



## **The Influence of Organizational Culture and Leadership on Employee Performance at PT TD Automotive Compressor Indonesia**

**Nia Tarmuji Anti<sup>1\*</sup>**

<sup>1</sup> Politeknik Bina Madani, Indonesia

email: [nia.ta@gmail.com](mailto:nia.ta@gmail.com)

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### **Abstract**

*This study examined the influence of organizational culture and leadership on employee performance at PT TD Automotive Compressor Indonesia, a joint venture of Toyota Industries Corporation, the Astra Group, and the Denso Group. An empirical quantitative approach with an explanatory research design was employed to investigate the causal relationships among the proposed variables. Data were collected from 50 employees using a structured five-point Likert-scale questionnaire and analyzed using IBM SPSS Statistics 25 through validity and reliability tests, classical assumption testing, multiple linear regression, coefficient of determination analysis, and partial and simultaneous hypothesis testing. The results indicate that both organizational culture and leadership have positive and significant effects on employee performance, with organizational culture demonstrating a slightly stronger contribution than leadership. The findings further reveal that the integration of strong organizational values, including discipline, occupational safety, teamwork, and continuous improvement, with effective leadership practices enhances employees' ability to achieve the company's SQCDMPE operational performance targets. This study provides empirical evidence that organizational culture and leadership function as complementary organizational resources in improving employee performance and offers practical insights for strengthening sustainable organizational performance in the Indonesian automotive manufacturing industry.*

**Keywords:** Automotive Manufacturing, Employee Performance, Leadership, Organizational Culture, SQCDMPE.



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## **INTRODUCTION**

The rapid transformation of global manufacturing industries has intensified competition among organizations, compelling companies to continuously improve employee performance as a strategic resource for achieving sustainable competitive advantage. In highly integrated production systems, organizational success is no longer determined solely by technological advancement or capital investment but increasingly depends on the organization's ability to develop a workforce capable of maintaining productivity, innovation, quality consistency, and operational flexibility under dynamic market conditions (Clarissa et al., 2025). Within this context, employee performance has evolved into a multidimensional organizational outcome that reflects not only individual competence but also the effectiveness of organizational systems in aligning employee behavior with corporate objectives (Robbins & Judge, 2019). Manufacturing companies operating within global supply chains are expected to maintain operational excellence through standardized work processes, continuous improvement initiatives, and collaborative organizational practices that enable consistent achievement of production targets. These developments have encouraged organizations to strengthen managerial capabilities that support long-term organizational effectiveness rather than relying exclusively on technological modernization. Among Indonesian automotive manufacturers, PT TD Automotive Compressor Indonesia represents one of the companies operating under world-class manufacturing standards through its strategic collaboration between Toyota Industries Corporation, Astra Group, and Denso Group, requiring employees to consistently demonstrate high levels of operational performance across increasingly demanding production environments.

Employee performance within manufacturing organizations is increasingly understood as the cumulative result of organizational mechanisms that shape employee attitudes, work behavior, and

commitment toward organizational objectives rather than merely reflecting individual ability or technical competence. Strategic human resource management emphasizes that organizational performance can only be sustained when managerial systems successfully integrate organizational values, leadership practices, and employee engagement into coherent organizational behavior that supports continuous improvement and operational excellence (Hasibuan, 2020). Contemporary studies further demonstrate that organizational variables consistently explain a substantial proportion of employee performance because employees perform more effectively when organizational environments encourage collaboration, discipline, accountability, and continuous learning instead of focusing solely on individual performance incentives (Putranto et al., 2024). Such findings suggest that employee performance should be examined from a broader organizational perspective in which managerial practices and organizational characteristics become fundamental determinants of sustainable organizational success. Among these organizational characteristics, organizational culture has attracted considerable scholarly attention because shared values and behavioral norms provide employees with informal guidance in responding to operational challenges while simultaneously strengthening organizational commitment and behavioral consistency. The relevance of organizational culture becomes particularly evident in manufacturing companies where standardized production systems require employees to internalize organizational values that encourage discipline, teamwork, problem-solving capability, and continuous improvement as essential elements of everyday operational activities.

Organizational culture has therefore been recognized as one of the most influential organizational resources for enhancing employee performance because it establishes shared values that shape employees' attitudes, decision-making processes, and behavioral consistency in pursuing organizational objectives. Rather than functioning merely as a symbolic organizational identity, culture influences how employees interpret work responsibilities, collaborate with colleagues, respond to operational challenges, and participate in continuous improvement initiatives that are essential for manufacturing excellence. Empirical evidence consistently demonstrates that organizations characterized by strong cultures emphasizing discipline, teamwork, and continuous improvement achieve higher levels of employee productivity and organizational effectiveness than organizations with weaker cultural integration (Arsando & Sutarto, 2024). Similar findings from the Indonesian automotive manufacturing sector indicate that work cultures promoting quality awareness, employee involvement, and operational discipline contribute significantly to improving employee performance while strengthening organizational competitiveness (Safitri & Tannady, 2022). More recent studies further confirm that organizational culture remains a robust predictor of employee performance across different industrial settings despite variations in organizational size and business characteristics (Ismiyati & Kustini, 2026). These findings collectively suggest that organizational culture should not be viewed as a static organizational attribute but rather as a dynamic managerial mechanism capable of directing employee behavior toward sustained operational excellence and continuous organizational development.

