

The Influence Of Transformational Leadership And Organizational Culture On Employee Performance At PT Pelindo Multi Terminal

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Abstract. Employee performance in port services depends on leadership that can mobilize people and on organizational values that guide consistent work behavior. This study examines the influence of transformational leadership and organizational culture on employee performance at PT Pelindo Multi Terminal. A quantitative causal survey was conducted using questionnaire data from 88 employees selected from a population of 711 employees. The data were analyzed with validity and reliability testing, classical assumption tests, multiple linear regression, the coefficient of determination, the F-test, and partial t-tests. Transformational leadership had a positive and significant effect on employee performance ($B = 0.421$; $t = 4.833$; $p < 0.001$), while organizational culture also had a positive and significant effect ($B = 0.355$; $t = 3.901$; $p < 0.001$). Simultaneously, both variables significantly explained employee performance, with $R\text{-square} = 0.518$. The findings show that inspirational leadership, employee support, shared values, effective communication, and consistent work norms are complementary organizational mechanisms for improving performance in a multipurpose terminal environment.

Keywords: Employee Performance, Organizational Culture, Port Services, Transformational Leadership.

INTRODUCTION

Globalization, digital transformation, and increasingly integrated logistics systems require organizations to strengthen competitiveness through effective human-resource management. Organizational performance is no longer determined solely by capital, technology, and infrastructure, but also by employees who can maintain productivity, service quality, commitment, innovation, and adaptability. In operational service organizations, the ability of leaders to provide direction and inspiration and the ability of the organization to sustain clear values and work norms are especially important because daily performance depends on coordination, discipline, and rapid responses to changing operational demands.

Transformational leadership is relevant in this setting because it emphasizes vision, inspiration, motivation, intellectual stimulation, and individualized consideration. Leaders who use this approach do more than supervise tasks; they encourage employees to understand organizational goals, develop confidence, and contribute beyond minimum requirements. Recent empirical research supports the relationship between transformational leadership and employee performance. Hijrina et al. (2025) discuss the importance of transformational leadership for performance, while Iskandar and Hasbi (2024) show that the leadership style can improve performance through stronger motivation and communication. Daeli et al. (2024) similarly identify leadership and organizational factors as significant determinants of employee performance.

Organizational culture complements leadership by shaping the values, expectations, and behavioral norms that employees use in daily work. Mulyaningsih (2018) describes culture as an internal control mechanism that influences responsibility, discipline, cooperation, and service quality. Robbins and Judge (2019) likewise explain that shared organizational values guide

behavior and can increase effectiveness when they are clearly communicated and consistently implemented. In organizations where leadership messages and cultural norms reinforce each other, employees receive a more coherent basis for making decisions and coordinating work.

PT Pelindo Multi Terminal is a subholding of PT Pelindo (Persero) that manages non-container or multipurpose terminal operations. The company's strategic role in Indonesia's logistics system requires stable employee performance across operational and support functions. Internal performance data for 2022-2024 show that overall performance remained in the good category but was not fully stable. Commitment and discipline improved, whereas integrity and teamwork fluctuated. These variations provide a practical basis for examining whether leadership and organizational culture help explain differences in employee performance.

Table 1. Employee Performance at PT Pelindo Multi Terminal, 2022-2024

Indicator	2022	Category	2023	Category	2024	Category
Work Behavior	76	Good	84	Good	82	Good
Integrity	73	Fair	81	Good	74	Fair
Commitment	75	Good	79	Good	85	Good
Discipline	74	Fair	81	Good	84	Good
Teamwork	74	Fair	81	Good	74	Fair
Average	74	Good	81.2	Good	79.8	Good

Source: PT Pelindo Multi Terminal, 2025.

The average score increased from 74 in 2022 to 81.2 in 2023 before declining slightly to 79.8 in 2024. Work behavior remained good, commitment rose steadily to 85, and discipline improved from 74 to 84. In contrast, integrity returned to the fair category in 2024 and teamwork declined from 81 to 74. These results suggest that the organization has achieved generally favorable performance while still facing inconsistency in behavioral dimensions that may be influenced by leadership and the strength of shared work values.

Although transformational leadership and organizational culture have been widely studied, evidence from Indonesia's port and multipurpose terminal services remains more limited than evidence from manufacturing, education, healthcare, and other service sectors. Laga et al. (2024) found significant effects of transformational leadership and organizational culture among health employees, and Sebayang et al. (2025) emphasize the strategic role of leadership and organizational systems in shaping organizational culture. The distinct operational context of PT Pelindo Multi Terminal therefore provides a relevant setting in which to test these relationships.

