

## The Effect of Performance Measurement System, Reward, Accounting Information System, and Leadership Style on Managerial Performance

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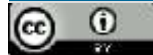
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### ABSTRACT

This research investigates the potential significant effects of performance measurement system, reward, accounting information system, and leadership style on managerial performance at PT Supra Matra Abadi Aek Nabara. The methodology employed included field research utilizing questionnaires distributed to company employees, complemented by literature review techniques. Individual variable analysis revealed several key findings. The Performance Measurement System (X1) demonstrated a significant impact on managerial performance (Y) as evidenced by the t significance value of 0.006, falling below the 0.05 threshold. Conversely, the Reward variable (X2) showed no substantial influence on managerial performance (Y), with a t significance value of 0.673 exceeding the 0.05 criterion. The accounting information system variable (X3) exhibited a significant effect on managerial performance (Y), supported by a t significance value of 0.027, below the 0.05 benchmark.

## **INTRODUCTION**

In contemporary business environments, accounting information continues to evolve rapidly alongside societal progression. Technological advancements deliver considerable benefits across human activities, particularly within accounting functions. Technology embodies the creation and deployment of tools, equipment, materials, and methodologies that enhance human problem-solving capabilities. These technological innovations amplify performance capacities and enable task execution with increased speed, precision, and accuracy, resulting in notable productivity enhancements.

Information systems deliver crucial management support by facilitating the production of financial data that is dependable, pertinent, prompt, accessible, and verified, thereby strengthening decision-making processes. Managerial performance encompasses the individual contributions of organizational members in executing managerial functions, including planning, investigation, coordination, evaluation, supervision, organization, negotiation, and representation activities. Performance measurement systems operate as mechanisms for regular enhancement of workforce efficiency. These systems consist of sequential decision-making stages that are methodical, cyclical, coordinated, and improvable. Such frameworks influence determinations regarding compensation, dismissals, advancements, and other essential workplace conditions.

Rewards and consequences serve essential functions in stimulating employee performance. Through these motivational instruments, employees cultivate superior work quality and demonstrate heightened responsibility for assigned duties. When high-achieving managers receive recognition, this positively affects the performance of peer managers in fulfilling their obligations and inspires team members to engage in productive competition by executing their responsibilities exceptionally to earn similar acknowledgment. Within this organizational context, rewards include performance bonuses, career advancement opportunities, and salary enhancements (Haga, 2018).

This investigation aims to examine the influence of performance measurement systems on various workplace dimensions through comprehensive performance assessment (Sitorus et al., 2022). The research specifically analyzes how performance measurement systems, rewards, accounting information systems, and leadership styles influence managerial performance at PT Supra Matra Abadi Aek Nabara. This focus is vital because understanding how accounting information systems can enhance managerial effectiveness represents a critical factor in organizational success. Consequently, the findings from this investigation are expected to provide management with valuable guidance for addressing operational challenges and improving overall organizational efficiency in today's competitive business landscape.

## **LITERATURE REVIEW**

### ***Management Accounting Theory***

The conceptualization of Management Accounting Theory (MAT) by Horngren T. Charles (1991) describes a systematic approach involving identification, measurement, accumulation, analysis, preparation, interpretation, and communication processes. This framework aims primarily to enhance decision-making quality by providing accurate, relevant, and timely information. Within this theoretical structure, the Accounting Information System (AIS) serves as a fundamental component that gathers both financial and non-financial data, processes this information into meaningful insights, and presents these results to support effective decision-making processes. As noted by Romney & Steinbart (2019) in research cited by Dharmawati et al. (2023), this establishes a strong conceptual foundation highlighting the essential role of methodical information processing in facilitating informed management decisions.

### ***Behavioral Theory of Leadership***

The Behavioral Theory of Leadership proposes that leadership effectiveness is contingent upon t The Behavioral Theory of Leadership suggests that leadership efficacy depends on the harmonization of personality, tasks, strengths, attitudes, and perceptions, as explained by Supriono & Ayun (2020). This behavioral perspective, also known as social theory, directly challenges genetic theory by maintaining that effective leaders are developed through preparation, education, and training rather than simply being born with inherent leadership qualities. This theory proposes that leadership abilities can be cultivated in anyone through deliberate development and personal motivation. According to Hidayah (2018), the essence of leadership lies in building cohesive teams and fostering their collective decision-making capabilities.

