

Employee Performance as a Driver of Economic Efficiency: The Role of Work Environment and Internal Communication through Job Satisfaction (Case Study at PT PLN ULP Singaraja)

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Abstract:

Human resources play a critical role in driving organizational efficiency and effectiveness. However, challenges in internal communication, work environment, and job satisfaction can significantly affect employee performance, especially in public service institutions such as PT PLN Singaraja Customer Service Unit. Despite improvements in infrastructure and compensation, recurring issues such as delayed service, lack of coordination, and performance evaluation inefficiencies persist. This study aims to examine the influence of work environment, internal communication, and job satisfaction on employee performance. Utilizing an explanatory quantitative approach, data were collected from all 125 employees using a saturated sampling technique and analyzed through multiple linear regression. Findings indicate that all three independent variables—work environment, internal communication, and job satisfaction—have a significant and positive effect on employee performance, both partially and simultaneously. Job satisfaction was found to be the most dominant predictor. The coefficient of determination ($R^2 = 0.577$) suggests that these factors collectively explain 57.7% of the variance in employee performance. The results underscore the importance of fostering a conducive work environment, enhancing internal communication, and prioritizing employee satisfaction to improve performance outcomes. The study contributes to human resource management literature by offering an integrated model of organizational communication and employee well-being in enhancing public sector performance.

Keywords: Employee Performance, Digital Workload, Job Satisfaction, Internal Communication

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1. Introduction

Human resources (HR) are central to the effectiveness and efficiency of organizational performance. The increasing complexity of internal and external organizational challenges demands high adaptability and resilience from human resources (Harahap, Nurhabibah, & Mardiana, 2024). Professional human resource management becomes

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vital in ensuring that the goals of the organization are achieved. This includes managing employee performance, satisfaction, and the organizational environment to foster optimal outcomes. At PT PLN Singaraja Customer Service Unit, despite improvements in service, persistent issues related to service quality, employee responsiveness, and workload management indicate that HR performance remains suboptimal.

Performance reflects the extent to which programs and activities meet the goals, vision, and mission of an organization. It directly relates to the work outcomes of individuals over a specific period (Galić, Verčič, & Žnidar, 2022). In public service organizations, underperformance often translates into customer dissatisfaction, delays, and perceptions of unprofessionalism. PT PLN Singaraja, for instance, frequently faces complaints related to delayed repairs, unresolved power issues, and uncoordinated responses—symptoms of systemic HR and performance evaluation challenges. This phenomenon highlights the need for in-depth studies addressing the root causes of HR performance shortcomings.

HR performance is measured both quantitatively and qualitatively within a defined period. Performance evaluations serve not only to assess employee output but also to provide feedback, allocate rewards, determine promotions, and improve future performance (Zulher, Norawati, Effendi, & Jatiningrum, 2025). Yet, in practice, many organizations, including PT PLN Singaraja, struggle to manage performance evaluations effectively. Gaps in performance accountability, delayed responses, and lack of autonomy among staff suggest a need for refined strategies, especially in strengthening employee motivation, satisfaction, and communication channels.

One area of growing concern and opportunity lies in internal communication. Effective internal communication fosters open, respectful relationships between superiors and subordinates. It creates a work environment where feedback is encouraged, promoting employee motivation and job satisfaction (Mohammad & Sarwoko, 2022; Karsikah, Tamaka, & Zulkarnaen, 2023). In PT PLN Singaraja, breakdowns in communication have been associated with delays and poor coordination during crisis handling. A communicative organizational culture not only improves collaboration but also creates a conducive environment for performance improvement.

Research has shown that high employee performance is closely linked to work satisfaction and motivational factors. Managing performance without addressing job satisfaction can have detrimental effects on the organization (Laksana, Kurniawan, & Mas'ud, 2024). Disengaged employees hinder productivity, and without proper incentives or developmental opportunities, the organizational goals are compromised. Meanwhile, job satisfaction is subjective, depending on personal values and needs (Istikarani et al., 2024). At PT PLN Singaraja, although compensation and job roles are considered satisfactory, issues related to workload distribution, promotion opportunities, and autonomy indicate the need for a more holistic approach to employee well-being.

