

# The Influence of Work Environment, Management Support, Organizational Culture, and Employee Engagement on Employee Performance Through Employee Satisfaction

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## ABSTRACT

**Keywords:** organizational culture; management support; employee engagement; the satisfaction of the wealthy; employee performance.

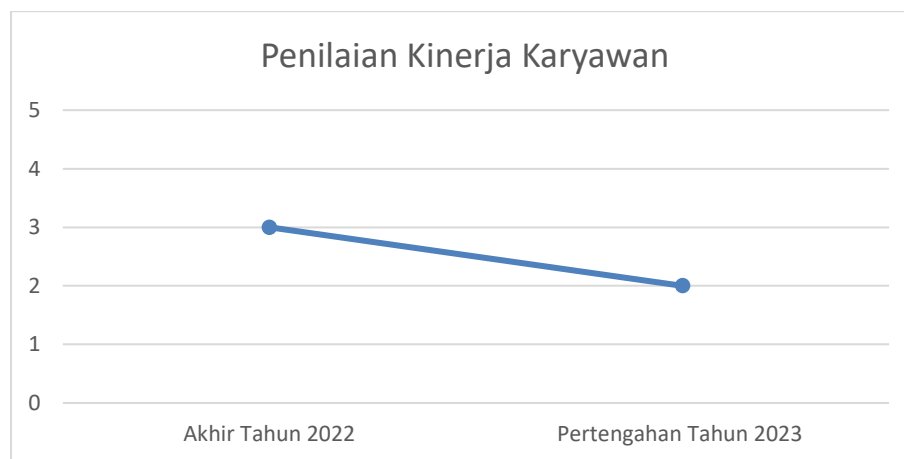
In the era of globalization, companies must optimize their resources to meet customer needs. To improve the quality of human resources, companies must focus on areas such as work environment, management support, organizational culture, employee engagement, and employee satisfaction. This study aims to identify employee performance about the variables studied and analyzed based on supporting components. Data collection was through a survey with a questionnaire, while the analysis method was Structural Equation Modeling (SEM). The results showed that a significant relationship between employee performance and employee characteristics in the work environment variable of 0.473 and employee engagement of 0.440 has been shown. Employees who work in a positive and supportive work environment and feel engaged in their work tend to be more committed, more productive and qualified, more satisfied and motivated, and have a positive work culture. These aspects can improve employee satisfaction and employee performance, which in turn contributes to the overall success of the company.



## Introduction

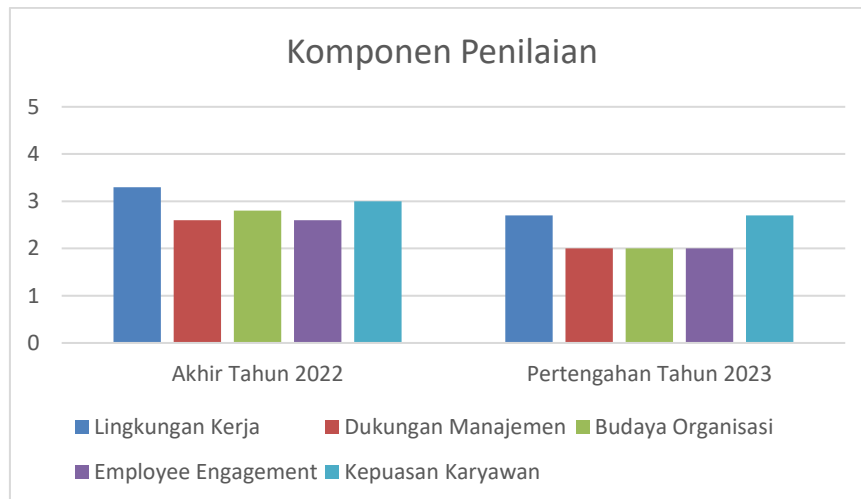
In facing fierce competition in the era of globalization like today, companies must optimize their assets to be able to face competition. One of the assets that does not go unnoticed is human resources. (Hair et al., 2019). Human resource management in a company is an inseparable unit from the expectations and goals of a company. Human resource management in a company must be carried out as best as possible to support good company performance because quality human resources are the company's reference in assessing employee performance with a very high predicate value. (RABBANI, 2020). So, companies need to improve the quality of their human resources. In the process of improving the quality of human resources, several aspects of support need to be paid attention to such as the work environment, management support, and organizational culture. (Nandedkar & Brown, 2018).

