

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu¹⁾, Kiki Farida Ferne²⁾, Sri Rahayu³⁾

¹⁾Master of Management Student, Universitas Pembangunan Pancabudi, Indonesia

^{2),3)} Universitas Pembangunan Pancabudi, Indonesia

E-mail: Bertagracela149@gmail.com

Correspondence author: kikifaridaferinesyarif@gmail.com, sriahayu@dosen.pancabudi.ac.id

Received : 25 July 2025

Published : 27 August 2025

Revised : 01 August 2025

DOI : <https://doi.org/10.54443/ijeas.v5i4.3916>

Accepted : 24 August 2025

Published links : <https://radjapublika.com/index.php/IJEBAJ>

Abstract

This study aims to analyze the influence of rewards, transformational leadership, and work environment on employee loyalty with job satisfaction as a moderating variable at PT PLN (Persero) Customer Service Implementation Unit (UP3) Padangsidimpuan. This study is motivated by the importance of maintaining employee loyalty so that the company can achieve its goals effectively and sustainably. The population of this study was all employees of PT PLN (Persero) UP3 Padangsidimpuan with a total of 86 respondents determined through saturated sampling techniques. The research method used was quantitative with a questionnaire instrument analyzed using Partial Least Square (PLS). The results showed that rewards had a positive and significant effect on employee loyalty. Transformational leadership was proven to have a positive and significant effect on employee loyalty, as well as a conducive work environment that can increase employee loyalty. In addition, job satisfaction acts as a moderating variable that strengthens the relationship between rewards, transformational leadership, and work environment on employee loyalty. Thus, it can be concluded that to increase employee loyalty, companies need to pay attention to providing fair rewards, implementing transformational leadership, creating a comfortable work environment, and maintaining employee job satisfaction.

Keywords: *Reward, Transformational Leadership, Work Environment, Job Satisfaction, Employee Loyalty*

BACKGROUND

Human resources (HR) refer to all individuals who have the potential and ability to work within an organization or society. Generally, HR encompasses all workers, whether skilled, unskilled, or those with specialized education and training, who are expected to contribute to achieving organizational or national goals. Human Resources (HR) are one of the most important assets in an organization. HR plays a vital role in achieving company goals because HR is directly responsible for implementing all strategies and activities that support the achievement of the organization's vision and mission. Quality HR not only contributes to productivity but also plays a determining factor in innovation, service quality, and company competitiveness. Specifically, HR plays a key role in carrying out various operational processes, including decision-making, management, and the management of technology and other resources. PT PLN (Persero), as a state-owned company responsible for providing electricity in Indonesia, plays a very important strategic role in the national economy. In this regard, HR plays a key role in ensuring operational continuity and the success of the company's ongoing transformation. As a company that plays a vital role in the electricity sector, PT PLN (Persero) must have human resources who not only possess technical expertise in the electricity sector, but also the ability to adapt to rapid technological developments, changing regulations, and the challenges faced in efforts to achieve national development targets, such as equitable electricity distribution and increased energy efficiency. Therefore, PT PLN (Persero) needs to

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

ensure that employees have relevant competencies and skills, and are ready to face new challenges in the ever-evolving energy industry. Furthermore, the success of PT PLN (Persero) in carrying out its strategic tasks—such as providing reliable and sustainable electricity services, developing renewable energy projects, and improving service quality—also depends heavily on how the company manages its human resources. Employee development programs, a healthy work environment, leadership styles, and awards for work performance, for example, will have a direct impact on increasing employee motivation and loyalty, which in turn will increase the company's productivity and operational efficiency. At a strategic level, human resources play an irreplaceable role in building a work environment that supports the achievement of long-term goals. Competent, motivated employees with a sense of loyalty to the company will work with high dedication, making a positive contribution to organizational performance. Conversely, if HR management is not properly managed, problems such as high turnover rates, low job satisfaction, and decreased work quality can arise, ultimately hindering the achievement of company goals.

Employee loyalty is a crucial element in achieving a company's long-term goals. In an increasingly competitive environment, companies need to focus on effective human resource management to create a positive work climate, minimize turnover rates, and improve performance. Various factors can influence employee loyalty, including reward programs, transformational leadership, and the work environment. However, the influence of these factors on employee loyalty cannot be viewed in isolation, as other factors can moderate the relationship, namely job satisfaction. Reward programs are a strategy often used by companies to recognize employee contributions. These reward programs encompass not only financial rewards, such as bonuses or incentives, but also non-financial rewards, such as recognition for achievement, career development opportunities, and a supportive work environment. Pratama & Haryanto (2022) found in their research that the rewards employees receive are directly related to increased job satisfaction and loyalty to the company. Appropriate rewards can make employees feel valued, which in turn can strengthen their engagement with the company. Transformational leadership is a leadership style in which leaders inspire and motivate employees to achieve organizational goals by involving changes in the way employees think and act. Transformational leaders can create a strong vision and inspire employees. This often increases loyalty because employees feel connected to the goals and values of the company led by a caring leader. Research by Wahyu S. & Anwar S. (2019) shows that transformational leadership has a positive effect on employee loyalty.

