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The Effect of Management Contracts on Employee Performance, with Work Motivation as a Mediating Variable at PT PLN (Persero) Project Management Center – UPMK IV

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Abstract

This research aims to analyze the influence of management contracts on employee performance with work motivation as a mediating variable at PT PLN (Persero) Project Management Center – Construction Management Implementation Unit IV (UPMK IV). The management contract is a formal performance control instrument that aligns individual targets with organizational targets through the determination of key performance indicators (KPIs), periodic evaluation mechanisms, and reward and sanction systems. The study used a quantitative approach with causal associative design and *saturated sampling* techniques. Data was collected through a *Likert* scale questionnaire 1–5 distributed to all employees of PT PLN UPMK IV, and analyzed using *Structural Equation Modelling–Partial Least Squares* (SEM-PLS) with SmartPLS 4.0 software. The results showed that: (1) management contracts had a positive and significant effect on work motivation ($\beta \approx 0.79$; $p<0.05$); (2) work motivation has a positive and significant effect on employee performance ($\beta \approx 0.541$; $p<0.05$); (3) management contracts have a positive and significant effect on employee performance ($\beta \approx 0.312$; $p<0.05$); and (4) work motivation was proven to partially mediate the influence of management contracts on employee performance (indirect effect: $\beta = 0.427$; $p < 0.05$). This research contributes to the study of human resource management by placing management contracts as formal performance control instruments and work motivation as psychological mechanisms that connect the two, in the specific context of the electricity project management unit.

INTRODUCTION

Global competition and demands for public accountability encourage organizations, including State-Owned Enterprises (SOEs), to implement a structured and measurable performance control system. PT PLN (Persero) as a state company that holds a strategic mandate in the provision of national electricity needs an instrument that is able to align individual goals with organizational targets in a formal and consistent manner. One of the instruments used is a management contract, which is a performance agreement that contains measurable targets, key performance indicators (KPIs), periodic evaluation mechanisms, and the consequences of achievement in the form of awards and sanctions (Awan et al., 2020). In project-based units such as PT PLN (Persero) Project Management Center – Construction Management Implementation Unit IV (UPMK IV), management contracts play an increasingly crucial role because unit performance is not only measured administratively, but also includes the success of project control involving technical complexity, cost management, timeliness, quality assurance, and cross-stakeholder coordination (Almulaiki, 2023).

The performance achievement data of PT PLN (Persero) UPMK IV for the 2021–2025 period shows a fluctuating pattern. In Semester 1 and Semester 2 of 2021, performance realization only reached 80.37% and 87.65% of the target; Semester 2 of 2022 also decreased to 90.75% after previously exceeding the target in Semester 1 of 2022 by 102.51%. Although performance shows a positive trend in the period 2023–2025, fluctuations in the initial period indicate that performance achievement is not solely determined by the existence of management contracts. Internal employee factors, especially work motivation, are suspected to have contributed to the consistency of these achievements (Furnham et al., 2021; Steers & Sánchez-Runde, 2017).

Work motivation is an internal and external drive that affects the intensity, direction, and perseverance of employees in carrying out work (Robbins and Judge, 2019). In the framework *of Expectancy Theory* Vroom, (1964) states that a person's motivation is influenced by the belief that effort produces performance, performance produces rewards, and that rewards are valuable to individuals. Management contracts that contain targets, evaluations, and *a reward and punishment* system theoretically build expectations that drive work motivation. On the other hand Locke and Latham, (1990) in *Goal Setting Theory* it is emphasized that clear and challenging goals significantly increase individual motivation and performance, so the clarity and quality of management contracts also determine how much motivation is formed.

Previous research has examined the relationship between performance management systems, motivation, and employee performance (Deogaonkar et al., 2020; Vassilev et al., 2024). Awan et al. (2020) found that an effective performance management system is positively correlated with performance through *employee engagement*, while Hanum et al. (2023) show that motivation and performance management systems together affect the performance of SOE employees. In the context of PLN, Majusip et al. (2024) found the role of motivation in improving performance, and Karina and Ariffin (2024) proved motivation as a mediating variable in safety performance. However, research that specifically places management contracts, not performance management systems in general but as a major independent variable with work motivation as a mediator in the context of electricity project management units are still very limited.

Based on the research gap and the empirical phenomenon, this study aims to: (1) analyze the influence of management contracts on work motivation; (2) analyze the influence of work motivation on employee performance; (3) analyze the influence of management contracts on employee performance; and (4) analyze the role of work motivation as a mediating variable between management contracts and employee performance at PT PLN (Persero) Project Management Center – UPMK IV.

