

THE INFLUENCE OF SERVICE QUALITY AND APPARATUS COMPETENCE ON PUBLIC SATISFACTION THROUGH PUBLIC PARTICIPATION AT THE DELI TUA DISTRICT OFFICE, DELI SERDANG REGENCY

Warniamawati Waruwu*, Elazhar & Barham Siregar

Universitas Pembinaan Masyarakat Indonesia Medan, Indonesia

*Email: warniwaruwu1@gmail.com**

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Abstract

This study aims to analyze the influence of service quality and apparatus competence on public satisfaction through community participation at the Deli Tua Sub-district Office, Deli Serdang Regency. This type of research is quantitative research with an associative approach, using primary data obtained through observation and interviews with the Deli Tua Sub-district community. Data analysis was carried out with the help of statistical software through partial tests (t), simultaneous tests (F), and coefficient of determination (R^2) analysis. The results of the study indicate that: (1) service quality has a positive and significant effect on public satisfaction with a calculated t value of $8.728 > t$ table 1.985 and an Adjusted R^2 of 0.432; (2) apparatus competence also has a positive and significant effect with a calculated t value of $7.784 > t$ table 1.985 and an Adjusted R^2 of 0.376; (3) Simultaneously, service quality, apparatus competence, and public participation have a positive and significant effect on public satisfaction, with an F-value of $52.986 > F$ -table of 3.25 and an R^2 of 0.612. These results demonstrate that public participation acts as a mediating variable that strengthens the influence of service quality and apparatus competence on public satisfaction. The higher the public participation, the more effective the performance of public services in Deli Tua District.

Keywords: Service Quality, Apparatus Competence, Public Participation, Public Satisfaction

A. INTRODUCTION

Every community organization is required to provide quality services to increase public satisfaction. Public satisfaction is a crucial indicator in assessing the success of government service delivery, as it reflects the extent to which the services provided meet or exceed public expectations. Based on Ministerial Decree No. 25 of 2004, public satisfaction is the result of comparing expectations with the reality of the services received. Therefore, improving the quality of public services is a top priority in building trust and a positive image of government institutions.

Service quality plays a significant role in determining the level of public satisfaction. Fast, accurate, transparent, and procedurally sound services will provide a positive experience for the public. However, service quality will not be optimal without the support of competent and competent civil servants. Government officials play the primary role of implementing public services, so their knowledge, skills, and professional attitudes significantly influence public perception of the agency's performance.

Furthermore, public participation also plays a crucial role in improving the effectiveness of public services. Active public involvement in the planning, implementation, and evaluation

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of services can strengthen accountability and encourage the creation of services that are more responsive to public needs.

The Deli Tua Sub-district Office of Deli Serdang Regency, as a government institution at the sub-district level, is responsible for providing efficient and high-quality administrative services. However, observations indicate that there are still obstacles in the service process, such as slow procedures, lack of professionalism of officials, and low public participation. Based on these conditions, this study was conducted to analyze the influence of service quality and official competence on public satisfaction through community participation at the Deli Tua Sub-district Office of Deli Serdang Regency.

B. LITERATURE REVIEW

Service Quality

Service quality is the comparison of the quality received by customers (perceived quality), after receiving a service, with the quality expected (Siswadi F, 2019). Service quality is the level of ability or how well a service provider meets the expectations and needs of the public. Service quality encompasses various aspects, such as speed, accuracy, reliability, and service delivery methods, all of which contribute to public satisfaction. The better the quality of service provided, the more likely customers will be satisfied and loyal to the service provider.

The dimensions of service quality in relation to public satisfaction include the following important aspects:

- **Tangible:** Refers to the physical aspects that can be observed by the public. This includes all tangible elements that support the service and influence customer perceptions of its quality.
- **Reliability:** The ability to deliver promised services consistently and accurately. Reliability creates trust and satisfaction among customers.
- **Responsiveness:** The willingness and ability to assist customers quickly and efficiently. This dimension includes response time and attention to customer needs.
- **Assurance:** Refers to the level of trust and security felt by customers in the service provided.
- **Empathy:** The ability to understand and meet individual customer needs. Empathy creates better relationships and increases satisfaction (Apriliana A, 2022).

Civil Servant Competence

Civil servant competence encompasses the knowledge, skills, and attitudes necessary to effectively carry out the duties and functions of civil servants (ASN) in facing constantly changing global challenges (Suryanto et al., 2023). This requires civil servants to have an adaptive and innovative mindset in carrying out their duties.

