

TRANSFORMATIONAL LEADERSHIP AND ORGANIZATIONAL CULTURE ON EMPLOYEE ENGAGEMENT AS AN ALTERNATIVE HUMAN RESOURCE DEVELOPMENT STRATEGY AT PT TIMAH TBK

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ABSTRACT

This research aims to examine the effect of transformational leadership and organizational culture on employee engagement and their subsequent effect on human resource development strategies. Utilizing a quantitative approach, the study involves employees of PT Timah Tbk holding positions at the Assistant Vice President and Manager levels in the Bangka Belitung Province. A purposive sampling method was employed with 102 respondents. Data analysis was conducted using Partial Least Square (PLS) regression and parametric statistical techniques to explore the interrelationship among variables. The finding indicate that transformational leadership significantly and positively affect employee engagement, and organizational culture also significantly and positively affect employee engagement. Additionally, both transformational leadership and organizational culture significantly and positively affect human resource development strategies. Employee engagement, in turn, has a significantly and positively effect on development strategies. Indirect effect reveal that transformational leadership positively and significantly influences human resource development strategies through employee engagement, and similarly, organizational culture positively and significantly affects these strategies via employee engagement. All proposed hypotheses are supported by the data.

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1. INTRODUCTION

Annual performance report, PT Timah Tbk has 4,249 employees (as of 31 December 2022). Employee demographics at PT TIMAH Tbk are grouped by division/region, position, gender and education level. One way to find out how satisfied employees are is to conduct an Employee Opinion Survey (SOK). This survey measures employee satisfaction and

organizational culture within the company. Yakup (2017) and Harahap (2019) revealed that scientific studies examine employee job satisfaction periodically and this phenomenon has the potential to influence the operations of a company. Job satisfaction is not an independent variable, it is influenced by several different variables, some come from employees and some come from superiors in the company (Boon Ooi et al., 2007; Octaviannand et al., 2017). In the process the company

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will strive to create organizational improvements. Another variable that can influence employees is the organizational culture within the company (Gregory et al., 2009; Akpa et al., 2021). Current developments in Human Resources in companies are how culture can work well in the process of forming the character of employees themselves (Piwowar-Sulej, 2021). One of the keys to the Company's success can be seen from Human Resources not only as a supporting function, but as a company asset to support the Company's success (Aris, 2024). Graph of Employee Opinion Survey results in the last 5 (five) years, starting from 2018 to 2022 with varied results with dynamic levels of satisfaction in each assessment category.

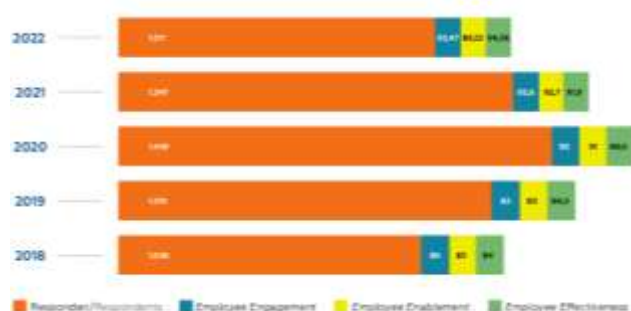


Figure 1. Employee Opinion Survey Results 2022

Source : www.timah.com

In the Figure 1, overall employees feel quite satisfied with Human Resources management in the last 5 (five) years. In 2018 s.d. In 2022, employee engagement will experience an insignificant decrease and increase, which means that employee engagement can be maintained by companies by encouraging employees to continue working. Meanwhile, employee enablement in the last year decreased by 3.5%, this was in dynamic areas, such as performance management and work achievement awards, which were deemed not fully implemented by the company. Employee effectiveness has increased in the last 3 (three) years, the level of work effectiveness is shown in employee assessments of behavior according to rules, working as a team, ability to communicate, work productively and think critically. Meanwhile, for the three categories measured, namely employee engagement, employee enablement and employee effectiveness, the highest achievement was in 2021, namely with an average of 92.7%, where at that time Indonesia experienced a crisis with the Covid-19 virus which attacked Indonesia, but all benefits still paid by the Company to employees. On the other hand, many companies have experienced reductions in compensation up to layoffs. In this case, overall there is a tendency for employees to assess themselves as quite effective in carrying out their work.

The survey results in Figure 2, PT Timah Tbk also conducted a survey of the culture implemented in the Company, the results of which showed that there was a tendency for employees to assess themselves as quite effective in carrying out their work. Working according

to the rules is the main thing that concerns employees. Corporate cultural values are very necessary in achieving the vision and mission of PT Timah Tbk. These cultural values are the distinguishing characteristics that characterize a company. Therefore, it is important to maintain the continuity of corporate cultural values and apply them in daily performance. Organizations are often faced with environments that are relatively static, but also very dynamic. Static environments create less uncertainty than dynamic ones. Because uncertainty is a threat to organizational effectiveness, management will try to minimize it (Darus Altin, 2022).

The direction of the Human Resources development strategy at PT Timah Tbk can include the implementation of training and development programs inspired by the transformational leadership style, with a focus on increasing employee skills, motivation and engagement. Strengthening organizational culture that supports company values and employee expectations, to increase engagement levels. Developing a reward system that recognizes and strengthens the positive contributions of employees who are actively involved. From the description it can be concluded that research links transformational leadership, organizational culture, employee engagement with Human Resource development strategies in an industrial context. This research is a new step that focuses on the relationship between transformational leadership, organizational culture, employee engagement and Human Resource development strategies. Although previous research has discussed related topics, such as the important role of leaders in encouraging employee participation and creating a comfortable work environment, the contribution of this research lies in a comprehensive approach to the Human Resources development strategy at PT Timah Tbk. This research aims to contribute to designing a Human Resources development strategy that focuses more on engagement. By understanding how leadership and organizational culture contribute to engagement levels, PT Timah Tbk can develop more appropriate and sustainable strategic steps.

