

## Human Resource Performance Improvement Model Based on K3 Management System, Work Culture and Job Satisfaction at PLN UP3 Tolitoli

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**Abstract.** *The performance of Human Resources (HR) in the Technical Service Unit (Yantek) at PT PLN UP3 Tolitoli is a critical element in ensuring reliable electricity services to the community. However, challenges such as non-compliance with Occupational Health and Safety (OHS) procedures, poorly internalized work culture, and low job satisfaction hinder the improvement of employee performance. This study aims to identify and analyze the direct and indirect effects of the Occupational Health and Safety Management System and Work Culture on HR Performance, with Job Satisfaction as a mediating variable. The novelty of this research lies in the integration of job satisfaction as a mediating variable between OHS management systems and work culture toward HR performance—an approach rarely explored specifically in the electricity sector with in remote areas such as Tolitoli. This study provides empirical evidence to fill the research gap related to how technical field work culture and safety systems affect operational performance through employees' psychological well-being. A quantitative method was applied using the Partial Least Square Structural Equation Modeling (PLS-SEM) approach. Data were collected from 100 Yantek employees at PT PLN UP3 Tolitoli using a structured questionnaire. The results of this study show that out of the seven proposed hypotheses, six are accepted and one is rejected. The Occupational Health and Safety Management System (SMK3) does not significantly affect Job Satisfaction, as indicated by a P-Value of  $0.052 > 0.05$  and a T-Statistic of  $1.898 < 1.96$ . Organizational Culture has a positive and significant effect on Job Satisfaction with a P-Value of  $0.000 < 0.05$  and a T-Statistic of  $5.601 > 1.96$ . The Occupational Health and Safety Management System also has a positive and significant effect on Human Resource Performance, as shown by a P-Value of  $0.004 < 0.05$  and a T-Statistic of  $2.191 > 1.96$ . Organizational Culture has a positive and significant effect on Human Resource Performance, with a P-Value of  $0.000 < 0.05$  and a T-Statistic of  $3.565 > 1.96$ . Job Satisfaction also positively and significantly influences Human Resource Performance, supported by a P-Value of  $0.000 < 0.05$  and a T-Statistic of  $4.468 > 1.96$ .*

**Keywords:** Employee; Improvement; Performance.

## 1. Introduction

Human Resources (HR) are a strategic asset within an organization, playing a crucial role in driving business processes and ensuring the sustainability of company operations. In the electricity sector, such as at the PLN Tolitoli Customer Service Implementation Unit (UP3), the presence of Outsourced Personnel (TAD), particularly the Yantek team, is at the forefront of maintaining reliable technical services to customers. From this case, improving HR performance is a crucial aspect. Optimal performance of TAD is strongly influenced by various internal company factors, including the Occupational Safety and Health (K3) management system, work culture, and job satisfaction levels.

In practice, the work of PLN's TAD Yantek is high-risk due to its direct contact with technical aspects in the field. An effective OHS Management System is needed to create a safe work environment, reduce the potential for accidents, and provide a sense of security for workers (Budianto & Nuraini, 2022). An adaptive, collaborative, and safety-oriented work culture also strengthens HR commitment to working productively and with discipline (Putri, 2023). However, strengthening these technical aspects will not have an optimal impact if not supported by adequate job satisfaction. Job satisfaction reflects employees' positive perceptions of the work environment, work culture, social relationships, and fair and transparent company policies (Saragih & Pratama, 2021).

The phenomenon found by researchers in the field shows that although TAD Yantek carries out its duties routinely, there are still complaints related to the clarity of the contents of the work contract, high workloads without being accompanied by a commensurate Work Culture, and a lack of involvement in decision-making related to K3. The applicable K3 SLA (Service Level Agreement) is often not yet integrated into daily operations, while the leadership of PLN management in building a commitment to a safety culture is still perceived as weak by some workers.