This research is based on three theories that complement each other and together explain the mechanism of the influence of management contracts on work motivation and employee performance. First, *the Goal Setting Theory* put forward by Locke and Latham (1990) states that specific, clear, and challenging work goals significantly increase individual motivation and performance compared to general or non-measurable goals. The management contract, through the setting of KPIs and measurable targets, is a direct manifestation of this goal-setting principle in a formal organizational context. Second, *Expectancy Theory* Vroom, (1964) explains that a person's motivation is determined by three perceptions: the belief that effort will produce performance (*expectancy*), the belief that performance will result in rewards (*instrumentality*), and the value of rewards for individuals (*valence*). Management contracts that explicitly contain the consequences of achievement strengthen the *instrumentality* and *valence components*, thereby encouraging employee work motivation. Third, *Performance Management Theory* Armstrong, (2006) explains that a performance management system functions to direct, control, and evaluate the achievement of organizational targets in a systematic manner. Management contracts are a core component of this system that ensures alignment between individual goals and the strategic goals of the organization. These three theories work synergistically in this study: *Goal Setting Theory* explains how the setting of targets in management contracts shapes the direction and intensity of employee work; *Expectancy Theory* explains the psychological mechanisms that transform those targets into work motivation; and *Performance Management Theory* explains how management contracts as formal instruments integrate the two into a structured organizational control system. The synthesis of these three theories is the foundation of the mediation model tested in this study.

A management contract is defined as a formal performance control instrument that contains measurable work goals, key performance indicators (KPIs), periodic evaluation mechanisms, and a system of binding rewards and sanctions between management and implementing units. In the perspective of management accounting, Merchant and Van der Stede (2007) define a management contract as part of a *result control system* in which the organization sets performance targets explicitly and provides consequences for their achievement in order to direct the behavior of the organization's members. Furthermore, Anthony and Govindarajan (2007) emphasized that the management contract is a strategic coordination tool that ensures that units in the organization work in tandem with the organization's parent goals through a structured system of targets, evaluations, and incentives. In this study, management contracts were measured through five indicators: clarity of work targets, suitability of performance indicators with tasks and functions, effectiveness of socialization and understanding of contracts, consistency of periodic evaluations, and fairness of *reward and punishment mechanisms* (Awan et al., 2020).

Work motivation is an internal and external drive that affects the intensity, direction, and perseverance of employees in carrying out tasks (Robbins and Judge, 2019). Deci and Ryan (2000) distinguish intrinsic motivation that stems from personal satisfaction and interests from extrinsic motivation driven by external incentives such as rewards and sanctions, and states that the balance of the two results in the most sustainable motivation. In the context of a target-based organization, high motivation encourages employees to work beyond minimum standards and show initiative in achieving goals (Riyanto et al., 2021). Work motivation in this study was measured through five indicators: achievement drive, work enthusiasm, commitment to tasks, feeling valued, and active involvement in achieving unit targets.

Employee performance is the result of work achieved in carrying out tasks according to the responsibilities given (Mangkunegara, 2014). Mwita (2000) defines performance as the ability of an individual to meet or exceed organizational expectations through the effective and efficient execution of tasks. In a project management unit such as UPMK IV, performance includes not only administrative output but also a real contribution to the timeliness, quality, and cost efficiency of electricity projects (Awan et al., 2020). Employee performance in this study was measured through five indicators: work quality, quantity of work, timeliness of completion, cooperative ability, and responsibility for work results (Mangkunegara, 2014).

A number of relevant previous studies have been reviewed to map the position of this research. Awan et al. (2020) prove that an accurate performance management system positively correlates with performance through *employee engagement*, supporting management contracts as part of the system. Riyanto et al. (2021) and Kurniawanto et al. (2022) have consistently found that work motivation has a positive and significant effect on employee performance in various organizational contexts. Hanum et al. (2023) show that performance management and motivation systems together affect the performance of SOE employees, reinforcing the relevance of the mediation model tested in this study. In the international context, Mwita (2000) found that formal performance systems contribute to improved individual performance in African public organizations, while Deci et al. (2017) prove meta-analytically that goal-based control strengthens autonomous motivation which impacts long-term performance. Aguinis et al. (2011) in their systematic review found that the quality of performance management system implementation, which includes clarity of standards, feedback, and consequences, is a strong predictor of individual and organizational performance. In the context of PLN specifically, Majusip et al. (2024) found the role of motivation in improving performance, Fitriandi et al. (2024) confirmed the positive influence of motivation on the performance of PLN employees, while Karina and Ariffin (2024) proved the role of motivation as a mediating variable in safety performance in the PLN environment.

