

THE EFFECT OF EMPLOYEE COMPETENCE AND REGULATORY COMPLIANCE ON THE EFFECTIVENESS OF GOODS AND SERVICES PROCUREMENT THROUGH CONTRACT VERIFICATION QUALITY IN THE GOODS AND SERVICE PROCUREMENT DIVISION OF THE DELI SERDANG REGENCY SECRETARIAT

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Abstract

This study aims to analyze the influence of employee competence and regulatory compliance on the effectiveness of goods and services procurement, as well as to determine the mediating role of contract verification quality within the procurement unit of the secretariat of Deli Serdang regency. The research employs a quantitative approach with an explanatory method. The population consists of 16 employees, all of whom were used as the sample through saturates sampling. Data were collected through questionnaires, observations, and documentation, and analyzed using multiple linear regression and the Sobel test. The results show that employee competence and regulatory compliance have a positive and significant effect on procurement effectiveness. Furthermore, employee competence and regulatory compliance simultaneously have a significant effect on contract verification quality. However, the Sobel test results indicate that contract verification quality does not mediate the relationship between employee competence and regulatory compliance on procurement effectiveness. Therefore, procurement effectiveness is influenced more directly by competence and compliance rather than the mediating role of contract verification quality.

Keywords: Contract Verification, Effectiveness of Procurement of Goods and Services, Employee Competence, Regulatory Compliance

A. INTRODUCTION

Government Procurement of Goods and Services (PBJ) plays a strategic role in governance as it serves as the primary mechanism for providing goods and services that support public service delivery. Effective procurement governance significantly determines the quality of development, bureaucratic efficiency, and the level of public trust in government. Therefore, PBJ is considered an integral part of public policy implementation and the achievement of national and regional development goals (Nurhikmahyanti, 2024). In addition, PBJ also functions as an important instrument in promoting economic growth and equitable development, as it is financed through the Regional Revenue and Expenditure Budget (APBD), which holds substantial value. Regional expenditure through procurement mechanisms not only fulfills internal government needs but also impacts local economic activity, job creation, and community welfare (Rahmania et al., 2024; Rakhman, 2022).

In practice, PBJ must be carried out in accordance with the principles of effectiveness, efficiency, transparency, and accountability to ensure the achievement of value for money, which refers to obtaining the best results from every public expenditure. This requires careful planning, compliance with regulations, and the utilization of information technology such as e-procurement systems to ensure openness and efficiency (Mulyono, 2020; Rahayu & Murtinah, 2022). To strengthen governance, the government has issued various regulatory frameworks that continue to evolve, ranging from Presidential Regulation No. 54 of 2010, updated through Presidential Regulation No. 16 of 2018, to the most recent amendment under Presidential Regulation No. 12 of 2021. These regulatory changes reflect the complexity of procurement processes and their continuous adaptation to environmental dynamics, technological advancements, and the demands for good governance (LKPP, 2018; Sulistyono et al., 2025).

At the regional government level, one of the key institutional units responsible for procurement implementation is the Procurement Unit through the Procurement Service Unit (ULP). This unit functions as the central control body ensuring that all procurement processes comply with legal regulations, from planning, vendor selection, contract execution, to final handover of work results. Given this responsibility, the ULP does not merely act as a technical executor but also serves as the frontline institution in ensuring that public funds are managed effectively, efficiently, and accountably to support regional development and public services (Patria, 2021).

Despite comprehensive regulatory frameworks, procurement implementation in practice still faces various challenges. Common issues include discrepancies between delivered goods or services and contractual specifications, delays in project completion, and payments for work that has not been optimally verified. These conditions indicate that procurement effectiveness has not yet fully achieved the value for money principle. Two major factors are identified as contributing to these challenges: human resource competence and regulatory compliance. The complexity of procurement processes requires personnel with strong technical, administrative, and regulatory understanding. However, in practice, there are still employees who lack sufficient knowledge of contract management and updated regulations, which affects procurement quality. Furthermore, compliance with regulations remains a challenge due to the complexity and volume of rules, which, if not consistently followed, may lead to deviations and financial risks for regional governments.