The following are the dimensions of civil servant competence:

- **Technical Competence:** Definition: Abilities related to the specific duties of an employee. Indicators: Education level, technical training, and work experience in a related field.
- **Managerial Competence:** Definition: Ability to manage resources and lead a team. Indicators: Managerial education, leadership training, and experience in a managerial position.
- **Sociocultural Competence:** Definition: Ability to interact with socially and culturally diverse communities. Indicators: Work experience related to a pluralistic society, as well as an understanding of local norms and values.
- **Personal Competence:** Definition: Individual attitudes and behaviors that support task performance. Indicators: Integrity, responsibility, flexibility, and adaptability.

- **Performance-Based Competence:** Definition: Ability to achieve work results that meet established standards. Indicators: Performance evaluation based on work results, effectiveness, and efficiency.

Community Participation

Community participation is the involvement of the community in the process of identifying problems and potentials within the community, selecting and making decisions about alternative solutions to address the problems, implementing efforts to address them, and involving the community in the process of evaluating the problems that arise (Zuraida E, 2020). Participation is the voluntary contribution of a community group to decision-making, which requires the community to engage emotionally and mentally in achieving a goal that will improve their well-being.

Indicators of community participation can be seen from various aspects, including:

- **Thought:** Suggestions and opinions from the community are included in the decision-making process. The community is involved in discussions or deliberations regarding a program or policy. They provide input based on their experience, expertise, or perceived needs.
- **Manpower:** The community voluntarily or cooperatively participates in physical activities, such as infrastructure development, environmental cleanup, or other social activities. Community groups are also involved in activities that require labor, such as community service or volunteering.
- **Materials:** The community contributes funds, goods, or facilities to support the program or activity. Participation in the form of donations, both from individuals and groups, helps sustain the social or development project.
- **Planning:** Community involvement in developing the program or project, including determining goals, objectives, and implementation strategies. The community participates in planning meetings, budgeting, and determining development priorities in their area.
- **Implementation:** The community actively implements the program or activity according to its assigned roles and responsibilities. Direct community involvement in monitoring and evaluating activities ensures the program's effectiveness and sustainability.

Public Satisfaction

The Indonesian Ombudsman's theory (2020) defines public satisfaction as the level of public satisfaction obtained from measuring the quality of public services. This encompasses public perceptions of how well government services meet their expectations and needs.

According to Decree of the Minister of State Apparatus Empowerment Number 14 of 2017, public satisfaction has the following indicators:

- **Requirements:** These are the requirements that must be met in administering a type of service, including both technical and administrative requirements.
- **Systems, Mechanisms, and Procedures:** These are standardized service procedures for service providers and recipients, including complaints.
- **Completion Time:** This is the time required to complete the entire service process for each type of service.
- **Fees/Tariffs:** These are the costs charged to service recipients for administering and/or obtaining services from the service provider, the amount of which is determined by agreement between the service provider and the community.
- **Service Product Specification:** These are the results of the service provided and received in accordance with established provisions. These service products are the result of each service specification.

- Implementer Competence: These are the abilities that implementers must possess, including knowledge, expertise, skills, and experience.
- Implementer Behavior: These are the attitudes of officers in providing services.
- Handling Complaints, Suggestions, and Feedback: These are the procedures for handling complaints and following up.
- Facilities and infrastructure: Facilities are anything that can be used as a tool to achieve goals and objectives. Infrastructure is anything that is the main support for the implementation of a process (business, development, project). Facilities are used for movable objects (computers, machines) and infrastructure for immovable objects (buildings).

C. RESEARCH METHODOLOGY

This study uses a quantitative approach, namely a method that utilizes numerical data to collect information, analyze phenomena, and draw conclusions objectively. According to Sugiyono (2019), quantitative research is based on the philosophy of positivism with empirical, measurable, rational, and systematic characteristics. This study aims to determine the effect of Service Quality (X1) and Apparatus Competence (X2) on Public Satisfaction (Y) through Public Participation (Z) at the Deli Tua Sub-district Office, Deli Serdang Regency. The population in this study is all people who interact at the Deli Tua Sub-district Office. Based on data from the Central Statistics Agency of Deli Serdang Regency (2024), the population in Deli Tua District consists of Deli Tua Village (13,171 people), West Deli Tua (8,071 people), and East Deli Tua (7,404 people), so that the total population is 28,646 people. Referring to Sugiyono (2021), population is a generalization area that has certain characteristics to be studied and conclusions drawn. The sample size was determined using the Slovin formula, which is used to determine sample size based on a certain margin of error (Sugiyono, 2017). With a margin of error of 10% and a population of 28,646, the calculation results were: $n = 28,646 / (1 + 28,646 \times 0.01) = 99.65 \approx 100$ respondents. Therefore, the sample size for this study was set at 100 respondents

The analytical model used in this study was path analysis, which aims to assess the direct and indirect relationships between the independent variables (Service Quality and Apparatus Competence) and the dependent variable (Public Satisfaction) and the intervening variable (Public Participation). Prior to the path analysis, the data were tested for validity and reliability to ensure the accuracy of the research instrument. Next, classical assumption tests, including normality, multicollinearity, and heteroscedasticity, were conducted to meet the requirements of regression analysis. Testing the relationship between variables is carried out through multiple linear regression, t-test for partial testing, f-test for simultaneous testing, and coefficient of determination (R²) to determine how much the independent variable contributes in explaining the dependent variable.