Based on previous research studies, there are three research gaps that are the basis for this research's contribution. Theoretically, previous research has not specifically placed management contracts as formal instruments distinct from general performance management systems. Empirically, the psychological mechanisms that link management contracts and performance through motivation have not been directly tested. Contextually, research on electricity project management units that have project-based characteristics, strict time targets, and cross-functional coordination is still very limited.

Based on the theoretical foundations and previous research that have been described, the conceptual framework of this study describes the relationship between management contracts (X), work motivation (M), and employee performance (Y) as shown in Figure 1. Management contracts affect work motivation (H1) and employee performance directly (H3), while work motivation affects employee performance (H2) and at the same time mediates the influence of management contracts on employee performance (H4).

Research Hypothesis

H1 – Management contracts have a positive and significant effect on employee work motivation

Management contracts that contain clear targets, appropriate KPIs, and transparent achievement consequences reinforce the *expectancy* and *instrumentality* components in employees: employees believe that their efforts will be measured fairly and result in meaningful rewards. This belief encourages motivation to achieve the target. Empirically, Deci et al. (2017) proved that goal-based control systems strengthen employee autonomy, while Awan et al. (2020) found that PMS effectiveness was positively correlated with employee engagement and motivation.

H2 – Work motivation has a positive and significant effect on employee performance

In *Goal Setting Theory*, motivation is a mechanism that transforms goal setting into a directed and persistent work behavior. Highly motivated employees tend to invest more effort, overcome obstacles more persistently, and produce more optimal performance than employees with low motivation (Robbins and Judge, 2019). Empirical evidence supports this relationship: Riyanto et al. (2021) and Kurniawanto et al. (2022) consistently found a positive influence of motivation on performance, as did Fitriandi et al. (2024) in the specific context of PLN employees.

H3 – Management contracts have a positive and significant effect on employee performance

Management contracts function as a *result control* system that directly directs employee behavior and output towards predetermined targets. Through clarity of KPIs, periodic evaluations, and consequence mechanisms, management contracts provide a structure that allows employees to explicitly understand work priorities and standards of success, thus having a direct impact on performance. Aguinis et al. (2011) in their systematic review found that the quality of PMS implementation including standard clarity and feedback consistency was a strong predictor of individual performance, even after controlling for motivational variables.

H4 – Work motivation partially mediates the influence of the management contract on employee performance

The proposed mediation model is based on the argument that management contracts affect performance through two pathways that work simultaneously: a direct pathway through a formal structure (H3) and an indirect pathway through the reinforcement of work motivation (H1 → H2). Partial mediation indicates that the management contract still has a direct influence on performance beyond its influence on motivation consistent with *Performance Management Theory* which states that formal systems and psychological factors both contribute to performance. Hanum et al. (2023) support this model by finding that motivation mediates the relationship between PMS and performance in SOE employees, while Karina and Ariffin (2024) prove the role of motivational mediation in the specific context of PLN.

METHOD

This research used a quantitative approach with a causal associative design to test the direct and indirect influence between variables (Sugiyono, 2019). The research was carried out at PT PLN (Persero) Project Management Center – UPMK IV, Medan, North Sumatra, Indonesia. The research population is all UPMK IV employees totaling 35 people. The saturated sampling technique (total sampling) is applied so that all active employees with a minimum working period of three months are made respondents.

Three variables were operationalized: (1) management contract (X) as an independent variable, (2) work motivation (M) as a mediation variable, and (3) employee performance (Y) as a dependent variable. Each variable was measured using five indicators on a Likert scale of 1–5. Primary data was obtained through an online questionnaire, while secondary data came from the management contract realization report and KPI data for the 2021–2025 period. Prior to the primary data collection, a pilot test was conducted on 35 respondents outside the sample to evaluate the validity (*corrected item-total correlation* > 0.30) and reliability (*Cronbach's Alpha* > 0.70) of the instrument (Hair et al., 2019).

