

# Analysis of the Potential Use of Artificial Intelligence, Division of Job Desks and Team Communication on Employee Performance At PT. Mina Berkah Selalu

Mochammad Azharuddin Haidi<sup>1</sup>, Kumara Adji<sup>2</sup>, Sumartik<sup>3</sup>, Khoong Tai Wai<sup>4</sup>

<sup>1,2</sup>Muhammadiyah University of Sidoarjo, Indonesia

<sup>3,4</sup>Tunku Abdul Rahman University of Management and Technology (TARUMT), Malaysia



DOI : <https://doi.org/10.61796/jaide.v2i10.1503>



## Sections Info

### Article history:

Submitted: August 29, 2025

Final Revised: September 12, 2025

Accepted: September 28, 2025

Published: October 31, 2025

### Keywords:

The potential use of artificial intelligence

Jobdesk division

Team communication

Employee performance

## ABSTRACT

**Objective:** This study aims to find out and measure how much influence the potential use of Artificial Intelligence, job desk division and team communication on employee performance at PT. Mina Berkah Selalu. **Method:** This research includes quantitative research using an explanatory research approach. The population in this study is taken from the number of all employees at PT. Mina Berkah Selalu. The sample obtained amounted to 50 respondents with a total sampling data collection technique. Data collection in this study was by observation and distribution of questionnaires measured using the Likert scale. This study uses the Structural Equation Modeling (SEM) analysis method. The data analysis technique used in this study uses PLS (Partial Least Square) version 4.0. **Results:** The results of this study show that the use of Artificial Intelligence and the division of jobdesks have a positive and significant influence on employee performance. However, team communication has no effect and is not significant to employee performance. **Novelty:** This study provides empirical evidence on how the integration of Artificial Intelligence and organizational structure (job desk division) can enhance employee performance in a corporate environment, while also identifying that team communication may not always directly impact performance outcomes.

## INTRODUCTION

In this era of increasingly intense business competition, companies are required to rely on human resources capable of providing optimal contributions to every organizational activity. Human resources (HR) are one of the most crucial elements for achieving corporate success [1]. As the intensity of competition rises, employee performance becomes a vital concern for companies, as it reflects the extent to which employees contribute to achieving organizational objectives [2].

Employee performance plays a crucial role because it directly relates to human resources, which serve as the foundation for operational sustainability [3]. Good employee performance is generally reflected through two main indicators—quality and quantity of work. When these two aspects are balanced, employees can deliver outcomes that support the company's strategic goals.

Employee performance can be observed through several measurable indicators, depending on the company's orientation and management style. This study focuses on PT. Mina Berkah Selalu, located in Penatarsewu Village, Tanggulangin District, Sidoarjo Regency. The company operates in the fisheries sector and emphasizes employee performance quality as one of its main corporate objectives. The decision to select PT. Mina Berkah Selalu as the research object was based on observed fluctuations in

employee performance over time, which require further analysis to determine their causal factors. The following table presents the performance data of PT. Mina Berkah Selalu employees during 2024

**Table 1.** Employee Performance Results of PT. Mina Berkah Selalu 2024.

| Month     | Number of Employees | Work Productivity | Work Quality | Average Performance (%) |
|-----------|---------------------|-------------------|--------------|-------------------------|
| January   | 50                  | 89                | 80           | 84.5                    |
| February  | 50                  | 102               | 95           | 98.5                    |
| March     | 50                  | 80                | 68           | 74                      |
| April     | 50                  | 88                | 93           | 90.5                    |
| May       | 50                  | 92                | 98           | 95                      |
| June      | 50                  | 80                | 73           | 76.5                    |
| July      | 50                  | 92                | 86           | 89                      |
| August    | 50                  | 80                | 107          | 93.5                    |
| September | 50                  | 95                | 88           | 91.5                    |
| October   | 50                  | 98                | 81           | 89.5                    |
| November  | 50                  | 87                | 83           | 85                      |
| December  | 50                  | 70                | 104          | 87                      |

Based on Table 1, it can be observed that the number of employees at PT. Mina Berkah Selalu is 50 people. On average, the work productivity of employees at PT. Mina Berkah Selalu in 2024 is 87.75, while the average quality of work results is 88. Employee performance results are also known to fluctuate each month. The highest work productivity occurred in February (102), while the lowest was in December (70). The highest work quality was recorded in August (107), while the lowest occurred in March (68). This indicates that the fluctuations in productivity and quality of work are quite significant from month to month, which requires further evaluation to identify the factors causing the rise and fall of performance.

One of the factors influencing employee performance is communication. Team communication is one of the factors that directly affects work effectiveness. The quality of communication within a team greatly determines the smoothness of coordination, information delivery, and relationships among team members. Good communication can increase task clarity, strengthen cooperation, and minimize errors [13]. At PT. Mina Berkah Selalu, communication dynamics between operational staff and management still face challenges, such as delayed information and miscommunication between teams.

Therefore, team communication also becomes a factor that must be considered [3]. Team communication in an organizational context is not limited to the function of transmitting information between individuals but is essential as an integral coordination mechanism for all company activities [4]. The effectiveness of task implementation by each member of the organization is significantly influenced by communication competence and the quality of comprehensive interpersonal relationships. The

implementation of rapid and transparent communication between leaders and subordinates is a crucial prerequisite in facilitating the achievement of established organizational objectives [5]. In the communication process, reciprocal interaction between the sender (communicator) and receiver (communicant) is a fundamental aspect. Communication is identified as one of the significant factors influencing employee performance levels within the company environment [6]. The main objective of communication is to transmit messages from the source to the receiver and, ideally, to obtain a response or feedback from the receiver [6].

