

# The Impact of Green Operational Practices, Digital HR Innovation, and Work Process Discipline on Employee Performance in an FMCG Company

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## ABSTRACT

This study examines the impact of green operational practices, digital human resource (HR) innovation, and work process discipline on employee performance at PT Savoria Kreasi Rasa. The population consisted of production employees, and purposive sampling was used to select respondents based on specific criteria, resulting in 63 samples. Primary data were collected through questionnaires using a Likert scale. Data were analyzed using multiple linear regression to test both partial and simultaneous effects of the independent variables on employee performance. Employee performance was measured through work quality, quantity, timeliness, compliance, and responsibility in completing tasks. The results show that green operational practices do not have a significant effect on employee performance, digital HR innovation has a negative and significant effect, and work process discipline has a positive and significant effect. Simultaneously, the three independent variables significantly affect employee performance. These findings indicate that environmentally oriented operational practices and digital HR systems do not automatically improve individual performance unless they are integrated with employee readiness and daily work activities. In contrast, consistent work process discipline plays a dominant role in improving employee performance in a manufacturing setting. This study contributes to human resource management literature by emphasizing the importance of aligning sustainability-oriented operations, HR digitalization, and disciplined work behavior to improve employee productivity. The findings also provide practical implications for companies seeking to optimize internal systems and strengthen employee performance outcomes.

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## 1. INTRODUCTION

The food and beverage industry, or fast-moving consumer goods (FMCG) sector, is one of the manufacturing subsectors that faces intense competition and operational complexity in meeting modern market needs. Companies in this sector are required to maintain production-process efficiency, product-quality consistency, and timely distribution because these aspects directly affect organizational competitiveness. Therefore, employee performance, particularly in the production division, becomes a key factor in supporting the continuity of company operations. Previous studies show that operational efficiency and the quality of employee performance are major determinants of productivity and corporate sustainability [1], [2].

Employee performance is not determined solely by individual ability, but is also influenced by work systems, operational policies, and human resource management practices implemented within the organization [3]–[6], employee performance results from the interaction between individual characteristics, work processes, and an organizational environment that supports effective and efficient work outcomes. In manufacturing companies, consistency in work implementation and compliance with standard operating procedures are important elements in maintaining production-process stability [7]. Nevertheless, the achievement of employee performance cannot be separated from organizational readiness to integrate effective work systems, especially in responding to the demands of digital transformation and environmental sustainability [8].

PT Savoria Kreasi Rasa is a manufacturing company in the food and beverage sector with continuous production activities and a workforce dominated by production employees. This condition makes production-employee performance a strategic factor in supporting smooth company operations. Based on preliminary observations, production-employee performance shows a fluctuating condition, as

reflected in variations in work-process consistency and the need for readjustment in several production activities. This indicates that employee performance is strongly influenced by the work systems and operational policies implemented by the company.

One relevant operational policy is the implementation of green operational practices, namely the integration of sustainability principles into operational activities through resource-use efficiency, waste reduction, and environmentally friendly work-process management [9]–[11]. The implementation of this concept is expected to create a more efficient and structured work system and to contribute to improved employee performance [12]. In practice, however, green operational implementation still faces challenges, particularly in adjusting work systems that combine digital processes with physical documentation requirements [9].

In addition, technological development encourages companies to adopt digital human resource innovation in managing human resources. This innovation includes the use of digital systems for personnel administration, attendance, and internal communication [13], [14]. The implementation of digital HR innovation has been shown to improve work-process effectiveness and employee performance [15]. However, the success of digital-system implementation depends greatly on technological readiness and employees' ability to adapt to the system [13].

On the other hand, work process discipline is an important factor that affects employee performance. Work process discipline reflects employees' level of compliance with procedures and work standards established by the organization [7]. In a standardized manufacturing environment, work discipline plays an important role in maintaining quality consistency and production-process efficiency [16]. However, several studies indicate that work discipline is not always the dominant factor because it is also influenced

by other factors, such as motivation and the work environment [17].

Previous studies show that green operational practices, digital HR innovation, and work discipline influence employee performance. However, prior findings remain varied and inconsistent. Some studies identify positive effects, whereas others show that these effects depend on contextual factors, such as organizational culture and technological readiness [9], [13].

Nevertheless, most previous studies have examined these variables only partially. Therefore, research is needed that simultaneously integrates green operational practices, digital HR innovation, and work process discipline in explaining employee performance, particularly in the FMCG sector.

The pre-survey results show that production-employee performance remains suboptimal, as indicated by unachieved output targets, a high level of defective products, and delays in completing work. In addition, problems were found in the aspects of green operational practices, digital HR innovation, and work process discipline, such as suboptimal waste management, limited understanding of digital systems, and low compliance with work procedures. These conditions indicate a relationship between the three factors and the performance of production employees.

