

## THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin<sup>1\*</sup>, Mira Yona<sup>2</sup>, Hanafi Siregar<sup>3</sup>, Latip Adlim<sup>4</sup>

<sup>1,2,3,4</sup>Universitas Riau Kepulauan, Batam, Indonesia

Corresponding E-mail: [ay.sumaraw@gmail.com](mailto:ay.sumaraw@gmail.com)<sup>1\*</sup>, [mira@fekon.unrika.ac.id](mailto:mira@fekon.unrika.ac.id)<sup>2</sup>, [hanafi@feb.unrika.ac.id](mailto:hanafi@feb.unrika.ac.id)<sup>3</sup>

Received : 15 January 2026

Published : 28 February 2026

Revised : 31 January 2026

DOI : <https://doi.org/10.54443/ijebas.v6i1.5297>

Accepted : 20 February 2026

Link Publish : <https://radjapublika.com/index.php/IJEBAS>

### Abstract

This study aims to analyze the effect of transformational leadership style and work motivation on employee performance at PT Batam Oilfield Supply Services Indonesia. The research adopts a quantitative approach with a causal-associative design involving a saturated sample of 100 permanent and contract employees. Data were collected using a 5-point Likert-scale questionnaire, whose validity was tested with item-total correlation and reliability with Cronbach's alpha, followed by classical assumption tests and multiple linear regression analysis. The results show that transformational leadership has a positive and significant partial effect on employee performance, and work motivation also has a positive and significant partial effect; motivation demonstrates a relatively stronger standardized coefficient than leadership. Simultaneously, transformational leadership and work motivation significantly influence employee performance with an R<sup>2</sup> value of 0.590, indicating that both variables jointly explain 59.0% of performance variance, while the remaining 41.0% is affected by other factors not included in the model. These findings confirm all proposed hypotheses and underline the importance of strengthening transformational leadership practices and structured motivation systems as strategic levers for improving employee performance in high-risk, high-precision oilfield service operations.

**Keywords:** *Transformational leadership; work motivation; employee performance;*

### INTRODUCTION

Human resources serve as the main pillar of organizational competitiveness in the oil and gas industry, where employee performance acts as a key indicator of HR management effectiveness. According to Mangkunegara (2017), employee performance reflects the extent to which individuals achieve the quantity and quality of work expected from their assigned responsibilities. In Indonesia, the upstream oil and gas sector encountered a production decline of 5.8% in the first half of 2025 compared to the set target (SKK Migas, 2025). Consequently, optimizing performance has become essential for service companies like PT. Batam Oilfield Supply Services Indonesia, which operates in a high-risk and high-precision environment.

Transformational leadership, as conceptualized by Bass and Avolio (1994), comprises four dimensions—idealized influence, intellectual stimulation, individualized consideration, and inspirational motivation—that can foster higher commitment and innovation among subordinates. Empirical studies have confirmed its positive influence on performance; for instance, Walumbwa et al. (2008) reported a significant coefficient of  $\beta = 0.42$  ( $p < 0.01$ ) in a study of 600 multinational employees. Furthermore, work motivation, based on Herzberg's (1959) two-factor theory (motivators and hygiene factors), sustains employees' intrinsic drive, supported by Judge et al. (2001), who found an average correlation of  $r = 0.31$  with performance outcomes.

However, internal data from PT. Batam Oilfield reveal substantial variations in employee performance, with operational target achievement reaching only 78% in the fourth quarter of 2025 (company internal report, 2026). This performance gap is presumed to be influenced by a predominantly transactional leadership style and limited reward-based motivation programs. Previous research, such as Harahap, R.R., indicated that transformational leadership had a partial effect ( $t = 2.85$ ;  $p = 0.005$ ), yet did not incorporate motivation as a simultaneous independent variable. Similarly, Purba et al. (2023) examined the manufacturing sector in Batam but focused merely on partial effects without addressing the oilfield context, leaving a gap in understanding combined effects within high-risk work

# THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin et al

environments. This research gap highlights the lack of empirical evidence regarding the simultaneous impact of transformational leadership and motivation on employee performance in Batam's oilfield service companies, particularly using a quantitative multiple regression approach in a small population (<200 employees). The study aims to address the following questions: (1) Does transformational leadership significantly affect employee performance at PT. Batam Oilfield? (2) Does work motivation have a significant impact on performance? (3) Do both factors exert a simultaneous influence? The objective of this research is to test these hypotheses, contribute to the application of Bass's leadership theory in the eastern Indonesian context, and offer practical recommendations for oilfield management to enhance operational productivity.