### ***Managerial Performance***

Managerial performance, as defined by Azhari (2021), refers to the performance of individuals in managerial activities, encompassing eight critical dimensions: Planning, Investigation, Coordination, Evaluation, Supervision, Staffing, Negotiation, and Representation, with the intended implementation achievement being the operational effectiveness of the organization from both managerial and economic perspectives, while according to Hidayah's journal (2018), this effectiveness is closely linked to activities involving the utilization of information systems within the organizational context.

### ***Performance Measurement System***

Azhari (2021) defines managerial performance as the effectiveness of individuals engaged in managerial functions, encompassing eight critical dimensions: Planning, Investigation, Coordination, Evaluation, Supervision, Staffing, Negotiation, and Representation. The intended outcome is organizational effectiveness from both managerial and economic standpoints. Hidayah's research (2018) further establishes that this effectiveness is intricately connected to activities involving the utilization of information systems within organizational contexts.

### **Reward**

Rewards function as strategic mechanisms employed to enhance managerial performance within organizations. When managers feel satisfied with their compensation and recognition, they respond by contributing their professional abilities, knowledge, time commitment, and organizational dedication (Pramesti et al., 2019). Reward systems effectively address employee management challenges while simultaneously serving as powerful motivational tools for workforce engagement.

### **Accounting Information System**

An accounting information system comprises a structured framework specifically designed to collect, record, store, and process data with the purpose of generating valuable information for decision-makers throughout the organization (Rohma, 2021). These sophisticated systems are developed by companies to fulfill their fundamental function of providing accounting information characterized by relevance, timeliness, and reliability for operational and strategic decision-making processes.

### **Conceptual Framework**

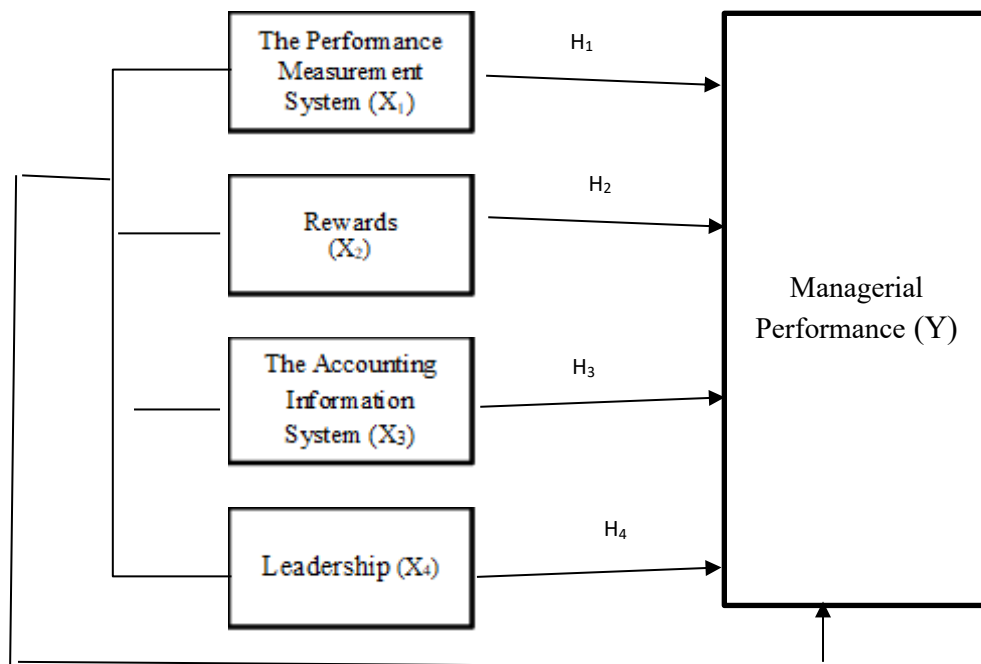


Figure.1 Conceptual Framework

### ***Research Hypotheses***

Based on the research framework presented, the hypotheses proposed in this study are as follows:

- H<sub>1</sub>: The performance measurement system has a positive and significant effect on managerial performance.
- H<sub>2</sub>: Rewards have a positive effect on managerial performance.
- H<sub>3</sub>: The accounting information system has a positive and significant effect on managerial performance.
- H<sub>4</sub>: Leadership style has a significant effect on managerial performance.
- H<sub>5</sub>: The performance measurement system, rewards, accounting information system, and leadership style simultaneously have a positive effect on managerial performance.