In addition, the division of job desks or proportional distribution of work tasks is also a key determinant of work efficiency. Uneven task distribution can cause workload imbalances and decrease work motivation [9]. Therefore, it is important to evaluate whether the existing task structure aligns with each employee's capacity and specialization. One of the important pillars in management is how tasks and responsibilities are distributed among employees [7]. A structured and proportional division of labor is not merely an allocation of workload but a strategy that significantly influences both individual and collective performance [8].

Management efforts to improve employee performance are carried out by distributing tasks evenly. The goal is to ensure that each employee receives a fair and proportional workload [9]. The specialization resulting from the division of labor allows employees to focus on developing expertise in certain areas, which in turn improves the quality of the work produced. According to research by [10], every increase in the implementation of work division indicators leads to an increase in employee work effectiveness; therefore, if the company seeks to improve work effectiveness, it must pay attention to the implementation of these work division indicators.

Furthermore, the emergence of Artificial Intelligence (AI) technology brings new opportunities for companies, including in supporting work efficiency. However, the potential of AI has not been optimally utilized by the company and is still a subject of debate among employees regarding its impact on workload and communication effectiveness. The development of information technology has led some to state that the Industrial Revolution 4.0 has blurred the boundaries between the physical, digital, and biological spheres. Artificial Intelligence (AI) has become one of the key factors currently influencing employee performance [11].

Through the use of AI, companies can open major opportunities to create added value through task automation, individualized service adjustments, and data-driven decision-making. For example, [7] states that AI can help companies process and analyze large-scale data with high speed and accuracy, detect market trends, and formulate strategic recommendations [12]. AI has great potential to enhance organizational value through automation, personalization, and data-based decision-making. In the manufacturing sector, AI can automate production, improve efficiency, and increase customer satisfaction [13]. However, improper implementation of AI can harm the company. This statement is supported by research from [14], which states that the use of Artificial Intelligence can affect employee performance within a company.

This research is built upon previous studies [15] that have explored the influence of communication and teamwork on employee performance. As a contribution of novelty, this article expands the scope of independent variables by integrating the potential use of Artificial Intelligence (AI) and the clarity of job desk division, in addition to team communication, in influencing employee performance as the dependent variable. The novelty of this study lies in the simultaneous testing of these three variables, which is rarely conducted—particularly in the fisheries sector context—thus providing new insights into how technology and task management can be integrated with communication aspects to enhance performance in this industry.

Furthermore, a significant difference also lies in the methodological approach. While previous studies primarily used qualitative methods, this research applies a quantitative method with primary data collection through questionnaires distributed to employees of PT. Mina Berkah Selalu. Data analysis was conducted using Smart PLS 4.0 software, enabling a more measurable and objective evaluation of the influence of each independent variable on employee performance.

Therefore, based on the research gap and the problems discussed above, the researcher decided to conduct a study entitled “Analysis of the Potential Use of Artificial Intelligence, Job Desk Division, and Team Communication on Employee Performance.” The main objective of this study is to empirically and comprehensively investigate the magnitude and direction of the influence of each independent variable — the potential use of AI, job desk division, and team communication — on the dependent variable, employee performance, within an organizational context.

Thus, this research aims to provide a deeper understanding of the synergistic contribution between the use of AI technology, clear work structuring, and the quality of team interaction in improving productivity and work efficiency in the company environment. The results of this study are expected not only to provide theoretical and practical implications for human resource management development but also to serve as a novel contribution in the field of HR research. These findings are expected to enrich the literature on technology utilization, job desk division, and team communication while offering new directions for developing adaptive human resource management strategies that respond effectively to organizational change.

**Research Question:** Does the potential use of Artificial Intelligence, task allocation, and team communication affect employee performance?

**SDG’s Category:** As described in the introduction and problem background of this study, it aligns with the Sustainable Development Goals, specifically point 8, which supports decent work and economic growth.

### **Problem Formulation**

1. Does the potential use of Artificial Intelligence have a significant effect on Employee Performance?
2. Does task allocation have a significant effect on Employee Performance?
3. Does team communication have a significant effect on Employee Performance?

## The use of Artificial Intelligence

*Artificial Intelligence (AI)* can be conceptualized as a discipline and practice of engineering intelligent systems capable of performing a series of tasks that typically require human cognition [16]. The relationship between *Artificial Intelligence (AI)* and employee performance lies in human resource efficiency, thereby facilitating employees in executing their tasks accurately and effectively [12]. AI provides tools and automation systems that enable employees to work more productively, gain better access to information, and complete tasks with greater precision. *Artificial Intelligence (AI)* refers to efforts to empower machines, such as computational systems, to manifest behavior that is cognitively equivalent to human intellectual capabilities [17]. Computer systems with the capability to execute tasks that conventionally require human intelligence are known as *Artificial Intelligence (AI)* or machine intelligence [18]. The implementation of *Artificial Intelligence (AI)* tends to exhibit higher persistence compared to natural intelligence, which is prone to changes due to human cognitive factors such as forgetfulness. The functional stability of AI is maintained as long as the underlying computational system architecture and programs are not modified [19].