Global and national statistics demonstrate the importance of optimal OSH implementation. According to data from the International Labour Organization (ILO), approximately 2.78 million workers worldwide die annually from workplace accidents and work-related diseases. Of these, 86.3% are caused by occupational diseases, while the remaining 13.7% are caused by work-related accidents (Sudiono & Milalestari, 2024). In Indonesia, the Social Security Agency for Employment (BPJS Ketenagakerjaan) recorded a significant increase in the number of workplace accidents, from 114,000 in 2019 to 177,000 cases by October 2020 (Irmayani et al., 2024). This data emphasizes the need for more serious preventive measures to minimize the risks and negative impacts of workplace accidents. Therefore, many companies, therefore, in electricity service operations, require a stricter safety management system to achieve better safety standards and significantly reduce the number of workplace accidents, through the process of identifying, evaluating, and controlling potential hazards to ensure worker safety.

Most previous studies discussing employee performance in the energy sector, particularly

within PLN, have focused more on job satisfaction, compensation, and individual motivation, while the variables of the OHS management system and work culture as the main determinants of field employee effectiveness have rarely been studied simultaneously. Several similar studies have found that job satisfaction has a positive effect on employee performance, but have not yet explained in depth how a fair and consistent work culture and the implementation of OHS training contribute to improving the performance of technical teams, particularly in technical service units such as Yantek PLN UP3 Tolitoli, which have high occupational risks. This research gap indicates that there is still room for analysis regarding the direct relationship between OHS, work culture, and job satisfaction on the performance of PLN field employees, which has not been previously resolved by previous studies. The urgency of this research is even stronger considering PLN's vital role in maintaining the continuity of electricity supply and public services, so that the work effectiveness of field employees not only impacts organizational performance but also the reliability of electricity services for the wider community.

Previous studies have highlighted the influence of job satisfaction on employee performance, as Luthans (2011) found that job satisfaction contributes significantly to organizational productivity. Other studies have emphasized the importance of organizational culture in driving employee engagement and performance. In the context of OHS, Ramli (2010) showed that implementing an occupational safety management system can reduce the risk of accidents and improve workforce performance in the construction sector. However, most of these studies have not examined the direct relationship between OHS, work culture, and job satisfaction as mediating variables in influencing field employee performance in the energy sector. For example, research by Prasetyo & Djastuti (2018) proved that job satisfaction significantly influences the performance of state-owned enterprise employees, but did not simultaneously include aspects of work culture and OHS implementation. Similarly, Sutrisno (2019) emphasized motivation and satisfaction as performance factors, but ignored the role of high-risk field work systems.

## 2. Research Methods

This research is included in the type of quantitative research data through surveys. The survey was conducted by distributing questionnaires containing structured questions and given to respondents designed to obtain more specific information (Sugiyono, 2018). Based on the research objectives that have been set, this type of research is explanatory research, namely research that proves the existence of cause and effect and relationships that influence or are influenced by two or more variables studied (Arikunto, 2018). The purpose of explanatory research is to test hypotheses and examine the effect of independent variables on dependent variables, namely the influence of the OHS Management System and Work Culture on employee HR Performance through Job Satisfaction at PLN UP3 Tolitoli.

### 3. Results and Discussion

The subjects of this study were employees of PT. PLN UP3 Tolitoli. Data collection was conducted through a questionnaire using Google Forms, distributed online via WhatsApp. The results of the questionnaire distribution in this study are shown in the table below:

Table Results of Data Distribution

Information	Amount
Questionnaires distributed	108
Returned questionnaire	100
Processable questionnaire	100

Based on the results of the data distribution, 100 respondents were obtained. This number meets the minimum sample size for this study, which is 100 respondents.