Through this research, it is hoped that solutions or recommendations can be found that can be implemented specifically at PT Timah Tbk Bangka Belitung Islands, and at the same time provide general insights that can be adopted by the mining industry at large. Therefore, the research title was raised, namely "Transformational Leadership and Organizational Culture on Employee Engagement as an Alternative Form of Human Resource Development Strategy at PT Timah Tbk.

Based on the relationships between variables and observed phenomena, the hypothesis of this research is as follows:

- H_1 : Transformational leadership has a positive and significant effect on employee engagement
- H_2 : Organizational culture has a positive and significant effect on employee engagement
- H_3 : Transformational leadership has a positive and significant effect on Human Resource development strategies

- H₄ : Organizational culture has a positive and significant effect on Human Resources development strategy
- H₅ : Employee engagement has a positive and significant effect on Human Resource development strategies.
- H₆ : Transformational leadership has a positive and significant effect on Human Resource

development strategies through employee engagement

- H₇ : Organizational culture has a positive and significant effect on Human Resource development strategies through employee engagement.

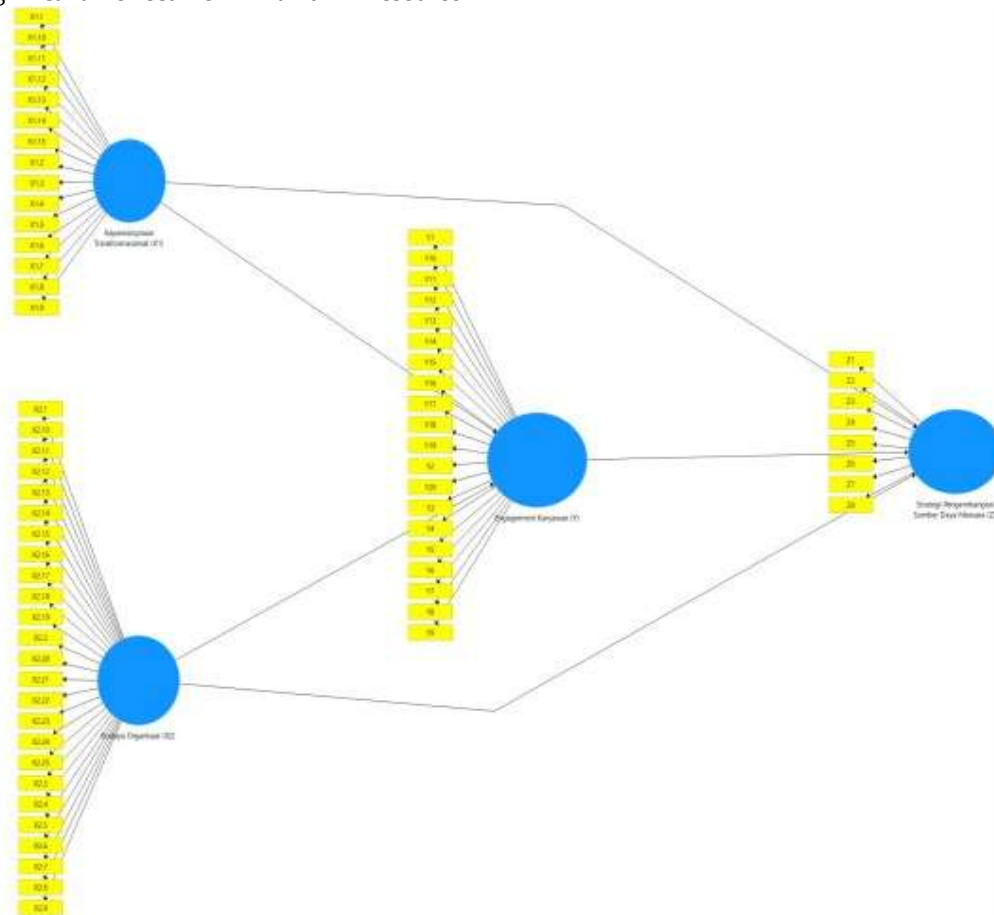


Figure 2. Diagram of the Transformational Leadership Model and Organizational Culture on Employee Engagement and Human Resource Development Strategy

2. LITERATURE REVIEW

2.1 Transformational Leadership

Poutiatine (2009) explains transformational leadership as a process in which “leaders and members raise their moral and motivational levels to a higher level.” These leaders seek to raise awareness among their members by displaying higher moral ideals and values, such as freedom, justice and humanity, rather than relying on emotions such as hate speech, greed, jealousy. On the other hand, Burns argues that the transformational leadership model essentially emphasizes that leaders must motivate their subordinates to fulfill their responsibilities beyond expectations. Transformational leaders must be able to define, communicate, and articulate the organization's vision clearly, and followers must accept and recognize the leader's credibility. According to (Yammarino et al., 1993), transformational leaders must be able to persuade their subordinates to

carry out tasks beyond their own interests, in the best interests of the organization. Transformational leaders offer a realistic vision of the organization's future, challenge followers intellectually, and pay attention to followers' differences. Chew and Choo (2008) the existence of transformational leaders has a good impact on transformation at the organizational level and at the individual level.

Leaders also need to engage in controlling actions to shape the way team members think, feel, and behave. All these actions should be focused on the goals of the organization. According to (Bass & Avolio, 1994), there are 4 (four) characteristics of transformational leadership (Figure 3), namely:

1. Idealized influence

Demonstrates the need for a transformative leader to have the magical ability to “bewitch” followers to act according to the leader's wishes. This charisma is demonstrated specifically through actions such as respecting staff members, making

decisions with a firm and consistent attitude, and knowing the goals and mission of the organization. In other words, people who report to transformative leaders will respect, admire, and emulate their example.