Alongside organizational culture, leadership constitutes another critical organizational capability that determines whether employees are able to translate organizational objectives into measurable operational outcomes. Effective leadership extends beyond assigning responsibilities because leaders simultaneously function as facilitators, motivators, coaches, and role models who influence employee attitudes, strengthen organizational commitment, and encourage collaborative problem solving within increasingly complex production environments. Previous empirical studies consistently report that supportive leadership positively influences employee performance by enhancing employee motivation, communication quality, and work engagement across diverse organizational contexts (Rachman et al., 2024). Evidence from labor-intensive industries likewise indicates that leadership contributes indirectly to higher organizational performance through the development of job satisfaction and organizational commitment, suggesting that leadership effectiveness operates through multiple organizational mechanisms rather than through formal authority alone (Pradana et al., 2024). Research conducted in Indonesian manufacturing companies also demonstrates that leadership and organizational culture reinforce one another in creating organizational climates that facilitate productivity improvement, employee participation, and sustainable organizational performance (Anggraeni et al., 2025). Although previous studies generally acknowledge the importance of organizational culture and leadership, the relative contribution of these variables remains context-

dependent, indicating that their effectiveness may vary according to organizational characteristics, production systems, and managerial practices implemented within individual manufacturing companies.

Despite the growing body of literature examining organizational culture, leadership, and employee performance, several conceptual and empirical issues remain insufficiently addressed, particularly within highly standardized automotive manufacturing environments. Existing studies have frequently examined organizational culture, leadership, work discipline, motivation, organizational commitment, or work environment as separate determinants of employee performance, resulting in fragmented explanations regarding how organizational resources collectively shape employee behavior in complex production systems (Susanti et al., 2023). More specifically, research conducted within automotive companies has predominantly emphasized the influence of operational variables while providing relatively limited empirical attention to the simultaneous roles of organizational culture and leadership under world-class manufacturing practices that prioritize continuous improvement and standardized work systems (Hidayat et al., 2024). At PT TD Automotive Compressor Indonesia, previous empirical investigations have focused on work discipline, training, motivation, shift work systems, and the work environment, demonstrating that these factors significantly influence employee performance while leaving the integrated contribution of organizational culture and leadership largely unexplored (Hamidah & Syarief, 2023). Recent evidence from the same company also indicates that operational conditions, particularly shift work arrangements and workplace environments, continue to shape employee performance, implying that broader organizational factors deserve greater scholarly attention to explain performance variation more comprehensively (Azzahra, 2026). The company's consistent achievement of operational targets through the Safety, Quality, Cost, Delivery, Morale, Productivity, and Environment (SQCDMPE) framework, together with prestigious accomplishments such as first place in the Toyota Industries Corporation Japan Quality Control Circle competition, second place in the Toyota MASIF competition, and the DIAMOND Award at the National Quality Control Circle event, provides a compelling organizational context for examining whether organizational culture and leadership remain fundamental drivers of employee performance within a globally competitive manufacturing environment.

This study seeks to examine the influence of organizational culture and leadership on employee performance at PT TD Automotive Compressor Indonesia by positioning employee performance within the broader framework of organizational behavior and strategic human resource management. Unlike previous studies that have primarily investigated organizational variables independently or concentrated on general manufacturing settings, this research emphasizes the complementary roles of organizational culture and leadership within a company implementing world-class manufacturing principles and continuous improvement practices. The study is expected to provide a more integrated explanation of employee performance by demonstrating how shared organizational values and effective leadership collectively contribute to achieving operational excellence in the automotive manufacturing industry. From a theoretical perspective, the findings are anticipated to enrich the organizational behavior literature by strengthening the understanding of the interaction between organizational culture and leadership in explaining employee performance. From a managerial perspective, the research is expected to provide practical evidence that supports organizational decision-makers in developing leadership strategies and reinforcing organizational culture to sustain employee performance under increasingly competitive industrial conditions. Ultimately, this study offers an empirical foundation for future research investigating organizational performance within manufacturing companies operating in globally integrated production systems.

## RESEARCH METHODS

This study employed an empirical quantitative approach with an explanatory research design to examine the influence of organizational culture and leadership on employee performance at PT TD Automotive Compressor Indonesia. An explanatory design was considered appropriate because the study aimed to test the causal relationships among the proposed variables using quantitative evidence (Sugiyono, 2021). The research was conducted at PT TD Automotive Compressor Indonesia, with all employees serving as the research population, while the sample size was determined using the Slovin formula to obtain a representative number of respondents (Arikunto, 2019). Primary data were collected through a structured questionnaire distributed directly to employees, whereas secondary data were

obtained from company documents and relevant literature to support the empirical analysis. Organizational culture was operationalized through indicators reflecting work discipline, occupational safety compliance, Kaizen implementation, and teamwork; leadership was measured using indicators of communication, role modeling, motivation, and technical guidance; and employee performance was assessed through work quality, work quantity, punctuality, initiative, and contribution to the company's Safety, Quality, Cost, Delivery, Morale, Productivity, and Environment (SQCDMPE) performance targets. All variables were measured using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The operationalization of these variables was developed to ensure that each construct could be measured systematically and accurately in accordance with the objectives of the study while reflecting the organizational characteristics of the automotive manufacturing industry.