D. RESULT AND DISCUSSION

Based on data processing of 100 respondents in Deli Tua District, the majority of respondents were female (54%), while 46% were male. In terms of educational attainment, the majority of respondents were high school graduates (51%), followed by junior high school graduates (20%), elementary school graduates (19%), and those with a diploma (3) and bachelor's degree (10%). In terms of age, respondents were predominantly in the 41–45 age group (24%), followed by 36–40 age groups (23%), 46–50 age groups (20%), 31–35 age groups (19%), and the 25–30 age group (14%). Overall, this composition indicates that respondents were predominantly individuals of middle-productive age with a high-school education.

Validity Test

Table 1.1 Validity Test

Variable	Item	Correlation	Sig	Inf.
Quality of Service X1	X1.1	0,369	0,000	Valid
	X1.2	0,372	0,000	Valid
	X1.3	0,483	0,000	Valid
	X1.4	0,417	0,000	Valid
	X1.5	0,315	0,001	Valid
	X1.6	0,394	0,000	Valid
	X1.7	0,372	0,000	Valid
	X1.8	0,429	0,000	Valid
	X1.9	0,440	0,000	Valid
	X1.10	0,353	0,000	Valid
	X1.11	0,384	0,000	Valid
	X1.12	0,370	0,000	Valid
	X1.13	0,354	0,000	Valid
	X1.14	0,335	0,001	Valid
	X1.15	0,579	0,000	Valid
	X1.16	0,370	0,000	Valid
	X1.17	0,338	0,001	Valid
	X1.18	0,436	0,000	Valid
	X1.19	0,339	0,001	Valid
	X1.20	0,397	0,000	Valid
	X2.1	0,416	0,000	Valid
	X2.2	0,400	0,000	Valid
	X2.3	0,331	0,001	Valid
	X2.4	0,309	0,002	Valid
	X2.5	0,354	0,000	Valid
	X2.6	0,392	0,000	Valid

ARTICLE				
Civil Servant Competence	X2	X2.7	0,498	0,000 Valid
		X2.8	0,342	0,000 Valid
		X2.9	0,471	0,000 Valid
		X2.10	0,414	0,000 Valid
		X2.11	0,385	0,000 Valid
		X2.12	0,394	0,000 Valid
		X2.13	0,531	0,000 Valid
		X2.14	0,511	0,000 Valid
		X2.15	0,433	0,000 Valid
		X2.16	0,334	0,001 Valid
		X2.17	0,360	0,000 Valid
		X2.18	0,407	0,000 Valid
		X2.19	0,386	0,000 Valid
		X2.20	0,336	0,001 Valid
		Y.1	0,323	0,001 Valid
		Y.2	0,360	0,000 Valid
		Y.3	0,346	0,000 Valid
		Y.4	0,326	0,000 Valid
		Y.5	0,424	0,000 Valid
		Y.6	0,336	0,001 Valid
Public Satisfaction		Y.7	0,471	0,000 Valid
		Y.8	0,483	0,000 Valid
		Y.9	0,418	0,000 Valid
	Y	Y.10	0,419	0,000 Valid
		Y.11	0,372	0,000 Valid
		Y.12	0,406	0,000 Valid
		Y.13	0,501	0,000 Valid
		Y.14	0,316	0,001 Valid

ARTICLE				
	Y.15	0,479	0,000	Valid
	Y.16	0,391	0,000	Valid
	Y.17	0,419	0,000	Valid
	Y.18	0,552	0,000	Valid
	Y.19	0,462	0,000	Valid
	Y.20	0,331	0,001	Valid
	Z.1	0,307	0,002	Valid
	Z.2	0,419	0,000	Valid
	Z.3	0,446	0,000	Valid
	Z.4	0,323	0,001	Valid
	Z.5	0,438	0,000	Valid
	Z.6	0,396	0,000	Valid
Public Satisfaction	Z.7	0,490	0,000	Valid
Z	Z.8	0,404	0,000	Valid
	Z.9	0,442	0,000	Valid
	Z.10	0,486	0,000	Valid
	Z.11	0,397	0,000	Valid
	Z.12	0,456	0,000	Valid
	Z.13	0,553	0,000	Valid
	Z.14	0,398	0,000	Valid
	Z.15	0,439	0,000	Valid