Based on the above explanation, a research gap exists in examining the simultaneous influence of green operational practices, digital HR innovation, and work process discipline on production-employee performance. Therefore, this study aims to analyze the influence of these three variables on employee performance at PT Savoria Kreasi Rasa. This study is expected to contribute to the development of human resource management knowledge, particularly in understanding the role of operational-system integration, HR digitalization, and work discipline in improving employee performance.

## 2. LITERATURE REVIEW

### 2.1 *Human Resource Theory and Systems Theory*

Human Capital Theory explains that employees are strategic assets who contribute to organizational performance through their skills and knowledge [18]. Organizations that invest in human resources and supporting systems can improve productivity [19].

Systems Theory views an organization as a set of interconnected subsystems that influence performance [20]. In this context, environmentally friendly operational practices, digital HR innovation, and work process discipline function as interconnected subsystems that affect employee performance.

### 2.2 *Resource-Based View (RBV) Theory*

The Resource-Based View (RBV) explains that an organization's competitive advantage derives from internal resources that are valuable, rare, inimitable, and non-substitutable [21]. These resources are not limited to physical assets, but also include operational practices, technology, and human resource capabilities.

In this context, green operational practices can be viewed as a strategic resource because they can improve operational efficiency and create a more conducive work environment. Practices such as waste reduction, energy efficiency, and optimized resource use contribute to increased employee productivity. Thus, the implementation of green operational practices can provide added value for the organization while improving employee performance.

### 2.3 *Sociotechnical Systems Theory*

Sociotechnical Systems Theory emphasizes the importance of integrating social systems and technological systems within an organization. According to [13], digital transformation in human resource management requires a balance between the use of technology and individual readiness to operate it. Digital HR innovation includes the use of technology-based systems in

administration, communication, and organizational decision-making.

Well-integrated digital HR innovation can improve work-process efficiency, data accuracy, and transparency in human resource management. When technological systems and the social aspects of the organization operate in alignment, employee performance increases because work processes become more effective and structured.

**2.4 Reinforcement Theory**

Reinforcement Theory explains that individual behavior can be shaped through reinforcement systems in the form of rewards and punishment. According to [22], behavior that receives positive reinforcement tends to be repeated, whereas behavior that receives negative consequences tends to be avoided.

In an organizational context, work process discipline is a form of

behavior that reflects employee compliance with rules and work standards. The consistent implementation of rewards and sanctions will shape disciplined behavior, such as punctuality, compliance with operating procedures, and effective use of working time. High work discipline will increase productivity and the quality of work outcomes, thereby improving employee performance.

Several previous studies have examined factors that influence employee performance, such as green operational practices, digital HR innovation, and work process discipline. The results of these studies indicate that each variable has the potential to influence employee performance, although the findings remain varied and inconsistent. A summary of previous studies relevant to this research is presented in Table 1.

Table 1. Previous Studies

No	Author(s) and Research Title	Similar Variables	Different Variables	Research Findings
1	[23]	X1: Green Operational Y: Employee Performance	Did not examine Digital HR Innovation and Work Process Discipline	Green HRM has a positive and significant effect on employee performance through the development of environmentally friendly work behavior.
2	[9]	X1: Green Operational Y: Employee Performance	Did not discuss Digital HR Innovation and Work Process Discipline	Green operational practices have a positive effect on employee performance through work-process efficiency and waste reduction.
3	[15]	X1: Digital HR Innovation Y: Employee Performance	Did not discuss Green Operational and Work Process Discipline	HR digitalization improves work efficiency and administrative-system clarity, which affects employee performance.
4	[13]	X1: Digital HR Innovation Y: Employee Performance	Did not directly measure employee performance	Digital HR creates a more structured work system and improves the quality of HR services.
5	[14]	X1: Digital HR Innovation Y: Employee Performance	Conceptual focus, without a performance variable	Digital HR improves HR-process effectiveness and organizational readiness to face changes in work systems.
6	[16]	X1: Work Discipline Y: Employee Performance	Did not discuss Green Operational and Digital HR	Work discipline has a significant effect on the consistency and quality of employee performance.

No	Author(s) and Research Title	Similar Variables	Different Variables	Research Findings
7	[24]	X1: Work Discipline Y: Employee Performance	Productivity, not performance, as the main variable	A high level of work discipline improves orderliness and effectiveness in task implementation.
8	[10]	X1: Green HRM Y: Employee Performance	Focused on HRM, not production operations	Sustainability practices shape positive work behavior that supports employee performance.
9	[2]	X1: Green Practices Y: Employee Performance	Workload variable, not Digital HR and Discipline	Green practices are related to performance, but are influenced by workload factors.
10	[24]	X1: Work Discipline Y: Employee Performance	Did not discuss Green Operational and Digital HR	Work discipline plays a role in reducing work errors and maintaining performance stability.