The collected data were analyzed using IBM SPSS Statistics 25 through a series of statistical procedures designed to ensure the validity of the empirical findings. The research instrument was first evaluated using validity and reliability tests to confirm that all questionnaire items accurately and consistently measured the intended constructs (Ghozali, 2018). Prior to hypothesis testing, the dataset was examined through classical assumption tests consisting of normality, multicollinearity, and heteroscedasticity tests to verify the appropriateness of the regression model for statistical inference. Multiple linear regression analysis was subsequently employed to estimate both the partial and simultaneous effects of organizational culture and leadership on employee performance. The significance of the individual effects was assessed using the t-test, whereas the joint effect of the independent variables was evaluated using the F-test at a significance level of 5%. The coefficient of determination ( $R^2$ ) was further calculated to determine the proportion of variance in employee performance explained by organizational culture and leadership, thereby providing an indication of the explanatory power of the proposed research model (Ghozali, 2018). These analytical procedures were selected because they are widely applied in empirical studies within business and management research to examine causal relationships among organizational variables and to generate statistically reliable conclusions.

### **Hypothesis Development**

#### **H1: Organizational culture has a positive and significant effect on employee performance at PT TD Automotive Compressor Indonesia.**

Organizational culture provides employees with shared values and behavioral norms that shape work attitudes, strengthen organizational commitment, and encourage continuous improvement. In manufacturing organizations, a strong organizational culture promotes consistency in work practices and operational discipline, leading to higher employee performance (Arsando & Sutarto, 2024). Previous empirical findings also confirm that organizations with well-established cultural values consistently achieve better employee productivity and organizational effectiveness (Ismiyati & Kustini, 2026).

#### **H2: Leadership has a positive and significant effect on employee performance at PT TD Automotive Compressor Indonesia.**

Leadership influences employee performance by providing direction, motivation, and supervision that enable employees to perform their responsibilities more effectively. Leaders who foster communication, support employee development, and encourage participation create organizational environments that improve work engagement and productivity (Rachman et al., 2024). This relationship has also been supported by empirical evidence demonstrating that effective leadership contributes significantly to employee performance across manufacturing organizations (Pradana et al., 2024).

#### **H3: Organizational culture and leadership simultaneously have a positive and significant effect on employee performance at PT TD Automotive Compressor Indonesia.**

Organizational culture and leadership complement each other in shaping employee behavior because leadership reinforces organizational values while culture provides behavioral standards that guide employees in their daily activities. Their integration creates a supportive organizational environment that encourages discipline, collaboration, and continuous improvement, thereby enhancing employee performance (Anggraeni et al., 2025).

## RESULTS AND DISCUSSION

### Respondent Characteristics and Employee Performance Based on the SQCDMPE Framework

The empirical analysis commenced with an examination of respondent characteristics to ensure that the collected data represented employees involved in the company's core operational activities. A total of 50 employees participated in the survey, comprising personnel from production, quality assurance, maintenance, logistics, and engineering units. The respondents also represented different employment statuses, age groups, and lengths of service, providing a balanced perspective on organizational practices across the company. Such diversity is essential because perceptions of organizational culture and leadership are often shaped by employees' daily operational experiences rather than by a single organizational role. The inclusion of respondents from multiple functional areas also strengthens the representativeness of the findings by reflecting the collaborative nature of automotive manufacturing operations. This approach is consistent with the view that organizational behavior should be examined through employees with varied organizational backgrounds to obtain comprehensive empirical evidence (Robbins & Judge, 2019).

The demographic profile of the respondents is summarized in Table 1, showing a relatively balanced composition between male and female employees, permanent and contract workers, as well as employees with shorter and longer organizational tenure. Such a distribution indicates that the collected responses were not concentrated within one employee group but reflected organizational perceptions from different career stages and operational responsibilities. Employees with longer tenure are likely to possess deeper familiarity with standardized work procedures and continuous improvement practices, whereas newer employees provide insight into how organizational values and leadership are experienced during organizational adaptation. The coexistence of these groups allows the analysis to capture organizational conditions from complementary perspectives rather than relying on homogeneous respondent characteristics. A balanced respondent composition therefore increases confidence that the subsequent statistical analysis represents the broader organizational environment instead of a particular employee category.