Indicators of *Artificial Intelligence (AI)* usage are [20]:

- a. Mechanical Intelligence: AI systems with mechanical intelligence capabilities can perform a series of repetitive and structured tasks, such as numerical computation, data organization, or information retrieval from databases.
- b. Intuitive Intelligence: The level of intuitive intelligence in the context of AI indicates the system's capacity to identify and interpret ambiguous or complex patterns that may be difficult for human cognition to capture.
- c. Analytical Intelligence: Analytical intelligence represents a higher cognitive level compared to mechanical intelligence.
- d. Empathetic Intelligence: The integration of empathetic intelligence in AI systems allows understanding and responding to a spectrum of human emotions, thereby facilitating interactions that feel more intuitive and human-like.

The use of Artificial Intelligence (AI) can influence employee performance [11]. Thus, higher AI utilization is associated with improved employee performance. This is supported by previous studies [14], [11] showing that AI usage has a positive and significant effect on employee performance. However, contrary findings are reported by [21], which state that AI has a negative impact on performance.

## Job Description Division

Task Allocation refers to breaking down work into more specific tasks, where each member of the organization is responsible for a certain set of activities rather than the entire job [22]. According to the study by [9], task allocation is a written description of various elements of a job, including its main functions, tasks to be performed, responsibilities held, authority limitations, working conditions, and other specific aspects. Through task allocation, organizations can develop employees' competencies deeply in their respective fields. This honed expertise enables employees to contribute optimally to the achievement of shared goals [10]. Task allocation involves breaking

down and grouping similar and closely related tasks and activities, which are then assigned to be performed within the organization [23]. Indicators of task allocation are [22]:

- a. Employee Placement: Placement should be based on employees' abilities, skills, and educational background. Misplacement of employees can hinder smoothness and effectiveness in job execution.
- b. Workload: The tasks assigned and responsibilities entrusted to a particular organizational unit or employee.
- c. Job Specialization: Task allocation that considers the specific skills or expertise possessed by each individual.

According to the findings of [9], task allocation affects employee performance. Proper task allocation can improve work efficiency and minimize work-related stress. This is also supported by research from [22], which states that task allocation can enhance employee performance. However, contrary results are reported by [24], which state that task allocation has a negative impact on performance.

### **Team Communication**

Team Communication is the process of sharing information among team members with the aim of achieving a common understanding [16]. According to the study by [5], communication is a process in which an individual conveys a message to another with the purpose of sharing information, influencing views, attitudes, or behavior, either verbally or through media intermediaries. This process requires a response or feedback between the sender (communicator) and the receiver (communicant). Excessive or inadequate communication can reduce employee performance because communication also functions to reinforce employee performance motivation [3].

According to [6], indicators of team communication are:

- a. Understanding: Effective communication is marked by the receiver's ability to accurately interpret the meaning conveyed by the sender.
- b. Enjoyment: Successful communication is also reflected when the information delivery process occurs in a positive and enjoyable atmosphere for both parties involved.
- c. Improved Relationships: Efficient and effective communication contributes to the enhancement of interpersonal relationships among individuals.
- d. Action: In successful communication, both parties respond or act according to the message that has been communicated.

According to the findings of [5], team communication can improve employee performance. Therefore, the better the team communication in a company, the higher an employee's performance. This is also supported by research from [25], [26], which states that team communication can enhance employee performance. However, contrary results are reported by [27], indicating that team communication has no effect on performance.

### **Employee performance**

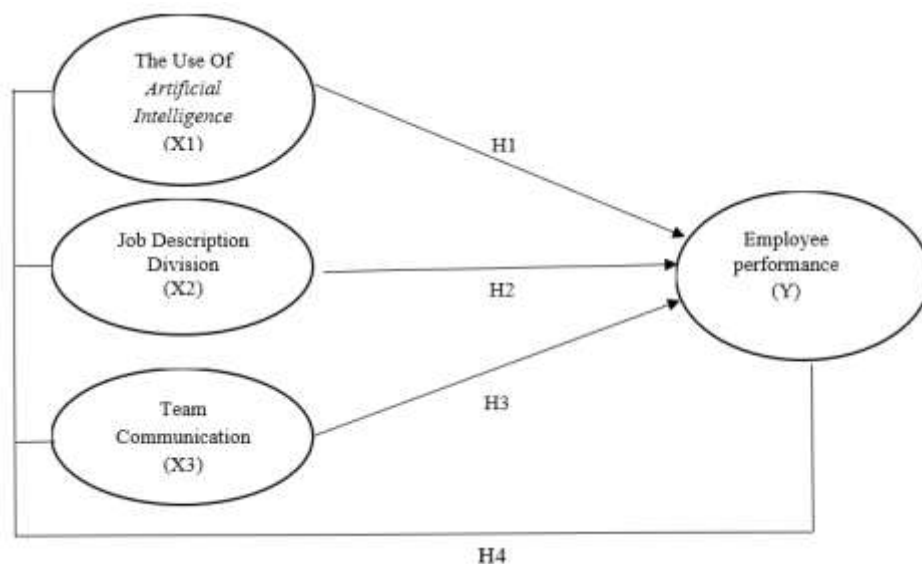
Performance refers to the work outcomes achieved by an individual or team within a company according to the responsibilities and authority assigned, with the aim

of legally meeting the company's targets [28]. Employee performance specifically refers to the results, in terms of both quantity and quality, achieved by an employee in carrying out their tasks in accordance with their responsibilities. Performance can also be defined as the individual's work results in fulfilling obligations, influenced by diligence, ability, experience, and time allocation [29]. Employee performance serves as a reference for work outcomes observed in terms of quality and quantity, namely the results achieved by an employee in completing tasks according to the responsibilities assigned [30]. Employee performance refers to the achievements obtained by an employee in completing the tasks and responsibilities assigned to them [31]. Employees with superior performance not only achieve targets but do so in an efficient and high-quality manner [32].