Table Respondent Characteristics

Characteristics	Frequency	Percentage
<b>Gender:</b>		
Man	96	96%
Woman	4	4%
<b>Total</b>	<b>100</b>	<b>100%</b>
<b>Age:</b>		
18 – 25 years old	7	7%
26 – 35 years old	43	43%
36 – 45 years old	33	33%
46 – 55 years old	13	13%
>55 years	4	4%
<b>Total</b>	<b>100</b>	<b>100%</b>
<b>Education:</b>		
High School or Equivalent	95	95%
Diploma	3	3%
S1	2	2%
S2	0	0%
<b>Total</b>	<b>100</b>	<b>100%</b>
<b>Length of work:</b>		
15 years	8	8%
6 – 10 years	33	33%
11 – 15 years	40	40%
>15 years	19	19%
<b>Total</b>	<b>100</b>	<b>100%</b>

A total of 100 respondents from PT PLN UP3 Tolitoli who were the objects of this study were mostly male (96 people or 96%), and female (4 people or 4%). Based on age, most respondents were in the age range of 26–35 years (43%), followed by 36–45 years (33%), 46–55 years (13%), 18–25 years (7%), and over 55 years (4%). Based on the last education, the majority of respondents had a high school education or equivalent (95%), while the rest were Diploma graduates (3%), and Bachelor's degree (S1) (2%). Based on length of service, respondents with 11–15 years of service dominated (40%), followed by those who worked 6–

10 years (33%), more than 15 years (19%), and 1–5 years (8%). These data show that the majority of respondents are experienced workers, have secondary education, and are of productive age.

Comparison between characteristics shows that the proportion of men is much more dominant than women, which reflects the reality of the technical workforce at PLN UP3 Tolitoli which is mostly filled by men. In terms of age, the 26–35 and 36–45 year old groups dominate, indicating that the majority of employees are in the mature, productive working age phase. In terms of education, there is quite a large disparity because almost all respondents only have a high school education or equivalent, while diploma and bachelor's graduates are very few, which reflects the low formal educational background of technical outsourcing workers in this unit. The length of service is most in the 11–15 years category, which means that most employees have quite extensive work experience, but there are still new employees with less than 5 years of experience, which illustrates the dynamics of turnover or regeneration in the work environment.

After conducting a model evaluation and finding that each construct met the validity (convergent and discriminant validity) and reliability (Composite Reliability and Cronbach's Alpha) requirements, the next step was to evaluate the structural model. The structural model for this study can be seen in the following figure:

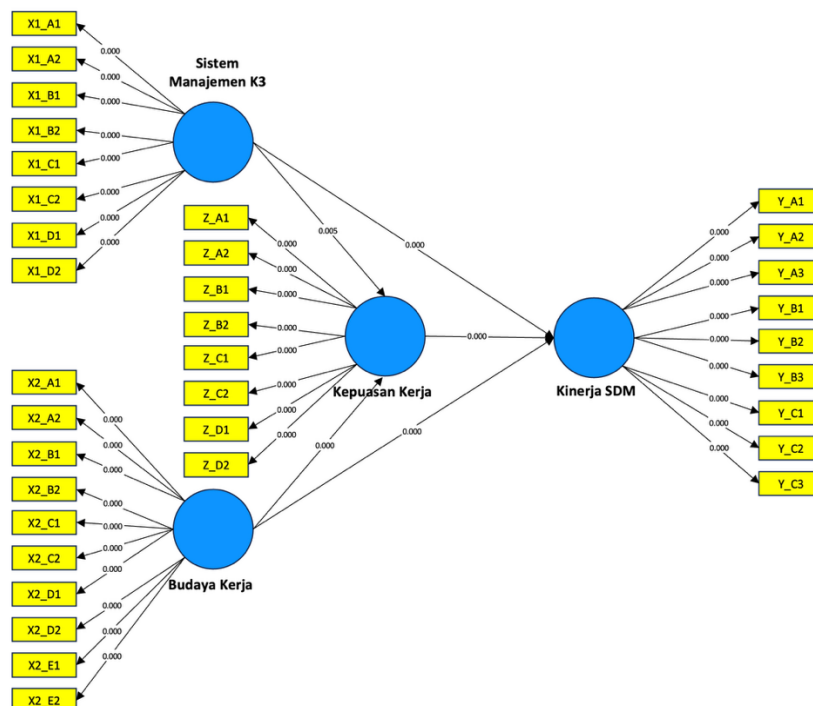


Figure Full Structural Model Partial Least Squares (Inner Model)