A reciprocal relationship exists between job satisfaction and performance. Employees who are satisfied tend to perform better, and higher performance, in turn, leads to greater job satisfaction (Daneshmandi et al., 2023). This cycle is critical in public utilities like PLN, where service reliability and responsiveness are paramount. However, at PT PLN Singaraja, the evidence suggests that while satisfaction in certain areas such as compensation is high, barriers in communication, autonomy, and performance evaluation disrupt this cycle, resulting in inefficiencies and client dissatisfaction.

Moreover, effective communication is essential for collaborative work culture. Twoway communication ensures that messages are understood, feedback is received, and actions are aligned with organizational goals (Siregar, Sudiarditha, & Wolor, 2023). Inadequate communication results in errors, delays, and employee frustration common themes in customer complaints at PT PLN Singaraja. Likewise, the work environment—both physical and cultural—also significantly influences performance. Organizational culture, relationships with peers and leaders, and physical infrastructure play critical roles in employee comfort and productivity (Najmudin et al., 2024; Yusnita, Melyiatama, & Irawan, 2023). A harmonious work environment enhances efficiency and effectiveness.

Despite efforts by PT PLN Singaraja to enhance employee facilities and promote comfort, significant challenges remain, particularly in performance delivery, time management, and service quality. While the organizational infrastructure is sound and compensation packages are competitive, the research gap lies in the insufficient integration of internal communication practices, performance appraisal systems, and job satisfaction strategies. This study offers novelty by simultaneously analyzing the interplay between internal communication, work environment, and job satisfaction in influencing employee performance—a perspective not extensively explored in previous studies (Atrian & Ghobbeh, 2023; Medina-Garrido, Biedma-Ferrer, & Ramos-Rodriguez, 2023). Therefore, the objective of this study is to assess how internal communication, work environment, and job satisfaction affect employee performance at PT PLN Unit Layanan Pelanggan Singaraja and to recommend strategies to optimize HR management based on empirical findings.

2. Theoretical Background

The Relationship Between Internal Communication and Performance

Internal communication is a critical component in building a productive and efficient organization. When communication flows effectively, information is conveyed clearly and promptly, allowing employees to understand their roles and organizational objectives. Effective internal communication enhances motivation, engagement, and a sense of belonging, all of which positively influence performance. According to Mohammad and Sarwoko (2022), strong internal communication drives employee motivation, which ultimately improves performance.

Karsikah et al. (2023) also affirm that internal communication significantly affects job satisfaction, which has a direct impact on employee performance. Their study highlights how harmonious internal relationships strengthen trust and collaboration among employees. Similarly, Siregar et al. (2023) found that high-quality internal communication fosters a supportive work environment that enhances both job satisfaction and employee performance.

The Relationship Between Work Environment and Performance

A supportive work environment is a key factor in achieving optimal performance. Physical aspects such as workspace comfort, lighting, cleanliness, and interpersonal relationships all play vital roles in employee productivity. Yusnita et al. (2023) indicate that a positive work environment contributes to higher job satisfaction, which in turn improves performance.

Zulher et al. (2022) emphasize that the work environment indirectly influences performance through job satisfaction. Najmudin et al. (2024) further argue that a positive work environment, especially when combined with transformational leadership, fosters conditions that support organizational goal achievement. In the context of the automotive component industry, Sabil et al. (2024) demonstrate that a good work environment boosts productivity through improved employee satisfaction.

The Relationship Between Job Satisfaction and Performance

Job satisfaction plays a pivotal role in shaping productive employee behavior. Satisfied employees are more likely to be loyal and deliver optimal performance. According to Laksana et al. (2024), job satisfaction not only enhances performance but also promotes green work behavior, which is increasingly essential in sustainability-focused organizations.