In this context, contract verification becomes a crucial stage in the procurement process. Contract verification serves as the final checkpoint to ensure that completed work aligns with contractual terms before payment is executed. Therefore, it can be regarded as the last safeguard in ensuring procurement effectiveness and preventing irregularities (Pratama, 2023). The quality of contract verification largely depends on the competence and compliance of the personnel involved. Competent employees are able to conduct accurate and thorough assessments, while compliant employees ensure that verification procedures follow established operational standards, thereby enhancing procurement accountability and integrity (Nurhikmahyanti, 2024; Wibowo, 2023).

Previous studies have emphasized that weaknesses in human resource competence and procedural compliance can lead to low procurement quality (Patria, 2021; Nurhikmahyanti, 2024). However, most existing studies focus primarily on the direct relationship between these variables and procurement effectiveness, without examining the mediating mechanisms within organizational processes. Therefore, this study introduces novelty by positioning contract verification quality as an intervening variable that links employee competence and regulatory compliance with procurement effectiveness. This approach is expected to provide a more

comprehensive understanding of how internal organizational processes mediate the relationships among these variables.

Based on the above discussion, this study is important as it aims to fill the existing research gap and provide empirical insights into the factors influencing procurement effectiveness within regional governments. The objective of this study is to analyze the effect of employee competence and regulatory compliance on procurement effectiveness, both directly and indirectly through contract verification quality as an intervening variable. The findings are expected to contribute theoretically to the development of management science, particularly in human resource management and procurement management, and practically to assist regional governments in improving procurement governance that is more effective, transparent, and accountable.

B. LITERATURE REVIEW

Effectiveness of Government Procurement of Goods and Services

The effectiveness of government procurement of goods and services refers to the degree to which procurement objectives are achieved, namely the extent to which procurement activities are able to meet organizational needs accurately, promptly, efficiently, and accountably. Effectiveness is not only assessed based on whether the specifications of goods or services are fulfilled, but also on the quality of the process, which reflects the principles of good governance such as transparency, efficiency, and accountability (Andio & Fanida, 2024). In the context of public bureaucracy, the implementation of an e-procurement system has become an important instrument for improving effectiveness, as it enables real-time monitoring, reduces the potential for irregularities, and enhances information transparency (Sholeh et al., 2023). However, procurement effectiveness still faces a number of challenges, including overlapping regulations, weak planning, limited infrastructure, and low levels of competence and compliance among human resources (Mulyono & Setyawan, 2018; Adri, 2024). In addition, unhealthy practices such as collusion in the tender process also hinder the realization of optimal procurement. Therefore, procurement effectiveness needs to be understood as the result of synergy between clear regulations, reliable information systems, the integrity of implementers, and strong oversight mechanisms in order to achieve value for money and strengthen public trust (Wardiningsih & Sasongko, 2019).

Indicators of the Effectiveness of Government Procurement of Goods and Services

Indicators of procurement effectiveness include several major dimensions, namely budget and time efficiency, process transparency, accountability, and fair business competition. In addition, effectiveness is also measured by the alignment of procurement outcomes with organizational needs (value for money), compliance with regulations, and adequate infrastructure and technological support (Adri, 2024; Andio & Fanida, 2024). Another equally important factor is the capacity and integrity of human resources, since the competence and professionalism of public officials strongly determine the quality of procurement implementation. Thus, indicators of procurement effectiveness do not focus solely on the final results, but also encompass the process, system, and behavior of implementers, all of which collectively reflect the success of sound and sustainable procurement governance (Sholeh et al., 2023).

