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Effect of E-Samsat Service Quality and Location on Taxpayer Satisfaction at Cikokol Samsat Tangerang City

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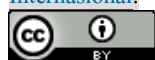
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ABSTRACT

This study aims to analyze the effect of online tax service quality through E-Samsat and location on taxpayer satisfaction at Cikokol Samsat, Tangerang City. The study employed a quantitative approach using a survey method. The population consisted of 381,581 motor vehicle taxpayers recorded at Cikokol Samsat during 2025. Based on the Slovin formula with a 10% margin of error, 100 respondents were selected as the research sample. Data were collected using a questionnaire and analyzed through validity and reliability tests, simple and multiple linear regression, correlation analysis, coefficient of determination, t-test, and F-test using SPSS 26. The findings indicate that service quality has a positive and significant effect on taxpayer satisfaction, with a standardized coefficient of 0.912 and significance of 0.000. Location also has a positive and significant effect, with a standardized coefficient of 0.818 and significance of 0.000. Simultaneously, service quality and location significantly affect taxpayer satisfaction, with R^2 of 0.868. These findings indicate that improving digital service quality and maintaining accessibility and convenience of the physical service location are important for strengthening taxpayer satisfaction.

INTRODUCTION

This study aims to analyze the effect of online tax service quality through E-Samsat and location on taxpayer satisfaction at Cikokol Samsat, Tangerang City. The study employed a quantitative approach using a survey method. The population consisted of 381,581 motor vehicle taxpayers recorded at Cikokol Samsat during 2025. Based on the Slovin formula with a 10% margin of error, 100 respondents were selected as the research sample. Data were collected using a questionnaire and analyzed through validity and reliability tests, simple and multiple linear regression, correlation analysis, coefficient of

determination, t-test, and F-test using SPSS 26. The findings indicate that service quality has a positive and significant effect on taxpayer satisfaction, with a standardized coefficient of 0.912 and significance of 0.000. Location also has a positive and significant effect, with a standardized coefficient of 0.818 and significance of 0.000. Simultaneously, service quality and location significantly affect taxpayer satisfaction, with R^2 of 0.868. These findings indicate that improving digital service quality and maintaining accessibility and convenience of the physical service location are important for strengthening taxpayer satisfaction.

Table 1. Number of Motor Vehicle Taxpayers at Cikokol Samsat, 2023–2025

Year	Number of Taxpayers
2023	307.698
2024	339.986
2025	381.581

Source: Cikokol Samsat Data, Processed by Researcher (2026).

The data show that the taxpayer population increased from 307,698 in 2023 to 339,986 in 2024 and reached 381,581 in 2025. The increasing number of taxpayers indicates the growing importance of service capacity and service quality at Samsat. At the same time, the increase in the number of taxpayers needs to be accompanied by improvements in digital and physical service delivery.

The development of taxpayer numbers does not necessarily correspond directly with the achievement of PKB revenue targets. The following data illustrate the target and realization of PKB revenue at Cikokol Samsat.

Table 2. Target and Realization of Motor Vehicle Tax Revenue

Year	Target	Realization	Percentage in Source Data
2023	Rp486.000.000.000	Rp498.000.000.000	102%
2024	Rp508.200.000.000	Rp342.300.000.000	61,36%
2025	Rp314.000.000.000	Rp256.825.792.900	81,72%

Source: BPD Samsat Cikokol Tangerang City, processed by researcher (2026)

The data indicate that the realization of PKB revenue varied across the three years. In 2023, realization exceeded the target, while in 2024 and 2025 realization was below the respective targets. This situation strengthens the importance of evaluating service processes because increasing taxpayer potential needs to be supported by services capable of encouraging convenience and positive experiences in fulfilling tax obligations.

One of the issues identified during the preliminary observation was the experience of taxpayers when utilizing online services. Complaints were found concerning application errors, vehicle data that could not be identified, payment connectivity, and the need for taxpayers to visit physical service locations for certain processes

Table 3. Preliminary Complaints Related to E-Samsat Services

No.	Complaint	Number of Taxpayers
1	Application technical problems, including login errors	57
2	Vehicle data unavailable or failure during data updating	43
3	Need to visit physical Samsat/Samsat Keliling for certain document processes	32
4	Network disruption during payment transactions	37

Source: Preliminary Observation, Processed by Researcher (2026)

The complaints indicate that digital service quality remains an important issue. Previous research on online tax services in Indonesia also identified technical and infrastructure-related problems, including server capacity, internal communication, human resources, and information and

communication technology infrastructure (Putra & Fathurrahman, 2023).