This study aims to analyze the partial effects of transformational leadership and organizational culture on employee performance and their simultaneous effect at PT Pelindo Multi Terminal. The results are expected to contribute to human-resource management literature and provide practical guidance for strengthening leadership quality and organizational culture in a port-service environment.

LITERATURE REVIEW

Transformational Leadership

Transformational leadership refers to a leadership approach that motivates followers to exceed routine expectations by connecting individual work with a broader organizational vision. Bass and Avolio (1994) identify idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration as central components. These behaviors can increase employee confidence and intrinsic motivation because leaders provide meaning, role

modeling, support, and opportunities for development. In a terminal operation, transformational leadership can be reflected in clear operational direction, encouragement during demanding service conditions, attention to employee needs, and support for problem solving and continuous improvement.

Organizational Culture

Organizational culture consists of shared values, norms, assumptions, and work practices that guide how employees interpret situations and behave. Mulyaningsih (2018) emphasizes its role as an internal behavioral control system, while Robbins and Judge (2019) describe culture as a mechanism that creates identity, commitment, stability, and behavioral guidance. A strong culture does not merely consist of slogans; it is visible in communication patterns, discipline, cooperation, integrity, and the way leaders and employees respond to operational problems. When cultural values are consistently reinforced, employees are more likely to coordinate their actions and maintain service standards.

Employee Performance

Employee performance represents the extent to which employees complete work in accordance with organizational expectations regarding quality, quantity, timeliness, responsibility, and behavioral standards. In the source study, the organizational performance context includes work behavior, integrity, commitment, discipline, and teamwork. These dimensions are particularly relevant to port services because operational reliability depends not only on individual task completion but also on coordination and adherence to procedures. Performance can therefore be influenced by leadership, culture, competence, motivation, reward systems, and the work environment.

Relationships among the Variables

Transformational leadership is expected to improve performance by increasing motivation, clarifying goals, empowering employees, and strengthening commitment. Organizational culture is expected to improve performance by creating consistent behavioral norms and a supportive work environment. The two mechanisms are also complementary: leaders help create and reinforce culture, while a strong culture makes leadership messages more credible and easier to implement. Empirical studies by Iskandar and Hasbi (2024), Daeli et al. (2024), and Laga et al. (2024) support positive relationships among leadership, culture, and performance. Accordingly, this study tests two partial hypotheses and one simultaneous hypothesis concerning employee performance at PT Pelindo Multi Terminal.

METHODS

The study used a quantitative causal design to examine the effects of transformational leadership (X1) and organizational culture (X2) on employee performance (Y). The population consisted of 711 employees of PT Pelindo Multi Terminal in 2025, and 88 employees were included as respondents. Data were collected using a structured questionnaire designed to measure the three constructs and were processed with SPSS version 22.0.

Instrument quality was assessed using item validity tests and Cronbach's alpha. The validity criterion compared each item correlation with an r-table value of 0.2096. Reliability was evaluated using Cronbach's alpha. Before estimating the regression model, classical assumptions were examined, including multicollinearity and heteroscedasticity. The multicollinearity assessment used tolerance and Variance Inflation Factor (VIF), while heteroscedasticity was evaluated from the distribution of residual points on a scatter plot.

Multiple linear regression was used to estimate the effects of X1 and X2 on Y. Model explanatory power was assessed with R and R-square. The F-test evaluated whether transformational leadership and organizational culture jointly affected employee performance, while t-tests assessed each independent variable separately. Statistical decisions used a significance level of 0.05.

Table 2. Research Variables and Measurement Focus

Variable	Measurement focus
Transformational Leadership	Vision, inspiration, motivation, intellectual stimulation, individualized support
Organizational Culture	Shared values, communication, discipline, cooperation, integrity, work norms
Employee Performance	Work behavior, integrity, commitment, discipline, teamwork and task accomplishment

Source: Adapted from the constructs and indicators used in the study.

RESULTS

Instrument Quality and Classical Assumptions

All questionnaire items for transformational leadership, organizational culture, and employee performance had item correlations above the r-table value of 0.2096 and were therefore categorized as valid. Reliability was acceptable to good for all constructs: Cronbach's alpha was 0.760 for transformational leadership, 0.803 for organizational culture, and 0.816 for employee performance. The independent variables also had tolerance values of 0.684 and VIF values of 1.462, indicating no multicollinearity problem. The scatter-plot assessment in the source analysis showed randomly distributed residual points without a clear pattern, supporting the absence of a serious heteroscedasticity problem.