Employee Competence

Employee competence refers to the characteristics inherent in individuals, including knowledge, skills, and attitudes/behaviors that contribute to effective performance in specific work situations. This concept refers to the model of Spencer and Spencer (1993), which explains that competence consists of five main elements: motives, traits, self-concept, knowledge, and skills, all of which together determine performance differences among

individuals (Gumilang et al., 2024). In the public sector context, competence is also understood as work ability that is aligned with job standards, as regulated in national policy. In the field of government procurement of goods and services, competence plays a highly crucial role because procurement processes are complex, dynamic, technology-based (e-procurement), and demand a high level of accountability. Empirical studies show that the technical and managerial competencies of employees, such as understanding regulations, decision-making skills, and coordination across stakeholders, significantly contribute to the efficiency, compliance, and quality of procurement implementation (Gumilang et al., 2024; Susanto & Arimawati, 2023). Therefore, competence is not merely a supporting factor, but a fundamental prerequisite for achieving effective and accountable procurement.

Indicators of Employee Competence

Indicators of employee competence in the procurement context generally include three main dimensions: knowledge, skills, and attitude/behavior. Knowledge relates to mastery of procurement regulations, technical procedures, and an understanding of the procurement stages from planning to the handover of work results. Skills include technical abilities such as preparing specifications and owner's cost estimates, evaluating bids, conducting negotiations, using e-procurement systems, and communicating with stakeholders. Meanwhile, attitude/behavior reflects integrity, objectivity, discipline, public service orientation, and teamwork ability. In addition to these three dimensions, the literature also emphasizes the importance of compliance as part of competence, reflected in adherence to regulations, administrative discipline, anti-corruption integrity, compliance with oversight mechanisms, application of fundamental procurement principles, and adherence to professional ethics (Adri, 2024; Sholeh et al., 2023). Overall, these indicators show that employee competence is not only technical in nature, but also encompasses behavioral and compliance dimensions that directly affect the quality and effectiveness of procurement implementation.

Regulatory Compliance

Compliance with regulations in the procurement of goods and services is a fundamental aspect of realizing good governance. In the context of Government Procurement of Goods and Services, compliance refers to the degree to which public officials adhere to the applicable legal provisions, procedures, and operational standards, as regulated under Presidential Regulation No. 16 of 2018 in conjunction with Presidential Regulation No. 12 of 2021. These regulations emphasize that every procurement process must be based on the principles of efficiency, effectiveness, transparency, openness, fair competition, justice, and accountability (Adri, 2023). Thus, compliance is not merely administrative in nature, but also reflects a commitment to integrity and professionalism in procurement implementation. High compliance minimizes the potential for irregularities, improves accountability, and strengthens public trust in government institutions.

Indicators of Regulatory Compliance

Indicators of regulatory compliance in procurement include several major dimensions, namely adherence to formal regulations, administrative discipline and document completeness, as well as integrity and anti-corruption attitudes. In addition, compliance is also reflected in the willingness of public officials to follow oversight mechanisms, both internal and external, such as audits by internal supervisory bodies and the Audit Board, as a form of accountability for procurement implementation (Andio & Fanida, 2024). Another important dimension is the application of basic procurement principles and adherence to professional ethics, including maintaining objectivity and avoiding conflicts of interest (Sholeh et al., 2023). Therefore, regulatory compliance is not only related to procedural obedience, but also includes moral and ethical aspects that collectively contribute to improving the effectiveness, transparency, and accountability of government procurement (Wardiningsih & Sasongko, 2019).

Quality of Contract Verification

The quality of contract verification is a crucial aspect of the procurement process because it functions as a control mechanism to ensure that the contract prepared is in accordance with legal provisions, technical specifications, and organizational needs. Contract verification does not only involve administrative examination, but also substantive assessment to ensure alignment with prior procurement documents, such as the Terms of Reference, owner's cost estimate, and bid evaluation results. Thus, the quality of contract verification can be understood as the degree of accuracy, thoroughness, and conformity of the contract review process with applicable regulatory standards (Mulyono & Setyawan, 2018). In addition, verification quality also reflects the organization's ability to maintain accountability and prevent potential irregularities from the early stage of contract implementation (Sholeh et al., 2023). In this study, the quality of contract verification is positioned as an intervening variable linking employee competence and regulatory compliance with the effectiveness of government procurement of goods and services.

