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BEYOND COMPLIANCE: DISCIPLINE, FACILITIES, CREATIVITY, AND TEAMWORK AS JOINT DRIVERS OF EMPLOYEE PERFORMANCE

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Abstract

This study examines the joint and partial effects of work discipline, work facilities, creativity, and teamwork on employee performance at PT. Bakri Karya Sarana, a logistics and construction-equipment trading firm in Batam, Indonesia. Small and medium-sized trading enterprises in Indonesia's outer-island industrial zones face persistent human-resource constraints, yet the combined behavioral and structural drivers of employee performance in such firms remain under-researched relative to large corporates. A quantitative associative design was used, with a census of all 75 permanent employees as respondents. Data were collected through a structured Likert-scale questionnaire and analyzed using multiple linear regression in SPSS 23, following classical assumption testing. The results show that work discipline ($t = 8.230$; $p = .000$), work facilities ($t = 3.020$; $p = .003$), creativity ($t = 2.865$; $p = .002$), and teamwork ($t = 3.246$; $p = .001$) each have a positive and significant partial effect on employee performance, and the four variables jointly explain 85.0 percent of the variance in employee performance ($R^2 = .850$; $F = 95.130$; $p = .000$). Work discipline is the most dominant predictor ($\beta = .512$), followed by creativity ($\beta = .210$), work facilities ($\beta = .221$), and teamwork ($\beta = .184$). The findings indicate that performance in this firm rests primarily on behavioral compliance, reinforced by adequate physical infrastructure and a working culture that supports both individual initiative and collaboration, with implications for human-resource practice in comparable trading and logistics SMEs.

Keywords: *Work Discipline, Work Facilities, Creativity, Teamwork, Employee Performance*

1. Introduction

Small and medium-sized trading and logistics enterprises play an outsized role in Indonesia's outer-island industrial economies, where they supply the equipment and materiel on which larger construction and resource projects depend. Yet employee performance in such firms is shaped by a more constrained and more behaviorally dependent set of resources than in large corporates, since formal training budgets, structured career paths, and dedicated human-resource functions are often limited (Atatsi et al., 2019). PT. Bakri Karya Sarana, a logistics and construction-equipment trading firm based in Batam, exemplifies this setting: employee performance depends less on elaborate systems than on the everyday interplay of rule compliance, adequate physical infrastructure, individual initiative, and collaboration among a relatively close-knit workforce.

Employee performance is conventionally defined as the quality and quantity of work an employee achieves in executing assigned duties within a given period (Atatsi et al., 2019). Four factors are examined here as antecedents of this outcome. Work discipline, understood as an employee's willingness to comply with organizational rules, has a well-documented association with job performance across service and industrial contexts (Bashir et al., 2020). Work facilities the

physical infrastructure, equipment, and workspace conditions an organization provides shape performance both directly, by enabling tasks to be carried out efficiently, and indirectly, through their effect on employee satisfaction and comfort (Afrin et al., 2023). Creativity, the capacity to generate and apply novel and useful ideas to work problems, has increasingly been linked to individual and organizational performance in innovation-oriented HRM research (Bysted, 2013; Liu et al., 2023). Teamwork, the capacity of employees to coordinate and cooperate toward shared goals, is a further behavioral resource whose absence has been shown to constrain performance even where individual competence is adequate.

At PT. Bakri Karya Sarana, field observation suggests that inconsistent rule enforcement and gaps in workspace infrastructure have coincided with delayed task completion, while employees report uneven opportunities to exercise initiative or collaborate across functions. These conditions motivate an empirical test of whether work discipline, work facilities, creativity, and teamwork jointly and individually predict employee performance in this firm.

Based on the foregoing, the study tests five hypotheses: H1, work discipline has a positive and significant effect on employee performance; H2, work facilities have a positive and significant effect on employee performance; H3, creativity has a positive and significant effect on employee performance; H4, teamwork has a positive and significant effect on employee performance; and H5, work discipline, work facilities, creativity, and teamwork simultaneously have a positive and significant effect on employee performance.