2. *Inspirational motivation*

This refers to the quality of a leader who can inspire his followers to meet and exceed high standards. Leaders like this are able to instill hope and a strong sense of enthusiasm in their followers. In other words, transformative leaders consistently provide motivation and inspiration to their team members.

3. *Intellectual stimulation*

A transformative leader can help his team members face difficulties wisely and logically. They can also inspire people to find new approaches to challenges. In other words, transformational leaders are those who can encourage their subordinates to always think outside the box.

4. *Individualized consideration*

Demonstrates a leader's ability to take into account individual diversity among his team members. Here, a transformational leader is competent and willing to listen to the goals of his followers and impart knowledge and skills to them. They are also able to recognize their need for development and their potential for progress. In other words, they have the ability to understand and respect their subordinates when necessary.



Figure 3. Transformational Leadership

Source : (Bass & Avolio, 1994)

2.2 Organizational Culture

Organizational culture, according to Kreitner and Kinicki (2005) is defined as organizational culture as a kind of perspective that is implicitly held and accepted within a group. In diverse situations, these perceptions influence the feelings, thoughts, and behavior of the group. Meanwhile, according to (Supriyadi et al., 2020) it is a framework that controls daily behavior, decision making and staff actions to achieve organizational goals. According to Rahayu et al. (2024), organizational culture is a framework that controls how employees behave, make decisions, and move throughout the day to achieve organizational goals. The cultural characteristics of an organization can be seen from the level of aggression, stability, focus on results, attention to detail, Risk taking, creativity, and orientation towards people of its members. According to Robbins and Judge (2003), the following are the indicators:

1. *Innovation and risk tasking*
2. *Attention to detail*
3. *Outcome orientation*

4. *People orientation*

5. *Team orientation*

6. *Aggressiveness*

7. *Stability*

2.3 Employee Engagement

The word employee engagement was raised by Kahn (1990) according to this definition, employee engagement occurs when people in a company feel emotionally involved in the company's success, as well as physical, mental and cognitive aspects. Personal engagement is a state of mind in which members of an organization or company's workforce use their skills to fulfill their employees within that organization or company. A person will work better and be happier if he is more invested in his various professional tasks, which means more engagement. Byrne (2022) developed a definition of employee engagement as a state of mind that motivates people to work towards achieving certain goals by keeping them emotionally and intellectually involved, focused on the task at hand, and committed to the overall success of the company. This concept was generated by integrating previous definitions and different perspectives.



Figure 4. Factors that Influence Engagement

Source: Anitha, (2014)

According to this definition, employee engagement is a motivating condition in which the achievement of organizational or professional goals takes priority. Each organization has a different definition of employee engagement. The elements that motivate people to feel connected to their employees and the company are undoubtedly different because each company has unique characteristics and culture, including its industry (Byrne, 2022). But turning employees into useful activities is what all companies have in common when it comes to employee engagement. This is proven when employees perform well qualitatively and quantitatively, are enthusiastic, highly committed to company goals, take the initiative, and interact effectively (Byrne, 2022).

Anitha (2014) in her journal entitled "Determinants of Employee Engagement and Their Impact on Employee Performance" defines employee engagement as the extent to which employees invest in the success of the company and its values; Engaged employees take their role in achieving those goals and inspire those around them to do the same. Based on this understanding of

employee engagement, Anitha (2014) concluded that there are 7 (seven) factors that influence engagement, which are depicted on the Figure 4.

2.4 Human Resources Development Strategy

According Allison and Kaye (2011) it was stated that generally strategy is a long-term goal carried out by an organization starting from determining leadership plans to preparing plans to achieve goals within the company. An organization's efforts to win corporate competition or achieve its corporate goals are known as strategy. Kotler and Armstrong (2008), define strategy as a series of decisions made by top-level executives with the aim of outperforming the competition. Human Resource Development is part of sustainable human resource management. Therefore, to adapt to dynamic development programs, it is necessary to understand the characteristics of workforce development strategies (McCracken et al., 2016). This strategy explains that strategic human resource development refers to strategic management and training, development and education interventions for professionals. A human resource development strategy is a series of plans and decisions aimed at identifying opportunities, overcoming obstacles, and adapting external factors to company resources (Werner, 2014). According to Priyatna (2016) emphasized that providing direction to those in positions of authority, especially those in leadership roles, is one tactic that can be used as part of the human resource development process of an organization. The human resource development process consists of four important steps, namely (Figure 5):

1. Diagnostic Phase: Identify requirements for growth at the individual, group, and organizational levels. A well-thought-out professional growth strategy must be in line with the demands of the company, which seeks to increase the competency demonstrated by employees who have employee-specific knowledge and skills. Human resource development begins with diagnosing a person's potential.
2. Design Phase is carrying out development planning based on:
 - a. Organizational problems that arise and the programs needed;
 - b. Selecting objectives and describing these objectives and their impacts;
 - c. Determine which parties will participate;
 - d. Identification of the development carried out is an important part that is needed as a plan for other alternative development;
 - e. Create a timeline for program development to achieve goals;
 - f. Create program designs that include various activities to meet individual and group needs;
 - g. Recruitment of participants;
 - h. Develop a timeline, standard procedures and evaluation; and
 - i. Determine and manage monitoring schedules.
3. Implementation/operation phase

This is to ensure that development programs are carried out in a coordinated manner and according to plan. It is important to gather support from various parties to find out how relevant the program is and how to produce professional staff.

4. Evaluation Phase

Carrying out evaluations is very important to understand the methodology of development programs and the performance of government program implementation. In essence, the evaluation phase process measures how the program is running according to the development program plan.