Source: Processed by Researchers, 2025

The results of the data validity test using IBM SPSS Statistics 25 showed that all statement items in the Service Quality variable (X1), ranging from X1.1 to X1.20; the Apparatus Competence variable (X2), ranging from X2.1 to X2.20; the Public Satisfaction variable (Y), ranging from Y.1 to Y.20; and the Community Participation variable (Z), ranging from Z.1 to Z.15, were considered valid because each statement item had a significance value of less than 0.05. This indicates that each statement item met the eligibility requirements as a measurement tool in this study.

Reliability Test

Data Variable X1 (Service Quality)

Table 2. R Reliability of Data Variable X1 (Service Quality)

ARTICLE

Reliability Statistics

Cronbach's Alpha	N of Items
.701	20

Source: SPSS Data Processing Results, 2025

The reliability test results show that the Cronbach's Alpha value for the Service Quality variable is 0.701, or 70.1%, indicating that the value is greater than 0.60, thus the questionnaire for variable X1 in this study is considered reliable. The Cronbach's Alpha value of 0.701 indicates that the reliability criterion is high, as it is $0.60 < 1.00$.

Data for Variable X2 (Apparatus Competence)

Table 3. Data Reliability of Variable X2 (Apparatus Competence)

Reliability Statistics

Cronbach's Alpha	N of Items
.703	20

Source: SPSS Data Processing Results, 2025

The reliability test results show that the Cronbach's Alpha value for the Civil Servant Competence variable is 0.703, or 70.3%, indicating that the value is greater than 0.60, thus the questionnaire for variable X2 in this study is considered reliable. The Cronbach's Alpha value of 0.703 indicates that the reliability criterion is high, as it is $0.60 < 1.00$.

Data for Variable Y (Public Satisfaction)

Table 4. Reliability of Data for Variable Y (Public Satisfaction)

Reliability Statistics

Cronbach's Alpha	N of Items
.725	20

Source: SPSS Data Processing Results, 2025

The reliability test results show that the Cronbach's Alpha value for the public satisfaction variable is 0.725, or 72.5%, indicating that the value is greater than 0.60, thus deeming the Y variable questionnaire reliable. The Cronbach's Alpha value of 0.725 indicates that the reliability criterion is high, as it is $0.60 < 1.00$.

Data for Variable Z (Public Participation)

Table 5. Reliability of Data for Variable Z (Community Participation)

Reliability Statistics

Cronbach's Alpha	N of Items
.664	15

Source: SPSS Data Processing Results, 2025

The reliability test results showed that the Cronbach's Alpha value for the community participation variable was 0.664, or 66.4%, indicating that the value was greater than 0.60, thus deeming the Z-variable questionnaire reliable. Based on the Cronbach's Alpha value of 0.664, the table indicates that the reliability criteria are high, as they are $0.60 < 1.00$.

Classical Assumption Test

Normality Test

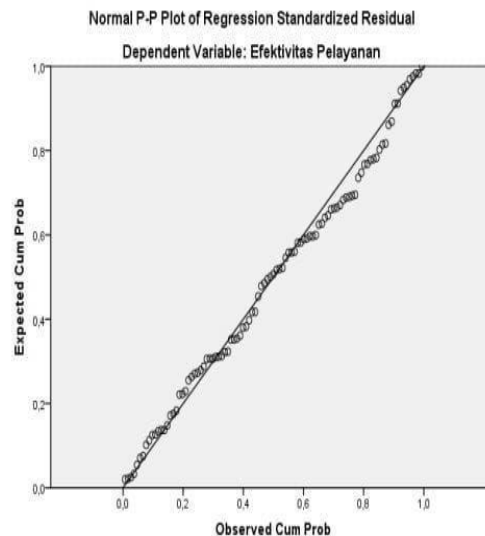


Figure 1. Normality Test for Normal Probability Plot

Source: Processed by Researchers, 2025

The normality test image above shows that the points for each statement follow a straight line and are spread out close to and follow the line's direction. Therefore, it can be concluded that the data is normally distributed. Therefore, the regression model in this study meets the requirements for normality.