Medina-Garrido et al. (2023) add that work-life balance significantly influences employee well-being and satisfaction, which ultimately enhances performance. Suparjiman et al. (2023) also reveal that a positive organizational culture increases job satisfaction, which mediates the relationship between workplace practices and performance outcomes.

Rachman (2022) stresses that transformational leadership and strong interpersonal communication increase job satisfaction and work discipline, both of which improve employee performance. Additionally, Zulher et al. (2025) show that job satisfaction moderates the influence of leadership style and work environment on performance, underlining the central role of satisfaction in performance management.

Research Hypotheses

Based on the literature review and previous empirical findings, the following hypotheses are formulated:

- H1. The work environment has a positive effect on employee performance at PT PLN Customer Service Unit Singaraja.
- H2. Internal communication has a positive effect on employee performance at PT PLN Customer Service Unit Singaraja.

H4. The work environment, internal communication, and job satisfaction simultaneously affect employee performance at PT PLN Customer Service Unit Singaraja.

3. Methodology

This study employs an explanatory research design aimed at testing hypotheses concerning the influence of independent variables—work environment (X1), internal communication (X2), and job satisfaction (X3)—on the dependent variable, employee performance (Y). A quantitative approach is used, with data collected via questionnaires from employees of PT PLN Unit Layanan Pelanggan Singaraja. The total population of 125 employees is fully sampled using a saturated sampling technique. Data collection is conducted over a two-month period, from December 2024 to February 2025.

Operational definitions are provided for each variable. Employee performance is assessed based on quality, quantity, timeliness, and independence. The work environment includes indicators such as workspace, tools, and inter-employee relations. Internal communication is evaluated through ease of information access, communication intensity, effectiveness, and message understanding. Job satisfaction is measured through factors like the nature of work, compensation, promotion opportunities, and supervision. All variables are measured using a Likert scale through closed-ended questionnaire items.

Data analysis is conducted using multiple linear regression to test the joint and partial effects of the independent variables on employee performance. The regression equation used is: Y = a + b1X1 + b2X2 + b3X3 + e. Prior to hypothesis testing with t-test and F-test, classical assumption tests including normality, multicollinearity, and heteroscedasticity are performed to ensure the validity of the regression model. Instrument validity is assessed through corrected item-total correlation (>0.3), while reliability is tested using Cronbach's Alpha (>0.6). Primary data are gathered directly from respondents, while secondary data are sourced from internal employee records.

4. Empirical Findings/Result

Respondent Characteristics

The characteristics of the respondents in this study were analyzed based on gender, age, educational background, and length of service. The majority of respondents were male, comprising 112 individuals or 89.6 percent of the total, while only 13 respondents or 10.4 percent were female, indicating that the workforce at PLN Singaraja is predominantly male. In terms of age distribution, the largest group of respondents fell within the 31–40 year age range, accounting for 44 percent. This was followed by those aged 41–50 years at 20.8 percent, those above 50 years at 18.4 percent, and the youngest group, aged 20–30 years, making up 16.8 percent of the

total. Regarding educational background, most of the respondents, or 63.2 percent, held a bachelor's degree (S1), followed by 32 percent who had completed high school or an equivalent level of education, and 4.8 percent with a diploma. None of the respondents held a postgraduate degree. As for length of service, the majority, or 53.6 percent, had worked for six to ten years. Meanwhile, 33.6 percent had worked for zero to five years, 9.6 percent for eleven to twenty years, and only 3.2 percent had served for more than twenty years.

Instrument Testing

To ensure the accuracy and reliability of the data used in the study, both validity and reliability tests were conducted. Validity testing was carried out using the corrected item-total correlation method, where an item was considered valid if its correlation coefficient exceeded 0.3. The test results confirmed that all indicators for the performance, work environment, internal communication, and job satisfaction variables met the validity criteria, with correlation values well above the threshold. Reliability testing was performed using Cronbach's Alpha, and all variables demonstrated strong reliability, as their coefficients exceeded the minimum requirement of 0.60. The variables for work environment, internal communication, and job satisfaction even showed excellent reliability with alpha values surpassing 0.80.

