


The Effect of Creative Thinking and Innovative Behavior on Employee Performance with Job Satisfaction as an Intervening Variable at PT. Bakrie Pasaman Plantations

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Article Info	ABSTRACT
Keywords: Creative Thinking, Innovative Behavior, Job Satisfaction and Employee Performance	This study aims to examine the influence of creative thinking and innovative behavior on employee performance, with job satisfaction as an intervening variable, at PT. Bakrie Pasaman Plantations. Data collection methods included a survey and questionnaire distribution, with a sample of 86 respondents. The analytical method used was path analysis using SmartPLS. The research results showed a significant influence of creative thinking and innovative behavior on job satisfaction. Creative thinking, innovative behavior, and job satisfaction significantly influence employee performance. Creative thinking significantly influences employee performance through job satisfaction. Innovative behavior also has an insignificant influence on employee performance through job satisfaction.
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INTRODUCTION

An organization requires people as its primary resource to achieve its goals. Humans are a crucial factor in an organization because they are able to mobilize all its components. Humans are resources with thoughts and feelings that distinguish them from other factors of production. The differences in their character and role are crucial, so organizations must consistently manage human resources effectively and efficiently to create excellence within society. High-quality, high-performing human resources will make a significant contribution to organizational advancement.

Implementing development, particularly in providing public services to the community, requires human resources in the form of government officials with specific capabilities. The level of professionalism of government officials needs to be continuously improved through the appropriate placement of government officials, in accordance with job demands, and possessing the qualifications and capabilities to carry out their work. In the current era of globalization, every government organization is required to improve the quality of its human resources to be more innovative in responding to change. Improving the quality of strategic human resources through skills enhancement, development, and management of human resource organization. This is a primary requirement for achieving competitiveness and independence. In a company, the role of human resources is crucial in determining the

effectiveness of a company's operations. Competent and qualified human resources are essential in a company, especially in the current era of globalization. In this era, all business organizations must be ready to adapt and strengthen themselves to be competitive and able to answer all challenges in the future. Human resources, in this case employees, must always play an active and dominant role in every organizational activity because humans are the planners, behaviorists, and determinants of the achievement of organizational goals. Effective use of the workforce is key to improving employee performance, so a company policy is needed to motivate employees to be able to work more productively according to the established plan. Productivity is a company's benchmark for measuring employee performance.

According to (Mangkunegara, 2018) Performance is the quality and quantity of work results achieved by an employee in carrying out their duties in accordance with the responsibilities assigned to them. The factors that influence performance are ability and motivation. Furthermore, according to (Mulyadi, 2017) Factors that influence performance are knowledge, skills, competence, compensation, motivation, leadership, enthusiasm, work environment, organizational commitment and job satisfaction.

An employee's performance success can be explained by their assessment of their results when subjected to internal or external control. Employees who are internally controlled are more satisfied with their jobs because they perceive the causes and consequences of events as being within their control. These employees feel their lives are controlled by their own behavior, skills, and abilities. Conversely, employees who are externally controlled perceive the causes and consequences of events as being beyond their control and perceive the causes of events as originating from the external environment, thus reducing their own performance.

PT. Bakrie Pasaman Plantations, the complete address is located in Air Balam, West Pasaman, West Sumatra. PT. Kemilau Permata Sawit is one of the many palm oil management companies in West Sumatra that has been operating since the 2000s. To maintain business continuity facing other competitors in West Pasaman Regency, PT. Bakrie Pasaman Plantations Sawit focuses its business strategy on efforts to increase productivity, improve efficiency in all lines, and diversify its business into prospective sectors related to its core business in the field of plantations and palm oil processing. However, not only this strategy must be considered by PT. Bakrie Pasaman Plantations but also Human Resources. To be able to create a balance between strategy and realization. With the presence of quality Human Resources at PT. Bakrie Pasaman Plantations will further support production. However, it will be the opposite if the Human Resources owned by PT. Bakrie Pasaman Plantations are not qualified, it will reduce its production. The quality of a company's human resources can be measured based on the targets set by the company and the results achieved by its employees. Employees must be able to deliver maximum results in achieving the targets set by PT. Bakrie Pasaman Plantations. By assigning production targets to PT. Bakrie Pasaman Plantations employees, we can assess their commitment to achieving those targets. The following are the targets and realizations of palm oil production at PT. Bakrie Pasaman