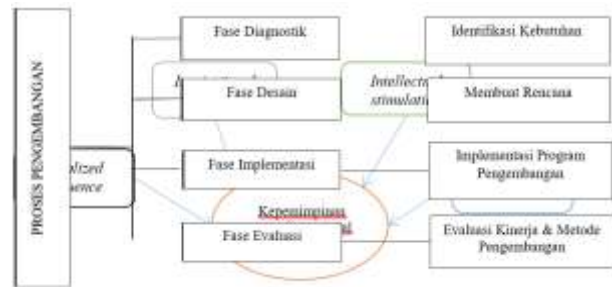


Figure 5. Development Plan Process

Source: (Priyatna, 2016)

It can be concluded that for the employee development process managers need to take steps to increase employee awareness and participation in the long-term success of the company. These steps can include the creation of programs and indicators, funding and control models, and strategies to create fairer or better working conditions that will increase social capital. This will help employees see these activities and how they contribute to the overall functioning of the company. In addition to addressing important global issues, organizations must strive to improve the lives of employees. As a result, people are attracted to working for companies that care about social problems and work to find solutions.

3. METHODOLOGY

The data collection technique that will be used is using a questionnaire to collect data from respondents, either directly or via Google form.

Table 1. Number of PT Timah Tbk Employees

Job Level	2023			%
	Female	Male	Grand Total	
Senior Vice President	1	11	12	0.3%
Vice President	4	42	46	1.1%
Assistant Vice President	16	152	168	4.0%
Manager	75	492	567	13.6%
Assistant Manager	103	715	818	19.7%
Assistant	57	1751	1808	43.5%
Officer	12	729	741	17.8%
Grand Total	268	3892	4160	100.0%

Source: Annual Report 2024 PT Timah Tbk

This research uses 4 variable concepts consisting of 44 indicators to test hypotheses and surveys using an ordinal scale. The multivariate analysis used in this research is by using Structural Equation Modeling with the Partial Least Square (SEM-PLS) technique. The researcher determined that the research sample to be taken would be in the range of Assistant Vice President to Manager positions with a minimum work period of 5 (five) years. From the number of employees, we can see in detail the employees of PT Timah Tbk with position levels as in the table 1.

4. DISCUSSION AND ANALYSIS

In this study, researchers grouped respondents based on gender, age, education, length of service and current position held by the respondent. Researchers distributed questionnaires to 160 employees, but only 120 people filled out and returned the questionnaires, 8 of the questionnaires were damaged so only 102 employees could process the data. Respondent data is based on ages 36 years to 40 years with a total of 40 people. The level of education they have is Diploma 3 (D-3) with the highest level being Strata 2 (S2), but dominated by Strata 1 (S1) education. The characteristics of the respondents in this study were dominated by employees who had a Bachelor's degree (S1) with a total of 60 people or 59% of the total respondents. Meanwhile, the respondents' work period ranged from 11 to 11. 15 years as much as 51% and then in the range 16 to 20 years with 42%, it can be said that during this work period the employee is at a productive age at work. And to be able to see the comparison of men and women during this work period, you can see the picture below. In this picture, it can be seen that the differences between men and women are not very significant and can be said to be balanced.

Data analysis

4.1 Convergent Validity Test

The results of the Convergent Validity Test show that all indicators for each variable in this study meet the requirements for convergent validity, therefore all variable indicators in table 2 can be considered valid because the value of each indicator is greater than 0.7 and the AVE value of each variable shows that each The construct meets the requirements for convergent validity and is considered valid because it has a value > 0.7 (Table 2).

Table 2. Convergent Validity Test Results

Variabel Laten	AVE (>0.5)
Transformational Leadership (X1)	0.697
Culture Organization (X2)	0.773
Employee Engagement (Y)	0.706
Human Resource Development Strategy (Z)	0.775

Source: Primary Data, 2024

4.2 Discriminant Validity Test

The discriminant validity test is a test used to test validity by checking the cross-loading value

Table 3. Discriminant Validity Test Results

Indikator	X1	X2	Y	Z
X1.1	0.862	0.784	0.75	0.765
X1.10	0.832	0.764	0.757	0.771
X1.11	0.867	0.767	0.773	0.777
X1.12	0.875	0.787	0.772	0.796
X1.13	0.874	0.83	0.821	0.798
X1.14	0.886	0.816	0.806	0.792
X1.15	0.84	0.806	0.762	0.755
X1.2	0.774	0.714	0.674	0.693
X1.3	0.771	0.678	0.664	0.697
X1.4	0.876	0.769	0.771	0.793
X1.5	0.816	0.745	0.749	0.725
X1.6	0.873	0.76	0.772	0.756
X1.7	0.83	0.685	0.713	0.718
X1.8	0.887	0.785	0.788	0.813
X1.9	0.901	0.83	0.818	0.837
X2.1	0.746	0.853	0.771	0.739
X2.10	0.816	0.893	0.851	0.809
X2.11	0.67	0.771	0.727	0.741
X2.12	0.743	0.885	0.808	0.749
X2.13	0.852	0.918	0.861	0.843
X2.14	0.829	0.864	0.808	0.846
X2.15	0.756	0.795	0.804	0.792
X2.16	0.797	0.919	0.828	0.797
X2.17	0.824	0.926	0.848	0.84
X2.18	0.83	0.921	0.853	0.819
X2.19	0.773	0.854	0.782	0.768
X2.2	0.754	0.874	0.785	0.749
X2.20	0.85	0.94	0.864	0.84
X2.21	0.803	0.82	0.794	0.77
X2.22	0.763	0.795	0.73	0.725
X2.23	0.769	0.833	0.803	0.742
X2.24	0.782	0.859	0.817	0.735
X2.25	0.792	0.876	0.822	0.762
X2.3	0.752	0.84	0.779	0.74
X2.4	0.775	0.9	0.806	0.771
X2.5	0.724	0.805	0.752	0.698
X2.6	0.767	0.896	0.801	0.75
X2.7	0.758	0.82	0.808	0.802
X2.8	0.737	0.829	0.773	0.756
X2.9	0.857	0.936	0.86	0.844
Y1	0.721	0.762	0.833	0.754
Y10	0.768	0.841	0.875	0.765
Y11	0.741	0.819	0.873	0.727
Y12	0.752	0.747	0.782	0.76
Y13	0.654	0.631	0.745	0.654
Y14	0.646	0.622	0.689	0.677
Y15	0.663	0.694	0.792	0.69
Y16	0.621	0.603	0.712	0.674
Y17	0.671	0.667	0.756	0.719
Y18	0.789	0.834	0.868	0.731
Y19	0.746	0.671	0.79	0.723
Y2	0.759	0.774	0.809	0.774
Y20	0.752	0.753	0.808	0.794
Y3	0.748	0.814	0.871	0.762
Y4	0.797	0.871	0.885	0.781
Y5	0.754	0.844	0.885	0.776
Y6	0.855	0.891	0.916	0.816