The indicators of employee performance are [33]:

- a. Work Quality: The outcomes of work reflected in the level of excellence or deficiency in the employee's task completion.
- b. Work Quantity: The amount produced by the individual, expressed in the number of cycles or units of activities completed.
- c. Timeliness: The extent to which activities are completed on time, considering coordination with outputs and optimal use of time for other activities.
- d. Effectiveness: The level of optimal utilization of organizational resources (money, technology, labor, and raw materials) aimed at maximizing results from each unit of resource use.
- e. Independence: The degree to which an individual can perform job functions without assistance, guidance, or supervision from others.

### Conceptual Framework



**Figure 1.** Cinceptual framework.

### Hypothesis

H1: The use of Artificial Intelligence has a positive and significant effect on employee performance.

H2: Task allocation has a positive effect on employee performance.

H3: Team communication has a positive and significant effect on employee motivation.

H4: The potential use of Artificial Intelligence, task allocation, and team communication simultaneously has a significant effect on employee performance.

## RESEARCH METHOD

This study is a quantitative descriptive research that describes the numerical data obtained as research results. This research employs explanatory research, which is a research method that explains the positions of the variables studied and the relationships between one variable and another. The reason for using this method is to test the proposed hypotheses and because there is a potential causal relationship among the variables. The population used in this study consisted of all employees at PT Mina Berkah Selalu, totaling 50 individuals. The sampling technique employed was total sampling, where the population consists of 50 people. If the population consists of 100 individuals or fewer, the sample is taken from the entire population. However, if the population exceeds 100, the sample is taken at 10%-15% or 20%-25% of the total population.

The research was conducted at PT Mina Berkah Selalu. The data required for this study included both primary and secondary data. Field research was conducted through observation and the distribution of questionnaires to respondents. Measurements in the questionnaire used interval measurement, specifically a Likert scale, which is suitable for capturing respondents' answers. The questionnaire contained questions about respondents' characteristics and statements related to variable indicators. The collected data were then analyzed using the Partial Least Squares (PLS) approach, implemented with SmartPLS version 4.0. PLS is a structural equation modeling technique that focuses on components or latent variables.

### Operational Definition

#### The use of Artificial Intelligence

According to the study by [17], Artificial Intelligence (AI) is the utilization of artificial intelligence in computers or machines used for company operations with adequate and advanced capabilities. The use of AI at PT. Mina Berkah Selalu refers to the use of computers that leverage artificial intelligence technology to streamline operational activities. Indicators of Artificial Intelligence (AI) usage include:

- a. Mechanical Intelligence: AI with mechanical intelligence can execute routine and mechanical tasks, such as performing calculations, organizing data, or retrieving information from databases.
- b. Intuitive Intelligence: The ability to think creatively and adapt effectively to new situations.
- c. Analytical Intelligence: AI can be used to analyze sales trends and make predictions regarding future sales.
- d. Empathetic Intelligence: AI can be used in customer service to understand and respond to customer emotions.

## **Job Description Division**

According to the study by [9], task allocation is a written description of various elements of a job, including its main functions, tasks to be performed, responsibilities held, authority limitations, working conditions, and other specific aspects. Indicators of task allocation are [23]:

- a. Employee Placement: Employees are placed according to their skills and abilities.
- b. Workload: The workload assigned to employees should be evenly distributed to avoid situations where an employee has too much or too little work.
- c. Job Specialization: Task allocation based on specific skills or expertise.

## **Team Communication**

According to the study by [5], communication is a process in which an individual conveys a message to another person with the aim of sharing information, influencing views, attitudes, or behavior, either verbally or through media intermediaries. This process requires a response or feedback between the sender (communicator) and the receiver (communicant). Indicators of team communication are [6]:

- a. Understanding: Good communication occurs when the receiver fully comprehends the sender's intended meaning.
- b. Enjoyment: Communication is also considered successful if the process of delivering information is pleasant and makes both parties feel comfortable.
- c. Improved Relationships: Effective communication can enhance interpersonal relationships, making them closer and of higher quality.
- d. Action: When communication is successful, both parties involved will respond or act according to the message conveyed.

## **Employee performance**

Employee performance serves as a reference for work outcomes observed in terms of quality and quantity, namely the results achieved by an employee in completing tasks according to the responsibilities assigned [30]. Employee performance refers to the achievements obtained by an employee in completing the tasks and responsibilities assigned to them [31]. The indicators of employee performance are [34]:

- a. Work Quality: The outcomes of work reflected in the level of excellence or deficiency in the employee's task completion.
- b. Work Quantity: The amount produced by the individual, expressed in the number of units of activities completed.
- c. Timeliness: The extent to which activities are completed on time, considering coordination with outputs and the optimal use of time for other activities.
- d. Effectiveness: The level of optimal utilization of organizational resources (money, technology, labor, and raw materials) aimed at maximizing results from each unit of resource use.
- e. Independence: The degree to which an individual can perform job functions without assistance, guidance, or supervision from others.