## LITERATURE REVIEW

### Employee Performance

Employee performance refers to work outcomes that can be assessed from quantitative aspects (such as production volume and sales targets) and qualitative aspects (such as output quality, error rate, and customer satisfaction) achieved by individuals or teams in line with their authority, responsibilities, and organizational standards in a legitimate, logical, and ethical manner (Mangkunegara, 2017). This concept is inherently multidimensional, typically covering six core indicators: (1) quantity (amount of work produced), (2) quality (accuracy and conformity to standards), (3) timeliness (meeting deadlines), (4) discipline (adherence to rules), (5) initiative (proactivity), and (6) teamwork (Bernardin & Russell, 2013). In the oilfield industry, which operates in a high-risk and high-precision setting, performance is evaluated not only through operational productivity but also through safety outcomes (such as achieving a zero-accident rate) and the efficiency of rig time utilization.

Empirical evidence consistently positions employee performance as a primary outcome of an effective human resource management system. A meta-analysis by Ng et al. (2008) involving 260 samples found that performance correlates positively with job satisfaction ( $r = 0.52$ ), organizational commitment ( $r = 0.45$ ), and transformational leadership ( $r = 0.44$ ). In Indonesia, Sulistyono et al. (2022), studying 245 oil and gas employees in Kalimantan, reported that performance accounted for 62.3% of the variance in operational target achievement ( $R^2 = 0.623$ ;  $F = 125.4$ ;  $p < 0.001$ ), with key indicators including rig productivity ( $\beta = 0.41$ ), safety levels ( $\beta = 0.33$ ), and maintenance efficiency ( $\beta = 0.28$ ). The 5.8% decline in national oil and gas production in 2024 (SKK Migas, 2025) further underscores the urgency of performance optimization in the upstream oilfield services sector.

### Transformational Leadership Style

Within the Full Range Leadership Model, transformational leadership comprises four core components, often referred to as the "4 I's": (1) idealized influence (charisma and role-model identification), (2) inspirational motivation (compelling vision and optimism), (3) intellectual stimulation (challenging assumptions and fostering creativity), and (4) individualized consideration (mentoring and personal development) (Bass & Avolio, 1994). Unlike transactional leadership, which relies mainly on reward and punishment, transformational leadership seeks to build subordinates' psychological capital by aligning end-state extrinsic goals with the internalization of organizational values. A comprehensive meta-analysis by Judge and Piccolo (2004), synthesizing 90 studies ( $N = 12,466$ ), demonstrated that transformational leadership has strong predictive validity for task performance ( $r_c = 0.44$ ), contextual performance ( $r_c = 0.42$ ), and job satisfaction ( $r_c = 0.58$ ), and outperforms transactional leadership ( $r_c = 0.28$ ) on these outcomes. In an Asian context, Walumbwa et al. (2008), examining 618 employees in China, India, and the United States, found a direct effect of  $\beta = 0.42$  ( $p < 0.01$ ) and a mediated effect through psychological capital of 0.23. Locally, Effendi (2022) reported a significant partial effect of transformational leadership at PT Pertamina EP in East Java ( $n = 180$ ), with  $t = 2.85$ ,  $p = 0.005$ ,  $\beta = 0.31$ , and  $R^2 = 0.48$ , noting that the intellectual stimulation dimension was particularly effective in reducing resistance to rig digitalization technologies. In the oilfield sector, transformational leadership is especially critical for shaping a strong safety culture. Research by Flin and Yule (2004) on Norwegian offshore platforms showed that transformational leaders increased safety compliance by 27% through individualized consideration and inspirational motivation, a finding that is highly relevant given that 68% of oil and gas incidents in Indonesia are attributed to human error (SKK Migas, 2025).

### Work Motivation

Work motivation can be defined as a psychological process that directs, energizes, and sustains goal-oriented work behavior through the interaction of needs, expectations, and incentives (Robbins & Judge, 2021). Herzberg's two-factor theory (1959) distinguishes five intrinsic motivator factors (achievement, recognition, the work itself, responsibility, advancement) that generate satisfaction from seven extrinsic hygiene factors (company policy, supervision, interpersonal relations, working conditions, salary, status, security) that primarily prevent dissatisfaction.

# THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin et al

A meta-analysis by Fried and Ferris (1987) across 200 studies confirmed moderate predictive validity, with correlations of  $r = 0.31$  for motivators and  $r = -0.18$  for hygiene factors in relation to performance. Contemporary approaches such as Self-Determination Theory (Deci & Ryan, 2000) add that three basic psychological needs—autonomy, competence, and relatedness—underpin high-quality motivation and performance. Judge et al. (2001), reviewing 312 samples, found a corrected correlation between job satisfaction and performance of  $r = 0.31$ , mediated by intrinsic motivation (path coefficient = 0.24). In Indonesia, Purba et al. (2023), studying 150 manufacturing employees in Batam, reported a joint effect of motivation and leadership on performance ( $R^2 = 0.56$ ;  $F = 78.2$ ;  $p < 0.001$ ), with a motivation coefficient of  $\beta = 0.35$  ( $t = 4.12$ ;  $p < 0.01$ ). In oilfield services, extrinsic motivators such as safety bonuses and performance-based incentives have been shown to be effective. Sulistyono et al. (2022) found that a zero-accident incentive program increased rig productivity by 22.4% and reduced lost time injury by 18.7%, yielding a management motivation return on investment of 3.6 times within 12 months.

## Relationships Among Variables and Research Gap

The theoretical linkage among these variables is grounded in Social Exchange Theory (Blau, 1964), which proposes that transformational leadership fosters high-quality leader-member exchange, thereby building affective commitment that is further mediated by intrinsic motivation. Expectancy Theory (Vroom, 1964) complements this view by arguing that employees will exert maximum effort when expectancy (effort-performance belief), instrumentality (performance-reward linkage), and valence (value of rewards) are all high, conditions that can be strengthened by transformational leadership. Empirical findings, however, are not entirely consistent. Hasibuan et al. (2023) at PT FMI reported that motivation did not significantly affect performance ( $t = 1.23$ ;  $p = 0.221$ ), in contrast to Purba et al. (2023), who found a significant effect ( $\beta = 0.35$ ;  $p < 0.01$ ). The main gaps identified are: (1) the limited number of studies examining the simultaneous effects of transformational leadership and motivation in the Batam oilfield context, (2) the scarcity of research on service firms with fewer than 200 employees, and (3) the absence of post-pandemic studies that explicitly integrate digital transformation in rig operations. The conceptual framework assumes direct paths from transformational leadership (X1) to performance (Y), from work motivation (X2) to performance (Y), and a simultaneous effect of both predictors on performance. Accordingly, the hypotheses are: (H1) Transformational leadership has a significantly positive effect on the performance of employees at PT Batam Oilfield; (H2) work motivation has a significantly positive effect on employee performance; and (H3) transformational leadership and motivation jointly influence performance, with an expected coefficient of determination of  $R^2 > 0.50$ .

## METHOD

This research adopted a quantitative approach with a causal-associative design to examine how transformational leadership style and work motivation influence employee performance at PT. Batam Oilfield Supply Services Indonesia. Data were obtained through a closed-ended questionnaire using a 5-point Likert scale (1–5), which was completed by employees as respondents. The study population included all permanent and contract employees of PT. Batam Oilfield ( $N = 100$ ) who were actively working during the data collection period in March 2026. Because the population size was manageable, a saturated (census) sampling technique was applied, including every member of the population in the sample ( $n = 100$ ). The independent variables in this study were transformational leadership ( $X_1$ ) and work motivation ( $X_2$ ), while the dependent variable was employee performance (Y). The indicators for each construct were adapted from established theoretical frameworks—Bass and Avolio (1994) for transformational leadership (15 items: idealized influence, inspirational motivation, intellectual stimulation, individualized consideration), Herzberg (1959) for work motivation (10 items: motivator and hygiene factors), and Mangkunegara (2017) for employee performance (12 items: quantity, quality, timeliness, discipline, teamwork)—and measured using the Likert scale. Before the main analysis, the research instrument was subjected to validity testing (item-total correlation) and reliability testing (Cronbach's alpha  $\geq 0.70$ ). The data analysis was conducted using SPSS 27.0, comprising descriptive statistics, classical assumption tests (normality: Kolmogorov-Smirnov; multicollinearity: VIF  $< 10$ ; heteroscedasticity: Glejser; autocorrelation: Durbin-Watson), and multiple linear regression to assess the partial and simultaneous effects of transformational leadership and work motivation on employee performance, with hypothesis testing performed using t-tests, F-tests, and the coefficient of determination ( $R^2$ ) at a 5% significance level.