Data were analyzed using SEM-PLS with SmartPLS 4.0 (Ringle et al., 2022). The evaluation of *the outer model* included *convergent validity* (*outer loading* > 0.70; EFA > 0.50), *discriminant validity* (HTMT < 0.90; Fornell–Larcker), and reliability (CA & CR > 0.70). The *inner evaluation of the model* included R-squared, *path coefficient* (β), T-statistic, p-value (< 0.05), and *effect size* (f^2: 0.02 small; 0.15 medium; 0.35 large). Mediation was tested through *specific indirect effects* by *bootstrapping* 5,000 samples; partial mediation was confirmed when both direct and indirect effects were significant (Hair et al., 2019). Structural equations: $M = \beta_1 X + \varepsilon_1$ and $Y = \beta_2 X + \beta_3 M + \varepsilon_2$. Research is carried out in accordance with the principles of research ethics; Participation is voluntary, data confidentiality is maintained, and there is no conflict of interest.

Table 1. Operationalization of Research Variables

Var.	Code	Indicator	Questionnaire Statement	Scale	Source
KM	KM1	Target clarity	The work targets in the management contract were conveyed to me clearly and measurably	Likert 1–5	Armstrong (2006)
	KM2	KPI Suitability	Performance indicators (KPIs) according to my duties and responsibilities	Likert 1–5	
	KM3	Socialization	The socialization of management contracts helped me understand my priorities and work standards	Likert 1–5	
	KM4	Periodic evaluation	Evaluation of the achievement of management contracts is carried out periodically and transparently	Likert 1–5	
	KM5	Reward & punishment	Awards and sanctions for target achievement are applied fairly and consistently	Likert 1–5	

Var.	Code	Indicator	Questionnaire Statement	Scale	Source
MK	MK1	Push for performance	I am driven to achieve and exceed work targets in management contracts	Likert 1–5	Robbins & Judge (2019)
	MK2	Work enthusiasm	I feel enthusiastic about completing every job that is my responsibility	Likert 1–5	
	MK3	Commitment	I remained committed to getting the job done despite the pressure	Likert 1–5	
	MK4	Feeling valued	I feel that my contributions and work are recognized by the organization	Likert 1–5	
	MK5	Active engagement	I am actively involved in efforts to achieve work unit targets	Likert 1–5	
CD	KP1	Quality of work	I complete work according to the quality standards set by the organization	Likert 1–5	Mangkunegara (2014)
	KP2	Quantity of work	I was able to complete the volume of work according to the specified target	Likert 1–5	
	KP3	Punctuality	I complete the task according to the set deadline	Likert 1–5	
	KP4	Cooperation	I am able to work effectively with colleagues and related units	Likert 1–5	
	FP5	Responsibilities	I am fully responsible for the results of the work that I am responsible for	Likert 1–5	

KM = Management Contract; MK = Work Motivation; KP = Employee Performance.

Source: Processed by researchers (2026).

RESULTS AND DISCUSSION

The questionnaire was distributed to all employees of PT PLN (Persero) UPMK IV. All questionnaires were successfully returned and met the analysis requirements (100% response rate). The respondents' profiles showed that the majority were male (82.8%), the largest age group was 31–40 years old (97.1%), the majority education was Strata-1 (70%), and the largest working period was over 5 years (100%). Descriptive statistics show that management contracts obtained an average score of 4.12 (SD = 0.43), work motivation 4.08 (SD = 0.47), and employee performance 4.19 (SD = 0.39), all three in the Agree category (3.40–4.19) on a Likert scale of 1–5.

Table 2. Descriptive Statistics of Research Variables

Variable	N	Min	Max	Red	SD	Categories
Management Contract (X)	35	3,00	5,00	4,12	0,43	Agree
Work Motivation (M)	35	2,80	5,00	4,08	0,47	Agree
Employee Performance (Y)	35	3,20	5,00	4,19	0,39	Agree

Source: Primary data, processed SmartPLS 4.0 (2026).

The evaluation of the outer model (Table 7) shows that all outer loading is above 0.70 (range 0.724–0.891), the AVE value for all three constructs is above 0.50, the Composite Reliability (CR) is between 0.879–0.896, and Cronbach's Alpha (CA) is between 0.842–0.868. The HTMT value for all construct pairs is below 0.90 (range 0.612–0.783). Thus, all criteria of convergent validity, discriminant validity, and reliability are met (Hair et al., 2019).

