

*Research Article*

## Enhancing Employee Performance at PT. Multicentral Aryaguna: The Role of Skills, Motivation, and the Work Environment

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### Abstract

This study aims to examine the influence of individual characteristics and the work environment on employee performance at PT. Multicentral Aryaguna. Individual characteristics refer to employees' abilities, skills, work experience, motivation, and attitudes, while the work environment encompasses both physical aspects, such as lighting, workspace, and facilities, and non-physical aspects, including communication, interpersonal relationships, and organizational climate. This research adopts a quantitative approach using a saturated sampling technique, involving all 35 employees as respondents. Data were collected through structured questionnaires and analyzed using multiple linear regression. The findings indicate that both individual characteristics and the work environment positively influence employee performance, both partially and simultaneously. These results highlight that employees with strong competencies and positive attitudes, supported by a conducive and well-managed work environment, tend to demonstrate higher levels of productivity and effectiveness in completing their tasks. Furthermore, the study emphasizes the importance of integrating internal and external factors in improving performance outcomes. Therefore, organizations are encouraged to prioritize employee development through continuous training and skill enhancement, while also fostering a supportive and comfortable work environment to optimize performance and achieve organizational goals sustainably.

Keywords: Individual Characteristics, Work Environment, Employee Performance.

JEL Classification: J24, M12, M54

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### 1. Introduction

Employee performance is a crucial factor in determining an organization's success and sustainability. In today's competitive business environment, companies are required to optimize the quality of their human resources to maintain productivity and achieve organizational goals. Employee performance reflects how effectively employees carry out their duties and responsibilities in accordance with organizational standards and expectations.

Organizations that successfully manage their human resources tend to demonstrate higher productivity and competitiveness than those that do not prioritize employee development (Robbins & Judge, 2017). Therefore, understanding the factors that influence employee performance has become an important issue in human resource management research.

Human resources are considered one of the most valuable assets within an organization because they play a strategic role in implementing organizational strategies and achieving long-term goals. Effective human resource management enables organizations to maximize employee potential by properly recruiting, training, motivating, and managing the work environment. According to Armstrong and Taylor (2020), organizations that focus on developing employee competencies and creating supportive working conditions are more likely to achieve higher organizational performance. This indicates that both internal and external factors must support the quality of human resources to produce optimal employee performance.

One factor that influences employee performance is individual characteristics. Individual characteristics are personal attributes of employees, such as abilities, attitudes, personality traits, experience, and motivation, that influence how they perform their work tasks. Employees with strong competencies, positive attitudes, and high motivation tend to perform more productively in the workplace. Robbins and Coltuer (2018) explain that individual characteristics significantly determine how employees respond to work challenges and organizational expectations. Therefore, understanding the role of individual characteristics is essential for organizations in designing effective human resource management strategies.

In addition to individual characteristics, the work environment is another important factor that affects employee performance. The work environment includes physical aspects such as lighting, temperature, workspace layout, and workplace safety, as well as non-physical aspects such as interpersonal relationships, communication patterns, and organizational culture. A supportive work environment can enhance employee comfort, motivation, and engagement, which ultimately leads to improved performance outcomes. According to Sedarmayanti (2017), a conducive work environment enables employees to perform their tasks efficiently and reduces the risk of work-related stress and dissatisfaction.

Several previous studies have shown that both individual characteristics and the work environment play significant roles in shaping employee performance. Research conducted by Mangkunegara (2017) found that employees who possess strong personal competencies and positive attitudes tend to perform better in completing their work tasks. Similarly, a study by Sunyoto (2019) revealed that a supportive work environment can significantly increase employee motivation and productivity. These findings suggest that both internal and external factors should be considered when analyzing employee performance within an organization.

However, despite the growing body of research on employee performance, inconsistencies remain in the findings regarding the relative influence of individual characteristics and the work environment. Some studies emphasize the importance of individual competencies and personal motivation as the primary determinants of performance. In contrast, others highlight the role of organizational factors such as leadership style, organizational culture, and workplace conditions. According to Dessler (2020), employee performance is often influenced by complex interactions between personal attributes and organizational conditions, underscoring the need for further research to understand these relationships across different organizational contexts.