Source: Processed from various studies

### 3. METHODS

This study uses a quantitative approach with a causal-associative research design to examine the impact of green operational practices, digital HR innovation, and work process discipline on employee performance at PT Savoria Kreasi Rasa. A quantitative approach was selected because the research variables can be measured numerically through questionnaire distribution, enabling hypothesis testing to be carried out statistically, objectively, and measurably [25], [26].

The population in this study consisted of all employees of PT Savoria Kreasi Rasa, totaling 223 people, with a specific focus on 164 employees in the production division. The sampling technique used purposive sampling with the criteria that employees were directly involved in production operational activities and used work systems related to green operational practices, digital HR, and standard operating procedures (SOPs). The sample size was determined using the Slovin formula with a 10% margin of error, resulting in 63 respondents.

The data used in this study are primary data collected through questionnaires using a 1-5 Likert scale to

measure respondents' perceptions of the research variables [27]. In addition, secondary data were used as supporting information obtained from internal company documents, such as employee data, organizational structure, and production SOPs.

The research variables include green operational practices (X1), digital HR innovation (X2), and work process discipline (X3) as independent variables, and employee performance (Y) as the dependent variable. Variable measurement was conducted using indicators developed in accordance with the theoretical concepts of each variable [28].

The data analysis methods included descriptive statistical analysis, data-quality tests comprising validity and reliability tests, and classical assumption tests consisting of normality, multicollinearity, and heteroscedasticity tests. Hypothesis testing was conducted using multiple linear regression analysis, complemented by the coefficient of determination ( $R^2$ ), the F-test for simultaneous testing, and the t-test for partial testing [28].

The operational definitions and measurement of variables in this study were developed based on indicators relevant to each variable concept. Details of the operational definitions, indicators, and measurement scale are presented in Table 2.

Table 2. Operational Definitions and Variable Measurement

No	Variable	Operational Definition	Indicator	Score	Measurement Scale
1	Green Operational (X1)	Green Operational refers to environmentally friendly operational practices that emphasize resource efficiency and sustainable waste management.	1. Efficiency of resource use	4	Likert 1-5
			2. Operational waste management according to procedures	2	
			3. Implementation of environmentally friendly work procedures in production activities	1	
			4. Compliance with environmental operating standards	2	
			5. Employee awareness of sustainable work practices	1	
2	Digital HR Innovation (X2)	Digital HR Innovation refers to the application of digital technology in human resource management to improve the efficiency and integration of personnel administration.	1. Ease of access to the digital HR system	3	Likert 1-5
			2. Clarity of digital-based personnel information	2	
			3. Efficiency of personnel administration processes	3	
			4. Employees' level of understanding of the digital HR system	1	
			5. Reliability of the digital HR system in supporting work activities	1	
3	Work Process Discipline (X3)	Work Process Discipline refers to the level of employee compliance and consistency in performing work according to company SOPs and rules.	1. Compliance with standard operating procedures (SOPs)	3	Likert 1-5
			2. Timeliness in work-process implementation	1	
			3. Consistency in work-process implementation	3	
			4. Compliance with production work rules	1	
			5. Responsibility in carrying out production tasks	2	
4	Employee Performance (Y)	Employee Performance refers to the level of work achievement measured based on quality, quantity, timeliness, compliance, and responsibility.	1. Work quality	2	Likert 1-5
			2. Work quantity	2	
			3. Timeliness in task completion	2	
			4. Compliance with work procedures	2	
			5. Work responsibility	2	

Source: Processed by the researcher

#### 4. RESULTS AND DISCUSSION

Descriptive statistics were used to provide a general overview of the data characteristics in this study. The analysis was conducted on 63 respondents who were employees of an FMCG company in

Tangerang. Descriptive statistics include the minimum, maximum, mean, and standard deviation values of each research variable, namely green operational practices, digital HR innovation, work process discipline, and employee performance. This analysis aims to identify data tendencies and the level of

variation in respondents' answers to each variable studied. The data-processing results are presented in Table 3.

4.1 Descriptive Statistics

Table 3. Descriptive Statistics

No.	Variable	N	Min	Max	Mean	Std. Deviation
1	Green Operational	63	3.70	5.00	4.2730	.39603
2	Digital HR Innovation	63	3.00	5.00	4.1429	.51422
3	Work Process Discipline	63	3.00	5.00	4.2698	.51422
4	Employee Performance	63	3.00	5.00	4.1460	.44244

Source: Processed by the researcher

Based on Table 3, all variables in this study have relatively high mean values, above 4. This indicates that, in general, respondents gave positive assessments of green operational practices, digital HR innovation, work process discipline, and employee performance.