Indicators of Contract Verification Quality

Indicators of contract verification quality include several main dimensions, namely document accuracy and thoroughness, compliance with regulations and legal standards, and alignment with technical specifications and organizational needs. In addition, verification quality is also measured by the ability to identify and mitigate potential contract risks, such as delays in work completion, quality discrepancies, or financial losses (Adri, 2024). A high-quality verification process ensures that every contract clause has been thoroughly reviewed, is free from errors, and is capable of anticipating problems that may arise during implementation. Therefore, these indicators show that the quality of contract verification does not only focus on administrative aspects, but also includes substantive and preventive dimensions that directly contribute to improving the effectiveness of government procurement of goods and services.

C. RESEARCH METHODOLOGY

This study uses a quantitative approach with an explanatory research method to examine the causal relationship between variables, namely the influence of Employee Competence (X_1) and Regulatory Compliance (X_2) on the Effectiveness of Goods and Services Procurement (Y) through Contract Verification Quality (Z) as an intervening variable (Sugiyono, 2013; Sumbodo et al., 2024). The study was conducted in the Goods and Services Procurement Section of the Deli Serdang Regency Secretariat, which was selected purposively due to its functional relevance as a Procurement Service Unit (ULP). The study subjects were all 16 employees directly involved in the procurement and contract verification process, therefore the sampling technique used was saturated sampling. The research design was non-experimental, using a path analysis model to examine the direct and indirect effects between variables (Hair et al., 2017).

Data collection was conducted through a survey using a Likert-scale questionnaire (1–5) as primary data, supported by observation and documentation as secondary data. Data analysis was carried out with the help of SPSS version 27 through several stages, namely data quality testing (validity and reliability), classical assumption testing (normality, multicollinearity, and heteroscedasticity), and hypothesis testing which includes t-test (partial), F-test (simultaneous), and coefficient of determination (R^2). Furthermore, path analysis was used to test the mediating role of contract verification quality variables through two structural equations, namely $Z = \beta_1 X_1 + \beta_2 X_2 + e_1$ and $Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 Z + e_2$, so that the magnitude of direct and indirect influence between variables in the research model can be determined (Ghozali, 2018).

D. RESULT AND DISCUSSION

Definition of Respondent Characteristics

Table 1 Respondent Characteristics

Characteristics	Frequence	Presentage (%)
a. Gender		
Male	8	50%
Female	8	50%
Amount	16 Respondent	100%
b. Year		
25 – 30 year	7	43,8%
31 – 40 year	6	37,5%
> 40 year	3	18,8%
Amount	16 Respondent	100%

Source: Primary Data, 2025

Based on Table 1, it can be seen that the number of respondents by gender shows a balanced composition between men and women, with 8 respondents each (50%). Meanwhile, based on age, respondents were dominated by the 25–30 age group (7 respondents) (43.8%), followed by 6 respondents (31–40), and 3 respondents (18.8%) over 41. This indicates that the majority of employees in the Goods and Services Procurement Section of the Deli Serdang Regency Secretariat are of productive age, which has the potential to support performance and effectiveness in carrying out goods and services procurement tasks.

Data Quality Test

Validity Test

Table 2. Data Validity Test

Variable	Statement Items	R count	R table	Information
Employee Competence (X1)	X1.1	0,792	0,532	Valid
	X1.2	0,838	0,532	Valid
	X1.3	0,897	0,532	Valid
	X1.4	0,725	0,532	Valid
	X1.5	0,944	0,532	Valid
	X1.6	0,810	0,532	Valid
	X1.7	0,859	0,532	Valid
	X1.8	0,905	0,532	Valid
	X1.9	0,832	0,532	Valid
	X1.10	0,827	0,532	Valid
Regulatory Compliance (X2)	X2.1	0,840	0,532	Valid
	X2.2	0,896	0,532	Valid
	X2.3	0,921	0,532	Valid
	X2.4	0,864	0,532	Valid
	X2.5	0,839	0,532	Valid
	X2.6	0,771	0,532	Valid
	X2.7	0,804	0,532	Valid
	X2.8	0,863	0,532	Valid
Effectiveness of Procurement of Goods and Services (Y)	Y1	0,770	0,532	Valid
	Y2	0,776	0,532	Valid
	Y3	0,896	0,532	Valid
	Y4	0,727	0,532	Valid

