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Realizing Smart Tax Governance through Service Quality, the Self-Assessment System, and Tax Administration Modernization to Enhance Tax Payment Motivation among MSMEs in Medan Timur District

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ABSTRACT

This study examines the associations of service quality, the Self-Assessment System, and tax administration modernization with tax payment motivation among Micro, Small, and Medium Enterprises (MSMEs) in Medan Timur District, within the broader context of Smart Tax Governance. This study employed a quantitative approach using questionnaire data collected from 111 MSMEs selected through simple random sampling from a population of 153 MSMEs in Medan Timur District. The data were analyzed using validity and reliability tests, classical assumption tests, multiple linear regression analysis, t-tests, an F-test, and the coefficient of determination (R^2). The results indicate that service quality has a significant positive association with tax payment motivation (t = 6.333 > t-table = 1.982). The Self-Assessment System also has a significant positive association with tax payment motivation (t = 2.840 > t-table = 1.982), as does tax administration modernization (t = 3.189 > t-table = 1.982). The overall regression model is statistically significant (F = 38.449, $p < .001$). The model explains 51.9% of the variation in tax payment motivation ($R^2 = 0.519$; adjusted $R^2 = 0.505$).
Keywords: Service Quality, Self Assessment System, Smart Tax Governance, Tax Modernization, Tax Payment Motivation

INTRODUCTION

Taxation is a source of state revenue that plays an important role in supporting national development and government administration, including infrastructure development, education, healthcare, and public welfare (Putri, 2022). Along with technological developments, the government has developed Smart Tax Governance through the utilization of information technology, transparency, accountability, and effective services to improve efficiency and taxpayer participation. The success of its implementation is also influenced by taxpayers' motivation to fulfill their tax obligations. According to Fadillah and Sandari (2021), tax payment motivation refers to internal and external drives that encourage taxpayers to fulfill their tax obligations in accordance with applicable regulations. The higher the level of taxpayer motivation, the greater their willingness to pay taxes voluntarily and on time, thereby supporting the effectiveness of the tax system and the implementation of Smart Tax Governance (Artamoni & Sani, 2022).

One factor that influences tax payment motivation is the quality of tax services. Tax service quality refers to the ability of tax authorities to provide services that are prompt, accurate, courteous, and compliant with applicable regulations, thereby creating taxpayer satisfaction (Fadillah & Sandari, 2021; Tjiptono & Chandra, 2023). However, based on preliminary observations of MSME operators in Medan Timur District, there are

still complaints regarding lengthy service processes, information that is difficult to understand, and suboptimal assistance. These conditions indicate that the quality of tax services still needs to be improved to encourage tax payment motivation.

In addition to service quality, another factor influencing tax payment motivation is the implementation of the Self-Assessment System. The Self-Assessment System is a tax collection system that authorizes taxpayers to calculate, pay, and report their tax liabilities independently in accordance with tax regulations (Tehuayo et al., 2023). The implementation of this system is expected to increase taxpayer awareness, responsibility, and motivation. However, based on preliminary observations of MSME operators in Medan Timur District, some business operators still do not understand the procedures for independently calculating, paying, and reporting their taxes. This condition causes taxpayers to hesitate or postpone their tax obligations because they are concerned about making mistakes, indicating that the implementation of the Self-Assessment System has not fully increased tax payment motivation.

Another factor influencing tax payment motivation is tax administration modernization. Tax administration modernization refers to the process of updating systems, procedures, technologies, and administrative practices to make them more efficient, effective, and transparent in accordance with technological developments and community needs (Bahrien & Purba, 2024; Yuliani & Ratnasari, 2025). Through digital-based tax services, the government seeks to facilitate taxpayers in fulfilling their obligations, thereby increasing tax payment motivation (Natascha & Trisnawati, 2021). However, based on preliminary observations of MSME operators in Medan Timur District, some business operators still experience difficulties in using electronic services due to limited technological skills and insufficient understanding of the relevant procedures. These conditions indicate that the benefits of tax administration modernization have not yet fully contributed to increasing tax payment motivation.