Leaders who apply a transformational leadership style, such as providing inspiration and individual attention, have more loyal employees. Furthermore, research by Siti M. & Hamzah U. (2021) shows that transformational leadership not only directly affects employee loyalty but also increases job satisfaction, which then has an impact on loyalty. Transformational leadership that prioritizes employee job satisfaction can increase long-term loyalty. The work environment refers to the physical, social, and psychological conditions in the workplace that can affect employee behavior and well-being. The work environment encompasses not only physical facilities such as office space, equipment, and cleanliness, but also social and psychological aspects such as employee relationships, management support, organizational culture, and workplace values and norms. Research conducted by Eka M. & Rizki S. (2021) found that aspects of the work environment, such as relationships between coworkers, recognition from leaders, and opportunities for career development, are strongly positively related to employee loyalty. However, the relationship between reward programs, transformational leadership, and the work environment with employee loyalty is not always direct. Job satisfaction plays an important role in strengthening or moderating the influence of these factors on loyalty. Job satisfaction refers to employees' feelings about various aspects of their work, such as relationships with coworkers, rewards received, and overall working conditions. Research by Sartika & Santoso (2022) found that job satisfaction functions as a moderating variable that strengthens the positive influence between motivational factors (such as rewards and company culture) on employee loyalty.

Formulation of the problem

1. Does Reward have a positive and significant effect on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan?
2. Does transformational leadership have a positive and significant influence on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan?
3. Does the work environment have a positive and significant influence on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan?

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu **et al**

4. Does job satisfaction have a positive and significant effect on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan?
5. Does Reward have a positive and significant effect on employee loyalty in moderating Job Satisfaction at PT PLN (Persero) UP3 Padangsidimpuan?
6. Does transformational leadership have a positive and significant effect on employee loyalty in moderating job satisfaction at PT PLN (Persero) UP3 Padangsidimpuan?
7. Does the work environment have a positive and significant effect on employee loyalty in moderating job satisfaction at PT PLN (Persero) UP3 Padangsidimpuan?

Research Objectives

The objectives to be achieved in this research are to find out and analyze:

1. To test and analyze the influence of rewards on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan
2. To test and analyze the influence of transformational leadership on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan
3. To test and analyze the influence of the work environment on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan
4. To test and analyze the influence of job satisfaction on employee loyalty at PT PLN (Persero) UP3 Padangsidimpuan
5. To test and analyze the influence of rewards on employee loyalty moderated by job satisfaction at PT PLN (Persero) UP3 Padangsidimpuan
6. To test and analyze the influence of transformational leadership on employee loyalty moderated by job satisfaction at PT PLN (Persero) UP3 Padangsidimpuan
7. To test and analyze the influence of the work environment on employee loyalty moderated by job satisfaction at PT PLN (Persero) UP3 Padangsidimpuan

Benefits of research

1. Theoretical Benefits

This research is expected to contribute to the development of science, especially in the field of Human Resource Management (HR), by:

1. Provides empirical support for theories related to rewards, transformational leadership, work environment, job satisfaction, and employee loyalty.
2. To be a scientific reference for further research that wants to examine the relationship between motivational and leadership factors on employee loyalty, especially by considering the moderating variable of job satisfaction.
3. Enriching the literature on the influence of internal and external organizational factors on employee loyalty, especially in the context of state-owned enterprises (BUMN) in Indonesia.

2. Practical Benefits

This research also provides practical benefits, especially for the management of PT PLN (Persero) UP3 Padangsidimpuan, namely:

1. Provides deeper information and understanding of the factors that influence employee loyalty, so that companies can take strategic steps to improve it.
2. It is the basis for formulating policies in the employee management system related to reward systems, leadership styles, and the creation of a more conducive work environment.
3. Helping management understand the important role of job satisfaction as a variable that strengthens or weakens the influence of rewards, leadership, and work environment on loyalty, so that the policies implemented are more targeted.
4. Provide evaluation and improvement materials for the current employee management system to be more effective in retaining loyal and high-performing employees.

Literature review

Employee Loyalty

According to Dutta and Dhir (2021), employee loyalty is an emotional, cognitive, and behavioral attachment that demonstrates long-term commitment to the organization.

Employee Loyalty Indicators

According to Dutta and Dhir (2021), employee loyalty indicators are:

- a. Sense of ownership.
A sense of belonging to the organization, employees feel like they are working on their own behalf, caring and committed
- b. Willingness to stay
The desire and willingness of employees to remain employed by the organization in the long term long
- c. Trust
The level of employee trust in the organization believes that the organization

Factors Influencing Employee Loyalty

According to Runtu (2020):

1. Personal Characteristics:
It covers various aspects of individual employees such as age, length of service, gender, education level, achievements, interests, and personality traits.
2. Job Characteristics:
These factors relate to the job itself, including job challenges, stress levels, social opportunities, recognition for work, feedback provided, and how well the job fits the employee.
3. Corporate Design Characteristics:
This includes internal company factors such as the level of formality, the level of participation in decision-making, and the level of responsibility given to employees.
4. Company Experience:
Employees' experiences interacting and working with the company, including how the company treats them, how safe they feel, and whether the company makes decisions that take their interests into account.

According to Runtu (2020), employee loyalty arises when their work fulfills their life needs. In other words, when employees are satisfied with their jobs and feel valued by the company, they tend to be more loyal.