## **METHODOLOGY**

### ***Type of Research***

This investigation employs a quantitative descriptive approach, concentrating on causal relationships. A causal research design explores cause-effect relationships between independent and dependent variables. The study utilizes survey methodology, conducting field investigations through questionnaire distribution to gather primary data directly from original sources.

### ***Population and Sample***

The study population consists of employees from the Accounting and Finance, Human Resources, and General Affairs departments at PT Supra Matra Abadi Aek Nabara, totaling 35 individuals. The entire population was selected as the research sample (census sampling) to ensure data accuracy and representativeness.

### **Research Variables**

#### ***Dependent Variable (Y)***

According to Sugiyono (2017), the dependent variable—also termed the output, criterion, or consequence variable—is influenced by independent variables. In this research, managerial performance serves as the dependent variable.

#### ***Independent Variables (X)***

Sugiyono (2017) defines independent variables also known as stimulus, predictor, or antecedent variables—as factors that influence or cause changes in the dependent variable. This study examines four independent variables:

- a. Performance Measurement System.
- b. Reward.
- c. Accounting Information System.
- d. Leadership Style.

### ***Data Collection Technique***

Primary data was acquired through questionnaire distribution to employees in the Accounting and Finance, Human Resources, and General departments at PT Supra Matra Abadi. The questionnaire contained statements evaluated on a 5-point Likert scale, where participants indicated their agreement or disagreement levels with the provided statements.

### ***Data Analysis Techniques***

#### ***Descriptive Statistics***

Descriptive statistics provide an overview of research variables through analysis of mean values, standard deviations, variances, and maximum and minimum values. This approach offers contextual understanding of sample characteristics and presents a concise summary of research data (Ariani et al., 2023).

#### ***Instrument and Data Quality Assessment***

To verify instrument accuracy and reliability, two testing methods are employed:

a. **Validity Testing**

Validity testing determines questionnaire legitimacy and confirms whether items accurately measure intended research variables (Putri et al., 2022). This process correlates individual questions with total scores for each variable. An instrument is considered valid when  $r$ -calculated exceeds  $r$ -table, and invalid when  $r$ -calculated is less than  $r$ -table. The  $r$ -table value is determined using the formula  $df = n - 2$ , where  $n$  represents the number of respondents.

b. **Reliability Testing**

Reliability testing assesses response consistency over time (Putri et al., 2022). Consistent responses indicate reliable data, while random responses suggest unreliability (Hermawan & Amirullah, 2016). Reliability is measured using Cronbach's Alpha ( $\alpha$ ), with values approaching 1 indicating higher internal consistency. Reliability is accepted when Cronbach's Alpha equals or exceeds 0.6.

c. **Classical Assumption Test**

Classical assumption tests ensure regression results are accurate, unbiased, and consistent (Rifkhan, 2023). Before hypothesis testing, these assessments must be conducted, including normality, multicollinearity, and heteroscedasticity tests.

#### ***Normality Test***

The normality test evaluates whether variables have normal distributions. Optimal regression models exhibit normal or near-normal distributions (Purnomo, 2017). This assessment employs histogram graphs and normal probability plots, comparing cumulative distributions from normal distributions. Additionally, One-Sample Kolmogorov-Smirnov testing with a 0.05 significance threshold is performed. Data distribution assessment criteria are:

1. If significance value exceeds 0.05, data follows normal distribution.
2. If significance value falls below 0.05, data does not follow normal distribution.

### ***Multicollinearity Test***

According to Roesminingsih et al. (2024), multicollinearity testing examines whether correlations exist between independent variables in the regression model. Quality regression models should not show correlations among independent variables. If independent variables correlate, they are not orthogonal. Orthogonal variables have zero correlation between independent variables. Multicollinearity is detected by examining tolerance values and Variance Inflation Factor (VIF). Multicollinearity is indicated when tolerance values fall below 0.10 or VIF values exceed 10 (Purnomo, 2017).

### ***Heteroscedasticity Test***

The heteroscedasticity test examines whether residual variance differs between observations in the regression model (Ghozali, 2018). When residual variance remains constant across observations, homoscedasticity exists; when it varies, heteroscedasticity occurs. Optimal regression models exhibit homoscedasticity. Assessment involves analyzing Scatterplot graphs. Heteroscedasticity is indicated when data points form regular patterns (wavy, widening, then narrowing), while homoscedasticity is indicated when no clear pattern exists and points are randomly dispersed above and below the Y-axis zero.