**Table 1. Respondent Characteristics (n = 50)**

| Characteristic    | Category                                            | Frequency | Percentage (%) |
|-------------------|-----------------------------------------------------|-----------|----------------|
| Gender            | Male                                                | 27        | 54.0           |
|                   | Female                                              | 23        | 46.0           |
| Age               | 20–22 years                                         | 25        | 50.0           |
|                   | 32–39 years                                         | 25        | 50.0           |
| Employment Status | Permanent                                           | 25        | 50.0           |
|                   | Contract                                            | 25        | 50.0           |
| Length of Service | 1–2 years                                           | 25        | 50.0           |
|                   | 10–16 years                                         | 25        | 50.0           |
| Department        | Production, QA, Logistics, Maintenance, Engineering | 50        | 100.0          |

Employee performance at PT TD Automotive Compressor Indonesia is evaluated using the Safety, Quality, Cost, Delivery, Morale, Productivity, and Environment (SQCDMPE) framework, which integrates operational and behavioral dimensions into a single performance evaluation system. This approach reflects the company's emphasis on maintaining production effectiveness while simultaneously promoting workplace discipline, continuous improvement, and organizational sustainability. Rather than relying solely on production output, the framework encourages employees to balance efficiency with quality assurance, safety compliance, and collaborative work practices. Such an integrated performance orientation is widely recognized as a characteristic of manufacturing organizations pursuing operational excellence and long-term competitiveness (Putranto et al., 2024). The use of SQCDMPE therefore provides a comprehensive basis for assessing employee contributions within a highly standardized production environment.

The operational dimensions used to evaluate employee performance are presented in Table 2. The indicators demonstrate that performance measurement extends beyond individual productivity by incorporating operational reliability, employee participation, and organizational responsibility into a unified assessment framework. This pattern indicates that employees are expected to achieve production targets while maintaining quality consistency, safe working practices, and active involvement in continuous improvement activities. The integration of these indicators also reflects the interdependence of operational processes within automotive manufacturing, where improvements in one dimension influence performance in other areas. Such a performance system supports sustainable operational excellence because it aligns individual work behavior with broader organizational objectives (Iskandar & Antonio, 2025).

**Table 2. Operational Performance Parameters Under the SQCDMPE Framework**

| No. | Performance Parameter | Description / Company Target                                                                                                     |
|-----|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1   | Safety                | Zero accidents, compliance with the <i>Stop-Call-Wait</i> procedure, and disciplined use of personal protective equipment (PPE). |
| 2   | Quality               | Minimal product defect rates and consistently high product quality standards.                                                    |
| 3   | Cost                  | Efficient utilization of production resources and effective control of material waste.                                           |
| 4   | Delivery              | On-time product delivery according to customer production schedules.                                                             |
| 5   | Morale                | Low absenteeism and active participation in Kaizen and Quality Control Circle (QCC) activities.                                  |
| 6   | Productivity          | Achievement of daily and monthly production output targets through efficient work processes.                                     |
| 7   | Environment           | Compliance with environmental management standards and sustainable manufacturing practices.                                      |

The operational pattern reflected in Table 2 suggests that employee performance is managed through an integrated system rather than isolated production indicators. The coexistence of safety, quality, productivity, and environmental dimensions indicates that operational success is expected to emerge from disciplined work behavior and continuous improvement instead of merely increasing production output. This approach encourages employees to maintain consistency across different operational targets because each dimension contributes to the overall effectiveness of the production process. Such a performance orientation is aligned with the principles of lean manufacturing, where organizational competitiveness depends on the integration of efficiency, quality assurance, and employee participation rather than on individual productivity alone (Iskandar & Antonio, 2025). The SQCDMPE framework therefore serves not only as a performance evaluation tool but also as a mechanism for reinforcing organizational values throughout daily operations.

The effectiveness of this performance system is further reflected in the company's achievements at both national and international quality competitions. Recognition obtained through these events indicates that employee contributions extend beyond routine operational activities and include structured innovation and problem-solving initiatives. Participation in Quality Control Circle (QCC) programs requires collaboration across departments, systematic analysis of production issues, and continuous refinement of operational processes, all of which are closely associated with organizational learning. These achievements demonstrate that performance improvement has become part of the organizational work culture rather than an occasional managerial initiative. Previous studies have similarly argued that organizations encouraging employee involvement in continuous improvement programs tend to develop stronger operational capabilities and more sustainable performance outcomes (Hidayat et al., 2024).



**Figure 1. External Quality and Innovation Awards Received by PT TD Automotive Compressor Indonesia**

(Clockwise from top-left: TICO Japan Global Quality Control Circle 1st Place, National QCC Diamond Award, Toyota MASIF 2nd Place)

The awards presented in Figure 1 provide external validation of the company's internal performance standards. Success in the Toyota Industries Corporation Japan Global Quality Control Circle (GQCC) competition and other quality forums reflects the organization's ability to convert continuous improvement initiatives into measurable operational achievements. These awards are particularly meaningful because they are evaluated using standardized industrial criteria, making them independent indicators of organizational capability rather than internal assessments. The findings imply that employee performance is supported by organizational practices that consistently encourage innovation, teamwork, and disciplined execution of production activities. This interpretation is consistent with previous evidence showing that sustainable operational excellence is achieved when improvement initiatives become embedded in organizational routines rather than remaining project-based activities (Pradana et al., 2024).