Reward

According to **Armstrong & Taylor (2017)** Rewards are a crucial factor in work motivation. Good compensation, both material and non-material, can motivate employees to improve their performance and stay with the company longer. Modern rewards encompass both financial and non-financial compensation, which impact motivation and loyalty. Hidayat et al. (2019) emphasize that fair, transparent, and consistent rewards directly contribute to employee engagement and loyalty.

Reward Indicator

According to **Armstrong & Taylor (2017)** is:

- a. Attract, Motivate, Retain
 1. Attract / Interesting
Rewards (whether salary, allowances or other facilities) are designed so that the company... attractive to qualified prospective employees.
 2. Motivate
Rewards are used to encourage existing employees to work better and achieve targets.

3. Retain / Maintain

Rewards must also be able to make employees feel at home and not move to other companies.

- b. Business aligned (aligned with Business)
- c. Financial (salary, bonuses, incentives) and Non-Financial (development, recognition, etc.)

Transformational Leadership

According to Bass (2017) Transformational leadership is a leadership style in which leaders strive to motivate, inspire, and positively change their followers. Transformational leaders focus on developing individual potential through clear communication, a compelling vision, and building closer, more personal relationships with followers.

Transformational Leadership Indicators

According to Bass (2017) indicators of transformational leadership:

- 1. Idealized Influence (Ideal Influence)
 - a. Leaders become role models who are admired, trusted and respected by followers.
 - b. Demonstrate integrity, commitment, and consistency of values to inspire respect and loyalty.
- 2. Inspirational Motivation
 - a. Leaders are able to inspire and motivate followers through clear vision, optimism, and high spirits.
 - b. Encourage followers to feel their work is meaningful and has a greater purpose.
- 3. Intellectual Stimulation
 - a. Leaders encourage followers to think creatively, innovatively, and look at problems from new perspectives.
 - b. Provide intellectual challenges and support independent problem solving.
- 4. Individualized Consideration
 - a. Leaders pay attention to the unique needs, aspirations, and potential of each follower.
 - b. Providing guidance, training and personal support for self-development.

Work environment

According to Edwards (2017) The work environment refers to various factors in the workplace that influence employee performance and well-being. The work environment encompasses physical, social, and organizational aspects that can influence motivation, job satisfaction, and productivity. Khan et al. (2021) stated that a physically and psychologically healthy work environment encourages employee loyalty. A supportive environment creates a sense of well-being and enhances a sense of belonging to the company.

Work environment indicators

According to Edwards (2017) work environment indicators are:

- 1. Physical work facilities
- 2. Social climate and employee relations
- 3. Management support and organizational culture

Job satisfaction

According to Judge & Klinger (2017), job satisfaction is the positive or negative feelings that individuals have towards their work, which is influenced by factors such as the work itself, rewards, and relationships with coworkers.

Job Satisfaction Indicators

Job Satisfaction Indicators according to Judge & Klinger (2017), namely:

- 1. Salary / pay
- 2. Promotion / promotion opportunities
- 3. Coworkers
- 4. Supervision
- 5. The work itself

Conceptual Framework

The following is a picture of the conceptual framework of this research.