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Contract Verification Quality (Z)	Y5	0,916	0,532	Valid
	Y6	0,810	0,532	Valid
	Y7	0,707	0,532	Valid
	Y8	0,835	0,532	Valid
	Y9	0,771	0,532	Valid
	Y10	0,830	0,532	Valid
	Z1	0,759	0,532	Valid
	Z2	0,646	0,532	Valid
	Z3	0,911	0,532	Valid
	Z4	0,763	0,532	Valid
	Z5	0,882	0,532	Valid
	Z6	0,841	0,532	Valid
	Z7	0,679	0,532	Valid
Z8	0,890	0,532	Valid	

Source: SPSS Data Processing Results, 2025

From the processed validity test results in Table 2, it can be seen that all questionnaire statements for the variables Employee Competence (X1), Regulatory Compliance (X2), Effectiveness (Y), and Contract Verification Quality (Z) can be seen that the results of all question items have a calculated r value greater than the table r value, which means that all question items included in this study are valid.

Reliability Test

Table 3. Data Reliability Test

Variable	Cronbach Alfa	Constanta	Information
Employee Competence (X1)	0,953	0,70	Reliabel
Regulatory Compliance (X2)	0,944	0,70	Reliabel
Procurement Effectiveness (Y)	0,938	0,70	Reliabel
Contract Verification Quality (Z)	0,917	0,70	Reliabel

Source: SPSS Data Processing Results, 2025

Based on the table above, it can be explained that the reliability test results for variables X1 (employee competence), X2 (regulatory compliance), Y (effectiveness of goods and services procurement), and Z (quality of contract verification) obtained a Cronbach's Alpha > 0.70. Therefore, it can be concluded that all questionnaire items are reliable, as is the basis for decision-making in the reliability test.

Classical Assumption Test

Normality Test

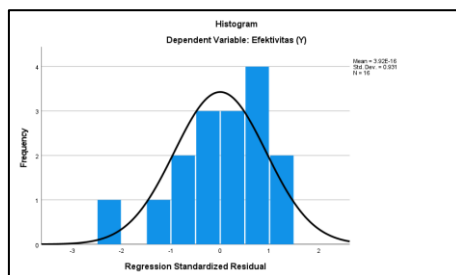


Figure 1. Histogram Normality Test

Source: SPSS Data Processing Results, 2025

Figure 1 above shows that the histogram of the research data is normally distributed. This can be seen from the bell-shaped shape of the graph, which does not deviate to the left or right

of the regression equation above. Therefore, it can be concluded that the regression model is suitable for use in this study.

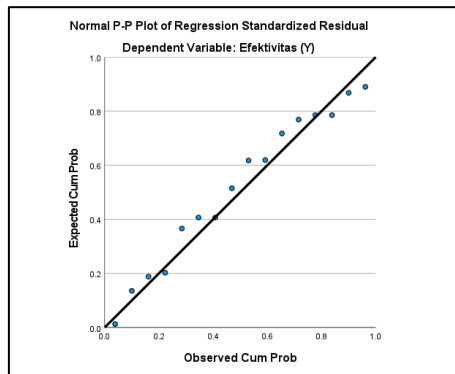


Figure 2. Normality Test: Normal Probability Plot

Source: SPSS Data Processing Results, 2025

In figure 2, the probability plot for normality testing above, we can see that the points follow the diagonal line. Therefore, we can conclude that the data is normally distributed and that the regression model can be used in this study.