The introduction highlights that both internal and external factors influence employee performance; however, prior studies present inconsistent findings regarding the relative importance of individual characteristics and the work environment. Some studies emphasize that individual characteristics such as abilities, skills, motivation, and attitudes are the dominant determinants of performance. In contrast, others argue that external factors, particularly the work environment, including physical conditions and organizational climate, play a more significant role in shaping

employee outcomes. This divergence indicates a specific research gap: which factor exerts the stronger influence, and how these variables interact within a particular organizational context. Moreover, most previous studies have examined these variables separately or in different industrial settings, limiting the generalizability of their findings. Therefore, this study offers novelty by simultaneously analyzing the relative and combined effects of clearly defined dimensions of individual characteristics and work environment within PT. Multicentral Aryaguna, a context that has not been previously explored, while also providing empirical evidence on the comparative strength of each variable in explaining employee performance. This approach contributes to a more precise understanding of how internal competencies and external workplace conditions jointly shape performance outcomes, thereby offering both theoretical refinement and practical insights for human resource management.

## 2. Literature Review and Hypothesis

### Literature Review

Employee performance is one of the key indicators used to measure the effectiveness of human resource management within an organization. Performance reflects employees' achievement in carrying out tasks and responsibilities in accordance with predetermined standards. According to Robbins and Judge (2017), employee performance refers to the results achieved by employees in completing their work based on their abilities, experience, and level of responsibility. Organizations that can manage employee performance effectively will achieve higher productivity and organizational effectiveness.

Both internal and external factors influence employee performance. Internal factors include employees' personal abilities, motivation, attitudes, and individual characteristics. Meanwhile, external factors include the work environment, leadership, organizational culture, and management systems implemented within the organization (Dessler, 2020). These factors interact and collectively influence how employees perform their duties within the organization. Individual characteristics are defined as personal attributes that differentiate one individual from another. These characteristics include personality traits, abilities, values, attitudes, and experiences that influence individual behavior in the workplace. According to Robbins and Coulter (2018), individual characteristics play an important role in determining how employees respond to work demands, solve problems, and interact with colleagues. Employees with strong competencies and positive attitudes tend to perform better because they can adapt to organizational changes and challenges.

Individual characteristics also influence employee motivation and work engagement. Employees who possess high levels of motivation, confidence, and professional competence are more likely to demonstrate greater productivity and commitment to their work responsibilities. Armstrong and Taylor (2020) explain that employees with strong personal competencies and positive behavioral traits are more capable of achieving high performance and contributing to organizational success.

In addition to individual characteristics, the work environment is another important factor that influences employee performance. The work environment refers to all physical and non-physical conditions surrounding employees while they perform their work tasks. According to Sedarmayanti (2017), the work environment includes physical aspects such as lighting, temperature, workspace layout, and workplace facilities, as well as non-physical aspects such as communication, employee relationships, and organizational climate.

A supportive work environment can foster a sense of comfort and security among employees, which, in turn, increases their motivation and productivity. Employees who work in a supportive environment tend to experience lower stress and higher job satisfaction. Sunyoto (2019) states that a positive work environment encourages employees to perform their tasks more effectively and efficiently, ultimately improving overall organizational performance. Furthermore, the work environment also plays a role in shaping employee attitudes and work behavior. A well-organized workplace with adequate facilities and supportive interpersonal relationships can increase employee enthusiasm and engagement. Mangkunegara (2017) explains that organizations that

prioritize improving the work environment will have employees who are more motivated and committed to achieving organizational goals.