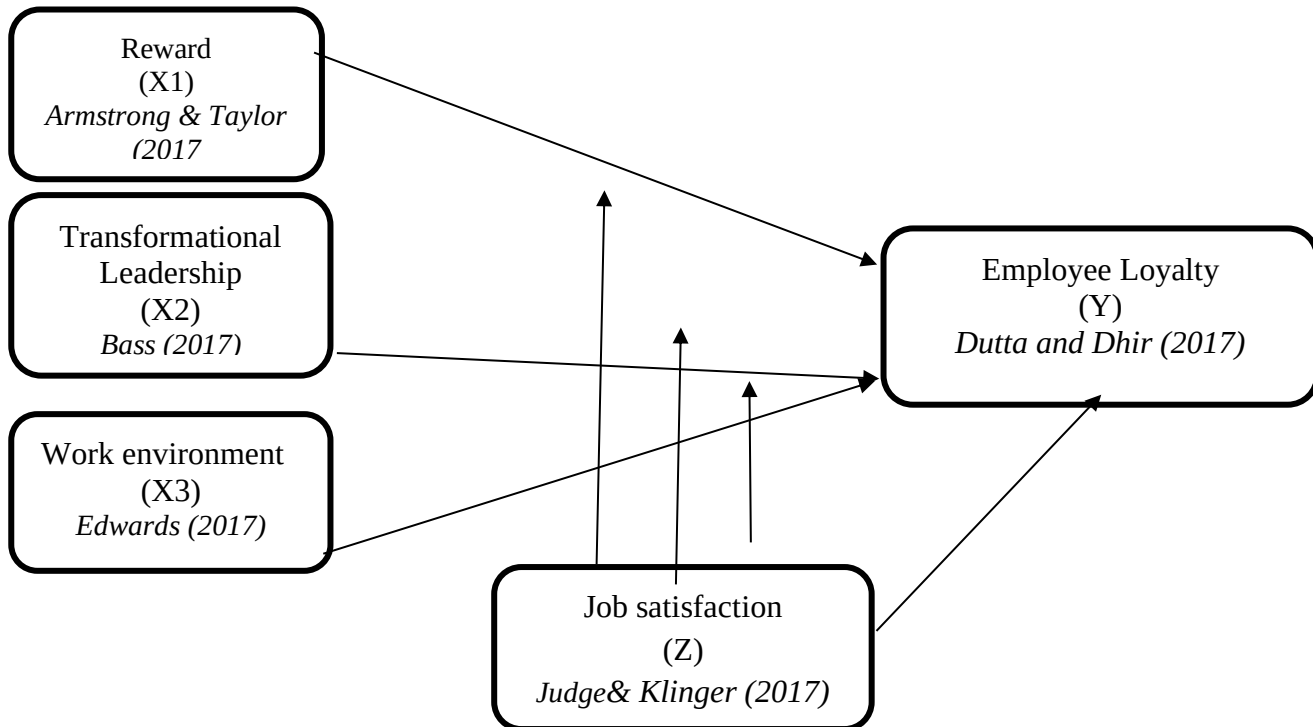


Figure 1: Conceptual Framework

Hypothesis

The hypothesis in this study is as follows:

- H1 : Rewards have a positive and significant effect on employee loyalty at PLN UP3 Padangsidimpuan
- H2: Transformational leadership has a positive and significant effect on loyalty. Employees at PLN UP3 Padangsidimpuan
- H3: The work environment has a positive and significant influence on employee loyalty at PLN. UP3 Padangsidimpuan
- H4: Job satisfaction has a positive and significant effect on employee loyalty at PLN. UP3 Padangsidimpuan
- H5: Rewards have a positive and significant effect on Employee Loyalty in moderation. Job satisfaction at PLN UP3 Padangsidimpuan
- H6 : Transformational leadership has a positive and significant influence on loyalty Employees in Job Satisfaction Moderation at PLN UP3 Padangsidimpuan
- H7: Work environment has a positive and significant influence on employee loyalty in Moderation of Job Satisfaction at PLN UP3 Padangsidimpuan

Types of research

This research uses quantitative methods with descriptive and causal approaches. Descriptive research aims to provide an overview of the variables studied, while causal research is used to analyze the cause-and-effect relationships

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

between independent variables, moderating variables, and dependent variables. According to Sugiyono (2017), quantitative methods are used to test hypotheses using statistical analysis tools.

Time and Location of Research

This research was conducted at PT PLN (Persero) UP3 Padangsidimpuan. Data collection took place from June to August 2025.

Population and Sample

Population: The population in this study was all employees of PT PLN (Persero) UP3 Padangsidimpuan, totaling 86 people.

Sample: This study used a saturated sampling technique, where all members of the population were sampled. According to Sugiyono (2017), the saturated sampling technique is used when the population is relatively small so that the entire population can be studied.

Research Data Sources

- Primary Data: Data obtained directly from respondents through questionnaires that have been designed according to the research variable indicators.
- Secondary Data: Data obtained from documents, reports, or official sources of PT PLN (Persero) UP3 Padangsidimpuan and related literature.

Data collection technique

Data collection was conducted using a survey method using a structured questionnaire. This questionnaire consists of statements that measure each research variable based on predetermined indicators.

Data Analysis Techniques

The data analysis technique was carried out using Partial Least Squares-Structural Equation Modeling (PLS-SEM), which is operated through SmartPLS software. According to Hair et al. (2017), PLS-SEM is used to analyze the relationship between variables with data that does not have to strictly meet the assumption of normality.

Operational Definition of Research Variables

Table 1. Operational Definition of Variables

Variable Types	Definition	Indicator
Employee Loyalty (Y)	According to Dutta and Dhir (2021), employee loyalty is an emotional, cognitive, and behavioral attachment that indicates long-term commitment to the organization.	According to Dutta and Dhir (2021) a. Sense of ownership. b. Willingness to stay c. rust
Reward(X1)	According to Armstrong & Taylor (2017), rewards are a crucial factor in work motivation. Good compensation, both material and non-material, can motivate employees to improve their performance and stay with the company longer.	According to Armstrong & Taylor (2017): a. Attract, Motivate, Retain b. Business aligned (aligned with Business) c. Financial (salary, bonuses, incentives) and Non-Financial (development, recognition, etc.)

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

Transformational Leadership (X2)	According to Bass (2017), transformational leadership is a leadership style in which leaders strive to motivate, inspire, and change their followers in a positive way. Transformational leaders focus on developing individual potential through clear communication, a compelling vision, and building closer, more personal relationships with followers.	According to Bass (2017) 1. Idealized Influence (Ideal Influence) 2. Inspirational Motivation 3. Intellectual Stimulation 4. Individualized Consideration
Work Environment (X3)	According to Edwards (2017), the work environment refers to various factors in the workplace that influence employee performance and well-being. The work environment encompasses physical, social, and organizational aspects that can influence motivation, job satisfaction, and productivity.	1. Physical work facilities 2. Social climate and relationships between employees 3. Management support and organizational culture (Edwards, 2017)

Variable Types	Definition	Indicator
Job Satisfaction(Z)	According to Judge & Klinger (2017), job satisfaction is the positive or negative feelings that individuals have towards their work, which is influenced by factors such as the work itself, rewards, and relationships with coworkers.	1. Salary / pay 2. Promotion / promotion opportunities 3. Coworkers 4. Supervision 5. The work itself (According to Judge & Klinger (2017),

Data Analysis Model

The analysis model used in this study is MRA (Moderated Regression Analysis), which is a multiple regression analysis technique used to test whether the relationship between the independent variable (X) and the dependent variable (Y) is influenced or depends on the level of another variable called the moderator (M).