### ***Multiple Linear Regression***

This study employs multiple regression analysis to predict independent variables' influence on the dependent variable. A quality linear regression model exhibits normal data distribution and freedom from classical statistical assumptions including multicollinearity and heteroscedasticity (Sugiyono, 2018). The multiple linear regression equation is formulated as:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

Y = Managerial Performance

$\alpha$  = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$  = Regression Coefficients

$X_1$  = Performance Measurement System

$X_2$  = Reward

$X_3$  = Accounting Information System

$X_4$  = Leadership Style

e = error term

### ***Partial Test (t-Statistic)***

This statistical procedure evaluates the distinct contribution of each predictor variable toward explaining variations in the outcome variable (Ghozali, 2018). The testing framework establishes:

1. Null hypothesis ( $H_0$ ): Predictor variables demonstrate no meaningful relationship with the outcome variable
2. Alternative hypothesis ( $H_a$ ): Predictor variables demonstrate meaningful relationships with the outcome variable

Interpretation guidelines:

1. When t-statistical value falls below the critical threshold and probability exceeds 0.05, we maintain the null hypothesis while dismissing the alternative
2. When t-statistical value exceeds the critical threshold and probability falls below 0.05, we dismiss the null hypothesis while accepting the alternative

### ***Simultaneous Test (F-Statistic)***

This analytical approach examines whether the combined set of predictor variables creates a statistically significant explanatory model for the outcome variable (Ghozali, 2018). The testing framework establishes:

1. Null hypothesis ( $H_0$ ): The collective predictor variables fail to meaningfully explain outcome variable variation
2. Alternative hypothesis ( $H_a$ ): The collective predictor variables meaningfully explain outcome variable variation

Interpretation guidelines based on F-statistical value, critical value, and significance level:

1. When F-statistical value falls below the critical threshold and probability exceeds 0.05, we maintain the null hypothesis while dismissing the alternative
2. When F-statistical value exceeds the critical threshold and probability falls below 0.05, we dismiss the null hypothesis while accepting the alternative

### ***Coefficient of Determination (Adjusted $R^2$ )***

The adjusted coefficient of determination quantifies the proportion of outcome variable variance successfully explained by the predictor variables. This metric ranges between zero and one ( $0 \leq \text{adjusted } R^2 \leq 1$ ). An adjusted  $R^2$  value of zero suggests complete absence of explanatory power among the predictor variables. As adjusted  $R^2$  approaches unity, it indicates progressively stronger explanatory capacity of the model. Conversely, values closer to zero suggest diminishing explanatory capacity (Ghozali, 2018).

## RESEARCH RESULT

### *Descriptive Statistics*

The statistical examination was conducted to present a comprehensive summary of the collected data by analyzing key metrics including highest values, lowest values, averages, and standard deviations across the study variables: performance evaluation systems, compensation structures, accounting information frameworks, management approaches, and administrative effectiveness.

**Table 1. Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Performance measurement system	60	6	30	23.60	3.499
Reward	60	4	20	16.13	2.266
Accounting information system	60	7	25	20.33	2.542
Leadership style	60	6	30	24.35	3.463
Managerial performance	60	7	35	28.28	3.992
Valid N (listwise)	60				

*Source: SPSS Processed Data, 2025*

The statistical analysis yielded the following interpretations:

1. For the Performance evaluation system variable, responses from 60 participants showed scores ranging from 6 to 30, with an average of 23.60 and variation of 3.499.
2. The Compensation structure variable, based on 60 responses, exhibited scores between 4 and 20, averaging 16.13 with a variation of 2.266.
3. Regarding the Accounting information framework variable, the 60 respondents provided scores from 7 to 25, averaging 20.33 with a variation of 2.542.
4. The Management approach variable, from 60 participants, showed scores ranging from 6 to 30, with an average of 24.35 and variation of 3.463.
5. The Administrative effectiveness variable, measured across 60 respondents, had scores between 7 and 35, averaging 28.28 with a variation of 3.992.

### *Validity Test*

To establish the accuracy of the questionnaire items, a significance evaluation was performed by comparing the calculated correlation coefficients with critical values at degrees of freedom ( $df = n - 2$ ). With 60 respondents, the  $df$  equals 58. Using a significance threshold of  $\alpha = 0.05$ , the critical value is 0.2542. Items are considered accurate when the calculated coefficient exceeds the critical value and shows positive correlation. Conversely, items with coefficients below the critical value are deemed inaccurate.