Although the government has implemented service digitalization, administrative simplification, and improvements in the quality of tax services, tax payment motivation among MSME operators in Medan Timur District remains a challenge. Based on informal preliminary observations, some MSME operators have not yet prioritized tax payments because they focus more on business operations and profits. In addition, perceptions that tax procedures are complicated, the benefits of taxation are not directly felt, and taxes represent an additional burden on businesses may influence their tax payment motivation. The local research gap is whether service quality, the Self-Assessment System, and tax administration modernization are associated with tax payment motivation among MSME owners in Medan Timur District when examined together. While previous studies have examined these factors in relation to tax compliance and taxpayer behavior, this study extends the existing literature by examining their associations with tax payment motivation among MSMEs in this specific local context. Therefore, this study aims to test the relationships between service quality, the Self-Assessment System, tax administration modernization, and tax payment motivation among MSMEs in Medan Timur District using a single multiple linear regression model. The findings are expected to provide insights into tax payment motivation in the broader context of Smart Tax Governance.

LITERATURE REVIEW

Tax Payment Motivation

According to Fadillah and Sandari (2021), tax payment motivation refers to internal or external drives that encourage an individual or taxpayer to take action to pay their tax obligations in accordance with the purposes and objectives stipulated by law. According

to Sahara et al. (2025), motivation is a factor underlying an individual's actions. When taxpayers have a high level of motivation to pay their tax obligations, development in Indonesia can proceed according to established plans. Furthermore, Prasetyaningsih et al. (2025) state that taxpayer motivation is an internal or external driving force within taxpayers to fulfill their tax obligations, considering that taxation plays an important role in the country's economy. The indicators of tax payment motivation according to Pratiwi and Sinaga (2023) are as follows:

1. Seeking information related to taxation
2. Registering to obtain a Taxpayer Identification Number (NPWP)
3. Paying taxes as an outstanding obligation
4. Preparing the documents required for tax payment

Service Quality

According to Fadillah and Sandari (2021), tax service quality refers to the manner in which tax officers provide proper and accurate services to taxpayers regarding taxation, thereby creating taxpayer satisfaction with the services provided by the Directorate General of Taxes. According to Richadinata et al. (2024), service quality encompasses all forms of service provided by an individual or service provider to the highest possible standard, with various advantages aimed at meeting customers' needs and expectations. Furthermore, Anita (2024) defines service quality as the extent to which an organization or service provider is able to meet or exceed customers' expectations and needs. The indicators of service quality according to Aishy et al. (2024) are as follows:

1. Reliability
2. Responsiveness
3. Assurance
4. Empathy
5. Tangible evidence

Self-Assessment System

According to Sormin and Simanjuntak (2024), the Self-Assessment System is a tax collection system that entrusts taxpayers with the responsibility of calculating, paying, and reporting their tax liabilities to the Tax Service Office (KPP). According to Hamid (2023), the Self-Assessment System is a tax collection system that authorizes taxpayers to independently calculate, remit, and report the taxes they are required to pay. Furthermore, Hakki et al. (2023) state that the Self-Assessment System is a system that entrusts taxpayers with the responsibility to independently fulfill and exercise their tax obligations and rights. The indicators of the Self-Assessment System according to Sheila et al. (2026) are as follows:

1. Level of taxpayer compliance
2. Tax revenue
3. Administrative convenience
4. Effectiveness of supervision and enforcement

Tax System Modernization

According to Bahrien and Purba (2024), tax administration modernization refers to the process of changing and improving tax administration systems, procedures, technologies, and practices to make them more efficient, effective, transparent, and responsive to technological developments and community needs. According to Putra (2020), system modernization is a form of innovation or renewal aimed at facilitating taxpayers in fulfilling their tax obligations and increasing taxpayer compliance. Furthermore, Hendrawati et al. (2021) state that system modernization facilitates the implementation of tax obligations and can therefore be a consideration for taxpayers in using the system. The indicators of tax system modernization according to Bahrien and Purba (2024) are as follows:

1. Based on communication and information technology
2. Simple and easy for taxpayers to understand
3. Providing benefits to taxpayers

Accordingly, the conceptual framework employed in this study is presented in the following figure:

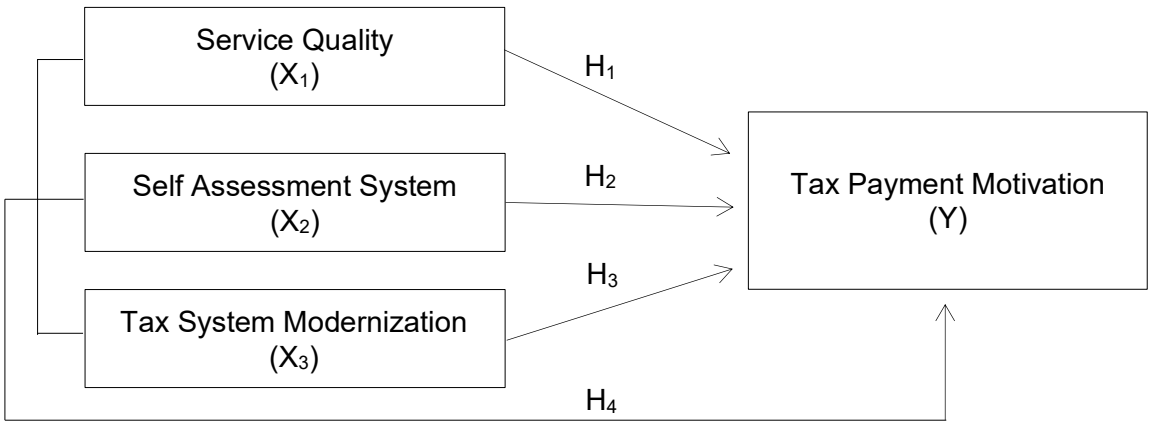


Figure 1. Kerangka Konseptual

Based on the explanation of the conceptual framework above, the hypotheses proposed in this study are as follows:

H_1: Service quality has a significant effect on tax payment motivation among MSMEs in Medan Timur District.

H_2: The Self-Assessment System has a significant effect on tax payment motivation among MSMEs in Medan Timur District.

H_3: Tax system modernization has a significant effect on tax payment motivation among MSMEs in Medan Timur District.

H_4: Service quality, the Self-Assessment System, and tax system modernization have a significant effect on tax payment motivation among MSMEs in Medan Timur District.

RESEARCH METHOD

This study employs a quantitative approach using primary data, with the research data consisting of survey results from MSMEs in Medan Timur District. The study was conducted from June 1 to September 30, 2026. The quantitative data used in this study consist of the respondents' answers to the questionnaire. The population in this study comprises all MSMEs operating in East Medan District, totaling 153 MSMEs (*Badan Pusat Statistik*, 2026).

Table 1.
Number of MSME Operators in East Medan District

Subdistricts	Micro Industry	Home Industry	Total
Gang Buntu	7	2	9
Sidodadi	0	9	9
Perintis	0	2	2
Gaharu	7	13	20
Durian	3	4	7
Glugur Darat II	1	1	2
Glugur Darat I	10	35	45
Pulo Brayan Darat I	9	16	25
Subdistricts	Micro Industry	Home Industry	Total

Pulo Brayan Darat II	5	15	20
Pulo Brayan Bengkel Baru	2	5	7
Pulo Brayan Bengkel	7	0	7
Total	51	102	153

Sources: Statistics Indonesia (BPS), 2026

A sample is a subset of the population selected to represent its characteristics. The sample size in this study was determined using the Slovin formula with a 5% margin of error, resulting in 111 MSMEs from a population of 153 businesses in East Medan District. The population data were obtained from East Medan District in Figures 2026 (Badan Pusat Statistik, 2026), based on data from the East Medan District Office. Simple random sampling was employed to select 111 MSMEs from the population list, ensuring that each business had an equal opportunity to be selected. One owner from each selected MSME served as a respondent and completed the questionnaire. Information regarding nonresponses and replacement procedures was not specified.

$$n = \frac{N}{1+N\,(e^2)} = \frac{153}{1+153\,(5\%^2)} = \frac{153}{1+153\,(0{,}0025)} = \frac{153}{1+0{,}3825} = \frac{153}{1{,}3825} = 111$$

The questionnaire items were developed by adapting the indicators from relevant previous studies to the context of MSME taxpayers. Each indicator was translated into a statement designed to measure respondents' perceptions, motivation, or experiences related to the respective construct rather than directly measuring tax outcomes. For Tax Payment Motivation, the items measure taxpayers' motivation to seek tax-related information, register for an NPWP, pay outstanding tax obligations, and prepare the documents required for tax payment. For Service Quality, the items measure taxpayers' perceptions of reliability, responsiveness, assurance, empathy, and tangible aspects of tax services. For the Self-Assessment System, the items measure respondents' perceptions of their responsibility and ability to independently calculate, pay, and report taxes, as well as their perceptions of administrative convenience, tax revenue, and the effectiveness of supervision and enforcement. In this context, tax revenue and supervision and enforcement effectiveness are measured as respondents' perceptions of the Self-Assessment System and do not represent objective tax revenue or enforcement outcomes. For Tax System Modernization, the items measure respondents' perceptions of the use of information and communication technology, simplicity and ease of understanding, and benefits provided by the modernized tax administration system. All questionnaire items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores indicating higher levels of the respective construct. The data analysis and testing procedures consisted of:

1. Validity Test
2. Reliability Test
3. Descriptive Statistics
4. Classical Assumption Tests:
   a. Normality Test
   b. Heteroscedasticity Test
   c. Multicollinearity Test
5. Multiple Linear Regression Analysis
6. Hypothesis Tests:
   a. t-Test
   b. F-Test
   c. Coefficient of Determination (R^2)

RESULT AND DISCUSSION

Validity Test

The validity test was conducted on a pilot sample consisting of 30 respondents who were not included in the research sample. The results of the validity test are presented below:

Table 2.
Validity Test Results

Statement	r_{hitung}	r_{tabel}	Criteria	Information
Service Quality				
1	0.850	0.361	$r_{hitung} > r_{tabel}$	Valid
2	0.635	0.361	$r_{hitung} > r_{tabel}$	Valid
3	0.723	0.361	$r_{hitung} > r_{tabel}$	Valid
4	0.822	0.361	$r_{hitung} > r_{tabel}$	Valid
5	0.638	0.361	$r_{hitung} > r_{tabel}$	Valid
6	0.598	0.361	$r_{hitung} > r_{tabel}$	Valid
7	0.775	0.361	$r_{hitung} > r_{tabel}$	Valid
8	0.685	0.361	$r_{hitung} > r_{tabel}$	Valid
9	0.665	0.361	$r_{hitung} > r_{tabel}$	Valid
10	0.725	0.361	$r_{hitung} > r_{tabel}$	Valid
Self Assessment System				
1	0.784	0.361	$r_{hitung} > r_{tabel}$	Valid
2	0.733	0.361	$r_{hitung} > r_{tabel}$	Valid
3	0.673	0.361	$r_{hitung} > r_{tabel}$	Valid
4	0.680	0.361	$r_{hitung} > r_{tabel}$	Valid
5	0.622	0.361	$r_{hitung} > r_{tabel}$	Valid
6	0.666	0.361	$r_{hitung} > r_{tabel}$	Valid
7	0.568	0.361	$r_{hitung} > r_{tabel}$	Valid
8	0.701	0.361	$r_{hitung} > r_{tabel}$	Valid
Tax Administration Modernization				
1	0.859	0.361	$r_{hitung} > r_{tabel}$	Valid
2	0.750	0.361	$r_{hitung} > r_{tabel}$	Valid
3	0.883	0.361	$r_{hitung} > r_{tabel}$	Valid
4	0.844	0.361	$r_{hitung} > r_{tabel}$	Valid
5	0.743	0.361	$r_{hitung} > r_{tabel}$	Valid
6	0.809	0.361	$r_{hitung} > r_{tabel}$	Valid
Tax Payment Motivation				
1	0.830	0.361	$r_{hitung} > r_{tabel}$	Valid
2	0.707	0.361	$r_{hitung} > r_{tabel}$	Valid
3	0.667	0.361	$r_{hitung} > r_{tabel}$	Valid
4	0.695	0.361	$r_{hitung} > r_{tabel}$	Valid
5	0.757	0.361	$r_{hitung} > r_{tabel}$	Valid
6	0.817	0.361	$r_{hitung} > r_{tabel}$	Valid
7	0.659	0.361	$r_{hitung} > r_{tabel}$	Valid
8	0.594	0.361	$r_{hitung} > r_{tabel}$	Valid

Source: Processed Research Data, 2026

The table above shows that the validity test results for all variables indicate that all Pearson item–total correlations values are greater than the r-table value of 0.361. Therefore, all questionnaire items for the variables are declared valid and can be used in the study.