Characteristics of MRA

- The form is the same as ordinary linear regression, but adds an interaction variable ($X \times M$).
- The moderator does not have to have a direct relationship with Y, but the influence of X on Y can change when M changes.
- Generally, data are centered (reduced to the mean) before forming interaction terms, to avoid multicollinearity.

RESULTS AND DISCUSSION

Outer Model Analysis

The outer model analysis aims to test the validity and reliability of the indicators against the research constructs. Based on the results of data processing using SmartPLS, it was found that all indicators had loading factor values above 0.7. This indicates that each indicator is able to reflect the latent variables well and can therefore be declared convergently valid. The Average Variance Extracted (AVE) value for each construct is also above 0.5, meaning that more than 50% of the indicator's variance can be explained by the construct. Thus, it can be concluded that all constructs meet the requirements for convergent validity.

Convergent Validity

Convergent validity is used to assess the extent to which indicators within a construct are interrelated and capable of reflecting that construct. Testing is carried out using loading factor values and Average Variance Extracted (AVE). The analysis results show that all indicators in this study have loading factor values above 0.7, thus they can be declared valid. This means that each indicator is able to represent the construct it measures well. Furthermore, the AVE value for each construct is above 0.5, indicating that more than 50% of the indicator's variance can be explained by the latent construct. Thus, all constructs have met the criteria for convergent validity.

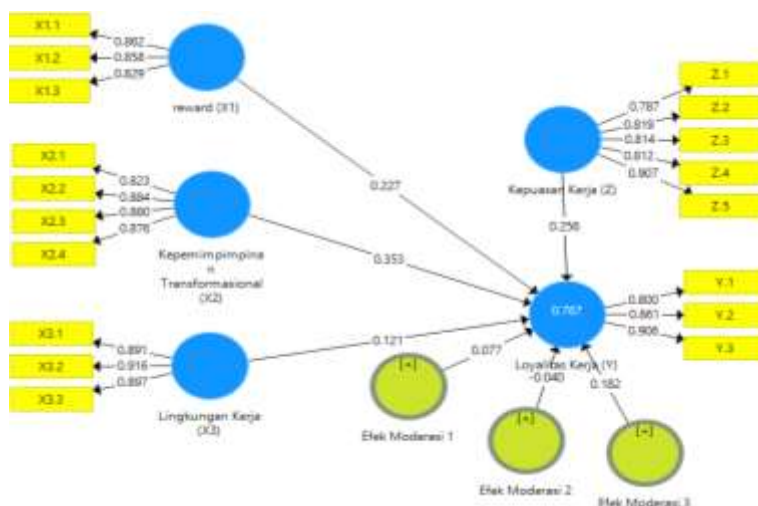


Figure 1. Outer Model

The Smart PLS output for loading factor gives the results in the following table: Outer Loadings In this study there is an equation and the equation consists of two equations.

$$Y = b_1X_1 + b_2Z + b_3X_1Z \quad e_1$$

$$Y = 0.227 + 0.256 + 0.007 + e_1$$

$$Y = b_2X_2 + b_3Z + b_4X_2Z + e_2$$

$$Y = 0.353 + 0.256 - 0.040 + e_2$$

$$Y = b_3X_3 + b_4Z + b_5X_3Z + e_2$$

$$Y = 0.121 + 0.256 + 0.182 + e_2$$

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

Table 2. Outer Loadings

	Moderation Effect 1	Moderation Effect 2	Moderation Effect 3	Transformational Leadership (X2)	Job Satisfaction (Z)	Work Environment (X3)	Work Loyalty (Y)	reward (X1)
Transformational Leadership (X2) * Job Satisfaction (Z)		0.843						
Work Environment (X3) * Job Satisfaction (Z)			0.814					
X1.1								0.862
X1.2								0.858
X1.3								0.829
X2.1				0.823				
X2.2				0.884				
X2.3				0.880				
X2.4				0.876				
X3.1						0.891		
X3.2						0.916		
X3.3						0.897		
Y.1							0.800	
Y.2							0.861	
Y.3							0.906	
Z.1					0.787			
Z.2					0.819			
Z.3					0.814			
Z.4					0.812			
Z.5					0.907			
reward (X1) * Job Satisfaction (Z)	0.887							

Source: Smart PLS 3.3.3.