2. Literature Review

A. Employee Performance in Trading and Logistics SMEs

Employee performance is the outcome of work, in both quality and quantity, that an individual achieves while carrying out the duties assigned within a specified period (Atatsi et al., 2019). In small and medium-sized trading enterprises, this outcome is particularly sensitive to everyday operating conditions rule compliance, physical workspace adequacy, and the behavioral climate among coworkers because such firms typically lack the layered management systems that buffer performance in larger corporates. A systematic review of the employee-performance literature identifies ability, motivation, and opportunity-related antecedents as the three broad categories shaping performance across organizational types (Atatsi et al., 2019), a structure well-suited to the discipline–facilities–creativity–teamwork model examined in this study.

B. Work Discipline and Employee Performance

Work discipline is an attitude of respect, honor, obedience, and compliance toward applicable regulations written or unwritten undertaken willingly, including a readiness to accept sanction for violations of assigned authority. In trading and logistics operations specifically, discipline translates directly into operational reliability: consistent adherence to procedure governs whether stock is accurately recorded, whether deliveries are made on schedule, and whether safety protocols around heavy equipment are observed. Evidence from comparable service and industrial settings supports a positive relationship between structured work conditions, of which discipline is a defining component, and job performance (Bashir et al., 2020).

C. Work Facilities and Employee Performance

Work facilities encompass the physical infrastructure, equipment, and workspace conditions an organization provides to enable employees to perform their duties. In a trading and equipment-logistics firm, this includes warehouse space, handling equipment, and office facilities that directly affect how efficiently tasks can be completed. Cross-industry evidence indicates that a favorable physical work environment improves employee performance both directly and through its association

with job satisfaction, a pattern documented in sustainability-oriented employee-performance research in the insurance and adjacent service industries (Afrin et al., 2023). Adequate facilities also reduce the physical friction that can otherwise erode discipline and cooperation, suggesting a plausible complementarity with the other predictors examined in this study.

D. Creativity and Employee Performance

Creativity refers to an employee's capacity to generate and apply novel, useful ideas while solving work-related problems. Innovative employee behavior has been shown to interact with contextual variables such as job satisfaction and mental involvement in shaping how creativity translates into work outcomes (Bysted, 2013), and more recent evidence shows that employees' sense of workplace status shapes their creativity through expectation-identity and organizational-support mechanisms (Liu et al., 2023). Workplace creativity is accordingly not solely an individual trait but also a function of organizational conditions, including the degree of support and inclusion an organization affords its employees (Bhatti et al., 2022). In a trading firm handling variable customer and supply-chain problems, employee creativity plausibly supports performance by enabling more adaptive problem-solving than rule-following alone would allow.

E. Teamwork and Employee Performance

Teamwork is the capacity of employees to coordinate effort, share information, and cooperate toward shared organizational goals. Even where individual competence is adequate, weak coordination among coworkers can constrain how effectively that competence is converted into organizational outcomes, a dynamic increasingly documented in research on team dynamics in evolving work models (see e.g. the treatment of coordination and connection as core team-functioning dimensions in hybrid and collaborative work settings). For a firm whose operations depend on coordinated handling of logistics and customer orders across functions, teamwork is plausibly a direct contributor to employee performance rather than a peripheral behavioral trait.

Building on this review, the conceptual framework below (Figure 1) positions work discipline (X1), work facilities (X2), creativity (X3), and teamwork (X4) as independent variables jointly predicting employee performance (Y).

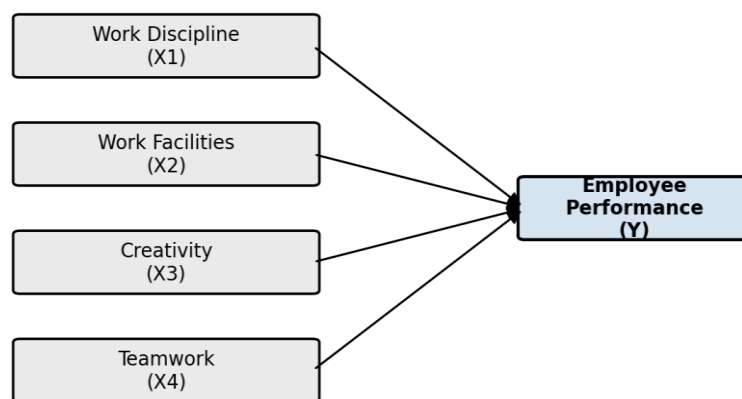


Figure 1. Conceptual Framework

Based on the framework above, the study proposes the following hypotheses:

- H1: Work discipline has a positive and significant effect on employee performance.
- H2: Work facilities have a positive and significant effect on employee performance.