Plantations from 2017 to 2021 as follows: palm oil production at PT. Bakrie Pasaman Plantations in 2017 target 300,000 tons, realization 211,231 tons. with a percentage of 70.41%. In 2018 target 300,000 tons, realization 189,863 tons with a percentage of 63.28%. In 2019 target 300,000 tons, realization 215,222 tons with a percentage of 71.74%. In 2020 target 300,000 tons, realization 221,988 tons with a percentage of 73.99%. In 2021 target 300,000 tons, realization 202,123 tons with a percentage of 66.70%. With an average target of 300,000 tons, the realization was only 212,085.4 tons, representing a percentage of 70.69%. This can be concluded that employee performance is suboptimal, possibly due to a lack of creative thinking and innovative behavior, as well as job satisfaction.

Based on the results of previous research conducted by(Jannah, 2017)which states that Creative Behavior and Innovative Behavior have a positive and significant influence on Job Satisfaction. Research conducted by(Andari, 2018)which states that Leadership Effectiveness and Innovative Behavior have a positive and significant influence on Job Satisfaction. However, research conducted by(Annam, 2019)which states that Leadership Effectiveness and Innovative Behavior have an insignificant influence on Job Satisfaction.

Furthermore, the results of research conducted by(Yuliana & T, 2019)which states that Job Satisfaction and Creative Behavior have a positive and significant influence on Performance. As well as research conducted by(Changgriawan, 2017)which states that Job Satisfaction and Innovative Behavior have an insignificant influence on Performance.

METHOD

Structural Equation Modeling (SEM) Analysis

This study used the Structural Equation Modeling (SEM) analysis tool using the SmartPLS program. SmartPLS is a component-based approach for testing structural equation models, commonly called SEM. SmartPLS is based on the idea of having two iterative procedures that use least squares estimation for single and multi-component models. By applying these procedures, this algorithm aims to minimize the variance of all dependent variables, therefore the cause and direction between all variables need to be clearly defined. SmartPLS is divided into measurement models and structural models. SmartPLS is a powerful method because it is not based on many assumptions. Data does not have to be multivariate normal distribution (indicators with categorical, ordinal, interval, and ratio scales can be used in the same model). SmartPLS is also more efficient with algorithmic calculations that are capable of estimating larger and more complex models with hundreds of latent variables and thousands of indicators.(Sukmawati, 2023).

Measurement Model Test (Outer Model)

In data analysis techniques using SmartPLS, there are three criteria for assessing the outer model: Convergent Validity, Discriminant Validity, and Composite Reliability. Convergent validity of a measurement model with reflective indicators is assessed based on the correlation between item scores or component scores estimated using SmartPLS software. An indicator is considered to have good reliability if it has a value above 0.7. We

can see this figure by referring to the Outer Loading table in SmartPLS.(Darwin, 2021).In this composite reliability test, there are two tables that must be observed: the values contained in the Composite Reliability table and Cronbach's Alpha, which must be greater than 0.7. For the Discriminant Validity test, it can be seen from the cross-loading value. The correlation value of the indicator to its construct must be greater than the correlation value between the indicator and other constructs. There is another way to test Discriminant Validity by comparing the root value of the Average Variance Extracted (AVE) for each construct with the correlation between the construct and other constructs.

1. *Measurement Modelor Validity*

The outer model assessment aims to assess the correlation between item or indicator scores and their construct scores, indicating the level of validity of a statement item. Outer model testing is conducted based on the results of a questionnaire trial conducted for all research variables. There are three criteria in the use of data analysis techniques to assess the outer model: Convergent Validity, Discriminant Validity, and Composite Reliability. In the development stage, a correlation of 0.50 to 0.6 is considered acceptable. In research, the limit for convergent validity is above 0.7.

2. *Reliability*

Once the data validity level is known, the next step is to determine the level of data reliability or the level of reliability of each construct or variable. This assessment is done by looking atComposite reliability value and Crombach alpha value. A construct is said to be reliable if it provides a Crombach alpha value > 0.70.

3. *R-square*

Next, as explained previously, the inner model assessment will be evaluated through the R-Squared value, to assess the influence of certain exogenous latent constructs on endogenous latent constructs to see whether they have a substantive influence.