Outer model analysis was used to test the validity and reliability of indicators against the research constructs. Based on the results of data processing using SmartPLS, all indicators in this study met the requirements for convergent validity. This can be seen from the loading factor values for each indicator which are above 0.70. For example, the Reward variable

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

indicator (X1) has a loading of 0.862; 0.858; and 0.829. The Transformational Leadership indicator (X2) shows a loading between 0.823–0.884, the Work Environment indicator (X3) between 0.891–0.916, the Work Loyalty indicator (Y) between 0.800–0.906, and the Job Satisfaction indicator (Z) between 0.787–0.907. Similarly, moderation indicators such as Reward * Job Satisfaction (0.887), Transformational Leadership * Job Satisfaction (0.843), and Work Environment * Job Satisfaction (0.814) also meet the validity criteria. The Average Variance Extracted (AVE) value for all constructs was greater than 0.50, indicating that more than 50% of the indicator variance was explained by the construct. Thus, all constructs met the convergent validity criteria.

Discriminant Validity

Discriminant validity is used to ensure that each construct in the study is truly distinct from one another and that the indicators used better reflect their respective constructs compared to other constructs. Discriminant validity testing is conducted using three approaches: cross-loading, the Fornell-Larcker Criterion, and the Heterotrait-Monotrait Ratio (HTMT). The analysis results show that the cross-loading value of each indicator is higher for the construct it measures compared to other constructs. This means that each indicator better represents its own variable.

Table 3. Discriminant Validity

	Moderation Effect 1	Moderation Effect 2	Moderation Effect 3	Transformational Leadership (X2)	Job Satisfaction (Z)	Work Environment (X3)	Work Loyalty (Y)	reward (X1)
Transformational Leadership (X2) * Job Satisfaction (Z)	0.812	1,000	0.766	-0.164	-0.365	-0.111	-0.077	-0.208
Work Environment (X3) * Job Satisfaction (Z)	0.737	0.766	1,000	-0.115	-0.129	0.048	0.074	-0.135
X1.1	-0.274	-0.229	-0.128	0.718	0.783	0.747	0.710	0.862
X1.2	-0.176	-0.152	-0.141	0.747	0.662	0.642	0.701	0.858
X1.3	-0.183	-0.144	-0.068	0.702	0.600	0.540	0.611	0.829
X2.1	-0.209	-0.158	-0.173	0.823	0.617	0.612	0.620	0.706
X2.2	-0.137	-0.093	-0.065	0.884	0.618	0.752	0.719	0.726
X2.3	-0.131	-0.115	-0.051	0.880	0.665	0.741	0.734	0.743
X2.4	-0.213	-0.202	-0.120	0.876	0.782	0.721	0.753	0.769
X3.1	-0.127	-0.069	0.019	0.757	0.627	0.891	0.702	0.726
X3.2	-0.104	-0.066	0.090	0.764	0.701	0.916	0.728	0.688
X3.3	-0.104	-0.172	0.017	0.690	0.659	0.897	0.660	0.645
Y.1	-0.150	-0.123	0.093	0.569	0.664	0.552	0.800	0.632
Y.2	-0.058	-0.056	0.051	0.706	0.626	0.672	0.861	0.687
Y.3	-0.042	-0.029	0.052	0.810	0.689	0.749	0.906	0.723
Z.1	-0.199	-0.246	-0.042	0.660	0.787	0.603	0.582	0.685
Z.2	-0.337	-0.265	-0.134	0.638	0.819	0.596	0.622	0.632
Z.3	-0.429	-0.373	-0.107	0.545	0.814	0.555	0.618	0.644
Z.4	-0.381	-0.366	-0.171	0.626	0.812	0.586	0.632	0.686
Z.5	-0.293	-0.265	-0.080	0.741	0.907	0.698	0.722	0.699
reward (X1) * Job Satisfaction (Z)	1,000	0.812	0.737	-0.198	-0.395	-0.124	-0.092	-0.249

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

The results of the discriminant validity test using cross-loading showed that each indicator had a higher loading value on its own construct compared to other constructs. Meanwhile, the Fornell-Larcker criteria were also met, where the square root of the AVE of each construct was higher than the correlation between other constructs. The Heterotrait-Monotrait Ratio (HTMT) test also produced a value below 0.90, indicating no discrimination problems between constructs. Thus, all constructs can be clearly distinguished from each other and have met the criteria for discriminant validity. In terms of reliability, the Composite Reliability (CR) value for all variables was greater than 0.70 and the Cronbach's Alpha value was also above 0.70. This indicates that all constructs have good internal consistency and can be relied upon as measuring instruments. Overall, the results of the outer model analysis indicate that the indicators of this study are valid and reliable, both in terms of convergent, discriminant, and reliability. Therefore, the measurement model (outer model) is feasible and can be used for further testing on the structural model (inner model).

Composite reliability

Construct reliability was tested using two measures: Composite Reliability (CR) and Cronbach's Alpha. These two measures demonstrate the internal consistency of the indicators that make up a construct. The criteria used were a CR value of ≥ 0.70 and a Cronbach's Alpha value of ≥ 0.70 for a construct to be considered reliable. The processing results are as follows:

Table 4. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Moderation Effect 1	1,000	1,000	1,000
Moderation Effect 2	1,000	1,000	1,000
Moderation Effect 3	1,000	1,000	1,000
Transformational Leadership (X2)	0.889	0.923	0.750
Job Satisfaction (Z)	0.885	0.916	0.687
Work Environment (X3)	0.885	0.929	0.813
Work Loyalty (Y)	0.818	0.892	0.734
reward (X1)	0.808	0.886	0.722

Source: Smart PLS 3.3.3.