## RESULTS AND DISCUSSION

### Results

#### Convergent Validity Test

**Table 2.** Convergent Validity Test Results.

| Variable                                  | Indicator | Outer Loading | Note  |
|-------------------------------------------|-----------|---------------|-------|
| <i>Artificial Intelligence Usage (X1)</i> | X1.1      | 0,660         | Valid |
|                                           | X1.2      | 0,684         | Valid |
|                                           | X1.3      | 0,785         | Valid |
|                                           | X1.4      | 0,778         | Valid |
|                                           | X1.5      | 0,870         | Valid |
|                                           | X1.6      | 0,655         | Valid |
| <i>Job Description Division (X2)</i>      | X2.1      | 0,756         | Valid |
|                                           | X2.2      | 0,693         | Valid |
|                                           | X2.3      | 0,793         | Valid |
|                                           | X2.4      | 0,688         | Valid |
|                                           | X2.5      | 0,739         | Valid |
|                                           | X2.6      | 0,840         | Valid |
| <i>Team Communication (X3)</i>            | X3.1      | 0,871         | Valid |
|                                           | X3.2      | 0,853         | Valid |
|                                           | X3.3      | 0,731         | Valid |
|                                           | X3.4      | 0,852         | Valid |
|                                           | X3.5      | 0,813         | Valid |
|                                           | X3.6      | 0,791         | Valid |
|                                           | X3.7      | 0,779         | Valid |
|                                           | X3.8      | 0,801         | Valid |
| <i>Employee Performance (Y1)</i>          | Y.1       | 0,910         | Valid |
|                                           | Y.2       | 0,806         | Valid |
|                                           | Y.3       | 0,832         | Valid |
|                                           | Y.4       | 0,657         | Valid |
|                                           | Y.5       | 0,712         | Valid |
|                                           | Y.6       | 0,632         | Valid |

Source: SmartPLS4 Output, processed 2025.

Table 2 shows the results of the convergent validity test for the variables Artificial Intelligence Usage (X1), Task Allocation (X2), Team Communication (X3), and Employee Performance (Y1) based on the outer loading values of each indicator. All indicators for the four variables have outer loading values above 0.6, indicating that each indicator is valid in measuring the intended construct. Outer loading values for X1 ranged from 0.655 to 0.870, X2 from 0.688 to 0.840, X3 from 0.731 to 0.871, and Y1 from 0.632 to 0.910,

showing that all indicators adequately represent their respective variables, thus fulfilling convergent validity.

#### Average Variance Extracted (AVE) Test

**Table 3.** AVE Test Results.

| Variable                                  | Average Variant Extracted (AVE) | Note  |
|-------------------------------------------|---------------------------------|-------|
| <i>Artificial Intelligence Usage (X1)</i> | 0,585                           | Valid |
| Job Description Division (X2)             | 0,660                           | Valid |
| Team Communication (X3)                   | 0,568                           | Valid |
| Employee Performance (Y)                  | 0,552                           | Valid |

Source: SmartPLS4 Output, processed 2025.

Table 3 shows the AVE test results for the four variables. All variables have AVE values above 0.5, with 0.585 for X1, 0.660 for X2, 0.568 for X3, and 0.552 for Y. This indicates that each variable explains more than 50% of its indicator variance, confirming convergent validity and validating the constructs used in this study.

#### Composite Reliability Test

**Table 4.** Composite Reliability Test Results.

| Variable                                  | Composite Reliability | Note     |
|-------------------------------------------|-----------------------|----------|
| <i>Artificial Intelligence Usage (X1)</i> | 0,892                 | Reliable |
| Job Description Division (X2)             | 0,939                 | Reliable |
| Team Communication (X3)                   | 0,887                 | Reliable |
| Employee Performance (Y)                  | 0,880                 | Reliable |

Source: SmartPLS4 Output, processed 2025.

Table 4 shows the results of the Composite Reliability test for the variables Artificial Intelligence Usage (X1), Task Allocation (X2), Team Communication (X3), and Employee Performance (Y), with values of 0.892 for X1, 0.939 for X2, 0.887 for X3, and 0.880 for Y. All values are above the threshold of 0.7, indicating that the four variables have high reliability and are consistent in measuring their respective constructs. Therefore, these variables are considered reliable and valid for analysis.

## Cronbach's Alpha Test

**Table 5.** Cronbach's Alpha Test Results.

| Variable                                  | Cronbach's Alpha | Note     |
|-------------------------------------------|------------------|----------|
| <i>Artificial Intelligence Usage (X1)</i> | 0,853            | Reliable |
| Job Description Division (X2)             | 0,926            | Reliable |
| Team Communication (X3)                   | 0,846            | Reliable |
| Employee Performance (Y)                  | 0,836            | Reliable |

Source: SmartPLS4 Output, processed 2025.

Table 5 shows the results of the Cronbach's Alpha test for the variables Artificial Intelligence Usage (X1), Task Allocation (X2), Team Communication (X3), and Employee Performance (Y), with values of 0.853, 0.926, 0.846, and 0.836, respectively. All Cronbach's Alpha values are above the threshold of 0.7, indicating that the four variables have good internal consistency and can be considered reliable measures in this study. Therefore, these variables are deemed reliable for further analysis.