Reliability Test
The reliability test was conducted on a pilot sample consisting of 30 respondents who were not included in the research sample (Wahyuni, 2025). The results of the reliability test are presented below:

Table 3.
Reliability Test Results

Variabel	Cronbach's Alpha	N of Items
Service Quality (X_1)	0.886	10
Self Assessment System (X_2)	0.831	8
Tax Administration Modernization (X_3)	0.898	6
Tax Payment Motivation (Y)	0.860	8

Source: Processed Research Data, 2026

Based on the table above, the Cronbach's Alpha values for the variables are 0.886 for Service Quality (X1), 0.831 for the Self-Assessment System (X2), 0.898 for Tax Administration Modernization (X3), and 0.860 for Tax Payment Motivation (Y). All of these values are greater than 0.60. Therefore, it can be concluded that all variables in this study are reliable and can be used as research instruments.

Descriptive Statistics
The results of the descriptive statistical analysis are presented in the following table:
Table 4.
Descriptive Statistics

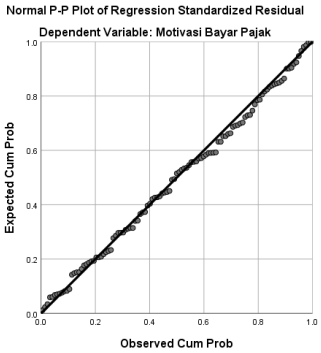
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Service Quality	111	19	44	32.59	5.185
Self Assessment System	111	17	36	25.51	4.582
Tax Administration Modernization	111	10	28	20.41	3.916
Tax Payment Motivation	111	17	37	26.91	4.635
Valid N (listwise)	111				

Source: Processed Research Data, 2026

Based on the table above, it can be seen that the data used in this study consist of 111 respondents from MSMEs in Medan Timur District. The Service Quality variable has a minimum value of 19 and a maximum value of 44, with a mean of 32.59 and a standard deviation of 5.185. The Self-Assessment System variable has a minimum value of 17 and a maximum value of 36, with a mean of 25.51 and a standard deviation of 4.582. The Tax System Modernization variable has a minimum value of 10 and a maximum value of 28, with a mean of 20.41 and a standard deviation of 3.916. The Tax Payment Motivation variable has a minimum value of 17 and a maximum value of 37, with a mean of 26.91 and a standard deviation of 4.635.

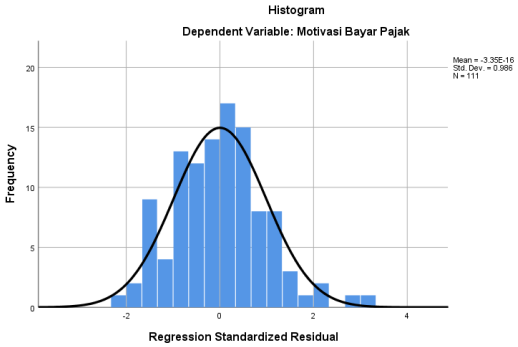
Normality Test
The residual normality test was conducted to ensure that the residuals of the regression model were normally distributed. The normality test can be performed using a histogram, a Normal Probability Plot of Regression, and the One-Sample Kolmogorov-Smirnov test. In the histogram, a normal distribution is indicated by a bell-shaped curve, whereas in the Normal Probability Plot of Regression, normality is indicated by data points that lie around the diagonal line (Wahyuni, 2021). The results of the graphical normality test are presented below.



Source: Processed Research Data, 2026

Figure 2. Normal Probability Plot Regression Graph

Based on the figure, the data points are distributed around the diagonal line and follow the direction of the line. Therefore, the residuals of the regression model are normally distributed and meet the normality assumption.



Source: Processed Research Data, 2026

Figure 3. Histogram Graph

Based on the figure, the curve appears bell-shaped and does not exhibit any skewness to the left or right. Therefore, the residuals of the regression model are normally distributed and meet the normality assumption.

The results of the normality test using the One-Sample Kolmogorov-Smirnov test are presented below:

Table 5.
One-Sample Kolmogorov Smirnov Test

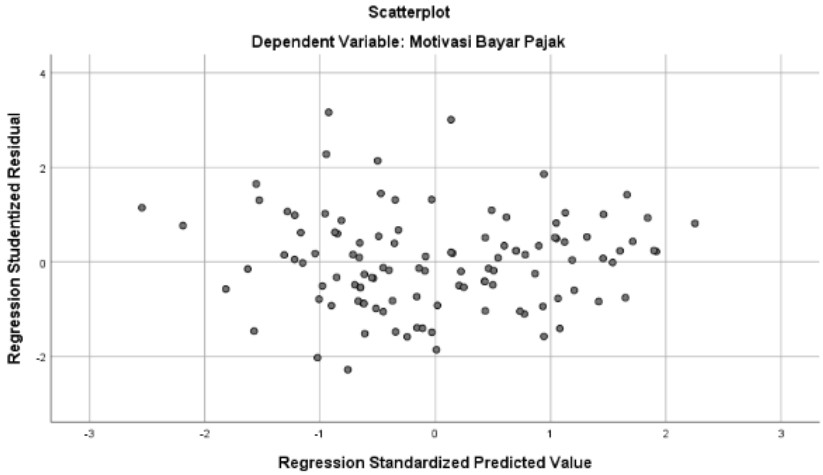
		Unstandardized Residual
N		111
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.21529445
Most Extreme Differences	Absolute	.055
	Positive	.055
	Negative	-.031
Test Statistic		.055
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
Source: Processed Research Data, 2026

Based on the table above, the results of the Kolmogorov-Smirnov normality test show that the significance value is greater than 0.05, namely 0.200. Therefore, it can be concluded that the data are normally distributed.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether the residual variance in the regression model is constant. A good regression model satisfies the assumption of homoscedasticity, whereas non-constant residual variance indicates the presence of heteroscedasticity. This condition can affect the efficiency of the estimates and the results of hypothesis testing (Wahyuni, 2021). The results of the heteroscedasticity test are presented in the following table.



Source: Processed Research Data, 2026

Figure 4. Scatterplot Graph

Based on the scatterplot, the data points appear to be randomly distributed above and below zero on the Y-axis without forming any particular pattern. This indicates that the regression model does not exhibit heteroscedasticity and can be used to predict the dependent variable based on the independent variables.

Multicollinearity Test

The multicollinearity test aims to determine whether there is a strong linear relationship among the independent variables in the regression model (Wahyuni, 2025). The results of the multicollinearity test are presented in the following table.

Table 6.
Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Service Quality	.689	1.451
	Self Assessment System	.677	1.477
	Tax Administration Modernization	.979	1.022

a. Dependent Variable: Tax Payment Motivation
Source: Processed Research Data, 2026

Based on the table above, all variables have tolerance values greater than 0.1 and VIF values less than 10. Therefore, it can be concluded that there are no multicollinearity problems in the regression model.

Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the relationships and effects of the independent variables on the dependent variable, as well as to predict the value of

the dependent variable based on the independent variables included in the model. The results of the multiple linear regression analysis are presented in the following table.

Table 7.
Multiple Linear Regression Analysis

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta
1	(Constant)	.813	2.563	
	Service Quality	.457	.072	.512
	Self Assessment System	.234	.082	.231
	Tax Administration Modernization	.256	.080	.216

a. Dependent Variable: Tax Payment Motivation
Source: Processed Research Data, 2026

Tax Payment Motivation = 0,813 + 0,457 Service Quality + 0,234 Self Assessment System + 0,256 Tax Administration Modernization + e

The constant (α) of 0.813 represents the intercept of the regression model. However, it has limited substantive meaning because a score of zero falls outside the measurement ranges of the independent variables. The regression coefficient for Service Quality of 0.457 indicates that, holding the other predictors constant, a one-point increase in the Service Quality score was associated with a 0.457-point increase in Tax Payment Motivation. The regression coefficient for the Self-Assessment System of 0.234 indicates that, holding the other predictors constant, a one-point increase in the Self-Assessment System score was associated with a 0.234-point increase in Tax Payment Motivation. Similarly, the regression coefficient for Tax Administration Modernization of 0.256 indicates that, holding the other predictors constant, a one-point increase in the Tax Administration Modernization score was associated with a 0.256-point increase in Tax Payment Motivation. These findings indicate that all three independent variables have positive associations with Tax Payment Motivation among MSMEs in East Medan District, with Service Quality showing the largest regression coefficient among the three predictors. Holding the other predictors constant, a one-point higher service-quality score was associated with a .457-point higher motivation score. The corresponding coefficients were .234 for the Self-Assessment System and .256 for modernization. The intercept (.813) is a model constant and has limited substantive meaning because zero scores fall outside the measurement ranges.

Partial Hypothesis Test (t-Test)
The partial test is used to determine the effect of each independent variable on the dependent variable. The test is conducted by examining the t-value at a 5% significance level (Wahyuni, 2025). The results of the partial hypothesis testing are presented in the following table.