H3: Creativity has a positive and significant effect on employee performance.

H4: Teamwork has a positive and significant effect on employee performance.

H5: Work discipline, work facilities, creativity, and teamwork simultaneously have a positive and significant effect on employee performance.

3. Research Method

This study employs a quantitative, associative research design intended to test causal relationships between independent and dependent variables through statistical hypothesis testing (Bashir et al., 2020). The population comprises all permanent employees of PT. Bakri Karya Sarana, totaling 75 individuals. Given the accessible size of the population, a saturated-sampling (census) technique was used, meaning all 75 employees served as respondents. Four independent variables were operationalized: work discipline (X1); work facilities (X2), measured through indicators of workspace adequacy, equipment condition, and access; creativity (X3), measured through indicators of idea generation and applied problem-solving; and teamwork (X4), measured through indicators of coordination, information-sharing, and cooperative conflict resolution. The dependent variable, employee performance (Y), was measured through indicators of work quality, quantity, timeliness, and task responsibility. All items used a five-point Likert scale from strongly disagree (1) to strongly agree (5), administered via a structured questionnaire supported by observation and interview.

The instrument was assessed for validity and reliability prior to hypothesis testing, and the regression model was checked against the classical assumptions of normality, multicollinearity, and heteroscedasticity. Multiple linear regression was used to estimate $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$, with partial effects assessed via the t-test, joint effect via the F-test, and explained variance via the coefficient of determination (R^2), computed in SPSS 23 at a 95 percent confidence level ($\alpha = .05$).

4. Results and Discussion

Questionnaires were distributed to all 75 employees of PT. Bakri Karya Sarana, all of which were returned complete and valid. Table 1 summarizes the respondent profile.

Table 1. Respondent Profile (n = 75)

Characteristic	Category	n	%
Gender	Male	60	80.0
	Female	15	20.0
Age	21–30 years	40	53.3
	31–40 years	20	26.7
	41–50 years	15	20.0
Tenure	< 5 years	60	80.0
	> 5 years	15	20.0
Education	Senior secondary (SMA)	40	53.3
	Bachelor's degree (S1)	35	46.7

The sample is predominantly male (80.0%), skews toward younger employees aged 21–30 (53.3%), and is dominated by shorter-tenured staff, with 80.0% having less than five years at the firm. Educational attainment is roughly split between secondary-school (53.3%) and bachelor's-degree holders (46.7%), consistent with a mixed-skill workforce typical of trading and logistics operations.

Table 2. Multiple Linear Regression Results

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	8.530	2.487	-	-	-
Work Discipline (X1)	.510	.062	.512	8.230	.000
Work Facilities (X2)	.290	.098	.221	3.020	.003
Creativity (X3)	.360	.127	.210	2.865	.002
Teamwork (X4)	.180	.056	.184	3.246	.001

Holding other predictors constant, a one-point increase in work discipline is associated with a 0.510-point increase in employee performance, a one-point increase in work facilities with a 0.290-point increase, a one-point increase in creativity with a 0.360-point increase, and a one-point increase in teamwork with a 0.180-point increase. All coefficients are positive, consistent with the hypothesized direction of effect. The standardized coefficients show work discipline as the strongest relative predictor (.512), followed by work facilities (.221), creativity (.210), and teamwork (.184).

$$Y = 8.530 + 0.510X1 + 0.290X2 + 0.360X3 + 0.180X4 + e$$

Table 3. F-Test (ANOVA) Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	905.243	4	226.311	95.130	.000
Residual	167.744	70	2.396		
Total	1072.987	74			

With $F = 95.130$ exceeding the critical F -table value of 2.34 at a significance level of .000 ($p < .05$), H_0 is rejected and H_5 is supported: work discipline, work facilities, creativity, and teamwork simultaneously exert a significant effect on employee performance.

Table 4. Coefficient of Determination (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919	.850	.835	1.457

The model yields $R^2 = .850$, indicating that work discipline, work facilities, creativity, and teamwork jointly account for 85.0 percent of the variance in employee performance, with the remaining 15.0 percent attributable to factors outside the model — a strong explanatory fit for a firm-level field survey.