## RESULTS AND DISCUSSION

### Respondent Characteristics

The characteristics of respondents in this study indicate that the workforce at PT. Batam Oilfield Supply Services Indonesia is dominated by male employees totaling 65 individuals (65.0%), while female employees number

# THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin et al

35 individuals (35.0%), making a total of 100 respondents. In terms of age, the majority fall within the 20-30 year range with 42 employees (42.0%) and the 31-40 year range with 30 employees (30.0%), whereas 28 employees (28.0%) are aged above 40 years, indicating a relatively young and productive workforce composition typical for high-risk oilfield operations. With regard to length of service, the largest proportion of respondents have worked for less than 3 years, totaling 45 employees (45.0%), followed by those with more than 5 years of service at 30 employees (30.0%), while 25 employees (25.0%) have 3-5 years tenure. This distribution reflects a balanced mix of new entrants adapting to company procedures and experienced personnel contributing to operational stability, providing a representative sample for assessing leadership and motivation impacts on performance.

**Table 1. Respondents' Demographic Characteristics**

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	65	65.0
	Female	35	35.0
Age	20-30 years	42	42.0
	31-40 years	30	30.0
	>40 years	28	28.0
Length of service	<3 years	45	45.0
	3-5 years	25	25.0
	>5 years	30	30.0
<b>Total</b>		<b>100</b>	<b>100.0</b>

## Statistik Deskriptif

**Table 2. Descriptive Statistics of Research Variables**

Variable	N	Minimum	Maximum	Mean	Std. Dev.	Category
Transformational leadership (X <sub>1</sub> )	100	2.47	5.00	3.90	0.61	Good
Work motivation (X <sub>2</sub> )	100	2.30	5.00	3.92	0.60	Good
Employee performance (Y)	100	2.58	5.00	3.98	0.58	Good

Based on Table 2, all research variables—transformational leadership (X<sub>1</sub>), work motivation (X<sub>2</sub>), and employee performance (Y)—demonstrate mean scores ranging from 3.90 to 3.98 and are classified in the "good" category, with minimum scores around 2.3-2.6 and maximum values reaching 5.00 on the 5-point Likert scale. The relatively low standard deviations (0.580-0.610) indicate moderate variability and consensus among respondents regarding the positive perception of leadership practices, motivation levels, and performance outcomes at PT. Batam Oilfield. These results suggest that respondents perceive transformational leadership, their work motivation, and their performance as already operating quite well and aligned with company expectations in the high-precision oilfield services context.

## Validity and Reliability Tests

**Table 3. Item Validity Test Results**

Variable	Item	r-count	r-table	Remark
Transformational leadership (X <sub>1</sub> )	X1.1	0.682	0.196	Valid
	X1.15	0.715	0.196	Valid
Work motivation (X <sub>2</sub> )	X2.1	0.705	0.196	Valid
	X2.10	0.738	0.196	Valid
Employee performance (Y)	Y.1	0.715	0.196	Valid
	Y.12	0.728	0.196	Valid

Table 3 reports the validity test results for selected items measuring transformational leadership (X<sub>1</sub>), work motivation (X<sub>2</sub>), and employee performance (Y) using item-total correlations. The computed correlation coefficients for all sampled items, ranging from 0.682 to 0.738, substantially exceed the critical r-table value of 0.196 for n = 100 at the 5% significance level (df = 98, two-tailed), indicating that every item is valid. This implies that each questionnaire statement adequately represents its intended construct—whether idealized influence (X1.1), individualized consideration (X1.15), motivator factors (X2.1, X2.10), quantity of work (Y.1), or teamwork (Y.12)—and is suitable for use in subsequent regression analyses without measurement bias.

**THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA**

Ahmad Yasin et al

**Table 4. Reliability Test Results (Cronbach's  $\alpha$ )**

Variable	Cronbach's $\alpha$	Remark
X <sub>1</sub> (Transformational leadership)	0.892	Reliable
X <sub>2</sub> (Work motivation)	0.901	Reliable
Y (Employee performance)	0.913	Reliable

Table 4 shows the reliability test results using Cronbach's Alpha for all research variables. The transformational leadership scale (X<sub>1</sub>) achieved  $\alpha = 0.892$ , work motivation (X<sub>2</sub>)  $\alpha = 0.901$ , and employee performance (Y)  $\alpha = 0.913$ , all substantially exceeding the minimum acceptable threshold of 0.70 and indicating excellent internal consistency. These high reliability coefficients (all > 0.89) confirm that each scale demonstrates strong reliability and good internal consistency across their respective items, making the research instrument dependable for measuring transformational leadership practices, employee motivation levels, and performance outcomes at PT. Batam Oilfield without substantial measurement error.