Classical Assumption Tests

Classical assumption tests were conducted to confirm that the data met the necessary statistical requirements. The normality test using the Kolmogorov-Smirnov method resulted in a significance value of 0.420, indicating that the data were normally distributed. The multicollinearity test showed that all independent variables had tolerance values above 0.10 and VIF values below 10, demonstrating the absence of multicollinearity among them. Furthermore, the heteroscedasticity test was carried out using the Glejser method, which revealed that the significance values for all independent variables were above 0.05, confirming that the data did not suffer from heteroscedasticity.

Multiple Linear Regression Equation

The analysis of the regression equation regarding the influence of work environment, internal communication, and job satisfaction on employee performance can be seen in the following equation:

$Y = 2.33 + 0.110X_1 + 0.121X_2 + 0.187X_3$

Based on this regression equation, several interpretations can be made. The positive constant value of 2.33 implies that if the effects of the work environment, internal communication, and job satisfaction are assumed to be zero, employee performance would still be positive at 2.33 units. The coefficient for the work environment variable is 0.110, indicating that a one-unit increase in the quality of the work environment (X_1) would result in an increase of 0.110 units in employee performance (Y).

Similarly, the internal communication coefficient is 0.121, suggesting that a one-unit improvement in internal communication (X_2) would raise employee performance (Y) by 0.121 units. Lastly, the coefficient for job satisfaction is 0.187, meaning that an increase in job satisfaction (X_3) by one unit would enhance employee performance (Y) by 0.187 units. All coefficients are positive, reflecting that these three variables have a direct and favorable impact on employee performance.

Hypothesis Testing

Hypothesis testing in this study was carried out through t-tests (partial), an F-test (simultaneous), and the determination coefficient (R^2), which are explained as follows. The t-test was performed using SPSS version 26 for Windows, with the results presented in Table 1.

No	Variable	t-value	Sig.
1	X1 (Work Environment)	2.392	0.037
2	X ₂ (Internal Communication)	3.361	0.002
3	X ₃ (Job Satisfaction)	3.412	0.001

Table 1. Partial Test Results (t-Test)

Source: Appendix (Data Processing Results)

From these results, it can be concluded that the t-value for the work environment variable is 2.392 with a significance value of 0.037, which is less than 0.05. Therefore, the first hypothesis is accepted, indicating that the work environment has a significant positive effect on employee performance at PT PLN Singaraja Customer Service Unit. The t-value for internal communication is 3.361 with a significance of 0.002, which also meets the significance criterion. This means the second hypothesis is accepted, confirming that internal communication has a significant positive influence on employee performance. Similarly, job satisfaction has a t-value of 3.412 with a significance level of 0.001, so the third hypothesis is accepted, affirming that job satisfaction significantly and positively affects employee performance.

The F-test results show an F-value of 10.705 with a significance level of 0.000, which is below the threshold of 0.05. Thus, the fourth hypothesis is accepted, indicating that work environment, internal communication, and job satisfaction simultaneously have a significant effect on employee performance at PT PLN Singaraja Customer Service Unit.

Furthermore, the coefficient of determination (R^2) was calculated to determine the extent to which the independent variables explain the variation in the dependent variable. The R^2 value obtained was 0.577, or 57.7 percent. This means that 57.7 percent of employee performance at PT PLN Singaraja is explained by the variables of work environment, internal communication, and job satisfaction, while the remaining 42.3 percent is influenced by other variables not included in this study.