Table 8.
Partial Hypothesis Testing

Model		t	Sig.
1	(Constant)	.317	.752
	Service Quality	6.333	.000
	Self Assessment System	2.840	.005
	Tax Administration Modernization	3.189	.002

a. Dependent Variable: Tax Payment Motivation
Source: Processed Research Data, 2026

The t-table value for 111 samples at α = 0.05 using a two-tailed test is 1.982. This value was obtained using the degree of freedom (df) formula, namely the number of samples (N) minus the number of independent variables (k) minus 1, resulting in df = 111 − 3 − 1

= 107. The results show that Service Quality has a calculated t-value of 6.333 > t-table value of 1.982, with a significance value of 0.000 < 0.05. Therefore, it can be concluded that Service Quality has a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District. The Self-Assessment System has a calculated t-value of 2.840 > t-table value of 1.982, with a significance value of 0.005 < 0.05. Therefore, it can be concluded that the Self-Assessment System has a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District. Tax Administration Modernization has a calculated t-value of 3.189 > t-table value of 1.982, with a significance value of 0.002 < 0.05. Therefore, it can be concluded that Tax Administration Modernization has a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District..

Simultaneous Hypothesis Test (F-Test)

The F-test is used to determine the simultaneous effect of all independent variables on the dependent variable. This test aims to determine whether the independent variables in the model have a simultaneous effect on the dependent variable (Wahyuni, 2018). The results of the F-test are presented below.

Table 9.
Simultaneous Hypothesis Testing

Model		F	Sig.
1	Regression	38.449	.000[b]
	Residual		
	Total		

a. Dependent Variable: Tax Payment Motivation
b. Predictors: (Constant), Tax Administration Modernization, Service Quality, Self Assessment System
Source: Processed Research Data, 2026

The F-table value for 111 samples at α = 0.05 is 2.689. This value was obtained using the degrees of freedom, with df1 = the number of independent variables = 3 and df2 = N − k − 1 = 111 − 3 − 1 = 107. The results show that the calculated F-value is 38.449 > F-table value of 2.689, with a significance value of 0.000 < α (0.05). Therefore, it can be concluded that Service Quality, the Self-Assessment System, and Tax Administration Modernization have a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District.

Coefficient of Determination

The coefficient of determination is a measure used in regression analysis to indicate the proportion of variation in the dependent variable (Y) that can be explained by the independent variables (X). Its value ranges from 0 to 1 (or 0% to 100%). A value closer to 1 indicates a greater ability of the model to explain the relationship among the variables (Wahyuni, 2018). The results of the coefficient of determination test are presented below:

Table 10.
Coefficient of Determination Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.720[a]	.519	.505	3.260

a. Predictors: (Constant), Tax Administration Modernization, Service Quality, Self Assessment System
b. Dependent Variable: Tax Payment Motivation
Source: Processed Research Data, 2026

Table 9 shows that R^2 is 0.519 and adjusted R^2 is 0.505. The model explains 51.9% of the variation in Tax Payment Motivation. The remaining 48.1% is unexplained by this model.

Variable Contributions
Contribution analysis is used to determine the ability of the independent variables to explain changes in the dependent variable. This measurement can be assessed based on the R Square value and the magnitude of the effect of each independent variable.
Table 11.
Variable Contribution Test Results

Variabel	Standardized Coefficents Beta	Koefisien Korelasi
Service Quality (X_1)	0.512	0.651
Self Assessment System (X_2)	0.231	0.547
Tax Administration Modernization (X_3)	0.216	0.274

Sumber: Hasil Penelitian, 2026 (Data Diolah)

Based on the formula above, the following calculations are used to determine the partial contributions of Service Quality, the Self-Assessment System, and Tax Administration Modernization to the dependent variable:
1. Service Quality contribution = 0.512 × 0.651 = 0.333312
2. Self-Assessment System contribution = 0.231 × 0.547 = 0.126357
3. Tax Administration Modernization contribution = 0.216 × 0.274 = 0.059184
4. Total contribution = (0.512 × 0.651) + (0.231 × 0.547) + (0.216 × 0.274) = 0.518 = 0.519 (51.9%)

Based on these calculations, Service Quality accounts for approximately 33.3%, the Self-Assessment System for 12.6%, and Tax Administration Modernization for 5.9% of the explained variation in Tax Payment Motivation, respectively. The products of the standardized beta coefficients and zero-order correlations represent the allocation of the model's coefficient of determination (R^2) among the predictors, rather than uniquely explained or causal contributions. Together, the three predictors account for approximately 51.9% of the variation in Tax Payment Motivation (R^2 = 0.519), while the remaining 48.1% is unexplained by the model.