Table 3. Summary of Reliability and Multicollinearity Tests

Variable	Cronbach Alpha	Tolerance	VIF	Interpretation
Transformational Leadership	0.760	0.684	1.462	Reliable; no multicollinearity
Organizational Culture	0.803	0.684	1.462	Reliable; no multicollinearity
Employee Performance	0.816	-	-	Reliable

Source: SPSS Version 22.0 output.

Correlation and Regression Results

The correlation matrix showed significant positive relationships among all three variables. Transformational leadership correlated with employee performance at 0.620 ($p < 0.001$), organizational culture correlated with employee performance at 0.570 ($p < 0.001$), and the two independent variables correlated at 0.545 ($p < 0.001$). The relationship among the predictors was moderate rather than excessive, consistent with the acceptable VIF values.

Table 4. Correlations among Research Variables

Relationship	Pearson r	p-value
Transformational Leadership - Employee Performance	0.620	0.000
Organizational Culture - Employee Performance	0.570	0.000
Transformational Leadership - Organizational Culture	0.545	0.000

Source: SPSS Version 22.0 output.

The estimated regression equation was $Y = 7.214 + 0.421X_1 + 0.355X_2$. The positive coefficients indicate that increases in transformational leadership and organizational culture were associated with higher employee performance while holding the other predictor constant. Transformational leadership had the larger unstandardized coefficient in the model.

Table 5. Multiple Linear Regression Coefficients

Predictor	B	Std. Error	t	p-value
Constant	7.214	2.115	3.409	0.001
Transformational Leadership	0.421	0.087	4.833	0.000
Organizational Culture	0.355	0.091	3.901	0.000

Source: SPSS Version 22.0 output.

Model Explanatory Power and Hypothesis Tests

The multiple correlation coefficient was $R = 0.720$, indicating a strong combined relationship between the two predictors and employee performance. The R-square value of 0.518 means that transformational leadership and organizational culture explained 51.8% of employee-performance variance, while 48.2% was associated with variables outside the model. The simultaneous F-test produced $F = 45.50$ with $p < 0.001$, confirming that the regression model was statistically significant.

Table 6. Model Summary and Simultaneous Test

R	R-Square	Adjusted R-Square	F	p-value
0.720	0.518	0.505	45.50	0.000

Source: SPSS Version 22.0 output.

Partial testing further confirmed both hypotheses. Transformational leadership produced $t = 4.833$ with $p < 0.001$, and organizational culture produced $t = 3.901$ with $p < 0.001$. Because both coefficients were positive and statistically significant, higher levels of each organizational factor were associated with better employee performance.

DISCUSSION

Transformational Leadership and Employee Performance

The positive coefficient for transformational leadership indicates that leadership practices involving inspiration, motivation, support, and employee development contribute to better performance at PT Pelindo Multi Terminal. The coefficient of 0.421 and the highly significant t-test suggest that leadership is not merely a contextual factor but an important predictor in the model. This result is consistent with Bass and Avolio's (1994) transformational leadership framework, which explains that employees are more likely to exceed routine expectations when

leaders connect work to meaningful goals, model desired behavior, stimulate problem solving, and recognize individual needs.

The finding also aligns with recent empirical studies. Iskandar and Hasbi (2024) report that transformational leadership improves employee performance through motivation and effective organizational processes, while Hijrina et al. (2025) discuss its relevance for strengthening performance in service settings. In a multipurpose terminal environment, the practical implication is that managers should communicate operational priorities clearly, provide constructive feedback, involve employees in improvement initiatives, and maintain visible support during high-demand operational periods. Such practices can increase employee confidence and help translate organizational objectives into consistent work behavior.

Organizational Culture and Employee Performance

Organizational culture also showed a positive and significant coefficient (0.355). This means that stronger shared values, communication patterns, work norms, and a supportive work environment are associated with higher employee performance. The finding is consistent with Robbins and Judge (2019), who argue that culture guides employee behavior and provides a shared framework for interpreting organizational expectations. Mulyaningsih (2018) similarly emphasizes culture as an internal control mechanism that can strengthen responsibility, discipline, cooperation, and service quality.

The internal performance data provide a useful context for this result. Commitment and discipline improved over the three-year period, whereas integrity and teamwork remained more volatile. A stronger organizational culture can help reduce such inconsistency by making expectations regarding collaboration, integrity, communication, and accountability more explicit and more consistently reinforced. The result is also compatible with Laga et al. (2024), who found that organizational culture contributes to employee performance together with transformational leadership.