Table 6. Normality Test Kolmogorov – Smirnov
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	2,34918636
Most Extreme Differences	Absolute	,071
	Positive	,071
	Negative	-,041
Kolmogorov-Smirnov Z		,076
Asymp. Sig. (2-tailed)		,700

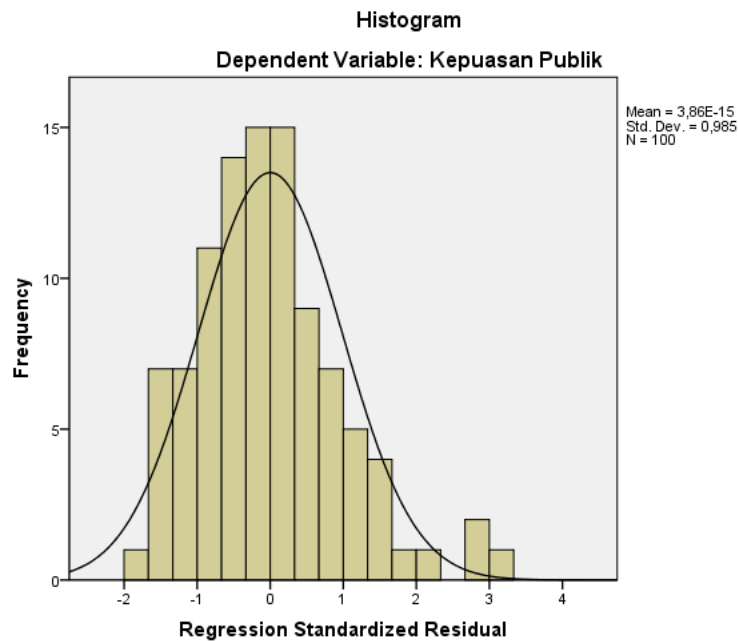
a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS Data Processing Results, 2025

The results of the One-Sample Kolmogorov-Smirnov test showed a significance value of 0.700, indicating that the value is greater than 0.05, thus concluding that the data is normally

distributed. Therefore, the regression model in this study meets the requirements for



normality.

Figure 2. Histogram Normality Test
Source: Processed by Researchers, 2025

Based on the figure above, it appears that the data follows the histogram line, indicating that the data is normally distributed.

Heteroscedasticity Test

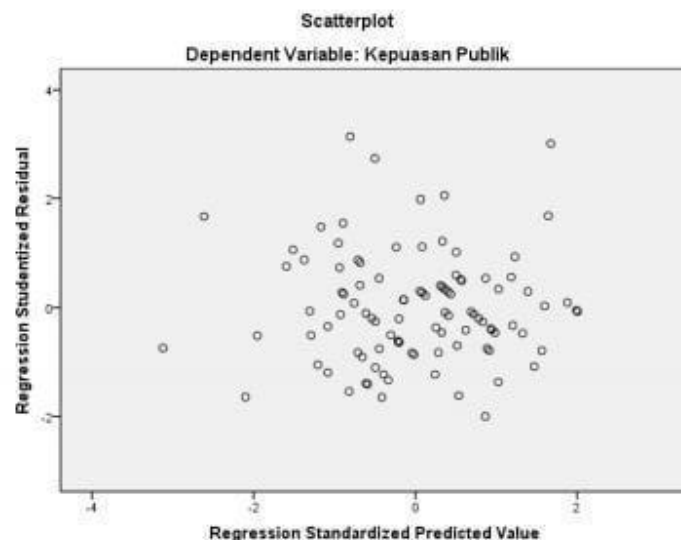


Figure 3. Scatterplot Heteroscedasticity Test
Source: SPSS Data Processing Results, 2025

Based on the scatterplot image above, it is found that the points are randomly distributed above, below, and around the number 0 on the Y-axis and do not form a specific pattern.

Therefore, it can be concluded that the data in this study does not experience heteroscedasticity.

Multicollinearity Test

Table 7. Multicollinearity Test Results Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1,605	6,127		,262	,794		
Service Quality	,442	,073	,432	6,064	,000	,774	1,292
Apparatus Competence	,319	,083	,301	3,821	,000	,633	1,580
Community Participation	,305	,099	,247	3,075	,003	,606	1,651

a. Dependent Variable: Satisfaction Public

Source: SPSS Data Processing Results, 2025

Based on the results of the multicollinearity analysis, the tolerance values for variables X1, X2, and Z were 0.774, 0.633, and 0.606, respectively, all above the minimum threshold of 0.10. Furthermore, the VIF values for variable X1 were 1.292, X2 1.580, and Z 1.651, all below the maximum threshold of 10. These results indicate that the three independent variables Service Quality, Apparatus Competence, and Public Participation do not influence each other excessively or exhibit a strong linear relationship. Therefore, it can be concluded that this research model does not exhibit multicollinearity, meaning all variables are suitable for use in the regression analysis and are able to make independent contributions in explaining the Public Satisfaction variable.