**Table 2. Validity Test Results**

Variable	Item	R. Hitung	Position	R. Tabel sig.5%	Status
				N-2= 60-2= 58	
Performance Measurement System	1	0,782	>	0,2542	Valid
	2	0,803	>	0,2542	Valid
	3	0,802	>	0,2542	Valid
	4	0,742	>	0,2542	Valid
	5	0,804	>	0,2542	Valid
	6	0,809	>	0,2542	Valid
Reward	1	0,825	>	0,2542	Valid
	2	0,711	>	0,2542	Valid
	3	0,809	>	0,2542	Valid
	4	0,743	>	0,2542	Valid
Accounting Information System	1	0,753	>	0,2542	Valid
	2	0,593	>	0,2542	Valid
	3	0,783	>	0,2542	Valid
	4	0,728	>	0,2542	Valid
	5	0,824	>	0,2542	Valid
Leadership Style	1	0,745	>	0,2542	Valid
	2	0,724	>	0,2542	Valid
	3	0,752	>	0,2542	Valid
	4	0,785	>	0,2542	Valid
	5	0,796	>	0,2542	Valid
	6	0,831	>	0,2542	Valid
Managerial Performance	1	0,687	>	0,2542	Valid
	2	0,799	>	0,2542	Valid
	3	0,872	>	0,2542	Valid
	4	0,814	>	0,2542	Valid
	5	0,794	>	0,2542	Valid
	6	0,759	>	0,2542	Valid
	7	0,904	>	0,2542	Valid

Source: SPSS Processed Data, 2025

### **Reliability Test**

The consistency assessment evaluates the reliability of questionnaire items serving as indicators for specific variables. The Cronbach's Alpha ( $\alpha$ ) coefficient was employed as the statistical metric, with variables considered consistent when this value exceeds 0.60. The statistical software package version 26 was used for this analysis. Results for each variable are presented below.

**Table 3. Reliability Test**

Variabel	CRONBACH ALPHA	Alpha	Status
Performance Measurement System	0,879	0,60	Reliabel
Reward	0,767	0,60	Reliabel
Accounting Information System	0,792	0,60	Reliabel
Leadership Style	0,863	0,60	Reliabel
Managerial Performance	0,908	0,60	Reliabel

Source: SPSS Processed Data, 2025

As shown in the table, each variable has a Cronbach's Alpha value exceeding 0.60 ( $\alpha > 0.60$ ), indicating that all independent (X) and dependent (Y) variables demonstrate sufficient consistency.

#### **Classical Assumption Test**

Prior to hypothesis testing, it was necessary to verify fundamental statistical assumptions including distribution normality, absence of multicollinearity, and heteroscedasticity.

#### **Normality Test**

This test determines whether the variables under examination follow a normal distribution pattern, which is a core requirement for regression analysis. The Kolmogorov-Smirnov (K-S) non-parametric statistical method was employed to evaluate the normality of residuals.

**Table 4. Normality Test**

			Unstandardized Residual
N			60
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	1.95166040	
Most Extreme Differences	Absolute	.157	
	Positive	.098	
	Negative	-.157	
Test Statistic			.157
Asymp. Sig. (2-tailed)			.001 <sup>c</sup>
Monte Carlo Sig. (2-tailed)	Sig.	.093 <sup>d</sup>	
	99% Confidence Interval	Lower Bound	.086
		Upper Bound	.101
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			

Source: SPSS Processed Data, 2025

Based on the results, the Monte Carlo Sig. (2-tailed) value is 0.093, which exceeds 0.05, indicating that the data follows a normal distribution pattern.

**Multicollinearity Test**

This evaluation determines whether correlations exist among independent variables in the regression model. Multicollinearity can be identified by examining Tolerance and Variance Inflation Factor (VIF) values, with acceptable thresholds being Tolerance > 0.10 and VIF < 10.