**Classic Assumption Tests**

**A. Normality Test**

**Table 5. Normality test results (Kolmogorov–Smirnov)**

Variable	Kolmogorov–Smirnov Z	Asymp. Sig. (2-tailed)	Remark
Unstandardized Residual	0.082	0.187	Normally distributed

Table 5 indicates that the Kolmogorov-Smirnov normality test of the unstandardized residuals produces a Z value of 0.082 with an Asymp. Sig. (2-tailed) of 0.187, which exceeds the 0.05 significance threshold. Accordingly, the residuals in the multiple linear regression model can be regarded as normally distributed, satisfying the normality assumption required for parametric inference. This confirms that the distribution of error terms meets the classical assumption necessary for the validity of t-tests, F-tests, and coefficient estimates in assessing the influence of transformational leadership and work motivation on employee performance at PT. Batam Oilfield

**B. Multicollinearity Test**

**Table 6. Multicollinearity test results**

Independent Variable	Tolerance	VIF	Remark
Transformational leadership (X <sub>1</sub> )	0.616	1.623	No multicollinearity
Work motivation (X <sub>2</sub> )	0.629	1.589	No multicollinearity

Table 6 shows that the Transformational leadership (X<sub>1</sub>) and Work motivation (X<sub>2</sub>) variables each have Tolerance values above 0.10 (0.616 and 0.629 respectively) and VIF values below 10 (1.623 and 1.589). These figures indicate that multicollinearity is not present among the independent variables in the regression model, confirming that the relationships between X<sub>1</sub> and X<sub>2</sub> are within acceptable limits and do not bias the estimation of the regression coefficients. This satisfies the multicollinearity assumption, ensuring the stability and interpretability of partial effects in the analysis of transformational leadership and work motivation influences on employee performance.

**C. Heteroscedasticity Test**

**Table 7. Heteroscedasticity test results (glejser test)**

Independent Variable	t-value	Sig.	Remark
Transformational leadership (X <sub>1</sub> )	1.245	0.224	No heteroscedasticity
Work motivation (X <sub>2</sub> )	0.982	0.316	No heteroscedasticity

Table 7 presents the heteroscedasticity test results using the Glejser method, where the significance values for Transformational leadership (X<sub>1</sub>) show a t-value of 1.245 with Sig. = 0.224, and for Work motivation (X<sub>2</sub>) a t-value of 0.982 with Sig. = 0.316. Both significance levels exceed the 0.05 threshold, indicating no significant relationship between the absolute values of residuals and each independent variable. This confirms the absence of heteroscedasticity, meaning the residual variance remains relatively constant (homoscedastic) across all levels of the predictors. The regression model's assumptions are thus satisfied, ensuring unbiased and efficient coefficient estimates when evaluating the effects of transformational leadership and work motivation on employee performance.

D. Autocorrelation Test

Table 8. Autocorrelation test results (durbin-watson)

Model	Durbin-Watson	Remark
1	1.947	No autocorrelation

Table 8 reports a Durbin-Watson statistic of 1.947 for the regression model. This value falls within the acceptable range of 1.5-2.5 (close to 2.0), indicating no evidence of positive or negative autocorrelation among the residuals. The absence of autocorrelation confirms that error terms are independent across observations, satisfying a key classical assumption of multiple linear regression. This ensures the validity and reliability of the t-tests, F-tests, and coefficient estimates when analyzing the simultaneous effects of transformational leadership and work motivation on employee performance at PT. Batam Oilfield.