Autocorrelation Test

Table 8. Results of the Autocorrelation Test Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	,790 ^a	,623	,612	2,386	1,818

a. Predictors: (Constant), Public Participation, Service Quality, Civil Servant Competence

b. Dependent Variable: Public Satisfaction

Source: SPSS Data Processing Results, 2025

The Durbin-Watson values are as follows:

Table 9. Test for No Autocorrelation

N	D	DL	DU	4-DL	4-DU
100	1,818	1,613	1,736	2,387	2,264

Source: SPSS Data Processing Results, 2025

Note:

n: Number of samples

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d: Durbin Watson

dL: Lower limit of Durbin Watson

dU: Upper limit of Durbin Watson

Based on the analysis results in the table above, the Durbin Watson value (d) is 1.818. Given the existing conditions, the d value meets the requirements in condition number 2, namely $dU < d < (4-dU)$, or in other words, $1.736 < 1.818 < 2.264$, meaning there is no autocorrelation in this study.

Hypothesis Test Results

Partial Test (T-Test)

The formula for finding ttable is:

$$\begin{aligned} t_{\text{tabel}} &= \frac{\alpha}{2} ; (n-k-1) \\ &= \frac{0,05}{2} ; (100-4-1) \\ &= 0,025; 95 \end{aligned}$$

Description:

A: Significance level of error

n: Number of samples

k: Number of variables

This formula is used as a reference to view the ttable in its distribution. The ttable value obtained at the 0.025 level with a 95th order is 1.985.

This table value will then be compared with the calculated t.

Table 10. T-Test Results of Variable X1 against Y Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
1 (Constant)	26,366	5,934		4,443	,000
Quality of Service	,676	,077	,661	8,728	,000

a. Dependent Variable: Public Satisfaction

Source: SPSS Data Processing Results, 2025

The results of the T-test analysis of variable X1 against Y above show that the calculated t value is $8.728 > t \text{ table } 1.985$ and the significance value of the service quality variable (X1) is 0.000, meaning its value is less than 0.05, so H1 in this study is accepted. Thus, there is an influence between service quality (X1) and public satisfaction (Y).

Table 11. Results of the T-test of Variable X2 against Y Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
1 (Constant)	26,669	6,614		4,032	,000
Kompetensi Aparatur	,655	,084	,618	7,784	,000

a. Dependent Variable: Satisfaction Public

Source: SPSS Data Processing Results, 2025

The results of the T-test analysis of variable X2 against Y above indicate a significance value of 0.000, which is less than 0.05, and a calculated t-value of $7.784 > t\text{-table } 1.985$, thus accepting H2 in this study. It can be concluded that there is an influence between Apparatus Competence (X2) and Public Satisfaction (Y).

Table 12: Partial Test (T-Test) of Variable Z against Y. Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
1 (Constant)	34,144	5,708		5,981	,000
Partisipasi Masyarakat	,758	,098	,615	7,711	,000

a. Dependent Variable: Kepuasan Publik

Source: SPSS Data Processing Results, 2025

The T-test analysis of variable Z against Y above shows that the calculated t-value is $7.711 > t\text{-table } 1.985$, and the significance value for the Public Participation (Z) variable is 0.000, which is less than 0.05. Therefore, H3 in this study is accepted. Therefore, there is an influence between Public Participation (Z) and Public Satisfaction (Y).

Simultaneous Test (F Test)

Table 13. Simultaneous Test (F Test) of Variables X1 and X2 against Y
ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	850,842	2	425,421	68,758	,000 ^a
Residual	600,158	97	6,187		
Total	1451,000	99			

a. Predictors: (Constant), Apparatus Competence, Service Quality

b. Dependent Variable: Public Satisfaction

Source: SPSS Data Processing Results, 2025

The analysis results above show that the significance value of X1 and X2 on Y is 0.000, meaning the value is less than 0.05, and the calculated F value of 68.758 is greater than the Ftable value of 3.83. Therefore, it can be concluded that H4 in this study is accepted, namely, there is a simultaneous influence between the variables Service Quality (X1) and Apparatus Competence (X2) on Public Satisfaction (Y).

Table 14 Simultaneous Test (F Test) of Variables X1 and X2 on Y Through Z
ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	904,651	3	301,550	52,986	,000 ^a
Residual	546,349	96	5,691		
Total	1451,000	99			

a. Predictors: (Constant), Public Participation, Service Quality, Civil Service Competence

b. Dependent Variable: Public Satisfaction

Source: SPSS Data Processing Results, 2025

The analysis results above indicate that the significance value of X1 and X2 on Y is 0.000, meaning they are less than 0.05, and the calculated F value of 52.986 is greater than the F table value of 3.25. Therefore, it can be concluded that H5 in this study is accepted, namely, there is a simultaneous influence between the variables of Service

Quality (X1) and Apparatus Competence (X2) on Public Satisfaction (Y), with Public Participation (Z) as the intervening variable.