In addition to digital service quality, physical location remains relevant. Preliminary observations at Cikokol Samsat identified complaints concerning limited parking capacity, congestion around the service area, crowded waiting areas, and manual

queues for certain vehicle inspection processes. These conditions suggest that the convenience of the service location can influence the overall experience of taxpayers even when digital payment facilities are available.

Service quality refers to the ability of a service provider to deliver services consistently according to customer expectations. In public services, service quality can be assessed through dimensions such as reliability, responsiveness, assurance, empathy, and tangible aspects (Diotiharta et al., 2023). These dimensions are particularly relevant to E-Samsat because taxpayers require reliable systems, responsive assistance, clear information, secure transactions, and adequate supporting facilities.

Location also represents an important element of service delivery. Accessibility, visibility, traffic conditions, parking availability, and the surrounding environment can determine the ease with which consumers or service users reach a service facility. Research by Muhajir and Ratnasari (2021) found that location and service were positively associated with customer satisfaction in a service context.

Taxpayer satisfaction can be understood as the evaluation that arises after taxpayers compare their expectations with the actual service experience. Kotler et al. (2024) explain customer satisfaction within the broader framework of evaluating perceived performance against expectations. In the context of taxation, satisfaction becomes important because a positive service experience may encourage taxpayers to perceive tax administration as easier, more reliable, and more responsive.

Previous empirical research supports the relationship between service quality and satisfaction. Utami and Rahman (2023), for example, found that service quality significantly affected the satisfaction of motor vehicle taxpayers at Maros Samsat. Similar findings were reported by Mahmud et al. (2023), who found a significant relationship between service quality and motor vehicle taxpayer satisfaction.

Research concerning location also indicates its relevance to satisfaction. Wulandari, Asdi, and Basir MR found that location had a positive and

significant effect on customer satisfaction together with service quality and price.

Although previous studies have examined service quality and location, this study places the variables within the specific context of Cikokol Samsat Tangerang City by combining online tax service quality through E-Samsat with the physical location of Samsat. The combination is relevant because the taxpayer experience is not exclusively digital or physical; taxpayers may move between online and offline service channels depending on their administrative needs.

Therefore, this study aims to determine: (1) the effect of E-Samsat service quality on taxpayer satisfaction; (2) the effect of location on taxpayer satisfaction; and (3) the simultaneous effect of E-Samsat service quality and location on taxpayer satisfaction at Cikokol Samsat, Tangerang City.

Literature Review and Hypothesis

Service Quality

Service quality is an evaluation of the extent to which the service provided meets or exceeds user expectations. In this research, service quality is operationalized through five dimensions: reliability, responsiveness, assurance, empathy, and tangible aspects. These dimensions represent the ability of the service system and service personnel to provide accurate, responsive, trustworthy, attentive, and physically supported services (Diotiharta et al., 2023). The concept is particularly applicable to E-Samsat because taxpayers expect applications to operate reliably, information to be accurate, transactions to be secure, assistance to be responsive, and supporting facilities to be adequate.

Empirically, the relationship between service quality and satisfaction has been consistently identified in service research. In the taxation context, Utami and Rahman (2023) found that service quality significantly influenced motor vehicle taxpayer satisfaction.

Based on the theoretical and empirical arguments, the first hypothesis is:

H1: Service quality has a positive and significant effect on taxpayer satisfaction at Cikokol Samsat, Tangerang City.

Location

Location refers to the physical place where service activities are carried out. Important location considerations include accessibility, visibility, traffic conditions, parking facilities, and the surrounding environment. For Samsat services, location is not only related to geographical distance but also to the practical convenience experienced by taxpayers when reaching, entering, waiting, and completing administrative processes.

Muhajir and Ratnasari (2021) demonstrated that location can influence satisfaction in a service context. Wulandari et al. also found a significant positive relationship between location and customer satisfaction.

Therefore:

H2: Location has a positive and significant effect on taxpayer satisfaction at Cikokol Samsat, Tangerang City.