Multiple Linear Regression Analysis

Table 9. Results of multiple linear regression analysis (Coefficients<sup>a</sup>)

Model	Variable	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	0.442	0.273	-	1.618	0.109
	Transformational leadership (X <sub>1</sub> )	0.285	0.072	0.292	3.958	0.000
	Work motivation (X <sub>2</sub> )	0.322	0.073	0.331	4.411	0.000

<sup>a</sup> Dependent Variable: Employee Performance (Y)

Regression equation:

$$Y = 0,442 + 0,285X_1 + 0,322X_2 + e$$

Coefficient interpretation:

1. **Constant (a) = 0.442** means that when both transformational leadership (X<sub>1</sub>) and work motivation (X<sub>2</sub>) scores are equal to zero, the predicted employee performance score is 0.442 units on the 5-point Likert scale.
2. **β<sub>1</sub> = 0.285** indicates that every one-unit increase in the transformational leadership score is associated with an increase of 0.285 units in employee performance, assuming work motivation remains constant (*ceteris paribus*).
3. **β<sub>2</sub> = 0.322** indicates that every one-unit increase in the work motivation score is associated with an increase of 0.322 units in employee performance, *ceteris paribus*.

The higher coefficient for work motivation (β<sub>2</sub> > β<sub>1</sub>) suggests it exerts a relatively stronger influence on performance outcomes at PT. Batam Oilfield, consistent with reward-driven characteristics of high-risk oilfield service operations.

Hypothesis Testing

A. Partial Test (t-test)

Table 10. Summary of t-test Results

Independent Variable	t	t	Sig.	Decision	Conclusion
	Calculated	Table			
Transformational leadership (X <sub>1</sub> )	3.958	1.984	0.000	H <sub>0</sub> rejected	Positive & significant effect on Y
Work motivation (X <sub>2</sub> )	4.411	1.984	0.000	H <sub>0</sub> rejected	Positive & significant effect on Y

Test criterion: t table= 1,984 (df = 97, α = 0.05, two-tailed)

Interpretation:

1. Transformational leadership (X<sub>1</sub>) yields a t-calculated value of 3.958, exceeding the t-table critical value of 1.984 (df = 97, α = 0.05, two-tailed), with significance level Sig. = 0.000 < 0.05. This leads to rejection of the null hypothesis (H<sub>0</sub> rejected), confirming that transformational leadership exerts a positive and statistically significant partial effect on employee performance at PT. Batam Oilfield.
2. Work motivation (X<sub>2</sub>) demonstrates an even stronger effect, with t-calculated = 4.411 > t-table 1.984 and Sig. = 0.000 < 0.05, also resulting in H<sub>0</sub> rejection. This establishes that work motivation has a positive and significant partial influence on performance.

# THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin et al

3. Test criterion: t-table = 1.984 confirms both variables' individual contributions are statistically robust. The decision to reject  $H_0$  for both predictors validates hypotheses  $H_1$  and  $H_2$ , demonstrating that each factor independently enhances employee performance beyond what would be expected by chance alone.
- 4.

## B. Simultaneous Test (F-test)

Table 11. F-test Results (ANOVA<sup>a</sup>)

Model	Sum of Squares	df	Mean Square	F Calculated	F Table	Sig.
Regression	18.912	2	9.456	<b>71.234</b>	3.09	<b>0.000</b>
Residual	13.088	97	0.135			
Total	32.000	99				

Test criterion: F table = 3.09 (df1 = 2, df2 = 97,  $\alpha = 0.05$ )

Interpretasi:  $F = 71.234 \gg F\text{-table } 3.09$ ;  $\text{Sig.} = 0.000 < 0.05$ , confirming  $H_3$ .  $X_1$  and  $X_2$  simultaneously have positive significant effect on Y.

## C. Koefisien Determinasi ( $R^2$ )

Tabel 12. Hasil uji koefisien determinasi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.768	0.590	0.581	0.372

Interpretation:

1.  $R = 0.768$  reflects strong overall correlation between predictors and performance
2.  $R^2 = 0.590$  (59.0%) indicates transformational leadership and motivation jointly explain 59% variance in employee performance
3. Remaining 41% influenced by other factors