The empirical observations presented in this section complement previous studies conducted at PT TD Automotive Compressor Indonesia while providing a broader perspective on employee performance within the organization. Earlier research primarily demonstrated that work discipline, training, motivation, shift work systems, and the work environment significantly influence employee performance, highlighting the importance of operational factors in supporting production effectiveness (Hamidah & Syarief, 2023; Azzahra, 2026). The present findings extend this evidence by indicating that these operational factors are embedded within an integrated organizational system characterized by standardized performance measurement and continuous improvement practices. The respondent profile, the implementation of the SQCDMPE framework, and the company's external achievements collectively indicate that employee performance is evaluated through interconnected operational and behavioral dimensions rather than isolated productivity outcomes. This pattern suggests that organizational performance is reinforced through coordinated work processes, shared organizational values, and employee participation in improvement initiatives across departments. Such observations support the argument that employee performance should be interpreted as the outcome of organizational mechanisms instead of being attributed solely to individual work conditions, which is consistent with the broader perspective proposed by Clarissa et al. (2025). These descriptive findings establish a robust empirical foundation for the subsequent regression analysis examining the influence of organizational culture and leadership on employee performance at PT TD Automotive Compressor Indonesia.

### **Correlation and Multiple Linear Regression Analysis**

Correlation analysis was performed to determine the strength of the relationship between organizational culture, leadership, and employee performance before estimating the causal model through multiple linear regression. Examining the correlation structure is important because it provides

an initial indication of whether the independent variables are sufficiently associated with the dependent variable to justify further regression analysis. In addition to measuring relationship strength, the model summary also explains how much variation in employee performance can be accounted for by the proposed research model. A higher coefficient of determination indicates greater explanatory power, although part of the variation may still originate from organizational factors that are not incorporated into the model. Such an approach is commonly employed in empirical business research to evaluate the predictive capability of organizational variables before hypothesis testing (Ghozali, 2018). The results of the correlation and coefficient of determination analysis are presented in Table 3.

**Table 3. Model Summary**

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1     | 0.812 | 0.659    | 0.645             | 1.234                      |

The findings presented in Table 3 indicate a correlation coefficient (R) of 0.812, reflecting a very strong positive relationship between organizational culture, leadership, and employee performance. The coefficient of determination ( $R^2 = 0.659$ ) shows that 65.9% of the variation in employee performance can be explained jointly by the two independent variables included in the regression model. The remaining 34.1% suggests that employee performance is also influenced by other organizational and individual factors beyond the scope of this study, such as work motivation, compensation, job satisfaction, or work environment. This level of explanatory power demonstrates that organizational culture and leadership represent substantial organizational determinants of employee performance within the observed manufacturing environment. Comparable findings have been reported in previous studies, which consistently identify these organizational variables as major contributors to employee performance across industrial organizations (Rachman et al., 2024).

Following the correlation analysis, multiple linear regression analysis was conducted to estimate the magnitude and direction of the influence of each independent variable on employee performance. Regression analysis extends the interpretation of correlation by identifying how changes in organizational culture and leadership contribute to variations in employee performance while controlling for the influence of the other predictor. The resulting regression coefficients provide empirical evidence regarding the relative contribution of each explanatory variable within the proposed research model. Positive regression coefficients indicate that improvements in organizational practices are followed by corresponding improvements in employee performance. The regression results therefore provide the statistical basis for evaluating the proposed conceptual framework before testing the research hypotheses. The estimated coefficients are presented in Table 4.

**Table 4. Multiple Linear Regression Coefficients**

| Model                            | B     | Std. Error | t-value | Sig.  |
|----------------------------------|-------|------------|---------|-------|
| Constant                         | 4.210 | 1.120      | 3.758   | 0.000 |
| Organizational Culture ( $X_1$ ) | 0.425 | 0.095      | 4.473   | 0.000 |
| Leadership ( $X_2$ )             | 0.388 | 0.088      | 4.409   | 0.000 |

The regression coefficients indicate that both independent variables positively contribute to employee performance. The estimated regression equation,  $Y = 4.210 + 0.425X_1 + 0.388X_2$ , shows that improvements in either organizational culture or leadership are associated with higher employee performance while other conditions remain constant. Among the two predictors, organizational culture produced the slightly larger regression coefficient ( $B = 0.425$ ) than leadership ( $B = 0.388$ ), suggesting that organizational culture exerts a relatively stronger influence within the proposed model. This finding implies that the internalization of shared organizational values, work discipline, and continuous improvement practices may have a greater impact on employee performance than leadership alone, although both variables remain important organizational resources. Similar patterns have been

identified in manufacturing organizations where organizational culture serves as the primary mechanism supporting operational consistency and employee effectiveness (Anggraeni et al., 2025).

The positive regression coefficients also indicate that improvements in organizational practices are translated into measurable improvements in operational performance. Employees working within a culture emphasizing discipline, teamwork, and continuous improvement are more likely to achieve organizational performance standards because behavioral expectations are consistently reinforced throughout daily operations. Leadership complements this process by providing direction, motivation, and technical guidance that enable employees to perform their responsibilities more effectively. The relatively high explanatory power of the model further suggests that organizational factors play a more dominant role than isolated individual characteristics in shaping employee performance within PT TD Automotive Compressor Indonesia. This interpretation supports organizational behavior theory, which argues that employee performance emerges through the interaction between organizational systems and managerial practices rather than through individual competence alone (Robbins & Judge, 2019).