5. Discussion

The hypothesis testing results confirm the significant impact of the work environment, internal communication, and job satisfaction on employee performance at PT PLN Singaraja Customer Service Unit. The t-test results demonstrate that all three independent variables—work environment (t = 2.392, p = 0.037), internal communication (t = 3.361, p = 0.002), and job satisfaction (t = 3.412, p = 0.001)—significantly affect employee performance. These findings are further supported by the F-test (F = 10.705, p = 0.000), which confirms the simultaneous influence of these variables. Additionally, the coefficient of determination (R² = 0.577) indicates that 57.7% of the variation in employee performance is explained by the model.

The significant influence of the work environment on employee performance aligns with the findings of Ihsan et al. (2023), who emphasized that a conducive work environment enhances motivation and productivity. A supportive physical and psychological environment reduces workplace stress and fosters better performance (Yusnita et al., 2023; Najmudin et al., 2024). Similarly, Zulher et al. (2022) found that employee satisfaction and performance improve when the work environment is positive, especially when mediated by job satisfaction.

The role of internal communication is also crucial. Effective communication facilitates information flow, minimizes misunderstandings, and enhances employee engagement (Galić et al., 2022). This study confirms that good internal communication significantly boosts employee performance, as supported by Mohammad and Sarwoko (2022), who found motivation to be a key mediator in this relationship. Moreover, Karsikah et al. (2023) highlighted that internal communication is a strategic factor that contributes to organizational effectiveness and employee satisfaction, ultimately leading to better performance.

Job satisfaction was found to have the strongest effect among the three variables. Employees who feel satisfied are more likely to be committed, innovative, and productive (Daneshmandi et al., 2023; Harahap et al., 2024). Laksana et al. (2024) emphasized the link between job satisfaction and pro-environmental behavior at work, further indicating that satisfaction plays a central role in shaping positive organizational outcomes. Furthermore, Sabil et al. (2024) and Siregar et al. (2023) found that job satisfaction often mediates the effects of other variables (such as work environment and communication) on performance.

The results of this study are consistent with the theory that organizational elements such as work environment and communication significantly affect performance when employees are satisfied in their roles. This is echoed in the studies by Suparjiman et al. (2023) and Medina-Garrido et al. (2023), who linked job satisfaction with employee well-being and sustainable performance. Moreover, the strategic implications of managing technostress and enhancing communication infrastructure—as highlighted by Atrian and Ghobbeh (2023)—are increasingly important in today's digital workplace.

In conclusion, the results underscore the critical importance of fostering a supportive work environment, maintaining effective internal communication, and ensuring high levels of job satisfaction. These factors are interdependent and collectively contribute to improving employee performance, as also demonstrated in the research of Zulher et al. (2025), which showed that job satisfaction can moderate and enhance the positive impacts of leadership and the work environment on employee outcomes.

6. Conclusions

This study investigated the influence of work environment, internal communication, and job satisfaction on employee performance at PT PLN Singaraja Customer Service Unit. The findings confirmed that all three variables significantly and positively affect employee performance, both individually and collectively. The work environment provides the physical and psychological conditions necessary for optimal productivity, while internal communication enhances coordination and motivation. Job satisfaction emerged as the most influential factor, reinforcing the importance of fulfilling employees' professional and emotional needs.

The coefficient of determination ($R^2 = 0.577$) indicates that 57.7% of employee performance is explained by these three variables, suggesting that other unexplored factors also contribute to performance outcomes. These results are in line with previous research that emphasizes the central role of employee well-being, communication, and organizational support in driving performance.

Future research should consider exploring additional variables that may influence employee performance, such as leadership style, work-life balance, digital adaptation, and employee engagement. The increasing presence of technostress and digital demands in modern workplaces also merits attention, particularly in sectors undergoing digital transformation.

Moreover, future studies could adopt a longitudinal design to assess how changes in work environment and job satisfaction affect performance over time. Qualitative approaches such as interviews or focus groups may also enrich the understanding of employee experiences beyond the quantitative data.

Expanding the sample to include other PLN units or different sectors could improve the generalizability of findings. Incorporating moderating or mediating variables such as organizational culture, leadership, or technostress—could further clarify the complex dynamics influencing employee performance in today's evolving work context.

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