**Table 5. Multicollinearity Test**

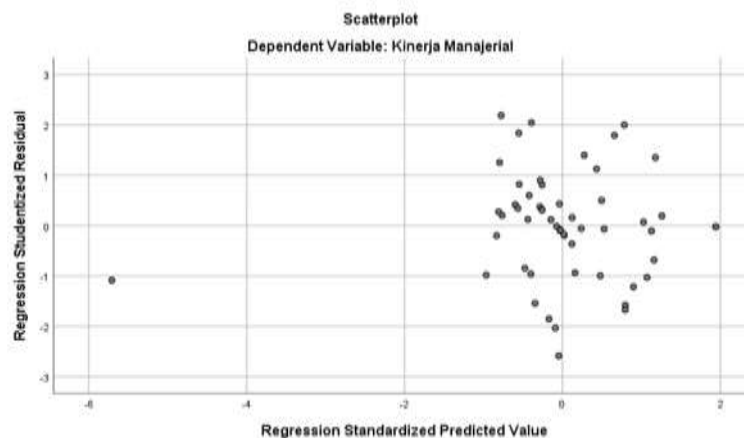
Model		Collinearity statistics	
		Tolerance	VIF
1	(Constant)		
	Performance Measurement System	.280	3.569
	Reward	.237	4.220
	Accounting Information System	.351	2.848
	Leadership Style	.277	3.606

Source: SPSS Processed Data, 2025

As indicated in the table, the VIF values for all independent variables fall below 10 (Performance evaluation system: 3.569, Compensation structure: 4.220, Accounting information framework: 2.848, Management approach: 3.606), confirming the absence of multicollinearity issues in this research.

**Heteroskedasticity Test**

This test examines whether residual variance remains consistent across observations in the regression model. A well-specified regression model should not exhibit heteroscedasticity symptoms. The scatterplot technique was employed to determine the presence of heteroscedasticity in the regression model.



**Figure 1. Scatterplot**

Source: SPSS Processed Data, 2025

Based on the scatterplot examination, the points appear randomly distributed without forming recognizable patterns. The scattered distribution of points indicates that the observational data differs from other studies, suggesting homoscedasticity and confirming the absence of heteroscedasticity.

**Multiple Linear Regression Analysis**

Multiple regression analysis was employed to identify relationships between independent variables and the dependent variable using a linear equation. The derived multiple regression model can be expressed as:

**Table 6. Multiple Linear Regression Testing**

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.758	2.199		.345	.731
	Performance Measurement System	.404	.142	.354	2.840	.006
	Reward	.161	.239	.091	.673	.504
	Accounting Information System	.396	.175	.252	2.267	.027
	Leadership style	.302	.144	.262	2.094	.041

Source: SPSS Processed Data, 2025

$$Y = 0.758 + 0.404X_1 + 0.161X_2 + 0.396X_3 + 0.302X_4 + e$$

From this equation, the influence of each independent variable on Administrative Effectiveness can be interpreted as follows:

1. The constant value of 0.758 indicates that if all independent variables equal zero, the administrative effectiveness would be 0.758.
2. The Performance evaluation system variable shows a positive relationship of 0.404, suggesting that each 1% improvement in the Performance evaluation system corresponds to a 0.404% increase in Administrative Effectiveness. Similarly, a 1% decline in the Performance evaluation system would result in a 0.404% decrease in Administrative Effectiveness, assuming other variables remain unchanged.
3. The Compensation structure variable demonstrates a positive relationship of 0.161, indicating that each 1% enhancement in Compensation structure is associated with a 0.161% improvement in Administrative Effectiveness. Conversely, a 1% reduction in Compensation structure would lead to a 0.161% decrease in Administrative Effectiveness, assuming other variables remain constant.
4. The Accounting information framework variable exhibits a positive relationship of 0.396, showing that each 1% improvement in the accounting information framework corresponds to a 0.396% increase in Administrative Effectiveness. Similarly, a 1% decline in the accounting

information framework would result in a 0.396% decrease in Administrative Effectiveness, assuming other variables remain unchanged.

- The Management approach variable shows a positive relationship of 0.302, indicating that each 1% enhancement in Management approach is associated with a 0.302% improvement in Administrative Effectiveness. Conversely, a 1% reduction in Management approach would lead to a 0.302% decrease in Administrative Effectiveness, assuming other variables remain constant.

### Hypothesis Testing

#### Partialt-Test

The results of the Individual Significance Test (t-test) can be summarized as follows:

**Table 7. Partial t-Test**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.758	2.199		.345	.731
	Performance Measurement System	.404	.142	.354	2.840	.006
	Reward	.161	.239	.091	.673	.504
	Accounting Information System	.396	.175	.252	2.267	.027
	Leadership Style	.302	.144	.262	2.094	.041

Source: SPSS Processed Data, 2025

- For the Performance evaluation system variable, the t-statistic is 2.840 with a significance level of 0.006. Since this significance value (0.006) is below the alpha threshold of 5% (0.05), and the calculated t-value (2.840) exceeds the critical t-value (0.2542), the null hypothesis is rejected and the alternative hypothesis is accepted. This indicates that the Performance evaluation system has a significant individual effect on Administrative Effectiveness.

