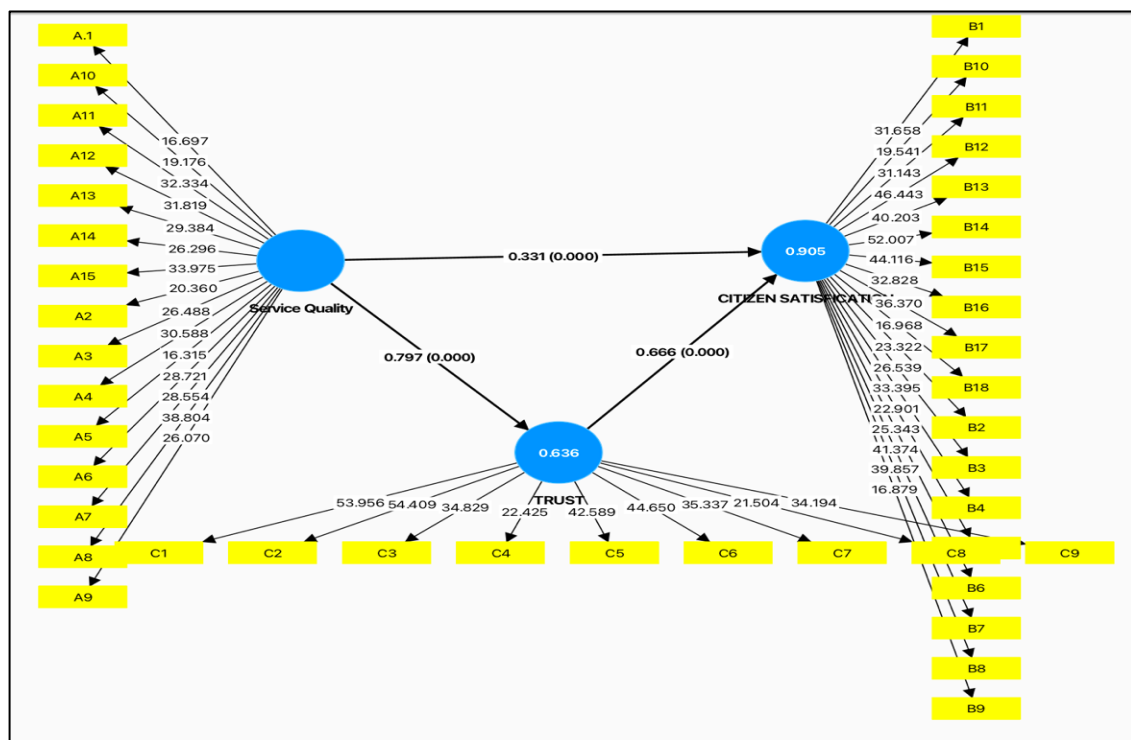


Figure 2. *Bootstrapping Result*

Hypothesis 1: The quality of public service positively influences citizen satisfaction in a significant way.

The path analysis indicate that Service Quality influences Citizen Satisfaction for OSS (Online Single Submission) RBA users. The T-statistic value of 20.206, much higher 1.96, and the P-values of 0.000, smaller than 0.05, indicate a strong statistical significance. Therefore, the hypothesis is accepted, confirming that the service quality provided by OSS RBA positively contributes to user satisfaction.

Hypothesis 2: The quality of public service positively influences trust in a significant way.

The path analysis findings indicate that Service Quality positively and significantly influences Trust for OSS (Online Single Submission) RBA users. The T-statistic value of



15.395, significantly higher than 1.96, and the P-value of 0.000, smaller than 0.05, indicate strong statistical significance. Thus, the hypothesis is accepted, confirming that the service quality provided by OSS RBA positively affects user trust.

Hypothesis 3: Trust has a beneficial and notable impact on citizen satisfactions.

The path analysis results show that Trust has a positive and significant impact on Citizen Satisfaction for OSS (Online Single Submission) RBA users. The T-statistic value of 7.951, significantly higher than 1.96, and the P-value of 0.000, smaller than 0.05, confirm a strong and significant relationship. This supports the hypothesis that user trust in OSS RBA positively influences their satisfaction with the system.

Table 10. Indirect effect

Variabel	(O)	(M)	(STDEV)	T Statistics (O/STDEV)	P Value
Service Quality -> Trust -> Citizen Satisfaction	0.531	0.519	0.057	9.277	0.000

The indirects affect of Service Quality on Citizen Satisfaction beyond Trust as a mediating variable contributes 5.31%, which is significant. This indicates that Service Quality not only directly impacts satisfaction but also enhances it through Trust, strengthening user satisfaction.

Hypothesis 4: The standard of public service quality positively and significantly influences citizen satisfaction via trust.