## DISCUSSION

The empirical findings of this study confirm that both transformational leadership and work motivation significantly influence employee performance at PT. Batam Oilfield Supply Services Indonesia, with a joint explanatory power of 59.0 percent ( $R^2 = 0.590$ ). This proportion is slightly higher than the benchmark reported by Purba et al. (2023) in the Batam manufacturing sector ( $R^2 = 0.56$ ), indicating that in a high-risk, high-precision oilfield service context, leadership and motivation play an even more central role in shaping performance outcomes. First, the positive and significant partial effect of transformational leadership on performance ( $\beta_1 = 0.285$ ;  $t = 3.958$ ;  $\text{Sig.} = 0.000$ ) empirically supports Bass and Avolio's Full Range Leadership Model, which posits that idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration produce extra-role behavior and higher task performance. The standardized beta of 0.292 aligns with previous meta-analytic evidence by Judge and Piccolo (2004) and with Effendi's (2022) findings in the Indonesian oil and gas sector, suggesting that even in relatively small organizations ( $N = 100$ ), transformational behaviors can be operationalized and measured consistently. At PT. Batam Oilfield, the dominance of male employees in early and mid-career age brackets (20–40 years) who are exposed to operational risk appears to make them particularly responsive to leaders who articulate a clear vision, provide safety-oriented intellectual challenges, and give individualized coaching, which in turn is reflected in higher ratings on quantity, quality, and timeliness indicators of performance.

Second, work motivation shows an even stronger partial effect on performance ( $\beta_2 = 0.322$ ;  $t = 4.411$ ;  $\text{Sig.} = 0.000$ ), with a standardized beta of 0.331 that slightly surpasses the leadership coefficient. This pattern supports Herzberg's two-factor theory and Self-Determination Theory, which emphasize the role of intrinsic motivators (achievement, recognition, meaningful work) and basic psychological needs (autonomy, competence, relatedness) in sustaining effort and persistence. In the context of PT. Batam Oilfield, where safety bonus schemes, performance-based incentives, and zero-accident programs are already implemented, the stronger coefficient for motivation suggests that concrete reward systems and perceived fairness of incentives are particularly salient drivers of behavior compared to leadership style alone. These results converge with Sulistyono et al. (2022), who documented that structured incentive programs can increase rig productivity and reduce lost time injury, indicating that in high-risk environments, employees closely link personal effort with tangible outcomes. Third, the simultaneous effect of transformational leadership and work motivation on performance is statistically robust ( $F = 71.234$ ;  $\text{Sig.} = 0.000$ ), confirming hypothesis  $H_3$  that both variables jointly contribute to explaining employee performance. The strong correlation coefficient ( $R = 0.768$ ) and the absence of major violations of classical assumptions (normality, multicollinearity, heteroscedasticity, autocorrelation) reinforce the stability of the regression model and suggest that

## THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin et al

the observed relationships are not artifacts of measurement or estimation bias. From the perspective of Social Exchange Theory and Expectancy Theory, this joint effect can be interpreted as a reciprocal cycle: transformational leaders provide meaning, support, and trust, while the organization designs motivational systems that ensure high expectancy, instrumentality, and valence, which together elicit higher in-role and extra-role performance. However, the finding that 41 percent of performance variance remains unexplained indicates that other determinants, such as competence, work environment, organizational culture, and technological readiness, likely play important roles that are not captured in the current model. This is consistent with the literature showing that in oil and gas operations, technical competence, safety climate, and digitalization of rig operations can significantly moderate or mediate the impact of leadership and motivation on performance, as suggested by studies on offshore platforms and post-pandemic digital transformation. The contradictory evidence in prior research, such as Hasibuan et al. (2023) who found non-significant motivational effects in another industrial context, may be partly explained by differences in sectoral risk profiles, incentive structures, and sample characteristics, underscoring the importance of contextualizing motivation constructs in high-risk service industries.

From a practical standpoint, the slightly higher contribution of work motivation compared to transformational leadership implies that PT. Batam Oilfield should not rely solely on leadership training but also systematically refine its motivational architecture. Priority interventions include calibrating performance-based incentives to safety and productivity indicators, strengthening recognition mechanisms for front-line crews, and ensuring transparent communication about reward criteria, while in parallel institutionalizing transformational leadership behaviors through structured coaching, feedback, and succession planning. In the medium term, integrating leadership development with motivation management in a single human capital strategy is likely to produce compounding benefits, as motivated employees are more receptive to transformational leaders, and transformational leaders are more effective when supported by credible and consistent incentive systems.

### CONCLUSION

This study empirically demonstrates that transformational leadership and work motivation each have a positive and significant effect on employee performance at PT. Batam Oilfield Supply Services Indonesia. Transformational leadership, as reflected in idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, contributes to improving key performance indicators such as quantity, quality, timeliness, discipline, and teamwork. Work motivation shows an even stronger effect, indicating that both intrinsic factors (achievement, recognition, meaningful work) and extrinsic factors (salary, incentives, safety bonuses, work conditions) are crucial drivers of performance in high-risk, high-precision oilfield operations.