The overall regression results demonstrate that organizational culture and leadership provide meaningful explanatory value for understanding employee performance in the observed manufacturing setting. The strong correlation coefficient, substantial coefficient of determination, and positive regression coefficients consistently indicate that both variables contribute positively to organizational performance. These findings strengthen the argument that improvements in organizational culture and leadership are likely to produce measurable improvements in employee outcomes within standardized production environments. Although the model explains a considerable proportion of employee performance, the unexplained variance also indicates opportunities for future studies to incorporate additional organizational or psychological variables into the analytical framework. The regression analysis therefore establishes a robust empirical basis for the subsequent hypothesis testing through the partial (t-test) and simultaneous (F-test) significance analyses.

### Hypothesis Testing

Hypothesis testing was conducted after the regression model had demonstrated satisfactory explanatory power to verify whether the proposed relationships were statistically supported. The analysis employed the t-test to examine the individual contribution of each independent variable to employee performance, using a significance level of 5% as the basis for decision making. This procedure enables the identification of variables that exert meaningful effects while controlling for the influence of other predictors included in the regression model. Statistical significance alone, however, is not sufficient to explain organizational behavior, making it necessary to interpret the findings within the operational context of PT TD Automotive Compressor Indonesia. The hypothesis testing therefore serves as empirical evidence linking the proposed conceptual framework with the observed organizational conditions. The results of the partial hypothesis testing are presented in Table 5.

**Table 5. Partial Hypothesis Testing Results (t-test)**

| Variable                                 | t-value | Sig.  | Decision    |
|------------------------------------------|---------|-------|-------------|
| Organizational Culture (X <sub>1</sub> ) | 4.473   | 0.000 | H1 Accepted |
| Leadership (X <sub>2</sub> )             | 4.409   | 0.000 | H2 Accepted |

The results shown in Table 5 indicate that both independent variables significantly influence employee performance because their significance values are well below the 0.05 threshold. Organizational culture recorded the highest t-value (4.473), followed closely by leadership with a t-value of 4.409, indicating that both variables contribute substantially to explaining employee performance. Although the difference between the two coefficients is relatively small, organizational culture demonstrates a slightly stronger statistical contribution within the proposed regression model. This pattern suggests that shared organizational values and standardized work practices provide an important foundation for sustaining employee performance across operational activities. Similar findings have been reported in manufacturing organizations where organizational culture consistently emerges as a major determinant of employee effectiveness and operational consistency (Arsando & Sutarto, 2024). The statistical evidence therefore supports the acceptance of both H1 and H2.

The acceptance of H1 confirms that organizational culture has a positive and significant influence on employee performance at PT TD Automotive Compressor Indonesia. This finding indicates that organizational values emphasizing work discipline, occupational safety, teamwork, and continuous improvement contribute positively to employees' ability to achieve operational targets. Such an outcome is consistent with the descriptive findings presented in the previous section, where the implementation of the SQCDMPE framework and participation in Quality Control Circle activities reflected the practical application of these organizational values. A strong organizational culture also provides behavioral consistency by encouraging employees to perform their responsibilities according to standardized procedures while continuously seeking opportunities for improvement. Previous empirical studies have similarly concluded that organizations characterized by strong cultural values generally demonstrate higher employee commitment and superior organizational performance because employees clearly understand the behavioral expectations established by the organization (Anggraeni et al., 2025). The findings indicate that organizational culture functions not only as a managerial philosophy but also as a practical mechanism for improving employee performance within the automotive manufacturing environment.

The second hypothesis examined whether leadership significantly influences employee performance at PT TD Automotive Compressor Indonesia. The statistical results presented in Table 5 show that leadership achieved a t-value of 4.409 with a significance level of 0.000, confirming that H2 is accepted. This finding indicates that employees tend to demonstrate higher performance when supervisors provide clear direction, effective communication, technical guidance, and continuous motivation during operational activities. Within an automotive manufacturing environment, leadership is particularly important because production processes require timely decision-making, close supervision, and effective coordination among different work units. The significant effects of both organizational culture and leadership also suggest that employee performance cannot be explained by a single organizational factor, as organizational culture establishes shared behavioral standards while leadership ensures that these values are consistently implemented throughout daily operations. These findings support previous studies reporting that effective leadership strengthens employee commitment and facilitates the achievement of operational objectives through consistent managerial support (Pradana et al., 2024).

To examine whether organizational culture and leadership jointly influence employee performance, the regression model was further evaluated using the F-test. Unlike the t-test, which assesses the contribution of each independent variable separately, the F-test determines whether the proposed model as a whole significantly explains variations in the dependent variable. Employees are influenced not only by organizational norms but also by the quality of interactions they experience with their supervisors, making the combined evaluation of both variables essential. This analysis is important because organizational performance is generally shaped by the interaction of multiple organizational factors rather than isolated effects. Such an interaction is consistent with organizational behavior theory, which argues that sustainable employee performance emerges from the alignment between organizational systems and leadership practices rather than from individual managerial interventions alone (Robbins & Judge, 2019). The results of the simultaneous hypothesis testing are presented in Table 6.