Public Service Quality positively and significantly impacts Citizen Satisfaction through Trust in the context of OSS RBA users. The T-statistic of 9.277, well above the threshold of 1.96, confirms this relationship as statistically significant. Additionally, the P-value of 0.000 further supports the significance of this result, indicating a real, non-random influence. Therefore, Public Service Quality affects Citizen Satisfaction both directly and indirectly via Trust.

Discussion

The findings of this study make significant contributions to the literature and theory related to technology-based public services, particularly the system. First, the study confirms that service quality plays a crucial role in user satisfaction, supporting the findings of Octavian, Susanti, & Bonti (2023), which identify that e-government service quality through OSS-RBA directly contributes to public satisfaction. Service quality dimensions such as reliability and accessibility are vital in creating positive user experiences, aligning with the SERVQUAL model (Parasuraman, Zeithaml, & Berry). Furthermore, this study emphasizes the essential function of trust as an intermediary linking service quality with satisfaction, which aligns with



Muzaki et al. (2023) and Lontoh, Pangkey, & Dilapanga (2023), highlighting that trust in the system and the government service provider can enhance satisfaction and participation.

Moreover, the research strengthens previous findings about the positive impacts of OSS-RBA reforms on investments, particularly in regions like West Sumatra (Anggunsuri & Zahara, 2023). This study adds a new perspective by showing how service quality and trust can reinforce the connection between system reforms and public satisfaction. It also expands the theoretical framework proposed by Campmas, Iacob, & Simonelli (2022) by integrating psychological dimensions such as trust and satisfaction, offering a more comprehensive models to evaluate the effectiveness of technology-based public services. Additionally, the study supports previous research regarding the connection among service quality and satisfaction, reinforcing the idea that quick responses and reliability influence positive public perceptions of the digital licensing system.

From a managerial perspective, these findings have several practical implications. First, to improve user satisfaction, it is crucial for the government to ensure high-quality services, focusing on clear information, easy access, speed, and data security. Second, managing trust should be a priority, as user trust significantly affects participation in OSS RBA. This can be achieved by ensuring transparency, guaranteeing data security, and resolving issues quickly and fairly. Third, enhancing user experience through technological innovations, such as interactive features and efficient complaint systems, will help strengthen trust and improve satisfaction. Additionally, building effective communication strategies between the government and the public will provide assurance that the services are safe and trustworthy. Finally, continuous evaluation and improvement of the system, based on user feedback and technological advancements, will ensure sustained service quality and increase long-term user satisfaction..

Conclusion

In conclusion, this study successfully validates the theoretical framework proposed in the introduction, highlighting the significant impact of Public Service Quality and Trust on Citizen Satisfaction. The findings align with the expectations set forth earlier, demonstrating that high service quality not only improves citizen satisfaction but also builds trust, which in turn strengthens overall satisfaction with public services. These findings underline the importance of maintaining service reliability, transparency, and responsiveness, as these factors directly contribute to positive citizen experiences and foster greater trust in government services.

1. Public Service Quality service positively and significantly influences citizen satisfaction. When a government organization or service provider delivers high-quality services, the public tends to feel pleasurable if the service quality meets their expectations. In the framework of Service Quality theory (Xu & Wang, 2016), service quality is considered a key determinant of user satisfaction through dimensions such as reliability, responsiveness, assurance, empathy, and physical aspects. Meanwhile, Citizen Satisfaction theory is based on the Expectancy-Disconfirmation model, which states that user satisfaction occurs when



- the perceived service quality matches or exceeds their expectations. This study integrates Trust as a mediating variable to clarify connection service quality and citizen satisfactions.
2. Public Service Quality has a positively and significantly effect on Trust. This study confirms that good service quality also enhances public trust in service providers. Trust (Sondern & Hertel, 2024) arises from consistent service that aligns with expectations and transparency in the service process. When an organization demonstrates consistent and reliable performance in delivering quality services, the public develops a higher level of trust in the organization. This trust can include belief that the organization is reliable and has good intentions in delivering services.
 3. Trust has a beneficial and substantial impact on Citizen Satisfaction. Trust plays a crucial role in enhancing citizen satisfaction, as users feel more comfortable and confident with the services provided. This aligns with the theory that trust mediates the relationship among public service quality and citizen satisfactions. Research by Satriadi et al. (2022) also emphasizes that high trust increases public satisfaction in various public service contexts. Overall, The results indicate that trust positively and significantly influences citizen satisfaction. The greater the trust the public possesses in the government or service provider, the greater their satisfaction with public services.
 4. Public Service Quality has a favorable and meaningful effect on Citizen Satisfaction through Trust. This research indicates that Trust acts as a mediating mechanism that strengthens the connection between service quality and citizen satisfaction. Therefore, good service quality not only provides direct satisfying experiences but also builds trust, which ultimately enhances overall citizen satisfaction. Overall, this study contributes both theoretically and empirically to enhancing the understanding of the relationship between Public Service Quality, Trust, and Citizen Satisfaction. Furthermore, these results support the development of policies focused on improving public service quality to foster greater trust and satisfaction within the community.

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