### **The Influence of Individual Characteristics on Employee Performance**

Grounded in Person–Job Fit theory, employee performance improves when individual attributes such as skills, competencies, and adaptability align with job demands (Kristof-Brown, Zimmerman, & Johnson, 2025). Employees who possess relevant skills and the ability to adapt to dynamic work conditions are more capable of completing tasks effectively and achieving higher productivity. In addition, from a motivational perspective, individuals with strong intrinsic motivation and positive work attitudes tend to exert greater effort and persistence in their work, leading to better performance outcomes (Robbins & Judge, 2017; Armstrong & Taylor, 2020). Prior studies also confirm that employee competence and adaptability significantly influence performance levels (Mangkunegara, 2017; Sunyoto, 2019). These mechanisms suggest that specific facets of individual characteristics particularly skills, adaptability, and motivation play a critical role in shaping employee performance outcomes.

**H1: Individual characteristics, particularly employees' skills, adaptability, and motivation, have a positive and significant effect on employee performance.**

### **The Influence of Work Environment on Employee Performance**

Furthermore, based on the **Job Demands–Resources (JD-R) model**, a supportive work environment provides essential resources that help employees manage job demands and enhance performance (Bakker & Demerouti, 2007). Physical factors, such as adequate lighting, workspace, and facilities, can reduce job strain, while psychosocial factors, such as supportive leadership, effective communication, and positive interpersonal relationships, can increase employee engagement and motivation (Sedarmayanti, 2017; Robbins & Colter, 2018). Empirical evidence also shows that a conducive work environment significantly improves employee productivity and performance (Sunyoto, 2019; Mangkunegara, 2017). These environmental resources enable employees to work more efficiently and sustain higher performance levels.

**H2: The work environment, particularly physical conditions and psychosocial support, has a positive and significant effect on employee performance.**

## **3. Data and Method**

### **Population and Sample**

The population in this study consists of all employees working at PT. Multicentral Aryaguna. Employees are considered the appropriate unit of analysis because they directly contribute to the operational activities and organizational performance. According to Sugiyono (2019), a population is a generalization area consisting of objects or subjects that have certain characteristics determined by the researcher to be studied and from which conclusions are drawn. In this research, the population includes all employees who actively work within the company.

The sampling technique used in this study is saturated sampling. Saturated sampling is a sampling method in which all members of the population are used as research samples. This technique is commonly applied when the population size is relatively small, allowing researchers to include all members of the population in the analysis. Sugiyono (2019) explains that saturated sampling is appropriate when the total population is small, ensuring that the research results reflect the organization's actual conditions. Therefore, the total number of employees in the company is used as the sample in this study.

The data used in this research are primary data collected directly from respondents through the distribution of questionnaires. The questionnaire method allows researchers to collect information on employee perceptions of individual characteristics, work environment conditions, and performance. Primary data collection provides more accurate and relevant information related to the research variables being studied (Sekaran & Bougie, 2016).

### Data Analysis Method

The data collected in this study are analyzed using quantitative analysis methods. Quantitative analysis is used to examine relationships between independent and dependent variables based on numerical data collected from questionnaires. According to Ghozali (2018), quantitative analysis enables researchers to test hypotheses and assess the magnitude of relationships among variables using statistical procedures.

To examine the influence of individual characteristics and the work environment on employee performance, this study uses multiple linear regression. Multiple regression analysis is used to determine the simultaneous effects of two or more independent variables on a dependent variable. This analysis helps identify the extent to which each independent variable contributes to variation in employee performance.

Before conducting regression analysis, several classical assumption tests are performed to ensure the validity of the regression model. These tests generally include tests for normality, multicollinearity, and heteroscedasticity. According to Ghozali (2018), classical assumption tests are important to ensure that the regression model produces unbiased and reliable estimates.

Furthermore, hypothesis testing is conducted using the t-test to examine the partial influence of each independent variable on the dependent variable and the F-test to examine the simultaneous influence of all independent variables on employee performance. The coefficient of determination is also used to measure the extent to which the independent variables in the regression model explain variation in employee performance.