Y7	0.721	0.802	0.84	0.722
Y8	0.802	0.873	0.904	0.799
Y9	0.775	0.813	0.871	0.743
Z1	0.786	0.836	0.832	0.867
Z2	0.786	0.786	0.812	0.881
Z3	0.809	0.798	0.819	0.897
Z4	0.824	0.814	0.836	0.907
Z5	0.759	0.783	0.768	0.88
Z6	0.792	0.81	0.766	0.896
Z7	0.818	0.775	0.784	0.904
Z8	0.843	0.806	0.783	0.901

Source : Primary Data, 2024

In this test, it will be evaluated to what extent a structure can be differentiated from other structures using experimental standards. In the cross-loading test above, it is known that the construct value for each variable has exceeded the value for the other variable constructs, so it can be said that the discriminant validity test has met the requirements and is valid (Table 3). From these results it is also known that the indicator values for each variable or measuring instrument used to prove the objectives to be achieved are appropriate.

4.3 Reliability Test

Reliability testing on PLS can test two results, namely the use of composite reliability and Cronbach's alpha. From these two results, Cronbach's alpha coefficient will give lower results, so it is recommended to use composite reliability. A construct is said to be reliable if the Cronbach's alpha or Composite Reliability value is > 0.7 . Below are the Composite Reliability and Cronbach's alpha values in this research.

Table 4. Reliability Test Results

Indicator	Cronbach's Alpha	Composite Reliability
Transformational Leadership (X1)	0.969	0.972
Culture Organization (X2)	0.988	0.988
Employee Engagement (Y)	0.978	0.980
Human Resource Development Strategy (Z)	0.958	0.965

Source: Primary Data, 2024

The data obtained shows that each variable shows an appropriate level of consistency and accuracy, so it can be considered reliable because the value is greater than 0.7 Table 4.

4.4 Coefficient Determination Test (R^2 Value)

In the evaluation using the coefficient of determination R^2 Value, a measure of model accuracy or a measure of model predictive accuracy can be determined. Through this evaluation, it can be seen how the ability of exogenous variables to influence endogenous variables. These coefficients are classified according to the R^2 classification using the coefficient of determination value with strong model significance (Table 5).

Table 5. Coefficient Determination Results (R^2 Value)

Variabel Laten	R Square	R Square Adjusted
Employee Engagement (Y)	0.729	0.723
Human Resource Development Strategy (Z)	0.846	0.842

Source: Primary Data, 2024

Based on the table 5, it shows that the R square value of variable Y (employee engagement) is 0.729 and can be categorized as a strong model. This can be interpreted as that variables X1 (transformational leadership) and X2 (organizational culture) influence variable Y (employee engagement) by 72.9% and the remaining 27.1% is influenced by other factors outside the research model. Then the R square value of variable Z (Human Resource development strategy) is 0.846 and can be categorized as a strong model. This can be interpreted as that variables X1 (transformational leadership) and X2 (organizational culture) influence variable Z (Human Resource development strategy) by 84.6% and the remaining 15.4% is influenced by other factors outside the research model.

4.5 Test Effect Size (f^2 value)

The results of the effect size (f^2) value test show that the f^2 value of the transformational leadership variable is 5,916, meaning it has a large contribution to the Human Resources development strategy (Table 6).

Table 6. Effect Size Test Results (f^2) Value

Variabel Laten	Human Resource Development Strategy (Z)
Transformational Leadership (X1)	5.916
Culture Organization (X2)	4.800
Employee Engagement (Y)	3.688

Source: Primary Data, 2024

Then, the f^2 value of organizational culture is 4,800, meaning it has a big contribution or influence on the Human Resources development strategy and the f^2 value on employee engagement has a value of 3,688, which means it also has a big contribution or influence on the Human Resources development strategy.

4.6 Predictive Relevance Test (Q^2)

The predictive relevance test is a tool to evaluate how well the model is able to predict observation values. If the Q^2 value is > 0 , then the model meets the predictive relevance test criteria, otherwise if the value is less than that. The assessment of predictive relevance can be seen through blindfolding analysis of the cross loading validity redundancy value (Table 7).

Table 7. Predictive Relevance Test Results Q^2

Variabel Laten	Q^2 (=1-SSE/SSO)
Employee Engagement	0.577
Human Resource Development Strategy	0.681

Source: Primary Data, 2024

Based on the table 7, it shows that the Q^2 value for the Employee Engagement variable construct model is 0.577 or more than 0 and the Q^2 value for the Human Resource Development Strategy variable construct model is 0.681, more than 0. So it can be said that the observation value obtained already has good predictive relevance of the structural model.