PT. Engineering Engineering is an engineering service company that serves several client companies and various fields of engineering services. (Tejpal, 2015). The work is quite varied following the standards and demands of each different client at PT. Engineering Engineering requires a positive feeling and a high sense of enthusiasm in carrying out work. Positive feelings and a high sense of enthusiasm for work can be called employee engagement. (Dasgupta, 2015). Companies with engaged employees tend to have high employee retention as a result of decreasing employee turnover. Based on Figure 1, it shows that the employee turnover rate is quite high at PT. Engineering Engineering resulted in a decrease in the number of employees that occurred in the period 2021 to 2022. However, the increase in the number of employees in the period 2022 to 2023 shows that PT. Rekayasa Engineering as a related company has succeeded in overcoming the large turnover in the 2021 to 2022 period, either by improving the quality of the work environment, improving management support and organizational culture, or increasing employee engagement. (Putra et al., 2024). Countermeasures by increasing the value of these four aspects also increase productivity, profitability, growth, and customer satisfaction.



**Figure 1 Employee Performance Assessment**

Employee performance in the range from the end of 2022 to mid-2023 has decreased due to a significant decline in performance support components such as the work environment, management support, organizational culture, employee engagement, and job satisfaction. Figure 2 shows the decrease for each component of the identification. (Fitriani et al., 2022).



**Figure 2 Research Components**

In terms of the work environment, there is a decline due to the problematic company acquisition process, resulting in the company's finances becoming unstable. As for the management support section, there was a decrease due to the absence of training provided in the development of employee skills. (Daryanto et al., 2023). Organizational culture has also decreased due to communication constraints between employees who work in different locations. For employee engagement, the decrease occurred due to the lack of activities that can increase engagement between company employees. Meanwhile, employee job satisfaction has decreased due to the absence of satisfactory salary development within the specified time frame. With the decline in the assessment component of employee performance, the pressure on the company's employees is increasing. (Kuo et al., 2015).

The amount of pressure on employees also occurs due to the development of technology which is quite massive, resulting in companies having to provide more technology-based skills, competencies, and knowledge to their employees. However, the development of skills, competencies, and knowledge possessed by each employee is certainly different, this is a challenge for companies to maintain their superiority and corporate values to remain competitive with competitors while facing technological developments that are always evolving. Improvements in these three aspects cannot be achieved, if it is not followed by an increase in the value of attachment, comfort, and satisfaction of employees with their company. (Dami et al., 2022). Therefore, to achieve the expected employee performance, the company must know what can affect performance and give it a positive boost. This research utilizes the variables of work environment, management support, organizational culture, and employee engagement. The purpose of this study is to find and examine what factors affect employee satisfaction and employee performance.

## Method

The population used in this study is 297 employees of PT. Engineering Engineering in 2023. The minimum sample used in this study uses the Slovin equation.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{297}{1 + 297(0.01)} = 94$$

Information:

- n = Minimum Sample
- N = Total Population
- e = Present Batas Toleransi / margin of error (10%)

**Table 1**  
**Number of Population and Research Sample**

Position	Population	Sample Calculation	Sample
VP Level	3	$\frac{3}{297} \times 94 = 0,95$	1
Manager Level	20	$\frac{20}{297} \times 94 = 6,33$	6
Non-Manager Level	279	$\frac{279}{297} \times 94 = 88,30$	88
<b>Total</b>	297		95

Based on the results of the sample calculation above, the population of 297 people for this study has a margin of error of 10%, so a sample of 95 people was obtained. The sampling technique used is stratified random sampling, where the population is divided into homogeneous groups called strata based on certain characteristics.

In this study, hypothesis development is carried out, there is a research model that has been described in Figure 3, and the relationship between the two variables in this study is explained as follows:

- a. Hypothesis 1: The work environment has a direct effect on employee performance.
- b. Hypothesis 2: The work environment does not have a direct effect on employee performance but is mediated by employee satisfaction.
- c. Hypothesis 3: Management support has a direct effect on employee performance.
- d. Hypothesis 4: Management support has no direct effect on employee performance but is mediated by employee satisfaction
- e. Hypothesis 5: Organizational culture has a direct effect on employee performance.
- f. Hypothesis 6: Organizational culture has no direct effect on employee performance but is mediated by employee satisfaction.
- g. Hypothesis 7: Employee engagement has a direct effect on employee performance.

- h. Hypothesis 8: Employee engagement has no direct effect on employee performance but is mediated by employee satisfaction.
- i. Hypothesis 9: Employee satisfaction has a direct effect on employee performance.