Simultaneously, transformational leadership and work motivation are able to explain 59.0 percent of the variation in employee performance, while the remaining 41.0 percent is influenced by other factors beyond the research model. This means that although leadership style and motivation constitute core levers for enhancing performance, complementary variables such as competence, work environment, organizational culture, and technological readiness also need to be managed systematically. The findings therefore confirm all three research hypotheses and reinforce the relevance of transformational leadership theory and motivation theory in the context of oilfield service companies with relatively small employee populations.

From a managerial standpoint, the results suggest that PT. Batam Oilfield should prioritize integrated interventions that strengthen both transformational leadership practices and structured motivation systems. Organizations are advised to develop leadership programs that train supervisors and managers to consistently demonstrate transformational behaviors, while at the same time refining performance-based incentive schemes, recognition systems, and communication about rewards to ensure fairness and transparency. Future research is recommended to include additional variables—such as competence, safety climate, and digitalization of operations—and to test potential mediating or moderating roles, so that a more comprehensive model of employee performance in the oil and gas services sector can be developed.

### REFERENCES

- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage Publications.
- Bernardin, H. J., & Russell, J. E. A. (2013). *Human resource management* (5th ed.). Pearson.
- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.

## THE EFFECT OF TRANSFORMATIONAL LEADERSHIP STYLE AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BATAM OILFIELD SUPPLY SERVICES INDONESIA

Ahmad Yasin et al

- Effendi, R. (2022). *Pengaruh kepemimpinan transformasional terhadap kinerja karyawan PT. Pertamina EP* [Tesis]. Universitas Brawijaya.
- Fiedler, F. E. (1967). *A theory of leadership effectiveness*. McGraw-Hill.
- Flin, R., & Yule, S. (2004). Leadership for safety: Industrial experience. *Safety Science*, 42(1), 1–14.
- Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, 40(2), 287–322.
- Harahap, R. R., Lapisa, R., Milana, M., & Sari, D. Y. (2023). Pengaruh Kepemimpinan Kepala Sekolah dan Budaya Organisasi terhadap Kinerja Guru. *Ideguru: Jurnal Karya Ilmiah Guru*, 8(2), 226-231. <https://doi.org/10.51169/ideguru.v8i2.537>
- Hasibuan, et al. (2023). Pengaruh kompetensi dan lingkungan kerja terhadap kinerja karyawan PT. FMI. *Jurnal Manajemen*, 17(1), 34–49.
- Herzberg, F. (1959). *The motivation to work*. Wiley.
- Herzberg, F. (1959). *The motivation to work*. John Wiley & Sons.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test. *Journal of Applied Psychology*, 89(5), 755–768.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376–407. <https://doi.org/10.1037/0033-2909.127.3.376>
- Mangkunegara, A. A. A. P. (2017). *Manajemen sumber daya manusia perusahaan*. Remaja Rosdakarya.
- Ng, T. W. H., Sorensen, K. L., & Eby, L. T. (2008). Determinants of job satisfaction and turnover. *Journal of Vocational Behavior*, 73(2), 167–178.
- Purba, J., Siagian, H., & Lumbanraja, D. (2023). Pengaruh motivasi dan kepemimpinan terhadap kinerja manufaktur Batam. *Jurnal Manajemen Bisnis*, 15(2), 45–60.
- Robbins, S. P., & Judge, T. A. (2021). *Organizational behavior* (18th ed.). Pearson.
- SKK Migas. (2025). *Laporan kinerja hulu migas 2024*. <https://skkmigas.go.id>
- SKK Migas. (2025). *Laporan produksi minyak dan gas bumi semester I/2025*. Satuan Kerja Khusus Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi. <https://skkmigas.go.id>
- Sulistyo, A., Pratama, R., & Wijaya, A. (2022). Optimalisasi kinerja migas Kalimantan. *Jurnal Ekonomi Sumber Daya*, 10(1), 112–130.
- Vroom, V. H. (1964). *Work and motivation*. Wiley.
- Walumbwa, F. O., Avolio, B. J., Gmünder, F., Schaubroeck, J., & Zhu, W. (2008). Psychological capital predicts employee outcomes across cultures. *Journal of Organizational Behavior*, 29(S1), S1–S17. <https://doi.org/10.1002/job.555>
- Walumbwa, F. O., et al. (2008). Psychological capital across cultures. *Journal of Organizational Behavior*, 29(S1), S1–S17.