2. For the Compensation structure variable, the t-statistic is 0.673 with a significance level of 0.504. Since this significance value (0.504) exceeds the alpha threshold of 5% (0.05), and the calculated t-value (0.673) is below the critical t-value (0.2542), the null hypothesis is accepted and the alternative hypothesis is rejected. This suggests that Compensation structure does not have a significant individual effect on Administrative Effectiveness.
3. For the Accounting information framework variable, the t-statistic is 2.267 with a significance level of 0.027. Since this significance value (0.027) is below the alpha threshold of 5% (0.05), and the calculated t-value (2.267) exceeds the critical t-value (0.2542), the null hypothesis is rejected and the alternative hypothesis is accepted. This confirms that the accounting information framework has a significant individual effect on Administrative Effectiveness.
4. For the Management approach variable, the t-statistic is 2.094 with a significance level of 0.041. Since this significance value (0.041) is below the alpha threshold of 5% (0.05), but the calculated t-value (2.094) is below the critical t-value (0.2542), the null hypothesis is accepted and the alternative hypothesis is rejected. This indicates that Management approach does not have a significant individual effect on Administrative Effectiveness.

#### *Simultaneous F-Test*

The F-test essentially indicates whether all the independent variables included in the model jointly influence the dependent variable. If the significance value of  $F > 0.05$ , then the independent variables simultaneously have no significant effect on the dependent variable. Conversely, if the significance value of  $F < 0.05$ , then the independent variables simultaneously have a significant effect on the dependent variable.

**Table 8. Simultaneous F-Test**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	715.454	4	178.863	43.775	.000 <sup>b</sup>
	Residual	224.730	55	4.086		
	Total	940.183	59			

*Source: SPSS Processed Data, 2025*

It can be concluded from the simultaneous significance test that the F-test in the ANOVA table shows an F value of 43.775 and a significance value of 0.000, which is less than 0.05. Therefore, it can be concluded that the Performance Measurement System, Reward, Accounting Information System, and Leadership Style simultaneously have a significant effect on Managerial Performance.

#### *Coefficient of Determination Test ( $R^2$ )*

The coefficient of determination, denoted as  $R^2$ , is a model used to predict and assess the extent of the contribution of independent variables simultaneously on the dependent variable.

**Table 9. Coefficient of Determination Test (R<sup>2</sup>)**

Model	R	R Square	Adjusted R Square
1	.872 <sup>a</sup>	.761	.744

*Source: SPSS Processed Data, 2025*

The results of the coefficient of determination test in Table 4.11 show that the adjusted R<sup>2</sup> is 0.744. Thus, the contribution of the Performance Measurement System, Reward, Accounting Information System, and Leadership Style to Managerial Performance is 74.4%. The remaining 25.6% is influenced by other factors not examined in this study.

## DISCUSSION

### *The Influence of Performance Measurement System on Managerial Performance*

The Performance Measurement System involves tracking and quantifying activities' success in alignment with organizational objectives, typically manifested through outputs such as products, services, or operational processes. Enhanced Performance Measurement System correlates positively with improved Managerial Performance. This research demonstrates that the Performance Measurement System influences Managerial Performance, attributed to leadership that values employee contributions impartially without favoritism toward specific groups or authorized personnel. Statistical analysis confirms this relationship, with t-test results yielding a value of 2.840 and significance at 0.006, below the 5% threshold (0.05). These findings establish that the Performance Measurement System independently impacts Managerial Performance. While these results contrast with Afriantoni & Misni's 2018 study that found no independent relationship, they align with Flantika's 2017 research, which identified a significant independent influence of the Performance Measurement System on Managerial Performance.