All research constructs met the reliability and convergent validity criteria, with Cronbach's Alpha values > 0.70 , Composite Reliability > 0.70 , and AVE > 0.50 . This indicates that the indicators used have good internal consistency and are able to accurately represent the latent constructs. Thus, the measurement model (outer model) is declared feasible, and the analysis can proceed to testing the structural model (inner model).

Inner Model Analysis

The structural model (inner model) is evaluated to ensure the resulting base model is robust and correct. Several markers that can be used to identify the stages of the main model assessment include:

Coefficient of Determination (R2)

Based on the data processing that has been carried out using the SmartPLS 3.0 program, the R Square value is obtained as follows:

Table 5. R Square Results

	R Square	Adjusted R Square
Work Loyalty (Y)	0.767	0.746

Source: Smart PLS 3.3.3.

The R-square value of 0.767 indicates that the independent variables in the research model (Rewards, Transformational Leadership, Work Environment, and Job Satisfaction as a moderating variable) can explain 76.7% of the variation in Job Loyalty. Meanwhile, the remaining 23.3% is explained by other factors outside the research model.

Hypothesis Testing

Hypothesis testing in this study was conducted using the Partial Least Square – Structural Equation Modeling (PLS-SEM) approach through the SmartPLS application. This test aims to determine whether the independent variables, namely Reward, Transformational Leadership, and Work Environment, have an influence on the dependent variable, namely Job Loyalty, either directly or indirectly through Job Satisfaction as an intervening variable. The results of the hypothesis testing are determined based on the T-Statistics and P-Values obtained from the bootstrap calculation. A hypothesis is declared accepted if the T-Statistics value is greater than 1.96 and the P-Values value is less than 0.05. Conversely, if the T-Statistics value is less than 1.96 and the P-Values value is greater than 0.05, then the hypothesis is declared rejected. The results of the hypothesis are as follows:

Table 6. Hypothesis Results

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Moderation Effect 1 -> Job Loyalty (Y)	0.077	0.618	0.268	Rejected
Moderation Effect 2 -> Job Loyalty (Y)	-0.040	0.308	0.379	Rejected
Moderation Effect 3 -> Job Loyalty (Y)	0.182	1,238	0.108	Rejected
Transformational Leadership (X2) -> Work Loyalty (Y)	0.353	2,689	0.004	Accepted
Job Satisfaction (Z) -> Job Loyalty (Y)	0.256	2,282	0.011	Accepted
Work Environment (X3) -> Work Loyalty (Y)	0.121	1,007	0.157	Rejected
reward (X1) -> Work Loyalty (Y)	0.227	1,744	0.041	Accepted

Source: Smart PLS 3.3.3.

After getting the hypothesis results, the explanation per hypothesis is as follows:

1. The test results show that rewards have a positive and significant effect on employee loyalty, with a T-statistic of 1.744 (close to 1.96) and a P-value of 0.041 (<0.05). This means the hypothesis is accepted. This means that the better the fairness of rewards, the higher the employee's loyalty to the organization.
2. The test results show that transformational leadership has a positive and significant effect on employee loyalty, with a T-statistic value of 2.689 (> 1.96) and a P-value of 0.004 (< 0.05). This means that this hypothesis is accepted. This indicates that the better the implementation of transformational leadership, the greater employee loyalty will be. Leaders who are able to provide vision, motivation, and personal attention to their subordinates will encourage employees to be more loyal to the organization.
3. The test results show that the work environment does not significantly influence employee loyalty, with a T-Statistic value of 1.007 (<1.96) and P-Values of 0.157 (>0.05). Thus, the hypothesis is rejected. These results indicate that a

THE EFFECT OF REWARDS, TRANSFORMATIONAL LEADERSHIP AND WORK ENVIRONMENT ON EMPLOYEE LOYALTY WITH JOB SATISFACTION AS A MODERATING VARIABLE AT PT PLN (PERSERO) CUSTOMER SERVICE IMPLEMENTATION UNIT (UP3) PADANGSIDIMPUAN

Berta Gracela Manalu et al

good work environment alone cannot necessarily increase employee loyalty if it is not accompanied by other factors such as leadership and job satisfaction.

4. Tests show that job satisfaction has a positive and significant influence on job loyalty, with a T-statistic of 2.282 (> 1.96) and a P-value of 0.011 (< 0.05). Therefore, this hypothesis is accepted. These findings support the view that employees who are satisfied with their jobs tend to be more loyal, committed, and stay longer in the organization.
5. The test results show that the first moderation effect does not significantly influence job loyalty, with a T-statistic value of 0.618 (< 1.96) and a significance value of 0.268 (> 0.05). This means that the first moderation is unable to strengthen or weaken the relationship between the independent variable and job loyalty. This finding indicates that in the context of the study, this moderating variable does not play a significant role in explaining changes in employee job loyalty.
6. The test results indicate that the second moderation effect does not significantly influence job loyalty, with a T-statistic value of 0.308 (< 1.96) and a P-value of 0.379 (> 0.05). Therefore, this hypothesis is rejected. These results indicate that the second moderation effect is unable to provide a significant contribution in strengthening the relationship with employee job loyalty.
7. The test results show that the moderating effect of variable 3 is also insignificant on work loyalty, as indicated by a T-statistic of 1.238 (< 1.96) and a P-value of 0.108 (> 0.05). This means that this third moderating variable cannot function as a strengthener or weakener of the relationship between variables, so the hypothesis is rejected. This condition indicates that work loyalty is more influenced by the main (independent) factor than the moderating factor.