The structural model in PLS is evaluated by testing the goodness of fit of the model,  $R^2$  and  $F^2$ , with the results being described as follows:

### 1) Model Fit Test

In this study, the evaluation of model fit used SRMR, d\_ULS, d\_G, Chi square and NFI, with the following results:

Table. Results of the Goodness of Fit Model Test

No	Structural Model	Cut-Off Value	Estimated	Information
1	SRMR	< 0.10	0.052	Fit
2	d_ULS	> 0.05	0.514	Fit
3	d_G	> 0.05	0.388	Fit
4	Chi-Square	>X2table, (df = 111; X2table = 87.6807)	192,595	Fit
5	NFI	Approaching 1	0.929	Fit

The analysis results show that the tested model exhibits an acceptable fit. This result indicates that the model has a good level of fit with the data, meaning the proposed model accurately represents the relationships between variables in the data.

### 2) R-square

The structural model is evaluated using R-square for the dependent construct. The  $R^2$  value can be used to assess the influence of certain endogenous variables and whether exogenous variables have a substantive influence.

Table R-Square Value

Variables	R-Squares
HR Performance	0.829
Job satisfaction	0.782

Based on table, the adjusted R-square value of HR Performance is 0.822, meaning that 82.2% of the variation or change in HR Performance is influenced by the OHS Management System, Work Culture, and Job Satisfaction. The adjusted R-square value of Job Satisfaction is 0.777, meaning that 77.7% of the variation or change in Job Satisfaction is influenced by the OHS Management System and Work Culture.

### 3) F-square

The  $F^2$  value criteria consist of three classifications: 0.02 (small/poor); 0.15 (moderate/sufficient); and 0.35 (large/good) (Setiaman, 2023). The following are the results of the F-square test in this study:

Table F-Square Value

Variable Relationship	f-Squares	Substantive influence
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Work Culture -> HR Performance	0.129	Small
Work Culture -> Job Satisfaction	0.283	Enough
K3 Management System -> HR Performance	0.226	Enough
Occupational Health and Safety Management System -> Job Satisfaction	0.002	Small
Job Satisfaction -> HR Performance	0.187	Enough

Based on the table above, it can be seen that quite large substantive influences occur in the variables of Work Culture on Job Satisfaction (0.283), the OHS Management System on HR Performance (0.226), and Job Satisfaction on HR Performance (0.187). Meanwhile, small substantive influences occur in the variables of Work Culture on HR Performance (0.129) and the OHS Management System on Job Satisfaction (0.002).

Hypothesis testing in this context aims to validate or refute the researcher's initial assumptions regarding the relationship between variables. Hypothesis testing is conducted by examining the structural path coefficients. Hypothesis testing in this study was conducted by examining the T-statistics, P-values, and original sample values through a bootstrapping procedure.

### 1) Direct Effect Hypothesis Testing

Table Testing the Direct Effect Hypothesis (Path Coefficient)

Hypothesis		Original (O)	Sample	T Statistics	P values	Decision
H1	Occupational Health and Safety Management System -> Job Satisfaction	0.207		1,898	0.052	H1 is rejected
H2	Work Culture -> Job Satisfaction	0.497		5,601	0,000	H2 is accepted
H3	K3 Management System -> HR Performance	0.292		2,191	0.004	H3 is accepted
H4	Work Culture -> HR Performance	0.230		3,565	0,000	H4 is accepted
H5	Job Satisfaction -> HR Performance	0.368		4,468	0,000	H5 is accepted

Based on the data presented in table above, it can be seen that of the five hypotheses proposed in this study, as follows:

#### a. The Influence of the Occupational Health and Safety Management System on Job Satisfaction

The results of the hypothesis test show that the P-values that determine the influence of the OHS Management System on Job Satisfaction are  $0.052 > 0.05$  and the T-Statistics value is  $1.898 < 1.96$ . While the original sample has a value of 0.207 (positive). These results do not support the first hypothesis, namely that the OHS Management System has no effect on Job Satisfaction, which means H1 is rejected.

b. The Influence of Work Culture on Job Satisfaction

The results of the hypothesis test show that the P-values that determine the influence of Work Culture on Job Satisfaction are  $0.000 < 0.05$  and the T-Statistics value is  $5.601 > 1.96$ . Meanwhile, the original sample has a value of 0.497 (positive). These results support the second hypothesis, namely that Work Culture has a positive and significant effect on Job Satisfaction, which means H2 is accepted.

c. The Influence of the OHS Management System on HR Performance

The results of the hypothesis test show that the P-values that determine the influence of the OHS Management System on HR Performance are  $0.004 < 0.05$  and the T-Statistics value is  $2.191 > 1.96$ . While the original sample has a value of 0.292 (positive). These results support the third hypothesis, namely that the OHS Management System has a positive and significant effect on HR Performance, which means H3 is accepted.

d. The Influence of Work Culture on HR Performance

The results of the hypothesis test show that the P-values that determine the influence of Work Culture on HR Performance are  $0.000 < 0.05$  and the T-Statistics value is  $3.565 > 1.96$ . Meanwhile, the original sample has a value of 0.230 (positive). These results support the fourth hypothesis, namely that Work Culture has a positive and significant effect on HR Performance, which means H4 is accepted.

e. The Influence of Job Satisfaction on HR Performance

The results of the hypothesis test show that the P-values that determine the influence of Job Satisfaction on HR Performance are  $0.000 < 0.05$  and the T-Statistics value is  $4.468 > 1.96$ . While the original sample has a value of 0.368 (positive). These results support the fifth hypothesis, namely that Job Satisfaction has a positive and significant effect on HR Performance, which means H5 is accepted.

**Discussion:**

Previous research has emphasized the importance of implementing an OHS Management System in improving job satisfaction and human resource performance (Miswanto & Nugroho, 2020; Rahmadani, 2021). However, most studies tend to find a consistent relationship between OHS and job satisfaction, thus assuming that better OHS implementation leads to higher employee satisfaction. The results of this study, however, show a different outcome: the OHS Management System has no significant effect on technician job satisfaction. This finding highlights an unresolved research gap: that even well-implemented OHS implementation may not necessarily improve job satisfaction if compensation and career development opportunities are not met. This study provides new evidence that job satisfaction is not solely determined by safety and security factors but is



also closely related to financial and personal development aspects, which have previously been under-recognized in OHS research.

Previous research on Work Culture has largely focused on the role of organizational values and rules in shaping work discipline and employee performance (Sutrisno, 2019; Wulandari & Putra, 2021). This study's findings reveal that the dominant factor in work culture that most influences technician satisfaction and performance is not formal rules, but rather teamwork, work ethic, and adaptation to change. This suggests that, in the context of PLN (State Electricity Company), organizational success in improving employee performance is more determined by a collaborative work climate and flexibility in dealing with procedural changes than simply adherence to written rules. Therefore, this study presents a new perspective: HR management in the electricity sector needs to emphasize strengthening a collective and adaptive work culture to boost technician performance more sustainably.

#### 1) Influence K3 Management System on Job Satisfaction

The results of the study indicate that the Occupational Health and Safety Management System has no significant effect on Job Satisfaction. The P-values indicating the influence of the Occupational Health and Safety Management System on Job Satisfaction are  $0.052 > 0.05$ , and the T-Statistics value  $(1.898) < 1.96$ . The original sample, on the other hand, has a positive value of 0.207.