### *The Influence of Reward on Managerial Performance*

This research indicates that Reward does not independently affect Managerial Performance due to ineffective incentive mechanisms at PT SMA that fail to adequately motivate managers. The organization's compensation system suffers from delayed distribution and insufficient alignment with actual work contributions. Consequently, these incentives do not effectively drive employees to fulfill their responsibilities or pursue organizational objectives, resulting in no enhancement of Managerial Performance. Statistical evidence supports this conclusion through t-test analysis yielding a t-value of 0.673 with a significance measure of 0.504, exceeding the established 5% threshold (0.05). This statistical outcome confirms that Reward has no independent impact on Managerial Performance. The findings align with Rumapea et al.'s 2018 research, which similarly demonstrated no independent effect of reward systems, while contrasting with Sitorus et al.'s 2022 study that identified a significant independent relationship between rewards and management effectiveness.

### ***The Influence of Accounting Information System on Managerial Performance***

This research demonstrates a significant impact of the Accounting Information System on Managerial Performance. The evidence suggests that PT SMA has implemented an effective Accounting Information System that delivers accounting data characterized by relevance, timeliness, and reliability to facilitate informed decision-making processes. These findings align with the Technology Acceptance Model (TAM), which reinforces the results by emphasizing the system's practical utility and user-friendly design at PT SMA. Superior Accounting Information System implementation correlates with enhanced Managerial Performance outcomes. Statistical validation comes from t-test analysis producing a t-value of 2.267 with significance at 0.027, below the established 5% criterion, confirming that the Accounting Information System independently influences Managerial Performance. These conclusions diverge from Rumapea et al.'s 2018 study that identified no relationship, while supporting Paramitha's 2017 research that established an independent effect of Accounting Information Systems on Managerial Performance metrics.

### ***The Influence of Leadership Style on Managerial Performance***

Leadership style can be considered successful when a leader is able to direct subordinates to cooperate, diligently perform their tasks, motivate, and take full responsibility for efforts to achieve organizational goals. At PT SMA, employees are satisfied with their managers' leadership styles, as managers do not favor certain groups, which motivates employees to maximize their abilities to achieve organizational goals. This is supported by the t-test showing a t-value of 2.094 and a significance value of 0.041, which is less than the 5% alpha level, indicating that Leadership Style partially influences managerial performance. This result is consistent with Ivana (2016), who found a partial effect of leadership style on managerial performance, but does not support Jumaidi et al. (2021), who found no partial effect.

### ***The Effect of Performance Measurement System, Reward, Accounting Information System, and Leadership Style on Managerial Performance***

Managerial performance is the result of a manager's ability to carry out management functions such as planning, organizing, directing, and controlling (Henri Fayol, Classical Management Theory). An effective performance measurement system provides a clear basis for managers to evaluate the extent to which organizational goals are achieved and offers the necessary feedback for improvements and decision-making (Haga, 2018). These four elements performance measurement system, reward, accounting information system, and leadership style are interrelated and collectively contribute to better managerial performance. Based on the simultaneous test (F-test) results shown in Table 4.12, the F value obtained is 43.775 with a significance value of 0.000 ( $< 0.05$ ). This indicates that these variables together have a significant effect on managerial performance.

## **CONCLUSIONS AND RECOMMENDATIONS**

1. Performance measurement systems demonstrated a statistically significant partial influence on managerial effectiveness ( $p = 0.006$ , below the 0.05 threshold).
2. Compensation and incentive structures failed to show a meaningful independent relationship with managerial effectiveness ( $p = 0.673$ , exceeding the 0.05 significance level).
3. Accounting and financial information frameworks exhibited a significant partial impact on managerial effectiveness ( $p = 0.027$ , below the 0.05 threshold).
4. Leadership approaches and behavioral patterns showed a significant partial effect on managerial effectiveness ( $p = 0.041$ , below the 0.05 threshold).
5. The combined model incorporating performance measurement methodologies, reward mechanisms, accounting information infrastructure, and leadership paradigms accounted for approximately three-quarters (74.4%) of the variation in managerial effectiveness. The remaining quarter (25.6%) of variation can be attributed to external factors outside the scope of this investigation.

To enhance and improve managerial performance quality, we offer the following suggestions:

1. Organizations should focus on developing employees who demonstrate limited proficiency with operational systems. Targeted training programs can strengthen their technical capabilities, enabling them to achieve superior performance outcomes.
2. Companies would benefit from implementing more equitable reward distribution mechanisms across all organizational levels, ensuring fair recognition from senior leadership to frontline staff.

## **ADVANCED RESEARCH**

Future researchers are encouraged to conduct follow-up studies with expanded sample sizes to validate these findings. Additionally, when employing primary data collection through questionnaires, careful attention should be given to balancing the proportion of question items across all research variables to enhance measurement validity.

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