Results of the Coefficient of Determination (R2) Test

The higher the R2/R Square value, the more the independent variable explains the dependent variable (Ghozali in Hidayatullah et al., 2023). The benchmarks used in this test refer to Chin (1998 in Savitri et al., 2021), where $R^2 > 0.67$ is classified as strong, $0.67 > R^2 > 0.33$ is classified as moderate, and $0.33 > R^2 > 0.19$ is classified as weak.

Table 15. Results of the Coefficient of Determination (R2) Test Summary Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,790 ^a	,623	,612	2,386

a. Predictors: (Constant), Public Participation, Service Quality, Apparatus Competence

b. Dependent Variable: Public Satisfaction

Source: SPSS Data Processing Results, 2025

The analysis above shows an adjusted R-square value of 0.612. This indicates that Service Quality, Apparatus Competence, and Public Participation have a 61.2% influence on the Public Satisfaction variable. Regarding the closeness of the relationship, according to Chin's benchmark, if the R-value is 0.790 or 79.0%, the influence of the independent variables on the dependent variable in this study is classified as strong because $R^2 > 0.60$ Path Analysis

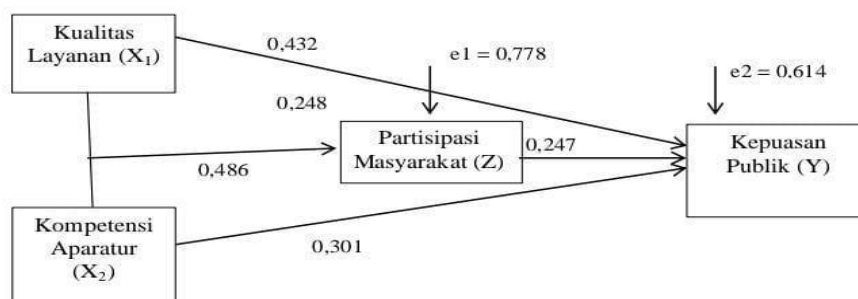


Figure 4. Path Model Coefficients
Source: Processed by Researcher, 2025

Based on the results of the path analysis above, it is known that Service Quality (X1), Apparatus Competence (X2), and Public Participation (Z) significantly influence Public Satisfaction (Y) at the Deli Tua Sub-district Office, Deli Serdang Regency. Partially, all three variables showed a significance value of $0.000 < 0.05$, thus proving a direct influence on public satisfaction. Simultaneously, service quality and apparatus competence also significantly influenced public satisfaction with an F-value of 68.758, which is greater than the F-table of 3.83. The path analysis results also show that both X1 and X2 not only directly influence Y but also through public participation as an intervening variable. The direct effects of X1 and X2 are greater than their indirect effects, but the mediation pathway through Z still makes a positive contribution to increasing public satisfaction. Thus, the results of this path analysis confirm that the hypothesis regarding the influence of service quality and apparatus

competence on public satisfaction through community participation can be accepted, where increasing service quality, apparatus competence, and community participation together can increase public satisfaction with public services.

The Effect of Service Quality (X1) on Public Satisfaction (Y)

The results of the partial t-test in this study indicate that the Service Quality variable (X1) has a positive and significant effect on Public Satisfaction (Y) at the Deli Tua Sub-district Office. This is evidenced by the calculated t-value of 8.728, which is greater than the t-table value of 1.985, with a significance level of <0.05 . Thus, the first hypothesis (H1) is accepted, meaning that the better the service quality provided, the higher the public satisfaction with public services. Furthermore, the Adjusted R-square value of 0.432 indicates that service quality contributes 43.2% to public satisfaction, with the remainder influenced by other variables not examined in this model.

The Effect of Civil Servant Competence (X2) on Public Satisfaction (Y)

The results of the partial t-test indicate that Civil Servant Competence (X2) has a positive and significant effect on Public Satisfaction (Y). This is evidenced by the t-value of 7.784 which is greater than the t-table of 1.985, with a significance value of <0.05 . Thus, the second hypothesis (H2) in this study can be accepted, which indicates that the higher the competence of the apparatus, the higher the level of public satisfaction felt by the community. The Adjusted R Square value of 0.376 indicates that 37.6% of the variation in Public Satisfaction can be explained by the competence of the apparatus, while the remaining 62.4% is influenced by other factors outside the research model. The Effect of Public Participation (Z) on Public Satisfaction (Y)

Based on the research results, it was found that Public Participation (Z) has a positive and significant effect on Public Satisfaction (Y). This is evidenced by the calculated t-value of $7.711 > t\text{-table } 1.985$, with a significance value of 0.000 for the Public Participation (Z) variable, which is less than 0.05. Therefore, the third hypothesis (H3) in this study is accepted, which indicates that the higher the level of Public Participation, the higher the level of Public Satisfaction perceived by the public. Therefore, there is an influence between Public Participation (Z) and Public Satisfaction (Y).