DISCUSSION

The Effect of Service Quality on Tax Payment Motivation
Based on the results of the partial test examining the effect of Service Quality, the calculated t-value is 6.333 > the t-table value of 1.982, with a significance level of 0.000 < 0.05. This indicates that Service Quality has a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District. Therefore, H_1 is accepted. These findings are consistent with Fadillah and Sandari (2021), who stated that tax service quality affects taxpayers' motivation to pay taxes. This indicates that good, accessible, prompt, and informative tax services can increase taxpayer convenience in fulfilling their tax obligations.

The Effect of the Self-Assessment System on Tax Payment Motivation
Based on the partial test results for the Self-Assessment System, the calculated t-value was 2.840, which exceeded the t-table value of 1.982, with a significance level of 0.005, below the 0.05 threshold. These results indicate that the Self-Assessment System has a significant positive association with Tax Payment Motivation among MSMEs in East Medan District. Therefore, H_2 is supported. The positive association is consistent with Anggraini and Herianti (2022), although their study focused on freelance taxpayers in South Tangerang. A possible explanation is that clearer responsibilities for calculating,

paying, and reporting tax obligations are associated with greater taxpayer awareness and motivation to fulfill tax obligations. However, this mechanism was not directly tested in the present study. The findings therefore suggest an association between the implementation of the Self-Assessment System and tax payment motivation, rather than establishing a causal relationship.

The Effect of Tax Administration Modernization on Tax Payment Motivation
Based on the results of the partial test examining the effect of Tax Administration Modernization, the calculated t-value is 3.189 > the t-table value of 1.982, with a significance level of 0.002 < 0.05. This indicates that Tax Administration Modernization has a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District. Therefore, H_3 is accepted. These findings are consistent with Sari and Utomo (2025), who stated that the modernization of the tax administration system can facilitate taxpayers in fulfilling their obligations. This indicates that the use of technology in the tax system can provide greater convenience and efficiency in fulfilling tax obligations.

The Effect of Service Quality, the Self-Assessment System, and Tax Administration Modernization on Tax Payment Motivation
Based on the results of the simultaneous test examining the effects of Service Quality, the Self-Assessment System, and Tax Administration Modernization, the calculated F-value is 38.449 > the F-table value of 2.689, with a significance level of 0.000 < 0.05. This indicates that Service Quality, the Self-Assessment System, and Tax Administration Modernization simultaneously have a significant effect on Tax Payment Motivation among MSMEs in Medan Timur District. Therefore, H_4 is accepted. These findings indicate that good tax services, the implementation of the Self-Assessment System, and Tax Administration Modernization collectively can support increased taxpayer motivation to fulfill their tax obligations.

CONCLUSION

Service quality, the Self-Assessment System, and tax administration modernization were positively and significantly associated with tax payment motivation among the surveyed MSMEs in East Medan District. The overall regression model was statistically significant and explained 51.9% of the variation in tax payment motivation ($R^2 = 0.519$; adjusted $R^2 = 0.505$), while the remaining 48.1% was unexplained by the current model. These findings reflect self-reported responses from the sampled businesses and do not establish causal effects. Future research may examine additional factors associated with tax payment motivation and consider other research approaches to gain a more comprehensive understanding of the factors related to tax payment motivation among MSMEs. Before the study can be considered for acceptance, the sampling frame and random selection procedure should be clarified using documented records, and the actual questionnaire, including the mapping of items to constructs and the scoring procedures, should be provided to support the reported methodology and findings.

RECOMMENDATIONS

Based on the research findings, the Directorate General of Taxes is recommended to continue improving tax Service Quality by providing services that are prompt, accessible, friendly, and informative, while also strengthening the implementation of the Self-Assessment System and Tax Administration Modernization so that these systems become increasingly easy for MSME taxpayers to understand and use. MSME operators are expected to improve their understanding and awareness of independently calculating, paying, and reporting their tax obligations. Future research may examine additional

factors related to tax payment motivation, as 48.1% of the variation remains unexplained by the current model.

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