## Discriminant Validity Test Results

**Table 6.** Cross Loading Values.

|             | X1    | X2    | X3    | Y     |
|-------------|-------|-------|-------|-------|
| <b>X1.1</b> | 0,660 | 0,539 | VB    | 0,402 |
| <b>X1.2</b> | 0,684 | 0,483 | 0,446 | 0,473 |
| <b>X1.3</b> | 0,785 | 0,554 | 0,588 | 0,507 |
| <b>X1.4</b> | 0,778 | 0,566 | 0,486 | 0,546 |
| <b>X1.5</b> | 0,870 | 0,724 | 0,665 | 0,693 |
| <b>X1.6</b> | 0,655 | 0,515 | 0,413 | 0,571 |
| <b>X2.1</b> | 0,669 | 0,756 | 0,680 | 0,709 |
| <b>X2.2</b> | 0,477 | 0,693 | 0,567 | 0,568 |
| <b>X2.3</b> | 0,600 | 0,793 | 0,681 | 0,664 |
| <b>X2.4</b> | 0,499 | 0,688 | 0,625 | 0,597 |
| <b>X2.5</b> | 0,439 | 0,739 | 0,564 | 0,669 |
| <b>X2.6</b> | 0,740 | 0,840 | 0,776 | 0,767 |
| <b>X3.1</b> | 0,568 | 0,686 | 0,871 | 0,726 |
| <b>X3.2</b> | 0,605 | 0,804 | 0,853 | 0,748 |
| <b>X3.3</b> | 0,585 | 0,614 | 0,731 | 0,645 |
| <b>X3.4</b> | 0,518 | 0,721 | 0,852 | 0,789 |
| <b>X3.5</b> | 0,633 | 0,656 | 0,813 | 0,695 |
| <b>X3.6</b> | 0,496 | 0,674 | 0,791 | 0,652 |
| <b>X3.7</b> | 0,438 | 0,642 | 0,779 | 0,628 |
| <b>X3.8</b> | 0,620 | 0,815 | 0,801 | 0,708 |
| <b>Y.1</b>  | 0,660 | 0,818 | 0,756 | 0,910 |

|     | X1    | X2    | X3    | Y     |
|-----|-------|-------|-------|-------|
| Y.2 | 0,681 | 0,771 | 0,771 | 0,806 |
| Y.3 | 0,548 | 0,689 | 0,672 | 0,832 |
| Y.4 | 0,481 | 0,550 | 0,600 | 0,657 |
| Y.5 | 0,479 | 0,610 | 0,496 | 0,712 |
| Y.6 | 0,457 | 0,567 | 0,619 | 0,632 |

Source: SmartPLS4 Output, processed 2025.

Table 6 presents the cross-loading values of the indicators for the variables Artificial Intelligence Usage (X1), Task Allocation (X2), Team Communication (X3), and Employee Performance (Y). Overall, each indicator shows the highest loading on its intended variable, supporting discriminant validity. For instance, indicator X1.5 has the highest loading on X1 at 0.870 compared to other variables, X2.6 loads highest on X2 at 0.840, X3.1 on X3 at 0.871, and Y.1 on Y at 0.910. Although some indicators show relatively high loadings on other variables, the primary variable loadings remain dominant, indicating that each indicator strongly represents its respective construct. Therefore, these results support that the model has good discriminant validity among the variables.

#### Uji Discriminant Validity (Fornell Larcker Criterion)

**Table 7.** Results of the Discriminant Validity Test (Fornell Larcker Criterion).

|    | Y     | X3    | X2    | X1    |
|----|-------|-------|-------|-------|
| Y  | 0,765 |       |       |       |
| X3 | 0,863 | 0,813 |       |       |
| X2 | 0,884 | 0,866 | 0,753 |       |
| X1 | 0,731 | 0,687 | 0,766 | 0,743 |

Source: SmartPLS4 Output, processed 2025.

Table 7 shows the results of the discriminant validity test using the Fornell-Larcker Criterion, where the diagonal values (in bold) represent the square root of the Average Variance Extracted (AVE) for each variable, and the values below the diagonal represent correlations between variables. All diagonal values are greater than their corresponding inter-variable correlations. For example, the AVE of variable Y is 0.765, which is higher than its correlations with X1, X2, and X3, as well as other variables that also meet this criterion. This indicates that each construct has a stronger association with its own indicators than with other constructs, confirming that discriminant validity among the variables is fulfilled and that the research model demonstrates good construct distinctiveness.

#### Hypothesis Testing

**Table 8.** Uji Path Coefficients.

|                                                         | Original Samples (0) | Sample Mean (M) | Standard Deviation (STDEV) | T-Statistics (0/STDEV) | P-values |
|---------------------------------------------------------|----------------------|-----------------|----------------------------|------------------------|----------|
| <i>Artificial Intelligence Usage (X1)-&gt; Employee</i> | 0,379                | 0,382           | 0,135                      | 2,816                  | 0,005    |

|                                                                  | Original<br>Samples (0) | Sample<br>Mean<br>(M) | Standard<br>Deviation<br>(STDEV) | T-Statistics<br>(0/STDEV) | P-<br>values |
|------------------------------------------------------------------|-------------------------|-----------------------|----------------------------------|---------------------------|--------------|
| Performance (Y)                                                  |                         |                       |                                  |                           |              |
| Job Description Division<br>(X2) )-> Employee<br>Performance (Y) | 0,474                   | 0,489                 | 0,126                            | 3,770                     | 0,000        |
| Team Communication (X3)<br>)-> Employee Performance<br>(Y)       | 0,108                   | 0,085                 | 0,126                            | 0,853                     | 0,394        |

Source: SmartPLS4 Output, processed 2025.