**Table 2**  
**Scale Likert Penelitian**

Attribute	Likert scale
Strongly disagree (STS)	1
Disagree (TS)	2
Simply Agree (CS)	3
Agree(s)	4
Strongly Agree (SS)	5

The SEM model test is carried out by entering all respondent data in the modeling that has been made, to produce an output in the form of a model match index, where the GFI, AGFI, RMSEA, and probability values reach the specified standard. The index values depend on the number of samples and the number of variables used in the model. After that, the analysis is carried out by comparing it with the real condition of the company to get an evaluation that can be obtained from the model that has been developed.

## Results and Discussion

The results of the questionnaire were carried out descriptively using percentage values. The characteristics of the respondents' profiles used were gender, age, education, department, and length of work in the company. Results from 103 respondents who participated in this study.

**Table 3**  
**Questionnaire Results**

Category	Frequency (n)	Presented
<b>Gender</b>		
Man	79	77%
Woman	24	23%
<b>Age</b>		
16-20 Years	3	3%
21-25 Years	12	12%
26-30 Years	20	19%
31-35 Years	16	16%
36-40 Years	17	17%
41-45 Years	14	14%
46-50 Years	7	7%
< 50 Years	14	14%
<b>Education</b>		
SMA	13	13%
D3	10	10%
D4/S1	75	75%
S2	5	5%

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<b>Position</b>		
<i>VP Level</i>	2	2%
<i>Manager Level</i>	8	8%
<i>Non-Manager Level</i>	93	90%
<b>Work Experience</b>		
> 5 Years	40	39%
5-10 Years	18	17%
11-15 Years	18	17%
16-20 Years	11	11%
21-25 Years	14	14%
< 25 Years	2	2%

The description of the variables of this study was made as a descriptive statistical analysis to find out the distribution of the frequency of answers from respondents to the statements in the research questionnaire.

**Table 4**  
**Description of Variable Indicators**

No	Variable	Total Mean	Total Std. Deviation	Information
1	Work Environment (X1)	3.013	1.240	Agree
2	Management Support (x2)	2.988	1.283	Simply Agree
3	Organizational Culture (X3)	2.947	1.300	Simply Agree
4	Employee Engagement (X4)	3.054	1.247	Simply Agree
5	Employee Satisfaction (Y1)	3.036	1.280	Agree
6	Employee Performance (Y2)	3.020	1.347	Agree

The results of the data normality test on all research variables, the multivariate C.R. value is 2,288 and this value is located outside -1.96 to 1.96, so it can be said that the data is distributed multivariate normally. The results of the outlier test in this study were presented at Mahalanobis distance or Mahalanobis d-squared. Mahalanobis values greater than the Chi-square of the table or p1 values < 0.001 are said to be outlier observations. In the study, 1 data was an outlier, but because it was still smaller closer to 5, it could be said that there was no outlier. The results of the study gave a Determinant of sample covariance matrix value of 0.094. This value is not close to zero so it can be said that there is no singularity problem in the analyzed data.

The discriminant validity of the measurement model with reflective indicators is assessed based on the cross-loading measurement with the construct. If the correlation of the construct with the item score is greater than the size of the other construct, then this indicates that the latent construct predicts the size of their block to go up more than the size of the other block. Another method to assess discriminant validity is to compare the

root value of the Average Variance Extracted (AVE) of each construct with the correlation between constructs and other constructs in the model (Monecke and Leisch, 2012). Here's the formula to calculate AVE.

$$AVE_{V-D} = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum Var(e_i)}$$

Where  $\lambda_i$  is component loading to the indicator and  $Var(e_i) = 1 - \lambda_i^2$ . If all indicators are standardized, then this measure is equal to the average commonalities in blocks. It is recommended that the root value of AVE should be greater than 0.50. In detail, the root value of AVE on the latent variable is as follows.