Path Coefficient and Hypothesis Testing

Inner model or structural model testing is conducted to examine the relationships between variables, their significance values, and the R-square of the research model. Model assessment using PLS begins by examining the R-square for each dependent latent variable. Changes in the R-square value can be used to assess the substantive influence of a particular independent latent variable on the dependent latent variable.

RESULTS AND DISCCUSION

Research Description

Table 1. Calculation of Questionnaire Distribution Results

No	Questionnaire	Amoun t	Percentage %
1	Distributed questionnaires	86	100
2	Unreturned questionnaires	0	0

No	Questionnaire	Amount	Percentage %
3	Incorrectly filled out (defective or damaged) questionnaire	0	0
4	Questionnaires suitable for data processing	86	100

Source: Survey Results, 2025

Research Data Analysis

The data processing technique in this study uses the SEM method based on Partial Least Square (PLS) which requires two stages for the assessment of a research model: the outer model and the inner model. The outer model assessment aims to assess the correlation between item or indicator scores and their construct scores, which indicate the level of validity of a statement item. Outer model testing is carried out based on the results of questionnaire trials that have been conducted for all research variables. There are three criteria in the use of data analysis techniques to assess the outer model: Convergent Validity, Discriminant Validity, and Composite Reliability. In the development stage, a correlation of 0.50 to 0.6 is considered adequate or acceptable. In research, the limit for convergent validity values is above 0.7.

Outer Model (Structural Model) Testing Before Elimination

Based on the results Testing the outer model using SmartPLS, obtained the correlation values between the statement items of the research variables as follows:

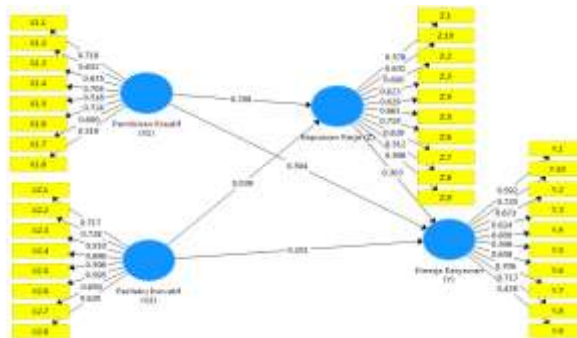


Figure 1. Outer Loadings Before Elimination

In data analysis techniques using SmartPLS, there are three criteria for assessing the outer model: convergent validity, discriminant validity, and composite reliability. Convergent validity of a measurement model with reflective indicators is assessed based on the correlation between item scores or component scores estimated with PLS software. Indicators are considered to have good reliability if they have a value above 0.7. There are three criteria in the use of data analysis techniques to assess the outer model: convergent validity, discriminant validity, and composite reliability. In the development stage, a correlation of 0.50 to 0.6 is considered adequate or acceptable. In research, the limit value of convergent validity is above 0.7.

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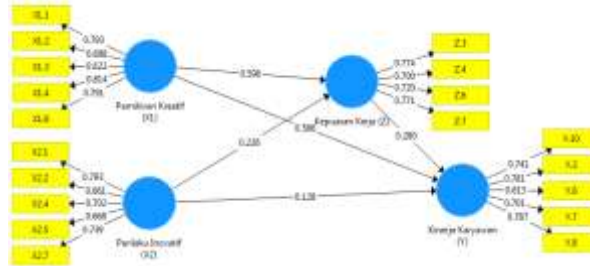


Figure 2. Outer Loadings After Elimination

Average Variance Extracted (AVE) Assessment

The validity criteria for a construct or variable can also be assessed through the Average Variance Extracted (AVE) value for each construct or variable. A construct is considered to have high validity if its value is above 0.50. The AVE values for all variables are presented below.

Table 2. Average Variance Extracted (AVE) Value

	Cronbach's Alpha	rho_A	Reliabilitas Komposit	Rata-rata Varians Diabstrak (AVE)
Kapuasan Kerja (Z)	0.727	0.729	0.830	0.551
Kinerja Karyawan (Y)	0.776	0.786	0.848	0.529
Perilaku Kreatif (X1)	0.799	0.810	0.862	0.558
Perilaku Inovatif (X2)	0.764	0.801	0.831	0.510

Based on Table 2, it can be concluded that all constructs or variables above meet good validity criteria. This is indicated by the Average Variance Extracted (AVE) value above the recommended 0.50 criterion.