Multicollinearity Test

Table 4. Multicollinearity Test

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	4.303	3.824		1.125	.281		
	Kompetensi Pegawai (X1)	-.028	.211	-.030	-.133	.896	.180	5.556
	Kepatuhan Peraturan (X2)	1.159	.271	.966	4.280	<.001	.180	5.556

a. Dependent Variable: Efektivitas (Y)

Source: SPSS Data Processing Results, 2025

The multicollinearity test results above show that the tolerance value is greater than 0.10, and the Variance Inflation Factor (VIF) values for all variables are less than 10. Therefore, it can be concluded that the data in this study does not experience multicollinearity.

Heteroscedasticity Test

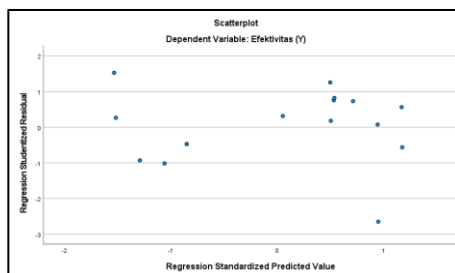


Figure 3. Scatterplot Heteroscedasticity Test

Source: SPSS Data Processing Results, 2025

Based on Figure 3 above, it shows that the points in this study are spread randomly and do not form a particular pattern and are spread above and below the zero point on the Y axis. Therefore, it is concluded that the regression model does not experience heteroscedasticity problems.

Hypothesis Testing

Partial Test (T-Test)

Table 5. Results of Hypothesis 1 Test

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	11.877	3.322		3.576	.003
	Kompetensi Pegawai (X1)	.535	.136	.724	3.928	.002

a. Dependent Variable: Efektivitas (Y)

Source: SPSS Data Processing Results, 2025

From the results of the first hypothesis test above, it can be seen that the calculated t value of the influence of employee competence (X1) on effectiveness (Y) is 3.928, which is greater than the t table value, namely $3.928 > 2.145$, so it can be concluded that there is an influence of employee competence (X1) on effectiveness (Y) or H1 is accepted.

Table 6. Results of Hypothesis 2 Test

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.560	2.404		1.897	.079
	Kepatuhan Peraturan (X2)	.826	.098	.915	8.471	<.001

a. Dependent Variable: Efektivitas (Y)

Source: SPSS Data Processing Results, 2025

From Figure 4.6, the results of the second hypothesis test above show that the calculated t-value for the effect of regulatory compliance (X2) on effectiveness (Y) is 8.471, which is greater than the t-value in the table, which is $8.471 > 2.145$. Therefore, it can be concluded that there is an effect between regulatory compliance (X2) and effectiveness (Y), or H2 is accepted.

Simultaneous Test (F Test)

Table 7. Results of Hypothesis Test 3

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	115.063	2	57.532	34.094	<.001 ^b
	Residual	21.937	13	1.687		
	Total	137.000	15			

a. Dependent Variable: Efektivitas (Y)

b. Predictors: (Constant), Kompetensi Pegawai (X1), Kepatuhan Peraturan (X2)

Source: SPSS Data Processing Results, 2025

From the results above, it can be seen that the calculated f-value is greater than the table f-value, namely $34.094 > 3.806$ and its significance is $0.001 < 0.05$. So it can be concluded that employee competence (X1) and regulatory compliance (X2) together have a positive and significant influence on work effectiveness, meaning H3 is accepted.

Table 8 Results of Hypothesis Testing 4

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	168.591	2	84.296	26.829	<.001 ^b
	Residual	40.846	13	3.142		
	Total	209.438	15			

a. Dependent Variable: Verifikasi Kontrak (Z)

b. Predictors: (Constant), Kompetensi Pegawai (X1), Kepatuhan Peraturan (X2)

Source: SPSS Data Processing Results, 2025

From the results above, it can be seen that the calculated f-value is greater than the tabulated f-value, namely $26.829 > 3.806$, with a significance level of $0.001 < 0.05$. Therefore, it can be concluded that employee competence (X1) and regulatory compliance (X2) jointly have a positive and significant influence on contract verification quality, meaning H4 is accepted.