Combined Effect of Leadership and Culture

The significant F-test and R-square of 0.518 demonstrate that transformational leadership and organizational culture should be understood as complementary mechanisms rather than isolated interventions. Leaders help articulate and reinforce organizational values, while culture creates the behavioral environment in which leadership messages are interpreted. A leader who communicates a strong vision but operates in an inconsistent culture may struggle to produce stable behavior; conversely, a written set of values may have limited influence if leaders do not demonstrate and reinforce them. The simultaneous result therefore supports integrated management of leadership practices and organizational culture.

For PT Pelindo Multi Terminal, the findings imply that leadership development should be connected with cultural reinforcement programs. Management can strengthen role modeling, communication, coaching, and employee participation while simultaneously improving mechanisms that reward integrity, teamwork, discipline, and commitment. Regular performance feedback, team-based problem solving, cross-unit coordination, and consistent application of work standards can help convert leadership and culture into observable performance. Because 48.2% of performance variance remains outside the model, these efforts should also be integrated with competence development, work motivation, reward systems, workload management, and the broader work environment.

Practical Implications for Port Service Management

The pattern of internal performance scores suggests that management interventions should be differentiated across performance dimensions. Commitment increased continuously

and discipline improved substantially, indicating that employees can respond positively when expectations and organizational priorities are reinforced. By contrast, integrity and teamwork showed greater fluctuation. These two dimensions require behavioral reinforcement that is visible in day-to-day supervision: leaders need to demonstrate consistent ethical standards, address deviations promptly, and create routines in which employees from different units solve operational problems collectively. This is particularly important in multipurpose terminal operations where delays or coordination failures in one function can influence the effectiveness of other functions. Leadership-development programs should therefore focus on operationally relevant transformational behaviors rather than only on general leadership theory. Supervisors can be trained to communicate a clear shift or unit-level vision, explain how individual tasks contribute to terminal performance, provide timely recognition, conduct short coaching conversations, and invite employees to propose process improvements. These practices can strengthen inspirational motivation and individualized consideration while also encouraging intellectual stimulation. When applied consistently, they can help employees interpret performance standards as shared organizational goals rather than merely administrative requirements. Cultural reinforcement should also be supported by organizational systems. Values such as integrity, teamwork, commitment, and discipline are more likely to influence performance when they are translated into observable indicators, included in performance feedback, recognized in reward and development decisions, and discussed in routine coordination meetings. Cross-unit forums, after-action reviews, and structured problem-solving sessions can strengthen teamwork, while transparent procedures and consistent supervisory responses can reinforce integrity. In this way, culture becomes a practical management mechanism that supports operational reliability rather than an abstract set of statements.

Finally, the unexplained 48.2% of performance variance indicates that leadership and culture should be treated as important but not exclusive determinants. The company can obtain a more complete performance strategy by combining them with competence mapping, technical training, workload balancing, occupational support, reward fairness, and employee-engagement initiatives. Future organizational evaluations can also examine whether the effects of leadership and culture differ across operational units, job levels, tenure groups, or work locations. Such analysis would provide a more targeted basis for human-resource interventions within a complex port-service organization.

CONCLUSION

Transformational leadership has a positive and significant effect on employee performance at PT Pelindo Multi Terminal, with $B = 0.421$, $t = 4.833$, and $p < 0.001$. Organizational culture also has a positive and significant effect, with $B = 0.355$, $t = 3.901$, and $p < 0.001$. Simultaneously, the two variables significantly affect employee performance, with $F = 45.50$, $p < 0.001$, and $R\text{-square} = 0.518$. These findings show that inspirational and supportive leadership and a strong, consistent organizational culture jointly provide an important foundation for employee performance in a port-service organization.

Management should strengthen transformational leadership competencies through communication, coaching, role modeling, employee empowerment, and support for problem solving. At the same time, organizational values concerning integrity, teamwork, commitment, and discipline should be reinforced consistently through performance systems, daily supervisory practices, and cross-unit coordination. Future research should examine additional determinants such as motivation, competence, compensation, workload, work environment, employee engagement, or job satisfaction and should include larger samples or comparative studies across port-service units.

LIMITATION

The study is limited to one organization and a sample of 88 employees, so its findings may not represent all units of the Pelindo group or other logistics and port organizations. The cross-sectional survey design captures perceptions at one point in time and cannot fully establish changes in leadership, culture, and performance over time. In addition, 48.2% of employee-performance variance was not explained by the two predictors. Future studies should use larger multi-site samples, longitudinal or mixed-method designs, and broader models that incorporate individual, job, and organizational factors.

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