4.7 Hypothesis Testing

Direct influence testing on PLS is used to measure the probability of data which can be seen in the path

coefficient menu and can state hypotheses in research. The conditions to support the research hypothesis are:

- The direction of the variable relationship is shown by the original sample value (positive or negative)
- If the t-statistic value is > 1.64 (two tailed) or > 1.96 (one tailed), then it can be said to be significant
- If the probability value (p-value) < 0.01 ; 0.05 ; < 0.10 , then it can be said to be significant. In the p-value, if a value > 0.10 is obtained, it can be said to be not significant.

Table 8. Hypothesis Test Results

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Result
X1 → Y	0.291	0.292	0.087	3.338	0.000	accepted
X2 → Y	0.659	0.656	0.092	7.207	0.000	accepted
X1 → Z	0.434	0.413	0.124	3.489	0.000	accepted
X2 → Z	0.278	0.278	0.140	1.988	0.024	accepted
Y1 → Z	0.250	0.269	0.111	2.255	0.012	accepted
X1 → Y → Z	0.073	0.078	0.039	1.844	0.033	accepted
X2 → Y → Z	0.165	0.178	0.083	1.997	0.023	accepted

The calculation results in the table 8 of the direct influence of transformational leadership (X1) on employee engagement (Y) show an original sample value of 0.291 (Positive), a sample mean of 0.292, and a standard deviation of 0.087 and a t-statistic of 3.338, and a P value of 0.000 or less. from 0.05 so it can be said that the direct influence of X1 on Y can be said to be positive and significant, so that the hypothesis can be accepted, in other words H1 is accepted and H0 is rejected. The next hypothesis is that the direct influence of organizational culture (X2) on employee engagement (Y) shows an original sample value of 0.659, sample mean 0.656, and a standard deviation of 0.092 and a t-statistic of 7.207, and a P value of 0.000 or smaller than 0.05, so it can be said that The direct influence of X2 on Y can be said to be positive and significant, so that the hypothesis can be accepted, in other words H2 is accepted and H0 is rejected.

The calculation results for H3 in this study are that the direct influence of transformational leadership (X1) on Human Resource development strategies (Z) has a positive and significant effect, as proven by the results of the original sample value of 0.434 (Positive), the sample mean of 0.413, and the standard deviation of 0.124 and the t-statistic is 3.489, and the P value is 0.000 or less than 0.05, so that the hypothesis can be accepted, in other words H3 is accepted and H0 is rejected. Meanwhile, testing on H4 with a value for each original sample of 0.0278, sample mean of 0.278, and standard deviation of 0.140 and t-statistic of 1.988, and a P value of 0.024 or smaller than 0.05, so that the hypothesis can be accepted in other words H4 is accepted and H0 rejected. The direct influence of organizational culture (X2) on Human Resources development strategy (Z) has a positive and

significant effect, meaning that the more organizational culture improves, the better the Human Resources development strategy that will be implemented. The direct influence of employee engagement (Y) on Human Resources development strategy (Z) has a positive and significant effect with an original sample value of 0.250, a sample mean of 0.269, and a standard deviation of 0.114 and a t-statistic of 2.255, and a P value of 0.012 or smaller than 0.05, so the hypothesis can be accepted, in other words H5 is accepted and H0 is rejected.

The results of the Indirect Effect test show that the results of the indirect influence test between transformational leadership on Human Resource development strategies through employee engagement, the original sample value is 0.073 (positive) with a t-statistic of 1.844 and a p-value of 0.033, smaller than 0.05 or 0.10, so it can be It is said that transformational leadership has a positive and significant effect on Human Resource development strategies through employee engagement so that H6 can be accepted and H0 is rejected. In the test results of the indirect influence of organizational culture on Human Resource development strategies through employee engagement with an original sample value of 0.165 (positive) with a t-statistic of 1.997 and a p-value of 0.023, smaller than 0.05 or 0.10, it can be said that organizational culture has a positive and significant effect on Human Resource development strategies through employee engagement so that H7 can be accepted and H0 is rejected (Table 8).

5. DISCUSSION

In this research, based on respondents' responses, it can be stated that all research variables, namely transformational leadership, organizational culture, employee engagement and Human Resource development strategies are in the high category at the interval 3.41-4.20 with the resulting score for each variable, namely transformational leadership (X1) of 3.89, organizational culture (X2) 3.87, employee engagement (Y) of 3.75 and Human Resource development strategy (Z) of 3.69. From the results of this test it can be stated that all variables have a positive and significant effect on the other variables tested. The dimensions of each variable tested will produce different average score values, although not too far apart. The extent to which these dimensions can influence one variable against another will be discussed in more detail in the next sub-chapter.

1) The Influence of Transformational Leadership on Employee Engagement

Based on the results of the research that has been conducted, it can be stated that the transformational leadership variable has a positive and significant effect on employee engagement, in line with previous research. This is in accordance with quantitative calculations with the transformational leadership variable producing an original sample value of 0.292, a t-statistic of 3.338 and a p-value of 0.000 or <0.05. It can be concluded that PT Timah Tbk shows that transformational leadership works well in carrying out work processes to achieve the Company's goals and can influence employee engagement towards the Company. This can be proven in the transformational leadership variable, the Inspirational Motivation Dimension, leaders are able to provide motivation to staff/subordinates. The motivation provided by the leadership can influence staff/subordinates to do their work well, quickly and complete the targets set by the organization or company, so that it is not too difficult to achieve.

2) The Influence of Organizational Culture on Employee Engagement

In this research, organizational culture in a company is thought to have a positive and significant effect on employee engagement. And the results of the quantitative calculation of the organizational culture variable show an original sample value of 0.659, and a standard deviation of 0.092 and a t-statistic of 7.207, and a P value of 0.000 or less than 0.05, so it can be stated that organizational culture has a positive and significant effect on employee engagement. Other research that supports this is research from Hardiyanti et al. (2022) entitled "The Influence of Organizational Culture on Employee Engagement among BAAK XYZ University Employees in Jakarta" shows that organizational culture has a positive and significant effect on employee engagement among BAAK XYZ University employees in Jakarta.