Table 8 shows the results of the path coefficients test, which measures the effects of Artificial Intelligence Usage (X1), Task Allocation (X2), and Team Communication (X3) on Employee Performance (Y). The results indicate that Artificial Intelligence Usage has a path coefficient of 0.379, with a t-statistic of 2.816 and a p-value of 0.005, meaning it has a significant positive effect on Employee Performance. Task Allocation also has a significant positive effect, with a coefficient of 0.474, t-statistic of 3.770, and p-value of 0.000. Meanwhile, Team Communication has a path coefficient of 0.108, t-statistic of 0.853, and p-value of 0.394, indicating an insignificant effect on Employee Performance. Thus, only Artificial Intelligence Usage and Task Allocation significantly contribute to improving Employee Performance in this model.

### **Discussion**

#### **The use of Artificial Intelligence affects employee performance**

The analysis at PT. Mina Berkah Selalu shows that the use of Artificial Intelligence (AI) has a significant effect on employee performance in the field. Based on empirical data obtained, AI implementation is able to improve individual work efficiency and productivity. AI systems help automate routine and administrative tasks, allowing employees to focus more on strategic work and decision-making. This finding is supported by direct field observations, which show improvements in task completion timeliness and output quality. In addition, AI also enhances employee engagement in their work, thereby contributing positively to overall organizational performance.

In practice at PT. Mina Berkah Selalu, AI implementation requires training and guidance for employees so that they can optimize the use of this technology. The company also needs to apply change leadership to manage adaptation to the new technology effectively, avoid resistance, and ensure a conducive work environment. With AI support, the company can monitor and evaluate employee performance more objectively and in real-time, provide constructive feedback, and accelerate data-driven decision-making processes. The implications of AI usage include sustained productivity improvements and increased company competitiveness in the market, making it a key factor in the digital transformation being carried out at PT. Mina Berkah Selalu. This study is supported by research from [19] and [35], which states that AI use can enhance performance. However, it contrasts with the findings of [14], which indicate that the use

of Artificial Intelligence does not have a significant effect on employee performance in companies.

### **Job description division affects employee performance**

The analysis at PT. Mina Berkah Selalu indicates that task allocation has a significant positive effect on employee performance. Based on the processed empirical data, assigning tasks appropriately according to each employee's abilities and expertise can enhance work effectiveness and motivation. This is reflected in more optimal achievement of work targets and more efficient task completion. Clear and structured task allocation helps reduce confusion, overlap of responsibilities, and facilitates coordination among teams, allowing employees to work more focused and productively. These findings align with previous research showing that well-organized task allocation directly impacts the improvement of employee performance and achievements.

The implementation of task allocation at PT. Mina Berkah Selalu considers the alignment between tasks, employee competencies, and the operational needs of the company. The company consistently conducts periodic evaluations to ensure task distribution remains relevant and responsive to changing work situations. Additionally, training and coaching are provided so that employees can perform their tasks optimally according to the assigned roles. With appropriate task allocation, employees have a clear sense of responsibility, which enhances discipline and work professionalism. The implications of effective task allocation include improved employee performance, which affects product and service quality, and helps PT. Mina Berkah Selalu maintain productivity and competitiveness in the market.

This finding is supported by studies from [10] and [9], which state that task allocation affects employee performance. However, it contrasts with the findings of [36], which indicate that task allocation does not have a significant effect on employee performance.

### **Team communication affects employee performance**

The analysis shows that the variable Team Communication does not have a significant effect on Employee Performance at PT. Mina Berkah Selalu. This insignificance is attributed to an organizational culture that does not fully support open and collaborative communication among team members. A hierarchical and individualistic work culture discourages employees from effectively sharing information, causing team communication to fail as an optimal factor in supporting employee performance.

In addition, limited communication facilities at PT. Mina Berkah Selalu hinder the effective exchange of information among team members. Inadequate communication tools and non-integrated media obstruct the flow of information within teams. Employees' interpersonal communication skills are also still low, resulting in messages that are often not conveyed optimally, leading to miscommunication. Consequently, team communication becomes less effective and does not significantly impact employee performance improvement. Therefore, the company needs to conduct a thorough evaluation of organizational culture, improve communication facilities, and provide

communication training to enhance the role of team communication in supporting performance.

This finding is supported by research from [36], which states that communication does not have a significant effect on performance. However, it contrasts with the findings of [37], which indicate that team communication does influence employee performance.