Although an OHS system provides a sense of security and protection for employees, this aspect does not directly increase job satisfaction if it is not accompanied by attention to other factors such as rewards, recognition, and a supportive work climate. According to Suhartini (2022), job satisfaction is more strongly influenced by intrinsic factors such as rewards, development opportunities, and interpersonal relationships, than by technical aspects such as work safety procedures. This is reinforced by a study by Nugroho & Sari (2021), which found that formal OHS implementation tends to be insufficient if it is not accompanied by a personal approach to employee well-being.

The Occupational Health and Safety Management System remains crucial as a key element in creating a safe work environment. However, if implemented solely as a regulatory obligation without active employee participation, its contribution to job satisfaction is limited. Occupational Health and Safety implementation isolated from organizational culture and two-way communication can also hinder its role as a driver of job satisfaction (Rahardjo, 2020). Therefore, to optimally enhance job satisfaction, organizations need to integrate an Occupational Health and Safety approach with the development of an inclusive work culture that appreciates employee contributions.

#### 2) Influence Work Culture on Job Satisfaction

The results of the study indicate that Work Culture has a positive and significant effect on Job Satisfaction. This is indicated by the P-Values of  $0.000 < 0.05$  and the T-Statistics value  $(5.601) > 1.96$ , as well as the positive original sample value of 0.497. These findings indicate

that the better the work culture formed in the work environment, the higher the level of satisfaction felt by employees, especially in the PLN UP3 Tolitoli technical service unit (Yantek).

In Yantek, employees are often faced with challenging and high-risk tasks, such as handling emergency power outages, network maintenance, and customer service, which require a quick and precise response. In these work environments, work culture is a key foundation for shaping attitudes, behaviors, and collaboration among employees. A work culture that instills the values of responsibility, discipline, open communication, and mutual respect significantly impacts employee well-being and job satisfaction.

When a positive work culture is internalized, Yantek employees will feel valued, supported, and engaged in achieving shared goals. This will increase work motivation, loyalty, and pride in the organization. Conversely, a negative work culture, such as unequal treatment, closed communication, or minimal recognition, can lower morale and create feelings of dissatisfaction, which impact productivity.

Research conducted by Nurhayati and Rachman (2021) shows that a work culture that prioritizes collaboration and clear organizational values significantly increases job satisfaction in the public service sector. Halim et al. (2022) also found that in technical and risk-intensive jobs, such as fieldwork in the electricity sector, a strong and positive work culture fosters a sense of psychological safety, emotional engagement, and appreciation for each individual's role.

In the context of PLN UP3 Tolitoli, where Yantek employees work shifts and often face time pressures and high safety demands, a solid work culture is a key factor in creating employee comfort and pride in their work. Values such as team cohesion, exemplary leadership, fairness in task allocation, and a culture of mutual assistance are crucial to maintaining and strengthening to create a healthy and enjoyable work environment.

### 3) Influence *Occupational Health and Safety Management System* on employee HR performance

The results of the study indicate that the Occupational Safety and Health (K3) Management System has a positive and significant effect on HR Performance. The P-Values value of  $0.004 < 0.05$ , the T-Statistics value of  $2.191 > 1.96$ , and the positive original sample value of 0.292 strengthen the conclusion that the better the implementation of the K3 system, the higher the level of human resource performance, especially for field engineering employees (Yantek) at PLN UP3 Tolitoli.

In the electricity sector, particularly in the Yantek unit, occupational risks are very high due to the work being directly related to medium and high voltage networks, unpredictable weather conditions, and the demands of service disruptions that require rapid mobility and work accuracy. In this context, the existence and effectiveness of an OHS Management System are not merely administrative formalities, but are fundamental elements that directly

affect the productivity, speed, and safety of employees in the field.

The implementation of OHS, which includes regular training, the provision of appropriate personal protective equipment (PPE), safe work procedures (SOPs), and a culture of transparent hazard reporting, provides psychological and physical security for Yantek employees in carrying out their duties. When workers feel physically safe and supported by adequate systems, work focus increases, the risk of errors is reduced, and work efficiency is achieved.