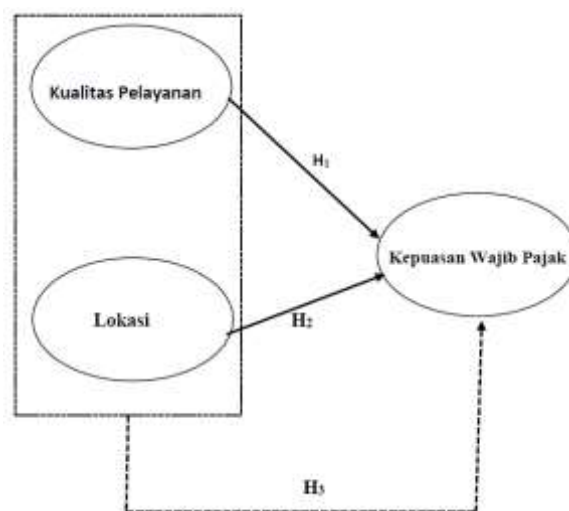
Simultaneous Effect

Taxpayer satisfaction is unlikely to be determined by only one service channel. Digital service quality determines the ease and reliability of online transactions, while physical location determines the convenience of taxpayers who still require face-to-face services. The two dimensions therefore complement each other in creating an integrated taxpayer experience.

Accordingly:

H3: Service quality and location simultaneously have a positive and significant effect on taxpayer satisfaction at Cikokol Samsat, Tangerang City.

Figure 1. Research Conceptual Framework



Source: Researcher, 2026.

The model places service quality (X1) and location (X2) as independent variables and taxpayer satisfaction (Y) as the dependent variable.

METHODS

This study employed a quantitative explanatory approach. The research was conducted at Cikokol Samsat, Tangerang City. The unit of analysis was motor vehicle taxpayers who had interacted with the Samsat service.

The research population consisted of motor vehicle taxpayers recorded at Cikokol Samsat during

January–December 2025. The total population was 381,581 taxpayers. The sample size was determined using the Slovin formula with a 10% margin of error:

$$n = N / [1 + N(e^2)]$$

where n represents the sample size, N represents the population, and e represents the margin of error. With a population of 381,581 and a 10% error level, the calculated sample was approximately 100 respondents. Thus, the study used 100 respondents.

Primary data were obtained through questionnaires distributed to respondents. The questionnaire used a five-point Likert scale

consisting of: 5 = strongly agree/very satisfied, 4 = agree/satisfied, 3 = fairly agree/fairly satisfied, 2 = disagree/not satisfied, and 1 = strongly disagree/very dissatisfied. Supporting data were obtained from observations, interviews, official institutional data, scientific literature, and relevant regulations.

The research variables consisted of service quality (X1), location (X2), and taxpayer satisfaction (Y). Each variable was measured through ten questionnaire statements. Service quality was measured using reliability, responsiveness, assurance, empathy, and tangible dimensions. Location was measured through aspects of accessibility, visibility, traffic, parking, and environmental convenience. Taxpayer satisfaction was measured through the extent to which taxpayers felt satisfied, experienced positive feelings, perceived that expectations had been fulfilled, and evaluated their service experience positively.

Data analysis was conducted using SPSS 26. The analysis consisted of descriptive analysis, validity testing, reliability testing, simple linear regression, multiple linear regression, correlation analysis, coefficient of determination, t-test, and F-test. A significance level of 5% ($\alpha = 0.05$) was applied.

Results and Discussion

Validity Test

The validity test was conducted by comparing the calculated correlation coefficient with the critical value. The research data report an r-table value of 0.1966. All ten service quality items, all ten location items, and all ten taxpayer satisfaction items were declared valid because their calculated correlation coefficients exceeded the reported r-table value.

Table 4. Validity Test Summary

Variable	Number of Items	Lowest r-count	Highest r-count	Result
Service Quality (X1)	10	0,440	0,766	Valid
Location (X2)	10	0,459	0,757	Valid
Taxpayer Satisfaction (Y)	10	0,424	0,657	Valid

Source: SPSS 26, Processed by Researcher (2026).

The results demonstrate that each questionnaire item has sufficient empirical association with its respective construct. Therefore, all items can be retained for subsequent analysis.

Reliability Test

Reliability was assessed using Cronbach's Alpha. The results are presented below.

Table 5. Reliability Test

Variable	Cronbach's Alpha	Number of Items	Result
Service Quality (X1)	0.879	10	Reliable
Location (X2)	0.852	10	Reliable
Taxpayer Satisfaction (Y)	0.755	10	Reliable

Source: SPSS 26, Processed by Researcher (2026).