3) The Influence of Transformational Leadership on Human Resource Development Strategy

The results of this research state that the transformational leadership variable has a positive and significant effect on Human Resource development strategies. This can be seen in the results of hypothesis testing with an original sample value of 0.434 (positive), a sample mean of 0.413, and a standard deviation of 0.124 and a t-statistic of 3.489, and a P value of 0.000 or less than 0.05. This shows that leaders who are able to inspire and motivate employees also play an important role in developing effective Human Resources strategies. This is an important finding that confirms the importance of leadership aspects in Human Resources management.

4) The Influence of Organizational Culture on Human Resource Development Strategy

The original sample value is 0.0278, the sample mean is 0.278, and the standard deviation is 0.140 and the t-statistic is 1.988, and the P value is 0.024 or smaller than 0.05. These findings strengthen the argument that a supportive and collaborative cultural environment in an organization can encourage resource development. Better humans. Human Resource Development Strategy is a pattern of Human Resource activities that are in accordance with organizational strategy with flexibility to support the achievement of maximum performance. The company culture also supports the development of the organization's business. This is confirmed by the opinion of Dessler (1997) regarding Human Resources strategy which is a bridge between Human Resources management and the role and goals of the organization to improve performance and develop a culture that encourages flexibility in work. A culture that is proactive towards learning will encourage employees to continuously improve their knowledge, skills and competencies. Organizations that provide opportunities for training, workshops and other development programs will help improve the quality and productivity of Human Resources.

5) The influence of employee engagement on human resource development strategies

The original sample value is 0.250, the sample mean is 0.269, and the standard deviation is 0.114 and the t-statistic is 2.255, and the P value is 0.012 or smaller than 0.05, so the hypothesis can be accepted, in other words H5 is accepted and H0 is rejected. This confirms that employees who are actively involved in their work are more likely to contribute to the development of innovative and effective Human Resources strategies. Career development is an effort to improve a person's ability to realize a desired desire. This career development program can enable employees to understand the internal needs of the individual themselves. With the phases in the Human Resources development strategy process designed by the Company in the form of support for employees, it is hoped that it can fulfill employee competencies and have a significant

impact on increasing productivity and Company performance.

6) The Influence of Transformational Leadership on Human Resource Development Strategy through Employee Engagement

The variables transformational leadership, employee engagement and Human Resource development strategy have a positive influence according to the results of the indirect influence test between transformational leadership on Human Resource development strategy through employee engagement, the original sample value is 0.073 (positive) with a t-statistic of 1.844 and p-value is 0.033, smaller than 0.05 or 0.10, so it can be said that transformational leadership has a positive and significant effect on Human Resource development strategies through employee engagement. In the employee engagement variable, there is a leadership dimension which is an important factor in determining engagement. There are several aspects to being a good leader, including self-awareness, internalized moral norms, balanced data processing and transparent interactions. When leaders inspire, engagement becomes natural. The success of the Company depends on the efforts of each employee and leader who is considered to provide support to each employee.

7) The Influence of Organizational Culture on Human Resource Development Strategy through Employee Engagement

The results of the indirect influence test show that organizational culture has a positive and significant impact on Human Resources development strategies through employee involvement. This is indicated by the original sample value of 0.165 (positive), the t-statistic of 1.997, and the p-value of 0.023, which is smaller than 0.05 or 0.10. In the process of developing Human Resources, the dimensions of organizational culture variables become very important. The dimensions of innovation and risk taking, for example, in the program planning process require innovation, creative new ideas to meet employee needs. Pay attention to the details of each program design, program orientation, both individual orientation and orientation to the results of program implementation. The program has been well planned, the timeline for program implementation is in line with employee schedules, but there is another thing that cannot be avoided, namely the risk of employees not being able to attend or contribute directly and continuously in the program implementation process.

6. CONCLUSION

Based on the results of distributing questionnaires, observations and interviews conducted by researchers after data analysis and discussion, the following conclusions can be drawn:

1. Transformational leadership has a positive and significant effect on employee engagement

2. Organizational culture has a positive and significant effect on employee engagement
3. Transformational leadership has a positive and significant effect on Human Resource development strategies
4. Organizational culture has a positive and significant effect on Human Resources development strategies
5. Employee engagement has a positive and significant effect on Human Resources development strategies.
6. Transformational leadership has a positive and significant effect on Human Resource development strategies through employee engagement.
7. Organizational culture has a positive and significant effect on Human Resources development strategies through employee engagement

7. REKOMENDATIONS

In this research, several theoretical recommendations were suggested by researchers that could be carried out by other researchers in a more comprehensive manner so as to have an impact on knowledge or other new findings, namely:

1. Researchers hope that it can become a reference for further research by developing other variables that can influence transformational leadership, organizational culture, employee engagement and Human Resource development strategies as well as other factors not discussed in this research.
2. It is necessary to carry out a more in-depth analysis regarding the relationship between transformational leadership variables, organizational culture on employee engagement and Human Resource development strategies, whether there are other variables that influence both, such as company type, company geography, or whether the company environment has a positive influence so that produce new findings.
3. Other researchers can conduct research with more diverse samples from various industries and geographic regions to test the generalizability of this research's findings. Comparative studies between industries can also provide further insight into the specific contexts that influence relationships between variables.
4. The method used in this research is a quantitative research method so that qualitative approaches can be added such as in-depth interviews and focus group discussions to gain a richer understanding of employee perceptions and experiences related to leadership, organizational culture and engagement.
5. Little research has been carried out linking Human Resource development strategy variables, so it is hoped that variations in the item constructs in the questionnaire can be carried out. Use statement sentences that delve deeper into employee thoughts, feelings and behavior, so that the results obtained are valid and reliable.