This finding is supported by research by Nasution and Harahap (2021), which states that the effective implementation of an OHS management system significantly correlates with improved performance of technical personnel in the energy sector. Zulkarnain and Arifin (2023) also note that OHS not only reduces workplace accidents but also directly improves employee morale, loyalty, and work output. In working conditions like those in Tolitoli, which face geographical challenges, challenging work environments, and limited resources, the existence of an OHS system is a crucial strategic management tool.

One important aspect of OHS implementation within the PLN UP3 Tolitoli Yantek environment is the role of supervisors and field supervisors in ensuring procedural compliance and fostering a safe work culture that is not only based on instructions but also on the internalization of values. When OHS is viewed solely as an administrative obligation, its effectiveness decreases. However, when OHS is cultivated as part of professionalism and shared responsibility, it will create a productive, efficient, and minimally disruptive work environment.

For example, prompt and systematic reporting of hazardous conditions will expedite corrective action and prevent accidents. The use of complete and high-quality PPE will protect employees from fatal incidents, thereby reducing absenteeism due to work injuries. All of these elements directly contribute to improved work quality, operational discipline, and field productivity.

These results indicate that the K3 management system that is consistently implemented and oriented towards employee protection has a direct impact on improving HR performance, especially for Yantek PLN UP3 Tolitoli employees who operate in a work environment with a high level of risk.

#### 4) The Influence of Work Culture on Employee HR Performance

The results of the study show that Work Culture has a positive and significant effect on HR Performance, with P-Values of  $0.000 < 0.05$ , T-Statistics  $3.565 > 1.96$ , and an original sample value of 0.230. This confirms that a strong, adaptive, and conducive work culture has a real contribution in improving employee performance, especially in technical work groups such as the Yantek team at PLN UP3 Tolitoli.

Work culture in the context of a public organization such as PLN UP3 Tolitoli is not only

interpreted as normative rules, but is a reflection of the values, beliefs, work ethic, and collective work practices carried out by all employees, especially Yantek, who are at the forefront of electricity services. As the spearhead of disruption services, new installations, network maintenance, and other technical services, the Yantek team works in challenging field conditions: dynamic working hours, customer pressure, and exposure to high work risks.

In situations like this, a work culture that instills the values of responsibility, mutual support among team members, strong discipline, and a readiness for change is crucial for operational effectiveness and the quality of work. When every member of the Yantek team possesses a strong work ethic, upholds integrity, and fosters a collective spirit, technical work can be completed more quickly, safely, and with minimal fatal errors.

This research aligns with the findings of Sihombing and Pardede (2022), who stated that a work culture oriented toward teamwork and exemplary leadership positively impacts operational staff productivity in the public service sector. A positive work culture fosters a sense of belonging to the work and organization. This is highly relevant in the field, as Yantek employees who feel supported and share shared work values are more resilient in dealing with technical workloads and deadline pressures.

PLN UP3 Tolitoli has a vast work area with quite complex geographical challenges, including rural, mountainous, and coastal areas. In this context, a work culture that prioritizes good field coordination, open communication, and flexibility in technical decision-making is crucial. Yantek is not only required to be technically competent, but also to possess mental resilience and the ability to adapt to less than ideal work environments.

One tangible manifestation of a positive work culture is the team's willingness to assist each other in emergency situations, even outside of normal business hours. When this culture develops organically, rather than solely based on instructions, it fosters a collaborative work environment that fosters a shared commitment to the outcome. The end result is improved individual and team performance, reflected in indicators such as speed of outage resolution, installation quality, and customer satisfaction.

Companies that successfully build a strong work culture will have employees who work not only out of obligation but also driven by an internal commitment to quality and safety. In the long term, a healthy work culture is the primary foundation for maintaining consistent Yantek employee performance, reducing turnover, and increasing organizational competitiveness, particularly in facing the ever-growing demands for electricity services in the digital and green energy era.