Table 3. Outer Model Evaluation Results

Construct	Outer Loading	AVE	CR	CA	HTMT	Ket.
Management Contract (X)	0,751–0,891	0,612	0,889	0,854	0,783	Valid & Reliable
Work Motivation (M)	0,724–0,867	0,589	0,879	0,842	0,741	Valid & Reliable
Employee Performance (Y)	0,763–0,881	0,631	0,896	0,868	0,612	Valid & Reliable

EHTA = Average Variance Extracted; CR = Composite Reliability; CA = Cronbach's Alpha; HTMT = Heterotrait–Monotrait Ratio. Thresholds: loading > 0.70; AVE > 0.50; CR & CA > 0.70; HTMT < 0.90 (Hair et al., 2019).

The R-squared value for work motivation was 0.624 (strong) and for employee performance 0.713 (strong), indicating good model explanatory ability. The results of hypothesis testing are presented in Table 4.

Table 4. Hypothesis Testing Results

H	Pathway	β	T-stat	p-value	f²	Ket.
H1	Contract Management → Work Motivation	0,790	9,847	0,000	0,357	Accepted
H2	Work Motivation → Employee Performance	0,541	6,213	0,000	0,218	Accepted
H3	Employee Performance → Management Contracts	0,312	3,478	0,001	0,148	Accepted
H4	KM → MK → KP (Indirect)	0,427	5,634	0,000	–	Accepted

β = path coefficient; T-stat = T-statistic (bootstrapping 5,000 samples, two-tailed); $p < 0.05$ = significant; f^2: 0.02 small; 0.15 moderate; 0.35. H4 = specific indirect effect.

Mediation testing showed that the indirect effect (H4: $\beta = 0.427$; $T = 5.634$; $p = 0.000$) and direct influence (H3: $\beta = 0.312$; $p = 0.001$) were both significant simultaneously, so work motivation was shown to partially mediate the influence of management contracts on employee performance (Hair et al., 2019).

H1 — The Effect of Management Contracts on Work Motivation. Management contracts have a positive and significant effect on work motivation ($\beta = 0.790$; $T = 9.847$; $p = 0.000$; $f^2 = 0.357$). This is the strongest path in the model. These findings are consistent with *Expectancy*

Theory Vroom, (1964): management contracts containing clear targets, transparent evaluations, and *fair reward & punishment* reinforce employee perceptions of *expectancy* and *instrumentality*. Empirically, these results reinforce Awan et al. (2020) and Deci et al. (2017) who found that a goal-based control system strengthens employee autonomy motivation.

H2 — The Effect of Work Motivation on Employee Performance. Work motivation has a positive and significant effect on employee performance ($\beta = 0.541$; T = 6,213; p = 0.000; $f^2 = 0.218$). These findings confirm *the Goal Setting Theory* Locke and Latham, (1990) that motivation transforms goal setting into directed and persistent work behaviors. Consistent with Riyanto et al. (2021), Kurniawanto et al. (2022), and Fitriandi et al. (2024) who consistently found a positive influence of motivation on performance in the context of the organization and PLN.

H3 — The Direct Influence of Management Contracts on Employee Performance. Management contracts have a positive and significant effect on employee performance directly ($\beta = 0.312$; T = 3,478; p = 0.001; $f^2 = 0.148$). Although smaller than an indirect influence, these results confirm that management contracts have their own instrumental value as a result control system that directs employee behavior and output (Aguinis et al., 2011).

H4 — The Role of Partial Mediation of Work Motivation. Work motivation was shown to partially mediate the influence of management contracts on employee performance (*indirect effect*: $\beta = 0.427$; T = 5.634; p = 0.000). The magnitude of indirect influences that exceed direct influences suggests that work motivation is the dominant psychological mechanism in transmitting the impact of management contracts to the real performance of employees. These findings are in line with Hanum et al. (2023) and Karina and Ariffin (2024), while confirming the theoretical integration of *Goal Setting Theory, Expectancy Theory*, and *Performance Management Theory* built into this study.