The green operational variable has a mean value of 4.2730, with a minimum value of 3.70 and a maximum value of 5.00. This indicates that environmentally oriented operational aspects are perceived positively by employees. Furthermore, the digital HR innovation variable has a mean value of 4.1429, with values ranging from 3.00 to 5.00, indicating that the implementation of digital innovation in human resource management has also been carried out fairly well.

The work process discipline variable has a mean value of 4.2698, with a minimum value of 3.00 and a maximum value of 5.00. This reflects that employee work discipline is relatively high. Meanwhile, the employee performance variable has a

mean value of 4.1460, with values ranging from 3.00 to 5.00, indicating that employee performance is generally in the good category.

In addition, the standard deviation values for all variables are relatively small, namely less than 1. This condition indicates that respondents' answers were not highly varied or were relatively homogeneous, meaning that respondents' perceptions of the variables studied were fairly consistent.

4.2 Validity Test

The validity test was conducted to determine the extent to which the questionnaire items were able to measure the variables studied. In this study, the validity test used the corrected item-total correlation method by comparing the correlation value of each item with the total variable score.

An item statement is declared valid if it has a corrected item-total correlation value greater than 0.30. The validity-test results for all statement items in each research variable are presented in Table 4.

Table 4. Validity Test of X1

No	Variable	Item	Corrected Item-Total Correlation	Remarks
1	Green Operational	X1.1	0.459	Valid
2	Green Operational	X1.2	0.389	Valid
3	Green Operational	X1.3	0.777	Valid
4	Green Operational	X1.4	0.788	Valid
5	Green Operational	X1.5	0.639	Valid
6	Green Operational	X1.6	0.758	Valid
7	Green Operational	X1.7	0.780	Valid

No	Variable	Item	Corrected Item-Total Correlation	Remarks
8	Green Operational	X1.8	0.752	Valid
9	Green Operational	X1.9	0.776	Valid
10	Green Operational	X1.10	0.720	Valid

Source: Processed by the author, 2026.

Based on the validity-test results in Table 4, all statement items for the green operational variable have corrected item-total correlation values greater than 0.30. This indicates that each statement item is able to measure the intended construct appropriately, so all items are declared valid.

More specifically, the corrected item-total correlation values for each item range from 0.389 to 0.788. These values are above the established minimum threshold, so all items can be concluded to have adequate correlation with the total score of the green operational variable. This indicates that each statement item

contributes well to representing the variable studied.

Furthermore, no item has a correlation value below the specified criterion, so no item needs to be deleted or revised in this variable. Thus, the research instrument for the green operational variable can be said to meet the validity requirements.

These results also show that the questionnaire used in this study is able to capture respondents' perceptions consistently regarding the green operational aspects implemented in the company. Therefore, all statement items in this variable are suitable for further analysis in this study.

Table 5. Validity Test of X2

No	Variable	Item	Corrected Item-Total Correlation	Remarks
1	Digital HR Innovation	X2.1	0.723	Valid
2	Digital HR Innovation	X2.2	0.840	Valid
3	Digital HR Innovation	X2.3	0.880	Valid
4	Digital HR Innovation	X2.4	0.817	Valid
5	Digital HR Innovation	X2.5	0.895	Valid
6	Digital HR Innovation	X2.6	0.868	Valid
7	Digital HR Innovation	X2.7	0.886	Valid
8	Digital HR Innovation	X2.8	0.897	Valid
9	Digital HR Innovation	X2.9	0.897	Valid
10	Digital HR Innovation	X2.10	0.838	Valid

Source: Processed by the author, 2026.

Based on the validity-test results in Table 5, all statement items for the digital HR innovation variable have corrected item-total correlation values greater than 0.30. This indicates that all statement items are valid and are able to measure the variable studied appropriately.

More specifically, the corrected item-total correlation values for each item range from 0.723 to 0.897. These values are far above the established minimum

threshold, indicating that each item has a very strong correlation with the total score of the digital HR innovation variable.

No item has a value below the criterion, so no item needs to be deleted or revised in this variable. This indicates that the research instrument used has very good quality in measuring respondents' perceptions of digital HR innovation.

In addition, the high correlation values across all items show that each

statement has high consistency in representing the variable studied. Therefore, all items in the digital HR

innovation variable are suitable for further analysis in this study.

Table 6. Validity Test of X3

No	Variable	Item	Corrected Item-Total Correlation	Remarks
1	Work Process Discipline	X3.1	0.905	Valid
2	Work Process Discipline	X3.2	0.960	Valid
3	Work Process Discipline	X3.3	0.951	Valid
4	Work Process Discipline	X3.4	0.924	Valid
5	Work Process Discipline	X3.5	0.839	Valid
6	Work Process Discipline	X3.6	0.861	Valid
7	Work Process Discipline	X3.7	0.854	Valid
8	Work Process Discipline	X3.8	0.957	Valid
9	Work Process Discipline	X3.9	0.769	Valid
10	Work Process Discipline	X3.10	0.965	Valid

Source: Processed by the author, 2026.