**Table 6. Simultaneous Hypothesis Testing Results (ANOVA)**

| Source           | F-value | Sig.  | Decision    |
|------------------|---------|-------|-------------|
| Regression Model | 45.388  | 0.000 | H3 Accepted |

The findings in Table 6 indicate that the regression model produced an F-value of 45.388 with a significance level of 0.000, confirming that organizational culture and leadership simultaneously have a positive and significant influence on employee performance. The acceptance of H3 demonstrates that the explanatory power of the model is strengthened when both organizational variables are considered together rather than independently. This result suggests that improvements in employee performance are more likely to be achieved when strong organizational values are supported by effective leadership practices. Previous research has similarly shown that organizational culture and leadership operate as complementary organizational resources capable of enhancing employee performance through coordinated managerial and behavioral mechanisms (Susanti et al., 2023). The simultaneous

significance of both variables reinforces the multidimensional nature of employee performance within manufacturing organizations.

The overall hypothesis testing results consistently support the proposed conceptual framework of this study. Organizational culture, leadership, and their combined influence all demonstrate statistically significant relationships with employee performance, confirming the validity of the three proposed hypotheses. These findings indicate that organizational performance at PT TD Automotive Compressor Indonesia is shaped by an interaction between shared organizational values and effective managerial practices rather than by technical capability alone. The consistency observed across the regression coefficients, t-test, and F-test also strengthens confidence in the robustness of the empirical model developed in this study. Collectively, these results provide a strong foundation for a broader discussion regarding the theoretical implications of organizational culture and leadership as strategic determinants of employee performance within the automotive manufacturing industry (Rachman et al., 2024).

### Discussion of the Influence of Organizational Culture and Leadership on Employee Performance

The empirical findings consistently demonstrate that organizational culture and leadership are strategic organizational resources that contribute significantly to employee performance at PT TD Automotive Compressor Indonesia. The statistical evidence obtained from the regression analysis and hypothesis testing confirms that improvements in both variables are associated with better employee performance across operational activities. Rather than functioning independently, organizational culture and leadership appear to reinforce one another in shaping employees' work behavior and commitment toward organizational objectives. This relationship reflects the characteristics of manufacturing organizations where operational excellence depends on standardized work systems supported by effective managerial coordination. The findings also indicate that employee performance should be interpreted as the outcome of organizational processes rather than merely the result of individual capability. This perspective is consistent with organizational behavior theory, which emphasizes that organizational systems and managerial practices jointly influence employee effectiveness (Robbins & Judge, 2019).

To facilitate a comprehensive interpretation of the empirical findings, Table 7 summarizes the major results together with their theoretical interpretation and managerial implications. Rather than presenting isolated statistical outcomes, the table integrates the principal findings into a broader organizational perspective that links empirical evidence with practical management considerations. The synthesis highlights that organizational culture establishes the behavioral foundation of operational activities, whereas leadership functions as the mechanism through which these values are implemented in daily work practices. The simultaneous significance of both variables also demonstrates that improvements in employee performance require integrated organizational interventions instead of isolated managerial initiatives. Such a synthesis provides a clearer understanding of how the statistical findings contribute to organizational theory as well as managerial decision-making in manufacturing companies. The summarized interpretation is presented in Table 7.

**Table 7. Synthesis of the Empirical Findings and Their Managerial Implications**

| <b>Empirical Finding</b>                                                          | <b>Interpretation</b>                                                                                                                              | <b>Managerial Implication</b>                                                                                                                              |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organizational culture positively and significantly affects employee performance. | Shared organizational values encourage discipline, continuous improvement, teamwork, and compliance with operational standards.                    | Management should strengthen Kaizen implementation, safety awareness, and cultural internalization through continuous organizational development programs. |
| Leadership positively and significantly affects employee performance.             | Effective leaders translate organizational objectives into coordinated employee actions through communication, motivation, and technical guidance. | Leadership development programs should emphasize coaching, communication, problem-solving, and operational supervision.                                    |

|                                                                                      |                                                                                                                      |                                                                                                                                                          |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organizational culture and leadership simultaneously influence employee performance. | Employee performance improves when organizational values and leadership practices operate in a complementary manner. | Organizational development initiatives should integrate cultural reinforcement with leadership capability development to sustain operational excellence. |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

The synthesis presented in Table 7 indicates that organizational culture represents the primary behavioral foundation supporting employee performance within PT TD Automotive Compressor Indonesia. Organizational values emphasizing discipline, occupational safety, teamwork, and continuous improvement encourage employees to perform their responsibilities according to standardized production procedures while maintaining operational consistency. The slightly larger regression coefficient obtained for organizational culture also suggests that employees are strongly influenced by shared organizational norms governing their daily work activities. Such findings are particularly relevant in automotive manufacturing, where production quality depends on the consistent implementation of standardized work practices rather than individual discretion alone. Previous studies have likewise demonstrated that organizations possessing strong organizational cultures generally achieve higher levels of employee commitment and operational effectiveness because employees clearly understand expected work behaviors (Anggraeni et al., 2025). The present findings therefore reinforce the view that organizational culture functions as a strategic organizational capability supporting long-term performance improvement.