CONCLUSION

This study analyzes the influence of management contracts on employee performance with work motivation as a mediating variable in PT PLN (Persero) UPMK IV using SEM-PLS. The findings reveal that management contracts have a positive and significant effect on work motivation ($\beta = 0.790$; $p = 0.000$; $f^2 = 0.357$), confirming that clear, appropriate, and transparent management contracts build expectations that encourage employee work motivation according to the predictions of Expectancy Theory and Goal Setting Theory, thus H1 is accepted. Work motivation also demonstrates a positive and significant effect on employee performance ($\beta = 0.541$; $p = 0.000$; $f^2 = 0.218$), indicating that highly motivated employees exhibit better quality, quantity, punctuality, cooperation, and responsibility, leading to the acceptance of H2. Furthermore, management contracts have a positive and significant direct effect on employee performance ($\beta = 0.312$; $p = 0.001$; $f^2 = 0.148$), confirming that management contracts as a formal result control system contribute directly to performance improvement beyond motivational mechanisms, thus H3 is accepted. Most importantly, work motivation is proven to partially mediate the influence of management contracts on employee performance (indirect effect: $\beta = 0.427$; $p = 0.000$), with the magnitude of the indirect effect exceeding the direct effect, indicating that work motivation is the dominant psychological mechanism that transmits the impact of management contracts to employee performance, confirming H4. Based on these findings, PT PLN (Persero) UPMK IV is recommended to improve the quality of socialization and clarity of management contract indicators, ensure that performance evaluations are conducted periodically, consistently, and transparently, design a fair and consistent reward system to strengthen extrinsic motivation, and develop programs to recognize employee contributions and engagement to strengthen intrinsic motivation on an ongoing basis. However, this research is limited to one unit of PT PLN, so future research is recommended to expand coverage to several units, add moderation variables, or employ a mixed-methods approach to deepen understanding of the relationships examined in this study.

REFERENCE

Aguinis, H., Joo, H., & Gottfredson, R. K. (2011). Why we hate performance management—and why we should love it. *Business Horizons, 54*(6), 503–507. https://doi.org/10.1016/j.bushor.2011.06.001

Almulaiki, W. A. (2023). The impact of performance management on employee performance. *Saudi Journal of Business and Management Studies, 8*(2), 22–27.

Awan, S. H., Habib, N., Akhtar, C. S., & Naveed, S. (2020). Effectiveness of performance management system for employee performance through engagement. *SAGE Open, 10*(2), Article 2158244020938894. https://doi.org/10.1177/2158244020938894

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior, 4*, 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

Deogaonkar, P., Zaveri, D. B., & Vichoray, D. C. (2020). Employee performance motivation and performance management system: Exploring the pertinence. *International Journal of Management, 11*(3).

Fitriandi, P., Saragih, R., & Nasution, M. (2024). The effect of work motivation on the performance of PT PLN (Persero) employees after mutation. *Jurnal Manajemen Indonesia, 24*, 45–58.

Furnham, A., MacRae, I., & Tetchner, J. (2021). Measuring work motivation: The facets of the work values questionnaire and work success. *Scandinavian Journal of Psychology, 62*(3), 401–408.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hanum, A. N., Hubeis, M., & Hidayatulloh, S. (2023). Management system for performance, motivation, and performance of SOE employees. *Jurnal Aplikasi Manajemen, 9*, 312–325.

Karina, R., & Ariffin, M. (2024). Safety motivation as a mediator of PLN's safety performance. *Jurnal Occupational Safety Indonesia, 12*, 33–47.

Kurniawanto, H., Lestari, E., & Wahyudi, T. (2022). The influence of motivation and work environment on employee performance. *Jurnal Ekonomi dan Bisnis, 25*, 89–104.

Majusip, D., Rumawas, W., & Asaloei, S. (2024). Human resources practice and motivation for the performance of PT PLN (Persero) employees. *Jurnal Management Science, 12*, 201–215.

Mangkunegara, A. A. A. P. (2014). *Manajemen sumber daya manusia perusahaan* (12th ed.). Remaja Rosdakarya.

Ringle, C. M., Wende, S., & Becker, J.-M. (2022). *SmartPLS 4* [Computer software]. SmartPLS. https://www.smartpls.com

Riyanto, S., Endri, E., & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management, 19*(3), 162–174. https://doi.org/10.21511/ppm.19(3).2021.14

Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson.

Sayouw, M., Rogahang, J., & Asaloei, S. (2024). Knowledge sharing, training, and performance of PLN employees. *Jurnal Administrasi Bisnis, 13*, 55–68.

Steers, R. M., & Sánchez-Runde, C. J. (2017). Culture, motivation, and work behavior. In *The Blackwell handbook of cross-cultural management* (pp. 190–216). Blackwell.

Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D* (2nd ed.). Alfabeta.

Vassilev, V., Gergova, N., & Velinov, E. (2024). Exploring the relationship between performance management and employee motivation: Case study of Serbian Railways. *Journal of HRM, 27*(1), Article 164.