## 4. Results

### Normality Test

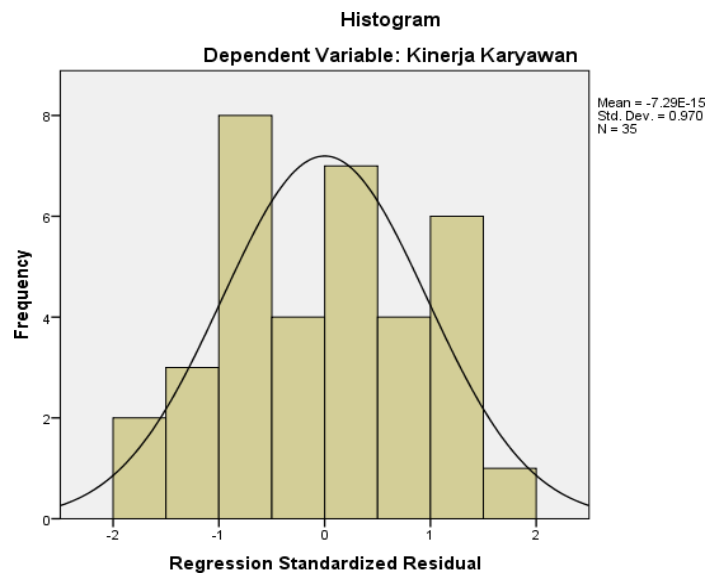
The normality test assesses whether the dependent and independent variables in a regression model are normally distributed. In the Kolmogorov-Smirnov test, the data distribution is considered normal if the p-value is  $>0.05$ . The normality test yields the following data:

**Table 1. Normality Test Results**

		Employee performance
N		35
	Mean	48.49
Normal Parameters <sup>a,b</sup>	Std. Deviation	1.926
	Absolute	.169
Most Extreme Differences	Positive	.073
	Negative	-.169
Kolmogorov-Smirnov Z		.999
Asymp. Sig. (2-tailed)		.271

Source: Data processed using SPSS 21 (2025)

Based on Table 1, the probability or significance value for Asym.Sig. is 0.271 and greater than 0.05, thus concluding that the data distribution is normal. A normality test using a histogram shows a bell-shaped, symmetrical curve with a single peak at the center and equal spread to the left and right, indicating a normal distribution. The normality test yields the following graph:



**Figure 1. Histogram Graph**

Based on the histogram in Figure 1, the distribution appears normal. This indicates that the regression model meets the assumption of normality. A normality test using a Normal Probability Plot can be seen in the distribution of data (points) along the diagonal axis of the graph. Data are considered normal if they are distributed around the diagonal line and follow the direction of the diagonal line.

**Multicollinearity Test**

A multicollinearity test is necessary to determine whether independent variables in a model are correlated. Similarities between independent variables will result in a very strong correlation. Furthermore, this test avoids the tendency to assess the influence of each independent variable on the dependent variable in partial tests. If the resulting VIF is between 1 and 10 and the Tolerance > 0.1, multicollinearity does not occur.

**Table 2. Multicollinearity Test Results**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	33.816	3.122		10.832	.000		
1 Individual Characteristics	.139	.055	.354	2.540	.016	.947	1.056
Work Environment	.357	.108	.461	3.309	.002	.947	1.056

Source: Data processed in SPSS 21 (2025)

The results in Table 2 show that the data output for Individual Characteristics and Work Environment on Employee Performance indicates that all VIF values are <10 and all Tolerance values are >0.1. This indicates that there is no multicollinearity, thus meeting the multicollinearity test. Therefore, it can be concluded that there is no multicollinearity among the independent variables in the regression model.