The Effect of Service Quality (X1) and Apparatus Competence (X2) on Public Satisfaction (Y)

Based on the results of the simultaneous test, it was found that Service Quality (X1) and Apparatus Competence (X2) influence Public Satisfaction (Y). The significance value of X1 and X2 on Y is 0.000, meaning they are less than 0.05, and the calculated F value of 68.758 is greater than the F table value of 3.83. Therefore, it can be concluded that H4 in this study is accepted, namely that there is a simultaneous influence between the variables Service Quality (X1) and Apparatus Competence (X2) on Public Satisfaction (Y).

The Effect of Service Quality (X1) and Civil Servant Competence (X2) on Public Satisfaction (Y) Through Public Participation (Z)

Based on the research results, it was found that Service Quality (X1) and Civil Servant Competence (X2) influence Public Satisfaction (Y), both directly and through Public Participation (Z) as an intervening variable. The coefficient of determination test revealed that the independent and intervening variables contributed 61.2% to public satisfaction, while the remaining 38.8% was influenced by variables outside the research model. A correlation value of $R = 0.790$ indicates a strong relationship between Service Quality, Civil Servant Competence, Public Participation, and Public Satisfaction. This indicates that the better the service provided and the more competent the civil servants are in carrying out their duties, as well as the higher the public participation, the higher the perceived level of public satisfaction. Furthermore, the simultaneous test (F-test) obtained a calculated F-value of

52.986, which is greater than the F-table of 3.25, with a significance value of <0.05 . These results demonstrate that simultaneously, the variables of Service Quality, Apparatus Competence, and Public Participation significantly influence Public Satisfaction at the Deli Tua Sub-district Office, Deli Serdang Regency. Therefore, the hypothesis in this study is accepted, meaning that improvements in these three variables will significantly increase public satisfaction with public services.

Therefore, the hypothesis stating the influence of Service Quality (X1) and Apparatus Competence (X2) on Public Satisfaction (Y) through Public Participation (Z) at the Deli Tua Sub-district Office, Deli Serdang Regency is accepted.

E. CONCLUSION

Based on the results of the research that has been conducted, the conclusions of this study are as follows: Service quality has a positive and significant influence on public satisfaction at the Deli Tua Sub-district Office, Deli Serdang Regency. This is proven through a partial test which shows a calculated t value of $8.728 > t \text{ table } 1.985$, and a significance value <0.05 . The Adjusted R Square value of 0.432 indicates that 43.2% of the variation in public satisfaction can be explained by service quality. This means that the better the quality of service in terms of clarity of procedures, timeliness, officer attitudes, and service facilities, the higher the satisfaction felt by the public. Apparatus competence also has a positive and significant influence on public satisfaction. The results of the partial test show a calculated t value of 7.784, greater than t table 1.985, with a significance value <0.05 . The Adjusted R Square value of 0.376 indicates that apparatus competence contributes 37.6% to public satisfaction. This indicates that the apparatus' understanding of duties, technical skills, communication, discipline, and ability to build good working relationships greatly determine the public's positive perception of the services received. Public Participation also has a positive and significant influence on Public Satisfaction (Y). This is evidenced by the calculated t value of $7.711 > t \text{ table } 1.985$ with a significance value of the Public Participation variable (Z) of 0.000 which means it is smaller than 0.05. Thus, the third hypothesis (H3) in this study is accepted. Based on the results of the simultaneous test, it is known that Service Quality and Apparatus Competence influence Public Satisfaction (Y), indicating that the significance value of X1 and X2 on Y is 0.000 which means the value is smaller than 0.05 and the calculated F value of $68.758 > F \text{ table } 3.83$. Therefore, it can be concluded that H4 in this study is accepted. Simultaneously, service quality (X1), apparatus competence (X2), and public participation (Z) have a positive and significant influence on public satisfaction (Y). The F test results show a calculated F value of $52.986 > F \text{ table } 3.25$ with a significance of <0.05 . The coefficient of determination (R^2) value of 0.612 indicates that 61.2% of public satisfaction can be explained by these three variables together, while the remaining 38.8% is influenced by other factors. This indicates that public participation is able to be an intermediary variable (mediator) that strengthens the influence of service quality and apparatus competence on public satisfaction. The higher the level of public participation, the more effective the influence of service and apparatus performance in increasing public satisfaction.

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