Based on the validity-test results in Table 6, all statement items for the work process discipline variable have corrected item-total correlation values greater than 0.30. This indicates that all statement items are valid and are able to measure the variable studied appropriately.

More specifically, the corrected item-total correlation values for each item range from 0.769 to 0.965. These values are far above the established minimum threshold, indicating that each item has a very strong correlation with the total score of the work process discipline variable.

The high correlation values across all items show that each statement has very good consistency in representing the variable studied. This indicates that the research instrument for the work process discipline variable has very high quality in measuring respondents' perceptions.

Furthermore, no item has a value below the specified criterion, so no item needs to be deleted or revised in this variable. Thus, all items in the work process discipline variable are suitable for further analysis in this study.

Table 7. Validity Test of Y

No	Variable	Item	Corrected Item-Total Correlation	Remarks
1	Employee Performance	Y.1	0.556	Valid
2	Employee Performance	Y.2	0.749	Valid
3	Employee Performance	Y.3	0.732	Valid
4	Employee Performance	Y.4	0.889	Valid
5	Employee Performance	Y.5	0.857	Valid
6	Employee Performance	Y.6	0.853	Valid
7	Employee Performance	Y.7	0.854	Valid
8	Employee Performance	Y.8	0.902	Valid
9	Employee Performance	Y.9	0.870	Valid
10	Employee Performance	Y.10	0.844	Valid

Source: Processed by the researcher, 2026.

Based on the validity-test results in Table 7, all statement items for the employee performance variable have

corrected item-total correlation values greater than 0.30. This indicates that all statement items are valid and are able to

measure the variable studied appropriately.

More specifically, the corrected item-total correlation values for each item range from 0.556 to 0.902. These values are above the established minimum threshold, indicating that each item has a good to very strong correlation with the total score of the employee performance variable.

The high correlation values in most items show that each statement has good consistency in representing the variable studied. This indicates that the research instrument for the employee performance variable is able to capture respondents' perceptions accurately.

Furthermore, no item has a value below the specified criterion, so no item needs to be deleted or revised in this variable. Thus, all items in the employee

performance variable are suitable for further analysis in this study.

#### 4.3 Reliability Test

The reliability test was conducted to determine the level of consistency of the research instrument in measuring the variables studied. A reliable instrument indicates that the measurement tool can produce consistent results when used under the same conditions.

In this study, the reliability test was conducted using Cronbach's Alpha. A variable is declared reliable if it has a Cronbach's Alpha value greater than 0.70. The higher the Cronbach's Alpha value, the higher the level of consistency of the instrument in measuring the research variable.

The reliability-test results for each variable in this study are presented in Tables 8, 9, 10, and 11.

Table 8. Reliability Test of Variable X1

No	Variable	Cronbach's Alpha	Remarks
1	Green Operational	0.910	Highly Reliable

Source: Processed by the researcher, 2026.

Based on the reliability-test results in Table 8, the Cronbach's Alpha value for the green operational variable is 0.910. This value is greater than 0.70, indicating that the research instrument for the green operational variable has a very good level of consistency.

A Cronbach's Alpha value above 0.90 indicates that all statement items in

this variable have a very high level of reliability. This shows that the instrument is able to produce consistent results in measuring the green operational variable. Therefore, the green operational variable is declared highly reliable and suitable for use in this study.

Table 9. Reliability Test of Variable X2

No	Variable	Cronbach's Alpha	Remarks
1	Digital HR Innovation	0.968	Highly Reliable

Source: Processed by the researcher, 2026.

Based on the reliability-test results in Table 9, the Cronbach's Alpha value for the digital HR innovation variable is 0.968. This value is greater than 0.70, indicating that the research instrument for digital HR innovation has a very good level of consistency.

The very high Cronbach's Alpha value indicates that all statement items in this variable have a very strong level of reliability. This shows that the instrument is able to produce consistent results in measuring digital HR innovation.

Therefore, the digital HR innovation variable is declared highly reliable and suitable for use in this study.

Table 10. Reliability Test of Variable X3

No	Variable	Cronbach's Alpha	Remarks
1	Work Process Discipline	0.979	Highly Reliable

Source: Processed by the researcher, 2026.

Based on the reliability-test results in Table 10, the Cronbach's Alpha value for the work process discipline variable is 0.979. This value is greater than 0.70, indicating that the research instrument for work process discipline has a very good level of consistency.