##### 5) The Influence of Job Satisfaction on HR Performance

The results of the study indicate that Job Satisfaction has a positive and significant effect on HR Performance, evidenced by the P-Values of  $0.000 < 0.05$ , the T-Statistics value of  $4.468 > 1.96$ , and the original sample of 0.368 (positive). These data provide empirical evidence that increasing the level of job satisfaction directly impacts the improvement of employee

performance, especially in work units operating at the forefront of technical services such as Yantek at PLN UP3 Tolitoli.

In the context of PLN UP3 Tolitoli's engineering services, job satisfaction is a critical factor influencing the morale, loyalty, and performance quality of Yantek employees, who are tasked with handling various aspects of electricity such as new installations, troubleshooting, network maintenance, and customer technical services. The vast work area and challenging geographic terrain in Tolitoli Regency – including coastal areas, hills, and remote villages – require Yantek to have a high level of job satisfaction to be able to work optimally in all conditions.

Job satisfaction in this study encompasses several key aspects: working conditions, salary and incentives, relationships with coworkers, and opportunities for development. These four aspects are highly relevant to the realities of Yantek's fieldwork. For example, a safe work environment and adequate work tools provide a sense of security when performing technical tasks on medium- or low-voltage networks, where the risk of accidents is high. When companies are able to meet safety standards and provide adequate operational support, employees feel valued and cared for, which increases job satisfaction.

Compensation is also an important aspect, considering that Yantek employees work under high risk and in unusual weather conditions or working hours (for example, when handling nighttime disruptions). Salaries and incentives that are perceived as fair and commensurate with the workload will foster a sense of justice and a drive to achieve peak performance. If employees feel that their hard work is recognized financially and non-financially, they tend to have strong internal motivation to continuously improve their performance.

Relationships between coworkers are crucial in Yantek's work environment, which often requires teamwork in the field. Technical coordination, open communication, and mutual assistance among technicians significantly impact work efficiency and safety. When interpersonal relationships are strong, field tasks can be completed more quickly, safely, and with higher quality. This, in turn, improves employees' perceptions of overall job satisfaction.

Last but not least, an important aspect is the opportunity for development. Many Yantek employees desire to improve their competencies through technical training or career development. When organizations provide opportunities for skill development, provide regular technical training, or offer promotion opportunities, employees feel they have a clear career path. Job satisfaction stems not only from current comfort but also from positive future expectations.

This finding is supported by a study by Setiawan & Supriyanto (2021), which showed that job satisfaction positively influences the performance of field employees in the energy and infrastructure sector. Similarly, Lestari et al. (2022) stated that the higher the level of job satisfaction, the greater the employee's contribution to achieving operational targets,



particularly in jobs that require punctuality and technical accuracy, such as in the electricity service sector.

In the case of PLN UP3 Tolitoli, the success of electricity services depends heavily on the internal motivation and optimal performance of Yantek employees. High performance will not be achieved if employees are dissatisfied with working conditions, compensation, or relationships with colleagues. Therefore, it is crucial for management to continuously evaluate the factors that shape employee job satisfaction and design policies that are responsive to Yantek's needs in the field.

#### 4. Conclusion

Based on the results of the research that has been conducted, to improve the HR Performance of Yantek PLN UP3 Tolitoli employees, the role of Work Culture and Job Satisfaction is needed. The OHS Management System contributes to creating a safe and structured work environment but is still considered unable to significantly influence job satisfaction. A conducive, fair, and professional Work Culture that is in line with the values of professionalism encourages employee emotional involvement in their duties. Job satisfaction is a determining factor for sustainable performance, because satisfied employees will show dedication and better performance. The variables of work culture and job satisfaction directly and the OHS management system variables are indirectly related to each other in influencing the individual performance of Yantek employees, especially in handling technical services in challenging work areas such as Tolitoli. From the gap research that has been explained at the beginning of the study, it can be proven that the research update is with the results obtained.

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