Work discipline shows a positive and significant partial effect on employee performance ($t = 8.230 > t\text{-table } 1.994$; $p = .000 < .05$), supporting H1 and confirming discipline as the most dominant predictor in the model ($\beta = .512$). This is consistent with evidence that structured, rule-compliant work conditions are closely tied to job performance in comparable operational settings (Bashir et al., 2020). For a firm whose operations depend on accurate stock handling and scheduled delivery, this finding suggests that consistent enforcement of standard procedure is the single most reliable performance lever available to management.

Work facilities show a positive and significant partial effect on employee performance ($t = 3.020 > t\text{-table } 1.994$; $p = .003 < .05$), supporting H2. This aligns with evidence that a favorable physical work environment improves employee performance, including in service and logistics-adjacent industries where infrastructure adequacy has been shown to matter for sustained performance (Afrin et al., 2023). Given that employees at PT. Bakri Karya Sarana handle physical equipment and stock, the comparatively strong facilities effect ($\beta = .221$) suggests that continued investment in warehouse and workspace infrastructure would yield measurable performance returns.

Creativity shows a positive and significant partial effect on employee performance ($t = 2.865 > t\text{-table } 1.994$; $p = .002 < .05$), supporting H3. This is consistent with evidence that innovative employee behavior, shaped by contextual factors such as job satisfaction, contributes to performance outcomes (Bysted, 2013), and with more recent evidence that employees' workplace status and sense of organizational support shape the creativity they bring to their roles (Liu et al., 2023). It also echoes findings that creativity is closely tied to the degree of inclusion and support an organization affords its employees (Bhatti et al., 2022), suggesting that PT. Bakri Karya Sarana could reinforce this effect by giving employees greater latitude to propose and test operational improvements.

Teamwork shows a positive and significant partial effect on employee performance ($t = 3.246 > t\text{-table } 1.994$; $p = .001 < .05$), supporting H4, with the smallest standardized effect among the four predictors ($\beta = .184$). While modest relative to discipline, this finding confirms that coordination and cooperation among coworkers remains a distinct and significant contributor to performance in this firm, consistent with the broader view that individual competence alone is insufficient without functioning coordination mechanisms across roles.

Taken together, work discipline, work facilities, creativity, and teamwork simultaneously exert a significant effect on employee performance ($F = 95.130 > F\text{-table } 2.34$; $p = .000 < .05$; $R^2 = .850$), supporting H5. The pattern of standardized coefficients discipline clearly dominant, followed by a roughly comparable cluster of facilities, creativity, and teamwork suggests that performance at this firm is anchored in behavioral compliance but meaningfully reinforced by structural and collaborative conditions, consistent with the view that employee performance is jointly a function of ability, motivation, and opportunity-related antecedents (Atatsi et al., 2019).

5. Conclusion and Recommendations

This study finds that work discipline, work facilities, creativity, and teamwork each have a positive and significant partial effect on employee performance at PT. Bakri Karya Sarana, and that the four variables jointly explain 85.0 percent of the variance in performance. Work discipline is by a clear margin the most dominant predictor, with work facilities, creativity, and teamwork contributing smaller but still significant and roughly comparable effects. For firm management, the findings imply four complementary priorities: establishing clearer rules with well-defined sanctions and consistent enforcement to sustain the strong discipline effect; investing in larger and more comfortable workspace and equipment access to reinforce the facilities effect; creating structured opportunities for employees to exercise initiative and propose operational improvements, since creativity contributes independently to performance; and strengthening cross-functional interaction and discussion venues to support teamwork. Because the study draws on the full population of a

single firm, generalization to other trading and logistics SMEs should be made cautiously. Future research could extend the model with variables such as supervisory quality and organizational justice, which were beyond the scope of the present design.