The very high Cronbach's Alpha value indicates that all statement items in

this variable have a very strong level of reliability. This shows that the instrument is able to produce consistent results in measuring work process discipline.

Therefore, the work process discipline variable is declared highly reliable and suitable for use in this study.

Table 11. Reliability Test of Variable Y

No	Variable	Cronbach's Alpha	Remarks
1	Employee Performance	0.957	Highly Reliable

Source: Processed by the researcher, 2026.

Based on the reliability-test results in Table 11, the Cronbach's Alpha value for the employee performance variable is 0.957. This value is greater than 0.70, indicating that the research instrument for employee performance has a very good level of consistency.

The high Cronbach's Alpha value indicates that all statement items in this variable have a very strong level of reliability. This shows that the instrument is able to produce consistent results in measuring employee performance.

Therefore, the employee performance variable is declared highly reliable and suitable for use in this study.

#### 4.4 Multiple Linear Regression Analysis

Multiple linear regression analysis was used to test the influence of green operational practices, digital HR innovation, and work process discipline on employee performance as the dependent variable. Through this analysis, the influence of each independent variable on employee performance can be identified. The data-processing results using multiple linear regression analysis are presented in Table 12.

Table 12. Multiple Linear Regression Results

Variable	Unstandardized Coefficient (B)	Std. Error	t	Sig.
Constant	1.082	0.333	3.246	0.002
Green Operational	0.124	0.133	0.928	0.357
Digital HR Innovation	-0.195	0.092	-2.132	0.037
Work Process Discipline	0.783	0.091	8.581	0.000

Based on the multiple linear regression results in Table 12, the constant

value is 1.082. This value indicates that if all independent variables are considered

constant, employee performance is estimated at 1.082.

The green operational variable has a regression coefficient of 0.124 with a significance value of 0.357 (> 0.05). This result shows that green operational practices do not have a significant effect on employee performance. Although the regression coefficient is positive, the effect is not statistically significant.

The digital HR innovation variable has a regression coefficient of -0.195 with a significance value of 0.037 (< 0.05). This result shows that digital HR innovation has a negative and significant effect on employee performance. This indicates that, under certain conditions, an increase in digital HR innovation is followed by a decline in employee performance.

The work process discipline variable has a regression coefficient of 0.783 with a significance value of 0.000 (<

0.05). This result shows that work process discipline has a positive and significant effect on employee performance. This means that the higher the level of discipline in the work process, the higher the employee performance.

Overall, the results show that digital HR innovation and work process discipline have significant effects on employee performance, whereas green operational practices do not have a significant effect on employee performance. Among the three variables, work process discipline has the most dominant influence on employee performance.

**4.5 Normality Test**

The normality test was conducted using the One-Sample Kolmogorov-Smirnov (K-S) method on the unstandardized residual values of the regression model.

Table 13. Normality Test

Description	Value
N	63
Kolmogorov-Smirnov Statistic	0.265
Asymp. Sig. (2-tailed)	0.200

Source: Processed by the author, 2025.

The normality-test results show an Asymp. Sig. (2-tailed) value of 0.200, which is greater than 0.05. This indicates that the residual data in the regression model are normally distributed, so the normality assumption is fulfilled.

With the normality assumption fulfilled, the regression model in this study can be used for further analysis. Therefore, the hypothesis-testing results

obtained through the t-test and F-test can be interpreted properly.

**4.6 Multicollinearity Test**

The multicollinearity test was conducted by examining the Tolerance and Variance Inflation Factor (VIF) values. The regression model is considered free from multicollinearity if the Tolerance value is greater than 0.10 and the VIF value is less than 10.

Table 14. Multicollinearity Test

Variable	Tolerance	VIF
Green Operational	0.338	2.962
Digital HR Innovation	0.426	2.349
Work Process Discipline	0.440	2.275

Source: Processed by the author, 2025.

Based on the multicollinearity-test results in Table 14, all independent variables in the regression model have tolerance values above 0.10 and Variance Inflation Factor (VIF) values below 10. This indicates that there is no serious multicollinearity problem in the research model.

The green operational variable has a tolerance value of 0.338 and a VIF value of 2.962. The digital HR innovation variable has a tolerance value of 0.426 and a VIF value of 2.349. Meanwhile, the work process discipline variable has a tolerance

value of 0.440 and a VIF value of 2.275. These values indicate that the relationships among the independent variables remain within acceptable limits.

Thus, it can be concluded that the regression model in this study does not experience multicollinearity symptoms and is suitable for further analysis.

**4.7 Heteroscedasticity Test**

The heteroscedasticity test was conducted through scatterplot analysis by mapping the regression studentized residual values against the regression standardized predicted values.