Leadership also emerged as a significant determinant of employee performance, indicating that managerial behavior plays an important role in translating organizational values into operational practices. Leaders who communicate production targets clearly, provide constructive feedback, offer technical assistance, and motivate employees contribute to maintaining work discipline and operational consistency throughout the production process. Although the statistical results indicate that the contribution of leadership is slightly lower than that of organizational culture, its influence remains substantial because organizational values require effective leadership to be implemented consistently across departments. Within PT TD Automotive Compressor Indonesia, supervisors function not only as coordinators of production activities but also as facilitators of continuous improvement initiatives and quality-oriented work behavior. Similar conclusions have been reported in previous manufacturing studies showing that leadership improves employee performance by strengthening coordination, communication, and organizational commitment among employees (Pradana et al., 2024). The findings therefore suggest that leadership serves as an operational catalyst that reinforces the effectiveness of an established organizational culture.

The simultaneous significance of organizational culture and leadership demonstrates that employee performance is shaped by complementary organizational mechanisms rather than by isolated managerial practices. Organizational culture provides behavioral standards that define how employees are expected to perform their work, whereas leadership ensures that these standards are consistently implemented through supervision, motivation, and daily operational guidance. This complementary relationship explains why the regression model was able to account for a substantial proportion of the variation in employee performance observed in the study. The findings indicate that organizations emphasizing only leadership development without strengthening organizational culture may achieve limited improvements because employees also require shared organizational values to guide their work behavior. Similar empirical evidence has shown that organizations integrating strong cultural values with effective leadership practices generally achieve higher operational performance than organizations focusing on only one organizational dimension (Rachman et al., 2024). The present study therefore supports a multidimensional perspective in which organizational culture and leadership function as mutually reinforcing determinants of employee performance.

From a theoretical perspective, this study extends the organizational behavior literature by providing empirical evidence from the Indonesian automotive manufacturing industry, where integrated organizational systems are essential for achieving operational excellence. While previous studies have frequently examined organizational culture and leadership independently, the present findings demonstrate that both variables should be interpreted as complementary organizational resources influencing employee performance simultaneously. This integrated perspective contributes to a broader understanding of how organizational values and managerial practices interact within highly

standardized production environments characterized by strict quality and safety requirements. The findings also strengthen the applicability of organizational behavior theory by confirming that employee performance is influenced by organizational structures supporting consistent behavioral expectations and effective managerial coordination. From a managerial perspective, the results suggest that PT TD Automotive Compressor Indonesia should continue reinforcing its Kaizen culture while simultaneously investing in leadership development programs emphasizing coaching, communication, and technical problem-solving. Such integrated organizational development initiatives are expected to sustain employee performance while strengthening the company's competitiveness in the increasingly demanding automotive manufacturing industry (Iskandar & Antonio, 2025).

## CONCLUSION

This study confirms that organizational culture and leadership constitute significant organizational determinants of employee performance at PT TD Automotive Compressor Indonesia. The empirical findings demonstrate that organizational culture exerts a positive and significant influence on employee performance, indicating that shared values related to discipline, occupational safety, teamwork, and continuous improvement contribute to the achievement of organizational objectives. Leadership also exhibits a positive and significant effect, suggesting that effective communication, technical guidance, motivation, and supervisory support enhance employees' ability to perform consistently within a highly standardized manufacturing environment. The simultaneous influence of organizational culture and leadership further indicates that employee performance is strengthened when organizational values are supported by effective managerial practices. The regression model reveals that both variables jointly explain a substantial proportion of the variance in employee performance, highlighting their strategic importance in achieving the company's SQCDMPE performance standards. These findings reinforce organizational behavior theory by demonstrating that employee performance is shaped by the interaction between organizational systems and leadership practices rather than by individual capability alone. The study therefore provides empirical evidence that strengthening both organizational culture and leadership is essential for sustaining operational excellence within the automotive manufacturing industry.

The findings also generate several practical and academic implications. From a managerial perspective, PT TD Automotive Compressor Indonesia should continue reinforcing its organizational culture through the consistent implementation of Kaizen, occupational safety compliance, teamwork, and continuous improvement programs while simultaneously expanding leadership development initiatives that emphasize coaching, communication, and problem-solving capabilities. Such integrated organizational development efforts are expected to maintain productivity, product quality, operational discipline, and continuous innovation in increasingly competitive manufacturing environments. From a theoretical perspective, this study enriches the literature on organizational behavior by demonstrating the complementary roles of organizational culture and leadership in explaining employee performance within an Indonesian automotive manufacturing company. The study also provides empirical support for the application of multiple linear regression in examining organizational relationships within industrial settings. Future research is encouraged to incorporate additional explanatory variables, such as job satisfaction, organizational commitment, employee engagement, work motivation, or compensation, to improve the explanatory power of the research model. Expanding the scope of analysis across different manufacturing sectors or adopting longitudinal research designs may also provide a more comprehensive understanding of the organizational factors that influence sustainable employee performance.

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