Coefficient of Determination (R²)

Table 9. R2 Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.916 ^a	.840	.815	1.299

a. Predictors: (Constant), Kompetensi Pegawai (X1), Kepatuhan Peraturan (X2)

Source: SPSS Data Processing Results, 2025

Based on the r-square coefficient, the resulting value is 0.840, or 84%. Therefore, it can be concluded that the influence of employee competence and regulatory compliance on effectiveness is 0.840, or 84%. The remainder is influenced by other variables not included in this study.

Path Analysis Test

Table 10. Path Analysis Results: Equation 1

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.240	3.374		.071	.944
	Kompetensi Pegawai (X1)	.044	.199	.048	.221	.829
	Kepatuhan Peraturan (X2)	.957	.243	.857	3.945	.002

a. Dependent Variable: Verifikasi Kontrak (Z)

Source: SPSS Data Processing Results, 2025

From the path analysis results for equation 1 above, the path coefficients for the employee competency variable (X1) on contract verification have a Standardized Beta Coefficient of 0.048, and the regulatory compliance variable (X2) on contract verification has a Standardized Beta Coefficient of 0.857.

Table 11. R-Square Value for Equation 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.897 ^a	.805	.775	1.773

a. Predictors: (Constant), Kepatuhan Peraturan (X2), Kompetensi Pegawai (X1)

Source: SPSS Data Processing Results, 2025

From the r-square value of equation 1, the Adjusted R-square value is 0.775. Therefore, the standard error/disturbing factor (e1) can be calculated using the formula $e1 = \sqrt{(1-0.775)} = \sqrt{0.225} = 0.474$.

Table 12. Path Analysis Results for Equation 2

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.538	2.552		1.779	.101
	Kompetensi Pegawai (X1)	-.069	.150	-.093	-.459	.654
	Kepatuhan Peraturan (X2)	.993	.272	1.099	3.651	.003
	Verifikasi Kontrak (Z)	-.097	.210	-.120	-.461	.653

a. Dependent Variable: Efektivitas (Y)

Source: SPSS Data Processing Results, 2025

From the path analysis results for equation 2 above, the path coefficients for the employee competency variable (X1) on effectiveness have a Standardized Beta Coefficient of -0.093, the regulatory compliance variable (X2) on effectiveness has a Standardized Beta Coefficient of 1.099, and the contract verification variable (Z) on effectiveness has a Standardized Beta Coefficient of -0.120.

Table 13. R-Square Value for Equation 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.918 ^a	.843	.803	1.340

a. Predictors: (Constant), Verifikasi Kontrak (Z), Kompetensi Pegawai (X1), Kepatuhan Peraturan (X2)

From the r-square value of equation 2, the Adjusted R-square value is 0.803, which can be calculated to determine the standard error/disturbing factor (e2) using the formula $e2 = \sqrt{(1-0.843)} = \sqrt{0.157} = 0.396$.

Furthermore, to determine the presence or absence of a mediating effect in this study, a Sobel test will be conducted to determine whether there is a significant relationship through a mediating variable. Testing the mediation hypothesis can be done using a procedure developed by Sobel (Abu-Bader & Jones, 2021) and known as the Sobel test. The Sobel test is performed using the formula:

$$sab = \sqrt{b^2sa^2 + a^2sb^2 + sa^2sb^2}$$

Dengan keterangan:

- sab : besarnya standar error pengaruh tidak langsung
a : jalur variabel independen (X) dengan variable interverning (I)
b : jalur variabel interverning (I) dengan variable dependen (Y)
sa : standar error koefisien a
sb : standar error koefisien b

To test the mediation effect, it is necessary to calculate the calculated t value of the ab coefficient using the following formula:

$$t = \frac{ab}{sab}$$

The calculated t-value is compared with the t-table value. If the calculated t-value is greater than the t-table value, it can be concluded that there is a mediation effect. From the explanation of the formula above, to find the calculated t-value, first find the sab value (standard error of indirect influence), as in the calculation below:

$$sab = \sqrt{b^2sa^2 + a^2sb^2 + sa^2sb^2}$$

$$a = \text{Nilai } X \rightarrow Z = 0,048 + 0,857 = 0,905$$

$$b = \text{Nilai } Z \rightarrow Y = -0,120$$

$$sa = e1 = 0,474$$

$$sb = e2 = 0,396$$

$$sab = \sqrt{(-0,120^2 \times 0,474^2) + (0,905^2 \times 0,396^2) + (0,474^2) \times (0,396^2)}$$

$$sab = \sqrt{(0,014 \times 0,224) + (0,819 \times 0,156) + (0,224 \times 0,156)}$$

$$sab = \sqrt{0,003 + 0,127 + 0,034}$$

$$sab = \sqrt{0,164}$$

$$sab = 0,404.$$

After the standard error result of the indirect effect is known, namely 0.440, a calculation is carried out to find the calculated t value using the calculated t formula = ab/sab, namely $\frac{0,905 + (-0,120)}{0,404} = \frac{785}{0,404} = 1,943$. From the calculation above, it is known that the calculated t value < the t table value, namely $1,943 < 2,145$, so it can be concluded that contract verification does not have an effect as a mediating variable between employee competence and regulatory compliance on the effectiveness of procurement of goods and services in the Procurement of Goods and Services Section of the Deli Serdang Regency Secretariat.

Based on the results of hypothesis testing, this study indicates that employee competence and regulatory compliance have a positive and significant influence on the effectiveness of goods and services procurement. Partially, employee competence was shown to have a significant effect on effectiveness, with a calculated t-value of $3,928 > 2,145$, indicating that improving employee knowledge, skills, and professional attitudes can improve work performance and effectiveness. Similarly, regulatory compliance had a stronger effect, with a calculated t-value of $8,471 > 2,145$, indicating that adherence to procedures and regulations can create work consistency, reduce errors, and increase accountability. Simultaneously, both variables were also shown to have a significant effect on effectiveness, with an F-value of

34.094 > 3.806, confirming that the combination of competence and compliance contributes significantly to improving organizational effectiveness.

Furthermore, employee competence and regulatory compliance were also shown to have a significant effect on the quality of contract verification, with an F-value of 26.829 > 3.806, indicating that technical proficiency and regulatory compliance play a crucial role in producing accurate and standardized contract verification. However, the results of the mediation test indicate that the quality of contract verification is not able to act as an intervening variable between competence and compliance with effectiveness, with a t-value of 1.943 < 2.145. This indicates that procurement effectiveness is more directly influenced by employee competence and compliance with regulations than through the role of contract verification. Thus, increasing the effectiveness of goods and services procurement is more optimally achieved by strengthening HR competence and increasing compliance with regulations, rather than relying solely on the contract verification process as a connecting mechanism.

E. CONCLUSION

Based on the research results, it can be concluded that employee competence and regulatory compliance have a positive and significant influence on the effectiveness of goods and services procurement in the Goods and Services Procurement Section of the Deli Serdang Regency Secretariat. Partially, employee competence proved to have a significant influence with a t-value of 3.928 > 2.145, while regulatory compliance showed a stronger influence with a t-value of 8.471 > 2.145. Simultaneously, both variables also significantly influenced effectiveness with an F-value of 34.094 > 3.806. In addition, employee competence and regulatory compliance together also significantly influenced the quality of contract verification with an F-value of 26.829 > 3.806. However, the results of the mediation test showed that the quality of contract verification was unable to mediate the relationship between employee competence and regulatory compliance on procurement effectiveness, as evidenced by a t-value of 1.943 < 2.145.

This confirms that procurement effectiveness is more directly influenced by competence and compliance than through the role of contract verification. Based on these findings, it is recommended that relevant agencies improve employee competency through ongoing training and strengthen regulatory compliance through consistent socialization and internal oversight. Furthermore, although not a mediating variable, the contract verification process still needs to be optimized to be more substantial and not merely administrative. Regular procurement performance evaluation is also important to improve the quality of procurement processes and outcomes. For future researchers, it is recommended to add other variables such as procurement technology, internal oversight, or organizational culture, as well as use more diverse research methods and expand the research objects to obtain more comprehensive results and broader generalizations.

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