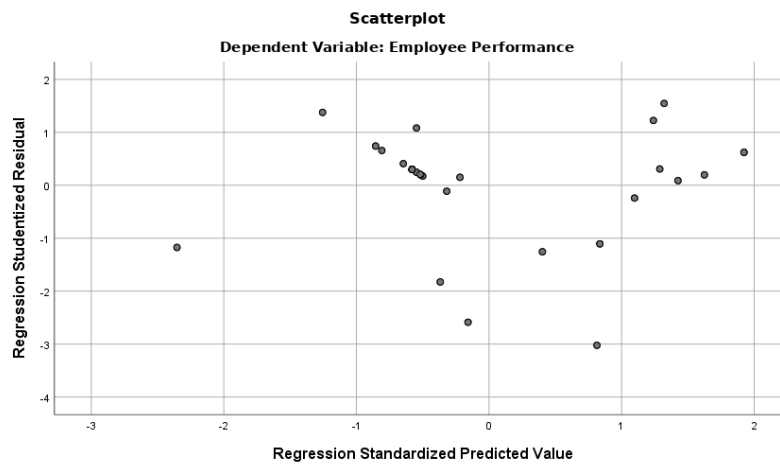


Figure 2. Heteroscedasticity Test  
Source: Processed data (2025)

Based on the scatterplot between Regression Studentized Residual and Regression Standardized Predicted Value, the residual points appear to be randomly distributed around the zero line, both above and below the line. The distribution of points does not show a clear pattern, such as a funnel shape or a wave-like pattern.

Although several points are located relatively far from the center, the residual distribution generally remains

scattered without forming a systematic pattern. This indicates that the residual variance tends to be constant across different predicted values.

Thus, it can be concluded that the regression model does not experience heteroscedasticity symptoms, so the homoscedasticity assumption has been fulfilled and the regression model is suitable for further analysis.

**4.8 Simultaneous Test (F-Test)**

Table 16. F-Test

Model	Df	F-value	Sig.
Regression Model	3	49.566	0.000
Residual	59		
Total	62		

Source: Processed by the author, 2025

Based on the F-test results in Table 16, the F-value is 49.566 with a significance value of 0.000. This significance value is less than 0.05, so it can be concluded that the regression model in this study is simultaneously significant.

This indicates that green operational practices, digital HR innovation, and work process discipline jointly affect employee performance. Therefore, the regression model used in this study is suitable for hypothesis testing.

**4.9 Partial Test (t-Test)**

Table 17. t-Test

Variable	Coefficient (B)	t-value	Sig.
Green Operational	0.124	0.928	0.357
Digital HR Innovation	-0.195	-2.132	0.037
Work Process Discipline	0.783	8.581	0.000

Source: Processed by the author, 2025

Based on the t-test results, not all independent variables have a significant effect on employee performance.

The green operational variable does not have a significant effect on employee performance, as indicated by a significance value of 0.357 (> 0.05). This indicates that the implementation of green operational practices has not yet had a meaningful effect on improving employee performance.

The digital HR innovation variable shows a negative and significant effect on employee performance with a significance value of 0.037 (< 0.05). This means that, under certain conditions, an increase in digital HR innovation is

followed by a decrease in employee performance.

The work process discipline variable shows a positive and significant effect on employee performance with a significance value of 0.000 (< 0.05). This indicates that the higher the level of discipline in the work process, the higher the employee performance.

Therefore, the results show that work process discipline is the variable with the most dominant influence on employee performance, while green operational practices do not have a significant effect and digital HR innovation has a significant effect in a negative direction.

**4.10 Coefficient of Determination (R<sup>2</sup>)**

Table 18. Coefficient of Determination (R<sup>2</sup>) Test

Model	R	R Square	Adjusted R Square
1	0.846 <sup>a</sup>	0.716	0.701

Source: Processed by the author, 2025

Based on Table 18, the R Square value of 0.716 indicates that 71.6% of the variation in employee performance can be explained by green operational practices, digital HR innovation, and work process discipline in the research model. Meanwhile, the remaining 28.4% is influenced by other factors outside the research model that were not included in this study.

The Adjusted R Square value of 0.701 indicates that, after adjusting for the number of independent variables used, the model's ability to explain the variation in employee performance remains high. This indicates that the research model has strong explanatory power for the dependent variable.

This finding is also consistent with the F-test results, which show that

the regression model is simultaneously significant. Therefore, the variables used in this study jointly explain variations in employee performance statistically.

#### 4.11 Discussion

##### a. The Effect of Green Operational Practices on Employee Performance

The results show that green operational practices do not have a significant effect on employee performance. This indicates that the implementation of environmentally based operational practices has not yet been able to directly improve individual employee performance within the company.

This result is not consistent with Permata et al. (2024), who state that the implementation of green human resource management can improve employee performance through increased environmental awareness and employee involvement in organizational activities.