**Table 5**  
**Validity of Discrimination**

Variable	AVE ( $\sqrt{AVE}$ )	Information
Work Environment (X1)	0.909	Valid
Management Support (x2)	0.896	Valid
Organizational Culture (X3)	0.904	Valid
Employee Engagement (X4)	0.905	Valid
Employee Satisfaction (Y1)	0.873	Valid
Employee Performance (Y2)	0.893	Valid

In this study, in calculating reliability using composite (construct) reliability with a cut-off value of at least 0.7. The calculation is as follows.

$$CR = \frac{(\sum \text{standarized loading})^2}{(\sum \text{standarized loading})^2 + \sum e_j}$$

**Table 6**  
**Reliability Test**

Variable	CR	Information
Work Environment (X1)	0.934	Reliable
Management Support (x2)	0.942	Reliable
Organizational Culture (X3)	0.930	Reliable
Employee Engagement (X4)	0.931	Reliable
Employee Satisfaction (Y1)	0.941	Reliable
Employee Performance (Y2)	0.952	Reliable

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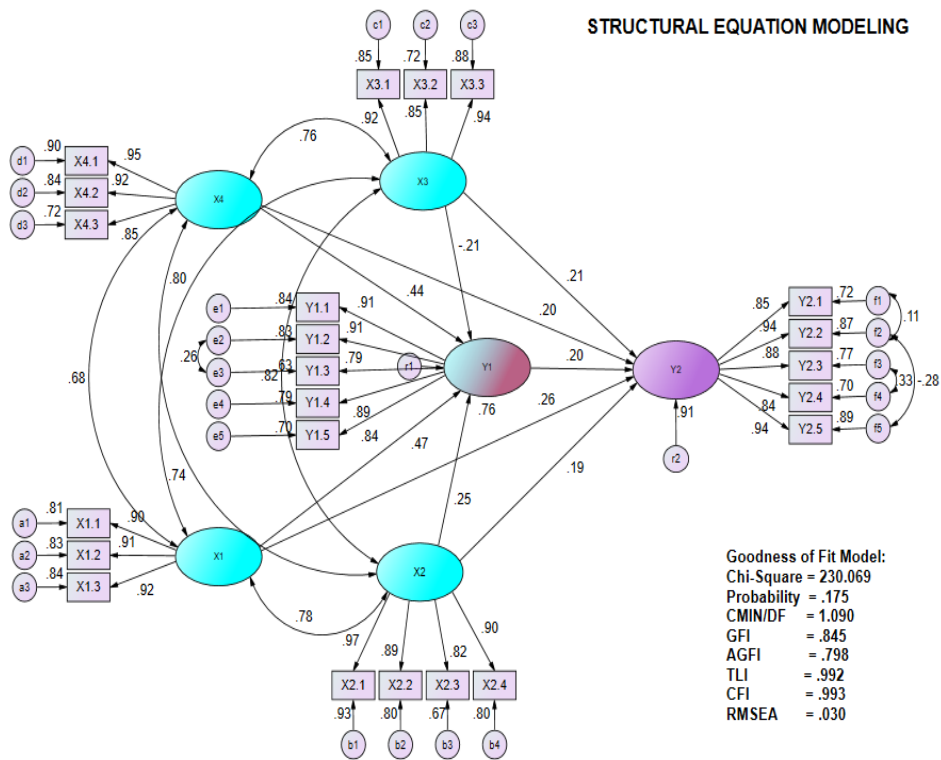


Figure 4 Results of Structural Equation Modeling (SEM) Testing

Table 7  
Model Test Results

Criterion	Cut-Off Value	Calculation Results	Information
			$\chi^2$ with df = 211
Chi-Square	Expected small	230.069	is 245,888 Good
Significance Probability	$\geq 0,05$	0.175	Good
RMSEA	$\leq 0,08$	0.030	Good
GFI	$\geq 0,90$	0.845	Pretty Good
AGFI	$\geq 0,90$	0.798	Pretty Good
CMIN/DF	$\leq 2,00$	1,090	Good
TAG	$\geq 0,90$	0.992	Good
CFI	$\geq 0,90$	0.993	Good

Based on Table 7, shows that the 8 criteria used to assess the feasibility or unfeasibility of a model and the results state all Good. This can be said that the model is acceptable, which means that there is a fit between the model and the data. From the model, each path coefficient can be interpreted. These path coefficients are hypotheses in this study, which can be presented in the following structural equations:

$$Y1 = 0.473 X1 + 0.248 X2 - 0.210 X3 + 0.440 X4$$

$$Y2 = 0.261 X1 + 0.186 X2 + 0.214 X3 + 0.202 X4 + 0.197 Y1$$

Information:

X1: Work Environment

X2: Management Support

X3: Organizational Culture

X4: Employee Engagement

Y1: Employee Satisfaction

Y2: Employee Performance

**Table 8**  
**Results of the Research Hypothesis Test**

Variable	Coefficient	C.R.	Prob.	Information
Work Environment (X1) → Employee Satisfaction (Y1)	0.473	3.940	0.000	Significance
Management Support (X2) → Employee Satisfaction (Y1)	0.248	1.999	0.046	Significance
Organizational Culture (X3) → Employee Satisfaction (Y1)	-0.210	-1.520	0.129	Insignificant
Employee Engagement (X4) → Employee Satisfaction (Y1)	0.440	4.248	0.000	Significance
Work Environment (X1) → Employee Performance (Y2)	0.261	2.829	0.005	Significance
Management Support (X2) → Employee Performance (Y2)	0.186	2.211	0.027	Significance
Organizational Culture (X3) → Employee Performance (Y2)	0.214	2.262	0.024	Significance
Employee Engagement (X4) → Employee Performance (Y2)	0.202	2.520	0.012	Significance
Employee Satisfaction (Y1) → Employee Performance (Y2)	0.197	2.171	0.030	Significance

## **Conclusion**

A significant relationship between employee performance and employee characteristics in the work environment and employee engagement variables has been shown. Employees who work in a positive and supportive work environment and feel engaged in their work tend to be more committed, more productive and qualified, more satisfied and motivated, and have a positive work culture. These aspects can improve employee satisfaction and employee performance, which in turn contributes to the overall success of the company.

## **Bibliography**

Dami, W. D., FoEh, J. E. H. J., & Manafe, H. A. (2022). Pengaruh Employee Engagement, Komitmen Organisasi, dan Budaya Organisasi Terhadap Kinerja

Karyawan Melalui Kepuasan Kerja Sebagai Variabel Mediasi (Suatu Kajian Studi Literatur Manajemen Sumberdaya Manusia). *Jurnal Ilmu Multidisplin*, 1(2), 514–526.

Daryanto, F., FoEh, J. E. H. J., & Niha, S. S. (2023). Pengaruh Motivasi, Budaya Organisasi, dan Lingkungan Kerja terhadap Kinerja Karyawan Melalui Kepuasan Kerja sebagai Variabel Mediasi (Kajian Studi Literatur Manajemen Sumber Daya Manusia). *Jurnal Ilmu Multidisplin*, 2(2), 217–225.

Dasgupta, M. (2015). Middle-level managers and strategy: Exploring the influence of different roles on organizational performance. *Journal of General Management*, 41(1), 25–43.

Fitriani, D., FoEh, J. E. H. J., & Manafe, H. A. (2022). Pengaruh Kompetensi, Motivasi, Dan Budaya Organisasi Terhadap Kinerja Pegawai Melalui Kepuasan Kerja Sebagai Variabel Intervening (Literature Review Manajemen Sumber Daya Manusia). *Jurnal Manajemen Pendidikan Dan Ilmu Sosial*, 3(2), 981–994.

Hair, J. F., Ringle, C. M., Gudergan, S. P., Fischer, A., Nitzl, C., & Menictas, C. (2019). Partial least squares structural equation modeling-based discrete choice modeling: an illustration in modeling retailer choice. *Business Research*, 12(1), 115–142.

Kuo, Y.-K., Su, Y.-Y., & Chang, B.-L. (2015). The study on relationships between perceived organizational support and job satisfaction in Taiwan's hospitality service industry. *Managing Intellectual Capital and Innovation for Sustainable and Inclusive Society, Joint International Conference, Italy*.

Nandedkar, A., & Brown, R. S. (2018). Transformational leadership and positive work outcomes: A framework exploring the role of LMX and distributive justice. *International Journal of Organization Theory & Behavior*, 21(4), 315–327. <https://doi.org/10.1108/IJOTB-09-2018-0105>

Putra, E. Y., Ariyanto, H. H., & Maytanius, J. (2024). Pengaruh manajemen pengetahuan, lingkungan kerja, keterlibatan karyawan, kepemimpinan transformasional dan budaya organisasi terhadap kinerja karyawan melalui kepuasan kerja. *Jurnal Manajemen Strategi Dan Aplikasi Bisnis*, 7(2), 197–210.

RABBANI, H. M. (2020). *Pengaruh Budaya Organisasi, Employee Engagement, Dan Produktivitas Terhadap Kinerja Karyawan Di Pt Ipc Terminal Petikemas*.

Tejpal, P. (2015). Enhancing the Job Satisfaction Level Through Dimensions of Employee Engagement: An Empirical Study on Private Sector Bank Managers. *Drishtikon: A Management Journal*, 7(1).