6. Employees are expected to be able to build harmony with colleagues and be able to collaborate in completing work.
 7. In planning Human Resources development at the design stage the technical skills and soft skills development program must be in accordance with job demands and developments in the mining industry. Program implementation must take into account differences in employee working hours in production areas, so companies must arrange time so that the program can be implemented in accordance with employee plans and needs.
 8. In the Human Resources development strategy process, carry out an evaluation process of programs that have been implemented so that in the future the programs are more targeted
 9. Clear and structured career development programs for employees, including career paths, opportunities and transparent development processes.
- From these recommendations, companies need to plan and design appropriate strategies to improve employee quality. Companies need to develop employees through training and development, as well as retain employees by providing rewards in the form of prizes, incentives, career opportunities, or simply saying thank you as a form of appreciation for the employee's hard work.

References:

- Akpa, V. O., Asikhia, O. U., & Nneji, N. E. (2021). Organizational culture and organizational performance: A review of literature. *International Journal of Advances in Engineering and Management*, 3(1), 361-372.
- Allison, M., & Kaye, J. (2011). Strategic planning for nonprofit organizations: A practical guide and workbook. John Wiley & Sons.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International journal of productivity and performance management*, 63(3), 308-323.
- Aris, A. A. (2024). Human Resource Assessment and Management. *Formosa Journal of Multidisciplinary Research*, 3(1), 245-254.
- Bass, B. M., & Avolio, B. J. (Eds.). (1994). Improving organizational effectiveness through transformational leadership. sage.).
- Boon Ooi, K., Abu Bakar, N., Arumugam, V., Vellapan, L., & Kim Yin Loke, A. (2007). Does TQM influence employees' job satisfaction? An empirical case analysis. *International Journal of Quality & Reliability Management*, 24(1), 62-77.
- Byrne, Z. S. (2022). Understanding employee engagement: Theory, research, and practice. Routledge.
- Chew, Y. T., & Choo, S. M. (2008). A study of the change management and challenges in a bank. *Research and Practice in Human Resource Management*, 16(2), 100-118.
- Darus Altin, S. E. (2022). Struktur Organisasi. *Organisasi dan Manajemen*, 41-56.
- Dessler, G. (1997). Human resource management. Prentice Hall.
- Gregory, B. T., Harris, S. G., Armenakis, A. A., & Shook, C. L. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes. *Journal of business research*, 62(7), 673-679.
- Harahap, D. S. (2019). Pengaruh Kepemimpinan Dan Kompensasi Terhadap Kepuasan Kerja Melalui Motivasi Kerja Pada PT PLN (Persero) Unit Induk Pembangkit Sumatera Bagian Utara. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 2(1), 69-88.
- Hardiyanti, G. R., Aima, M. H., & Ridwansyah, M. (2022). The Influence of Corporate Culture and Transformational Leadership against Employee Performance Mediated By Employee Engagement at PT PLN (Persero) UP3 Kebon Jeruk. *Dinasti. International Journal of Education Management and Social Science*, 3(3), 373-391.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724
- Kotler, P. & Armstrong, G. (2008). Principles of Marketing. New Delhi, PHI publications Ltd.
- Kreitner, R., & Kinicki, A. (2005). Perilaku organisasi. Jakarta: Salemba Empat.
- McCracken, M., Currie, D., & Harrison, J. (2016). Understanding graduate recruitment, development and retention for the enhancement of talent management: Sharpening 'the edge' of graduate talent. *The International Journal of Human Resource Management*, 27(22), 2727-2752.
- Octaviannand, R., Pandjaitan, N. K., & Kuswanto, S. (2017). Effect of Job Satisfaction and Motivation towards Employee's Performance in XYZ Shipping Company. *Journal of education and practice*, 8(8), 72-79.
- Piowar-Sulej, K. (2021). Human resources development as an element of sustainable HRM—with the focus on production engineers. *Journal of cleaner production*, 278, 124008.
- Poutiatine, M. I. (2009). What is transformation?: Nine principles toward an understanding of the transformational process for transformational leadership. *Journal of Transformative Education*, 7(3), 189-208.
- Priyatna, M. (2016). Manajemen pengembangan sdm pada lembaga pendidikan Islam. *Edukasi Islami: Jurnal Pendidikan Islam*, 5(09), 21-21.
- Rahayu, S., Yayandi, M., & Priyatna, H. N. (2024). Analisis Pengaruh LDR, NPL & Bopo Terhadap Kinerja Keuangan (ROE) Perbankan Yang Terdaftar Di Bursa Efek Indonesia 2011-2015. *Innovative: Journal of Social Science*

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Research, 4(3), 18546-18562.

- Robbins, S. P., & Judge, T. A. (2003). *Organizational Behavior*. By Pearson Education. Inc., Upper Saddle River, New Jersey.
- Supriyadi, I., Khamdari, E., & Susilowati, F. (2020). Peran manajemen sumber daya manusia dalam peningkatan kinerja perusahaan konstruksi. *Orbith: Majalah Ilmiah Pengembangan Rekayasa dan Sosial*, 16(1), 27-34.
- Werner, J. M. (2014). Human resource development≠ human resource management: So what is it?. *Human Resource Development Quarterly*, 25(2), 127-139. DOI: 10.1002/hrdq.21188
- Yakup, Y. (2017). Pengaruh Keterlibatan Kerja, Budaya Organisasi dan Motivasi Kerja terhadap Kepuasan Kerja Pegawai. *Perisai : Islamic Banking and Finance Journal*, 1(3). 270-209. DOI:10.21070/perisai.v1i3.1112.
- Yammarino, F. J., Spangler, W. D., & Bass, B. M. (1993). Transformational leadership and performance: A longitudinal investigation. *The Leadership Quarterly*, 4(1), 81-102. DOI: 10.1016/1048-9843(93)90005-E.

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