References

- Afrin, S., Asyraf Bin Mohd Kassim, M., Yusof, M. F., Hassan, M. S., Islam, M. A., & Khairuddin, K. N. B. (2023). Investigating the determinants of employee performance for sustainability: A study on the Bangladesh insurance industry. *Sustainability*, 15(7), 5674. <https://doi.org/10.3390/su15075674>
- Al Rawas, S. A. S. M., & Jantan, M. D. (2023). The moderating effect of leadership style on the relationship between job description and employee performance in the Omani public sector. *Cogent Business & Management*, 10(3), 2288362. <https://doi.org/10.1080/23311975.2023.2288362>
- Alqudah, I. H. A., Carballo-Penela, A., & Ruzo-Sanmartín, E. (2022). High-performance human resource management practices and readiness for change: An integrative model including affective commitment, employees' performance, and the moderating role of hierarchy culture. *European Research on Management and Business Economics*, 28(1), 100177. <https://doi.org/10.1016/j.iedeen.2021.100177>
- Asif, A., & Rathore, K. (2021). Behavioral drivers of performance in public-sector organizations: A literature review. *SAGE Open*, 11(1). <https://doi.org/10.1177/2158244021989283>
- Atatsi, E. A., Stoffers, J., & Kil, A. (2019). Factors affecting employee performance: A systematic literature review. *Journal of Advances in Management Research*, 16(3), 329–351. <https://doi.org/10.1108/JAMR-06-2018-0052>
- Awan, S. H., Habib, N., Akhtar, C. S., & Naveed, S. (2020). Effectiveness of performance management system for employee performance through engagement. *SAGE Open*, 10(4). <https://doi.org/10.1177/2158244020969383>
- Bashir, A., Amir, A., Jawaad, M., & Hasan, T. (2020). Work conditions and job performance: An indirect conditional effect of motivation. *Cogent Business & Management*, 7(1), 1801961. <https://doi.org/10.1080/23311975.2020.1801961>
- Bhatti, O. K., Irfan, M., Öztürk, A. O., & Maham, R. (2022). Organizational inclusion through interaction of work meaningfulness and servant leadership: An artificial neural network approach. *Cogent Business & Management*, 9(1), 2059828. <https://doi.org/10.1080/23311975.2022.2059828>
- Bysted, R. (2013). Innovative employee behaviour: The moderating effects of mental involvement and job satisfaction on contextual variables. *European Journal of Innovation Management*, 16(3), 268–284. <https://doi.org/10.1108/EJIM-09-2011-0069>
- Ibrahim, R., Boerhannoeddin, A., & Bakare, K. K. (2017). The effect of soft skills and training methodology on employee performance. *European Journal of Training and Development*, 41(4), 388–406. <https://doi.org/10.1108/EJTD-08-2016-0066>
- Karimi, S., Ahmadi Malek, F., Yaghoubi Farani, A., & Liobikienė, G. (2023). The role of transformational leadership in developing innovative work behaviors: The mediating role of employees' psychological capital. *Sustainability*, 15(2), 1267. <https://doi.org/10.3390/su15021267>
- Kwon, K., & Rupp, D. E. (2013). High-performer turnover and firm performance: The moderating role of human capital investment and firm reputation. *Journal of Organizational Behavior*, 34(1), 129–150. <https://doi.org/10.1002/job.1804>
- Liu, Y., Zhao, L., Liu, P., & Yang, Z. (2023). Effect of workplace status on employees' creativity from the perspective of expectation identity: A moderated chain double mediation model. *Chinese Management Studies*, 17(4), 718–738. <https://doi.org/10.1108/CMS-12-2021-0550>
- Mardanov, I. (2021). Intrinsic and extrinsic motivation, organizational context, employee contentment, job satisfaction, performance and intention to stay. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 9(3), 223–240.

- Roberts, J. A., & David, M. E. (2020). Boss phubbing, trust, job satisfaction and employee performance. *Personality and Individual Differences*, 155, 109702. <https://doi.org/10.1016/j.paid.2019.109702>
- Saleem, F., Zhang, Y. Z., Gopinath, C., & Adeel, A. (2020). Impact of servant leadership on performance: The mediating role of affective and cognitive trust. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244019900562>
- Schulz, E. R. (2013). Firm productivity moderated link between human capital and compensation: The significance of task-specific human capital. *Human Resource Management*, 52(1), 1–22. <https://doi.org/10.1002/hrm.21537>
- Sendawula, K., Nakyejwe Kimuli, S., Bananuka, J., & Najjemba Muganga, G. (2018). Training, employee engagement and employee performance: Evidence from Uganda's health sector. *Cogent Business & Management*, 5(1), 1470891. <https://doi.org/10.1080/23311975.2018.1470891>
- Shetty, P. K., Rao, P. K., & Kamath, R. C. (2022). Impact of servant leadership on perceived organizational support of employees in manufacturing industries and educational institution. *Cogent Business & Management*, 9(1), 2143074. <https://doi.org/10.1080/23311975.2022.2143074>
- Truitt, D. L. (2011). The effect of training and development on employee attitude as it relates to training and work proficiency. *SAGE Open*, 1(3). <https://doi.org/10.1177/2158244011433338>