All Cronbach's Alpha values exceeded 0.60. Service quality obtained 0.879, location 0.852, and taxpayer satisfaction 0.755. Thus, the instruments demonstrated acceptable internal consistency and were considered reliable.

Simple Regression: Service Quality and Taxpayer Satisfaction

The simple regression analysis produced the following equation:

$$Y = 12.060 + 0.734X_1$$

The standardized coefficient (Beta) was 0.912, with a t-value of 21.960 and significance of 0.000.

Table 6. Simple Regression of Service Quality on Taxpayer Satisfaction

Variable	B	Beta	t	Sig.
Constant	12,060	–	8,432	0.000
Service Quality	0,734	0,912	21,960	0.000

Source: SPSS 26, Processed by Researcher (2026).

The positive regression coefficient indicates that an improvement in service quality is associated with higher taxpayer satisfaction. The significance value of 0.000 is below 0.05, indicating a statistically significant relationship.

The result supports H1. This finding is consistent with Utami and Rahman's (2023) study of motor vehicle taxpayers at Maros Samsat, which found a significant effect of service quality on taxpayer satisfaction.

In the context of Cikokol Samsat, this result indicates that taxpayers' satisfaction is strongly associated with the quality of the service experience. The preliminary complaints concerning application errors, vehicle data problems, payment connectivity,

and administrative information demonstrate that service quality remains a critical element. Improving system reliability, providing clearer information, strengthening responsiveness, and ensuring appropriate assistance can therefore contribute to better taxpayer experiences.

Simple Regression: Location and Taxpayer Satisfaction

The simple regression equation for location was:

$$Y = 10.880 + 0.748X_2$$

The standardized coefficient was 0.818, with a t-value of 14.079 and significance of 0.000.

Table 7. Simple Regression of Location on Taxpayer Satisfaction

Variable	B	Beta	t	Sig.
Constant	10,880	–	5	0,000
Location	0,748	0,818	14	0,000

Source: SPSS 26, Processed by Researcher (2026).

The coefficient is positive and the significance value is below 0.05. Therefore, H2 is supported. The result indicates that more favorable perceptions of the Samsat location are associated with greater taxpayer satisfaction.

This finding is consistent with the service-location perspective proposed by Muhajir and Ratnasari (2021), where location was found to have a significant relationship with customer satisfaction. It is also consistent with Wulandari et al. (2024), who found that location significantly contributed to customer satisfaction.

Although digital tax services provide greater flexibility, the physical Samsat location remains

relevant for taxpayers who require face-to-face administrative services. Accessibility, parking, traffic, waiting areas, and the overall convenience of the location can therefore influence the satisfaction generated by the complete service experience.

Multiple Regression

Multiple regression was conducted to determine the simultaneous effect of service quality and location on taxpayer satisfaction. The regression equation obtained was:

$$Y = 8.036 + 0.553X_1 + 0.271X_2 + e$$

The results are presented below.

Table 8. Multiple Regression Results

Variable	B	Beta	t	Sig.
Constant	8	–	5	0,000
Service Quality (X1)	0,553	0,686	12	0,000
Location (X2)	0,271	0,296	5	0,000

Source: SPSS 26, Processed by Researcher (2026).

Both independent variables have positive regression coefficients and significance values below 0.05. Thus, service quality and location each contribute significantly to taxpayer satisfaction when analyzed simultaneously.

The standardized beta coefficient also shows that service quality has a stronger relative contribution than location in the multiple regression model. Service quality has a Beta of 0.686, whereas location has a Beta of 0.296. This finding indicates that although physical location remains important, the quality of service has a greater relative role in explaining taxpayer satisfaction within this research model.

Correlation and Coefficient of Determination

The correlation between service quality and taxpayer satisfaction was $R = 0.912$, while the correlation between location and taxpayer satisfaction was $R = 0.818$. Both relationships were categorized as very strong according to the classification used in the original research. When service quality and location were considered together, the multiple correlation coefficient was $R = 0.932$.

Table 9. Coefficient of Determination

R	R Square	Adjusted R Square	Interpretation
0,932	0,868	0,865	Very strong model

Source: SPSS 26, Processed by Researcher (2026).

The R Square value of 0.868 means that 86.8% of the variation in taxpayer satisfaction in the research model can be statistically explained by service quality and location. The remaining 13.2% is associated with other factors outside the variables examined in this study.