**Heteroscedasticity Test**

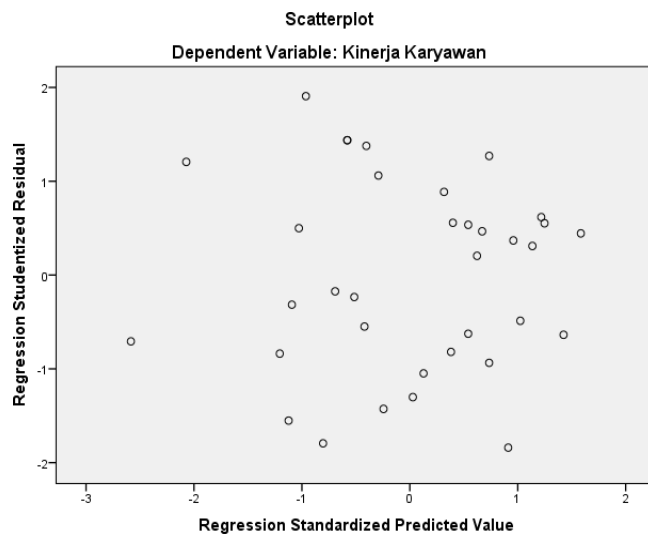
The heteroscedasticity test assesses whether the residual variances across observations differ in the regression model. If the residual variances remain constant, it is called homoscedasticity, and if they differ, it is called heteroscedasticity. A good regression model is homoscedastic or free of heteroscedasticity. In this study, researchers used the Glejser method and scatterplot graphs to test for heteroscedasticity. In the Glejser method, the significance value in the coefficients Table 3 is used to determine whether it exceeds 0.05. The heteroscedasticity test produces the following data:

**Table 3. Results of the Glejser Method Heteroscedasticity Test**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.766	1.586		2.561	.015
1 Individual Characteristics	-.043	.026	-.286	-1.660	.107
Work Environment	-.024	.051	-.080	-.466	.644

Source: Data processed in SPSS 21 (2025)

Based on the Coefficients Table 3, the Sig column shows that the significance values for the independent variables are greater than 0.05, with Individual Characteristics at 0.107 and Work Environment at 0.644. Therefore, heteroscedasticity is not present. In a scatterplot, if the dots form a regular pattern (wavy, widening, then narrowing), this indicates heteroscedasticity. If there is no clear pattern, and the dots are spread above and below 0 on the y-axis, then heteroscedasticity is not present (homoscedasticity)



**Figure 2. Dependent Scatterplot Graph**

The scatterplot graph in Figure 2 above shows no clear pattern, and the points are spread above and below 0 on the y-axis. This concludes that there is no heteroscedasticity in the regression model, making it suitable for predicting Employee Performance based on the independent variables of Individual Characteristics and Work Environment.

**Partial Effect Test (T-Test)**

The t-statistical test is used to determine the partial effect of each independent variable on the dependent variable. The independent variables in this study are Individual Characteristics and Work Environment, while the dependent variable is Employee Performance. The t-table value in this study is 2.036.

**Table 4. Partial Effect Test Results (T-Test)**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	33.816	3.122		10.832	.000
1 Individual Characteristics	.139	.055	.354	2.540	.016
Work Environment	.357	.108	.461	3.309	.002

Source: Data processed in SPSS 21 (2025)

The calculated t-value for the Individual Characteristics variable (X1) is 2.540 with a significance level of 0.016. Because the calculated t-value of 2.540 is greater than the t-table value of 2.036 and the significance level of 0.016 is less than the probability of significance  $\alpha=0.05$ ,  $H_a$  is accepted, and  $H_o$  is rejected. This means that the Individual Characteristics variable has a partial and significant effect on Employee Performance. The calculated t-value for the Work Environment variable (X2) is 3.309, with a p-value of 0.002. Because the calculated t-value of 3.309 is greater than the t-table value of 2.306 and the significance level of 0.002 is less than the probability of significance  $\alpha=0.05$ ,  $H_a$  is accepted, and  $H_o$  is rejected. This means that the Work Environment variable has a partial and significant effect on Employee Performance.

## 5. Discussion

### **The Influence of Individual Characteristics on Employee Performance**

The results of this study indicate that individual characteristics positively influence employee performance. This finding shows that employees who possess strong personal attributes such as abilities, work experience, positive attitudes, and motivation tend to demonstrate better performance in completing their tasks and responsibilities. Individual characteristics play an important role in determining how employees respond to work challenges, adapt to organizational changes, and maintain productivity in their daily activities. Employees with strong competencies and professional attitudes generally work more effectively and efficiently. They are also better able to solve problems, collaborate with colleagues, and maintain a high level of responsibility in their work. These conditions encourage employees to produce better work outcomes and contribute positively to the achievement of organizational goals.