Outer Model Testing (Structural Model)

The next testing process is testing the inner model, or structural model, which aims to determine the relationships between hypothesized constructs. The structural model is evaluated by observing the R-Square value for the endogenous construct and the influence it receives from the exogenous construct.

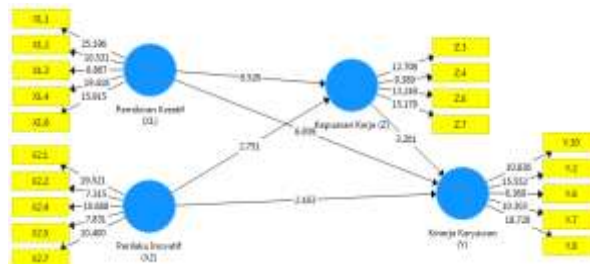


Figure 3. Structural Model

Based on the image above, the structural model above can be formed into the following model equation:

- Equation Model I, is a description of the magnitude of the influence the construct of creative thinking and innovative behavior towards job satisfaction with the existing coefficients plus the error rate which is an estimation error or which cannot be explained

in the research model.

$$Z = 8,526X_1 + 2,751X_2 + e_1$$

- b. Equation Model II, is a description of the magnitude of the influence creative thinking construct, innovative behavior and work motivation to employee performance with each coefficient for each construct plus an error which is the estimation error.

$$Y = 6,939X_1 + 2,163X_2 + 3,201 Z + e_2$$

Next, as explained previously, the inner model assessment will be evaluated through the R-Square value of the employee performance construct of 0.802 or 80.2%, which illustrates the magnitude of the influence received by the employee performance construct from the creative thinking construct, innovative behavior and job satisfaction. Meanwhile, the R-Square value for the job satisfaction construct of 0.563 or 56.3% indicates the magnitude of the influence given by the creative thinking construct and innovative behavior in explaining or influencing job satisfaction.

PenHypothesis test

Testing The hypothesis aims to answer the problems in this study, namely the influence of certain exogenous latent constructs on certain endogenous latent constructs, either directly or indirectly through mediating variables. Hypothesis testing in this study can be assessed from the magnitude of the t-statistic or t-count compared to the t-table of 1.96 at 5% alpha. If the t-statistic/t-count < t-table 1.96 at 5% alpha, then Ho is rejected and if the t-statistic/t-count > t-table 1.96 at 5% alpha, then Ha is accepted. The following SmartPLS output results illustrate the estimated output for testing the structural model.

Table 4. Results for Inner Weights Direct Affect

	Sampel Asli (O)	Rata-rata Sampel (M)	Standar Deviasi (STDEV)	T Statistik (O/STDEV)	P Values
Kepuasan Kerja (Z) -> Kinerja Karyawan (Y)	0.280	0.275	0.087	3.201	0.001
Pemikiran Kreatif (X1) -> Kepuasan Kerja (Z)	0.598	0.596	0.070	8.526	0.000
Pemikiran Kreatif (X1) -> Kinerja Karyawan (Y)	0.586	0.587	0.085	6.939	0.000
Perilaku Inovatif (X2) -> Kepuasan Kerja (Z)	0.226	0.237	0.082	2.751	0.006
Perilaku Inovatif (X2) -> Kinerja Karyawan (Y)	0.128	0.132	0.059	2.163	0.031
	Sampel Asli (O)	Rata-rata Sam...	Standar Devias...	T Statistik (O/...	P Values
Pemikiran Kreatif (X1) -> Kepuasan Kerja (Z) -> Kinerja Karyawan (Y)	0.167	0.163	0.055	3.047	0.002
Perilaku Inovatif (X2) -> Kepuasan Kerja (Z) -> Kinerja Karyawan (Y)	0.063	0.067	0.035	1.802	0.072

CONCLUSION

From the discussion in the previous chapters, several conclusions can be drawn as follows: There is a significant influence of creative thinking to job satisfaction. There is a significant influence of innovative behavior on job satisfaction.. There is a significant influence of creative thinking on employee performance. There is a significant influence of innovative behavior on employee performance.. There is a significant influence on job satisfaction to employee performance. There is a significant influence of creative thinking on employee performance through job satisfaction. There is no significant influence on innovative behavior to employee performance through job satisfaction.

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