Conclusion

After explaining the results of the research, the conclusions of this research are as follows:

1. Rewards have a positive and significant effect on work loyalty with a T-Statistic value of 1.744 (approaching 1.96) and P Values of 0.041 (< 0.05).
2. Transformational leadership has a positive and significant effect on work loyalty, with a T-statistic value of 2.689 (> 1.96) and a P value of 0.004 (< 0.05).
3. The work environment does not have a significant effect on work loyalty, with a T-Statistic value of 1.007 (< 1.96) and P Values of 0.157 (> 0.05).
4. Job satisfaction has a positive and significant influence on work loyalty, with a T-statistic of 2.282 (> 1.96) and a P value of 0.011 (< 0.05).
5. Moderation effect 1 does not have a significant effect on work loyalty, with a T-Statistic value of 0.618 (< 1.96) and a significance value of 0.268 (> 0.05).
6. Moderation effect 2 does not have a significant effect on work loyalty with a T-Statistic value of 0.308 (< 1.96) and P Values of 0.379 (> 0.05).
7. The moderating effect of 3 is also not significant on work loyalty, as indicated by a T-Statistic value of 1.238 (< 1.96) and a P value of 0.108 (> 0.05).

Suggestion

The suggestions in this research are as follows:

1. Reward: Companies need to provide a fair and transparent reward system in order to increase employee work loyalty.
2. Leadership: Leaders are advised to apply a more transformational leadership style by being a role model, giving direction, and providing motivation.
3. Job satisfaction: Companies should maintain and improve employee job satisfaction through welfare, career development, and harmonious working relationships.
4. This research can be a reference for developing theories regarding factors that influence work loyalty, especially the role of rewards, transformational leadership, and job satisfaction.
5. Further research is recommended to add other variables as moderators or mediators to see more complex relationships.
6. Further research can also use different objects or sectors so that the results are more general and can be compared between industries.

REFERENCES

- Arman Paramansyah Sri Rahayu, Ramadhan Harahap, Saleh Sitompul (2020), Effect Of Work To Family Conflict And Work Stress On Organizational Commitments With Work Satisfaction As Intervening Variables, International Journal For Innovative Research In Multidisciplinary Field.
- Dutta, T., & Dhir, S. (2021). Employee Loyalty: Measurement and Validation. Global Business Review
- Eka M., & Rizki S. (2021). "The Relationship between Work Environment and Employee Loyalty in the Education Sector", Journal of Education and Management, 13(4), 81-95.
- Ferine, Kiki Farida, Reza Aditia, Muhammad Fitri Rahmadana (2022) ,What Determines Work Discipline and Performance? An Empirical Study in Indonesia, The Journal of Asian Finance, Economics and Business
- Ferine, Kiki Farida (2020),The Influence of Motivation and Competence on the Performance of Employees of SMEs Fostered by Bank Sumut, Kampung Baru Branch, Medan Branch, LIABILITIES (JOURNAL OF ACCOUNTING EDUCATION)
- Ferine, Kiki Farida, and Hendri Sembiring. "Human Resource Management: MSME Empowerment Strategy." Deepublish (Budi Utama CV Publishing Group) (2018).
- Ghozali, I. (2015). Multivariate Analysis Application with IBM SPSS 23 Program. Diponegoro University Publishing Agency.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Sage Publications.
- Hadj, K. (2024). The Relationship Between Job Satisfaction and Employee Loyalty. Business Ethics and Leadership, 8(1), 15–27.
- Hidayat, R., Udin, U., & Yuniawan, A. (2019). The Effect of Rewards and Motivation on Employee Performance. Journal of Economics and Business, 2(1), 58–72
- Judge, T. A., & Klinger, R. (2017). Job Satisfaction: A Critical Review of the Literature. Journal of Organizational Behavior, 38(6), 731-752
- Khan, M.A., Mahmood, H., & Akhtar, M.I. (2021). Impact of workplace environment on employee loyalty. Journal of Business and Management, 23(2), 42–55.
- Latan, H., & Ghozali, I. (2015). Partial Least Squares Concepts, Techniques, and Applications using SmartPLS 3.0. Diponegoro University Publishing Agency.
- Pratama, DP, & Haryanto, R. (2022). The effect of reward programs on job satisfaction and employee loyalty in the manufacturing sector. Journal of Management and Organization, 18(3), 221–238.
- Sartika, N., & Santoso, S. (2022). The role of job satisfaction as a moderating variable in the influence of rewards and organizational culture on employee loyalty. Journal of Management Research, 26(4), 512–526.
- Sekaran, U. (2015). Research Methods for Business: A Skill-Building Approach (7th ed.). John Wiley & Sons.
- Siti M., & Hamzah U. (2021). "Transformational Leadership, Job Satisfaction, and Employee Loyalty", Journal of Organization and Management, 13(2), 89-102.