However, this finding is consistent with (Renwick et al., 2013), which states that the implementation of environmentally friendly practices has a stronger effect on organizational performance and sustainability than on individual performance directly.

From a human resource management perspective, environmentally based operational policies focus more on resource-use efficiency and compliance with environmental standards (Sutrisno, 2021). Therefore, their impact tends to be felt at the organizational level rather than directly at the individual employee level.

In addition, green operational implementation that has not yet been integrated with the employee performance appraisal system causes this policy to have no

direct effect on individual work outcomes.

Thus, green operational practices are not the main factor influencing employee performance in this study.

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In addition, green operational implementation that has not yet been integrated with the employee performance appraisal system causes this policy to have no direct effect on individual work outcomes.

Thus, green operational practices are not the main factor influencing employee performance in this study.

**b. The Effect of Digital HR Innovation on Employee Performance**

The results show that digital HR innovation has a negative and significant effect on employee performance. This indicates that the implementation of digital technology in human resource management has not fully improved performance and, in fact, tends to reduce it.

This result is consistent with Strohmeier (2020), who states that digital HRM implementation can create adaptation challenges for employees, particularly when it is not accompanied by sufficient organizational readiness and technological competence.

However, this result is not consistent with (Varadaraj & Al Wadi, 2021), which states that HR digitalization can improve organizational performance through efficiency and work-process automation.

From a human resource management perspective, the success of digital innovation depends greatly on human resource readiness to adopt technology (Noe et al., 2021). If technology implementation is not accompanied by adequate training and mentoring, it can create resistance and reduce employee work effectiveness.

Thus, digital HR innovation in this study has not been optimally implemented, resulting in a negative effect on employee performance.

**c. The Effect of Work Process Discipline on Employee Performance**

The results show that work process discipline has a positive and significant effect on employee

performance. This indicates that the higher the level of employee discipline, the higher the resulting performance.

This result is consistent with Gustini et al. (2025), who state that work discipline has a positive effect on employee performance. In addition, Rivai and Zainal (2016) also state that work discipline is an important factor affecting employee productivity and performance.

From a human resource management perspective, work discipline reflects compliance with rules, responsibility, and consistency in carrying out tasks (Hasibuan, 2020). Employees with high discipline tend to work in a more structured and efficient manner, thereby producing more optimal performance.

Thus, work process discipline is the most dominant factor influencing employee performance in this study.

**d. Theoretical Implications**

The findings of this study contribute to the development of human resource management literature by showing that not all variables examined have the same influence on employee performance. Green operational practices are not proven to have a significant effect on employee performance, while digital HR innovation has a negative and significant effect, and work process discipline is proven to have a positive and significant effect on employee performance.

In addition, the results indicate that factors directly related to individual work behavior have a stronger influence than organizational-policy factors or technological innovation. In this case, work discipline as part of individual behavior is proven to be the dominant

factor in improving employee performance.

This finding also shows that technology-based innovation does not always have a positive effect when it is not supported by human resource readiness. Thus, this study strengthens the view that organizational success is determined not only by systems and technology but also by the readiness and behavior of individuals within the organization.

**e. Practical Implications**

The results of this study provide practical implications for companies, indicating that improving employee performance cannot rely solely on the implementation of green operational practices or digital innovation in human resource management. This is because both factors were not proven to have a direct positive effect on employee performance.

Conversely, work process discipline is proven to play a significant role in improving employee performance. Therefore, companies need to place greater emphasis on improving work discipline through rule enforcement, consistent supervision, and clear work standards for employees.

On the other hand, digital HR innovation needs to be accompanied by training, mentoring, and adjustment to employees' capabilities so that it can be implemented optimally and does not lead to decreased performance.

## 5. CONCLUSION

This study aims to analyze the influence of green operational practices, digital HR innovation, and work process discipline on employee performance. Based on the empirical testing that has been conducted, several main findings were obtained.

First, green operational practices do not have a significant effect on employee performance. This shows that the implementation of environmentally based operational practices has not yet been able to directly improve individual employee performance.

Second, digital HR innovation has a negative and significant effect on employee performance. This finding indicates that technology implementation in human resource management that is not yet optimal can reduce employee performance, especially when it is not supported by adequate readiness and adaptability.

Third, work process discipline has a positive and significant effect on employee performance. This shows that employees' level of discipline in carrying out work procedures is a main factor in improving performance.

Overall, the results of this study show that employee performance is influenced more strongly by individual work-behavior factors than by operational-policy factors or technological innovation. Work discipline is the most dominant factor in determining employee performance.

Therefore, future studies are recommended to expand the research object and add other variables that may influence employee performance, such as work motivation, job satisfaction, and organizational culture, in order to obtain more comprehensive results.


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