This finding is consistent with the theory proposed by Robbins and Judge (2017), which states that individual characteristics such as abilities, personality traits, and attitudes influence how individuals perform their work tasks within an organization. Employees with stronger individual competencies tend to perform better because they can manage their work responsibilities more effectively. The results of this study are also supported by previous research conducted by Mangkunegara (2017), which found that individual competence and personal attributes significantly influence employee performance. Similarly, research by Sunyoto (2019) indicates that employees with strong personal abilities and positive work attitudes are more likely to achieve higher levels of productivity and job performance. These findings confirm that individual characteristics are an important internal factor in improving employee performance.

### **The Influence of Work Environment on Employee Performance**

This study also shows that the work environment positively influences employee performance. A supportive work environment enables employees to perform their duties comfortably and effectively. When employees feel safe, comfortable, and supported in their workplace, they tend to be more motivated and focused on completing their tasks. A conducive work environment includes both physical and non-physical aspects. Physical factors such as adequate lighting, comfortable workspace arrangements, and the availability of work facilities help employees perform their tasks efficiently. Meanwhile, non-physical factors such as good communication, positive relationships among colleagues, and a supportive organizational climate contribute to employee motivation and job satisfaction.

This finding aligns with Sedarmayanti's (2017) theory, which posits that a conducive work environment can foster comfort and security, enabling employees to work more productively. Employees who work in a supportive environment are more likely to demonstrate higher levels of engagement and responsibility toward their work. The results of this study are also supported by previous research conducted by Mangkunegara (2017), which found that workplace conditions significantly influence employee productivity and performance. In addition, research by Sunyoto (2019) shows that employees working in comfortable, supportive environments tend to perform better than those working in unfavorable conditions. These findings emphasize that the work environment plays a significant role in shaping employee behavior and performance.

## 6. Conclusion

This study concludes that individual characteristics particularly skills, adaptability, and motivation and the work environment both physical and psychosocial have a positive and significant effect on employee performance at PT. Multicentral Aryaguna, with the work environment showing a relatively stronger influence. These findings contribute to the human resource management literature by integrating the Person–Job Fit perspective and the Job Demands–Resources (JD-R) model, demonstrating how internal competencies and external work conditions jointly shape performance outcomes. However, the results are constrained by the study's context, as they are derived from a single organization with a small sample ( $n = 35$ ) and a cross-sectional design, which may limit generalizability.

From a managerial perspective, the findings translate into actionable HR strategies. Organizations should implement competency-based recruitment focusing on key indicators such as technical skills, adaptability, and motivation, with performance measured through productivity and task completion rates within 3–6 months. In addition, targeted training programs should be conducted to strengthen employee competencies, evaluated using pre- and post-performance assessments. Work-environment interventions should include improving workspace layout and safety, clarifying workload and job roles, and strengthening communication norms between employees and supervisors. The effectiveness of these initiatives can be monitored through measurable indicators such as reduced error rates, increased output efficiency, and improved employee satisfaction within a 6–12 month timeframe.

## Recommendation

Organizations should implement measurable HR strategies to improve performance. First, conduct a quarterly work-environment survey and target  $\geq 10\%$  improvement in satisfaction and communication scores. Second, set 20–40 training hours per employee annually, followed by post-training evaluations using productivity, task completion, and error rates. Third, redesign the workspace and streamline processes to reduce bottlenecks, with KPIs such as faster processing time and higher output efficiency within 6–12 months. Finally, future studies should examine interactions between individual characteristics and the work environment to understand their combined impact on employee performance better.

## Limitations and avenues for future research

This study has several limitations related to the research scope, data, and analytical design. The study focuses only on individual characteristics and the work environment as factors influencing employee performance and is conducted within a single organization with a limited number of respondents. The use of questionnaire-based data may also reflect respondents' perceptions, which may not fully capture actual performance conditions. Future research is recommended to include additional variables, such as leadership style, organizational culture, and job satisfaction, and to involve larger samples across different organizations to obtain more comprehensive and generalizable findings.

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