The relatively high explanatory value suggests that taxpayer satisfaction at Cikokol Samsat is closely associated with the combination of digital/administrative service quality and physical service location. Nevertheless, the remaining 13.2% indicates that other factors may also contribute, such

as perceived ease of use of the application, trust, payment convenience, information quality, perceived fairness, waiting time, or taxpayer characteristics.

Simultaneous Test

The F-test produced an F-value of 319.453 with a significance value of 0.000. The F-value was considerably greater than the reported F-table value of 3.09.

Table 10. Simultaneous Test

F-count	F-table	Sig.	Decision
319,453	3,09	0,000	H3 supported

Source: SPSS 26, Processed by Researcher (2026).

The result demonstrates that service quality and location simultaneously have a positive and significant effect on taxpayer satisfaction. Thus, H3 is supported.

The finding has practical implications for Samsat management. Improvements should not focus solely on the digital application while neglecting physical service facilities. Conversely, improving the physical office without addressing online service problems may also limit the overall taxpayer experience. An integrated improvement strategy is therefore more appropriate.

Discussion

The findings demonstrate that service quality is the strongest predictor among the two independent variables. This is evident from the standardized Beta coefficient in the multiple regression model, where service quality obtained 0.686 compared with 0.296 for location. The result is relevant to the current transformation of public taxation services because taxpayers increasingly interact with government services through digital channels.

The official Bapenda Banten information confirms that digital payment facilities have been developed to allow taxpayers to pay motor vehicle tax without visiting Samsat offices, including through SIGNAL and SAMBAT. Consequently, technical reliability, information clarity, transaction security, and responsiveness to user problems become important elements of perceived service quality.

The preliminary complaints identified in this study provide practical context for the statistical findings. Complaints about application errors and vehicle data verification indicate the importance of reliability. Payment network problems are related to service system reliability and convenience. Complaints concerning the need to return to physical service locations show that the online and offline service experiences remain interconnected.

The finding concerning location also deserves attention. Despite the increasing availability of E-Samsat, the physical Samsat office remains necessary for taxpayers whose administrative needs cannot be completed entirely online. Therefore, adequate parking, accessible routes, clear service areas, comfortable waiting facilities, and orderly

queues remain important components of public service quality.

The simultaneous effect of the two independent variables reinforces the argument that taxpayer satisfaction is formed through an integrated service experience. A taxpayer may initially use SIGNAL or SAMBAT, encounter a problem, seek assistance, and subsequently visit the Samsat office. In such circumstances, digital service quality and physical service location become complementary rather than competing factors.

The findings are broadly consistent with previous studies. Utami and Rahman (2023) found a significant influence of service quality on motor vehicle taxpayer satisfaction, while Mahmud et al. (2023) reported similar evidence in the Samsat Maros context. Research by Wulandari et al. also supports the role of location in customer satisfaction.

The contribution of the present research lies in bringing these two perspectives together in the context of Cikokol Samsat, where taxpayers are exposed to both digital E-Samsat services and physical Samsat services. This provides a more integrated perspective on taxpayer satisfaction than examining online service or physical service location separately.

CONCLUSION

The results show that service quality has a positive and significant effect on taxpayer satisfaction at Cikokol Samsat, Tangerang City. The service quality variable obtained a standardized coefficient of 0.912 in the simple regression analysis, with a significance value of 0.000. Therefore, H1 is supported.

Location also has a positive and significant effect on taxpayer satisfaction. The standardized coefficient was 0.818 with a significance value of 0.000, indicating that better perceptions of the accessibility and convenience of the Samsat location are associated with higher taxpayer satisfaction. Thus, H2 is supported.

Furthermore, service quality and location simultaneously have a positive and significant effect on taxpayer satisfaction. The F-test produced a value of 319.453 with a significance level of 0.000, while the coefficient of determination was 0.868.

Therefore, H3 is supported, and 86.8% of the variation in taxpayer satisfaction in the research model can be explained by service quality and location.

From a practical perspective, Cikokol Samsat should prioritize improvements in the reliability and responsiveness of E-Samsat services, particularly in relation to application errors, data verification, payment connectivity, and information clarity. At the same time, physical service facilities should continue to be improved through better parking management, waiting-area capacity, queue management, accessibility, and service information.

Future research may add variables such as perceived ease of use, trust in digital services, information quality, perceived security, or taxpayer compliance to obtain a more comprehensive explanation of taxpayer satisfaction.

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