## CONCLUSION

**Fundamental Finding :** Based on the discussion at PT. Mina Berkah Selalu, it can be concluded that the use of Artificial Intelligence, proper task allocation, and effective team communication collectively have a significant impact on improving employee performance. AI implementation enhances efficiency and productivity by automating routine tasks, allowing employees to focus more on strategic work. Task allocation aligned with employees' abilities and competencies facilitates coordination, clarifies responsibilities, and increases motivation and work professionalism. Meanwhile, open and structured team communication smooths information flow, reduces misunderstandings, and improves synergy among team members, all contributing to a harmonious and productive work environment. Overall, these three factors serve as key pillars in maintaining the performance and competitiveness of PT. Mina Berkah Selalu in the market, while also supporting digital transformation and sustainable human resource development. **Implication :** As practical recommendations, PT. Mina Berkah Selalu should conduct regular training for employees to maximize their use of Artificial Intelligence in work processes. In addition, task allocation should be periodically evaluated to ensure that job distribution aligns with employees' evolving competencies and organizational needs. To build a culture of effective communication, the company can implement strategies such as establishing regular inter-departmental discussion forums, using integrated digital communication platforms, and providing interpersonal communication training that emphasizes openness and collaboration. **Limitation :** This study is contextually limited to PT. Mina Berkah Selalu and may not fully represent other organizational environments or industries with different technological readiness and communication structures. The number of respondents and company-specific characteristics could also limit the generalization of findings to broader contexts. **Future Research :** Future research is recommended to expand the study across multiple industries to identify whether similar factors influence employee performance in different organizational settings. Further studies can also explore additional variables, such as leadership style, organizational culture, or employee engagement, as mediating or moderating factors in the relationship between Artificial Intelligence, task allocation, communication, and employee performance.

## ACKNOWLEDGEMENT

I would like to express my deepest gratitude to Muhammadiyah University of Sidoarjo, particularly the Faculty of Business, Law, and Social Sciences and the Management Study Program, for all the facilities, guidance, and support provided

throughout the completion of this final article. The assistance and direction from the lecturers and academic staff have been invaluable in refining this research work to its successful completion. I hope that the collaboration established can continue and contribute positively to the development of knowledge within the campus environment.

## REFERENCES

- [1] S. Setyaningsih and K. K. Wacana, "Pengaruh Disiplin Kerja, Pengembangan Karir Terhadap Kinerja Karyawan Yang Dimediasi Oleh Motivasi Kerja," vol. 2, pp. 1–15, 2022.
- [2] S. Selfianita and ira meirana Chair, "Analisis kualitas dan kuantitas kerja karyawan receptionist di rocky hotel padang," J. Pariwisata Bunda, vol. 1, no. 2, pp. 33–38, 2021.
- [3] H. A. Najuti and A. H. Susanto, "Terhadap Kinerja Karyawan Inews Jakarta," J. Ris. Rumpun Ilmu Ekon., vol. 1, no. 2, 2022, [Online]. Available: <https://prin.or.id/index.php/JURRIE/article/view/355>
- [4] I. A. Wijaya, R. A. Shahirah, and M. E. Yuliana, "The Effect of Communication and Teamwork on Employee Performance," J. Ilm. Multidisiplin Indones. Vol, vol. 2, no. 3, pp. 058–079, 2022, doi: 10.53866/jimi.v2i1.109.
- [5] H. Nugrahaningsih, "Pengaruh Komunikasi Dan Kerjasama Tim Terhadap Kinerja Karyawan Dengan Stres Kerja Sebagai Variabel Pemoderasi," Media Manaj. Jasa, vol. 10, no. 2, pp. 66–83, 2022, doi: 10.52447/mmj.v10i2.6622.
- [6] Y. Prasetya Yudutio, R. Nastiti, M. Maladi, and I. Daud, "Pengaruh Komunikasi Dan Kerjasama Tim Terhadap Kinerja Pegawai Di Sekretariat Daerah Kabupaten Barito Timur," Manaj. J. Ekon., vol. 6, no. 1, pp. 143–151, 2024, doi: 10.36985/rpnx1454.
- [7] A. Info, "Hubungan antara Penguasaan Literasi Digital dan Pemanfaatan AI dengan Kinerja Karyawan di Industri Ekonomi," vol. 1, no. 1, pp. 6–10, 2025.
- [8] Akbar Wahbi, Jamal Bake, Malik, and Syamsul Alam, "Pembagian Tugas, Iklim Kerja, Tambahan Penghasilan Pegawai Dan Pengaruhnya Terhadap Kinerja Pegawai," J. Publicuho, vol. 6, no. 1, pp. 297–317, 2023, doi: 10.35817/publicuho.v6i1.137.
- [9] N. K. A. Riastini, I. W. R. Junaedi, and M. Meitiana, "Pengaruh Pembagian Kerja, Lingkungan Kerja, Dan Disiplin Kerja Terhadap Kinerja Karyawan Pada Departemen Front Office Di The Ritz-Carlton Bali," J. Manaj. Sains dan Organ., vol. 3, no. 1, pp. 49–59, 2022, doi: 10.52300/jmso.v3i1.3459.
- [10] P. N. Divya Amrita, Sutaryadi, "PEMBAGIAN KERJA DALAM RANGKA MENINGKATKAN EFEKTIVITAS KERJA KARYAWAN," vol. 11, no. 1, pp. 1–14, 2021, [Online]. Available: [http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484\\_SISTEM\\_PEMBETUNGAN\\_TERPUSAT\\_STRATEGI\\_MELESTARI](http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI)
- [11] A. S. Pratama, S. M. Sari, M. F. Hj, M. Badwi, and M. I. Anshori, "Pengaruh Artificial Intelligence, Big Data Dan Otomatisasi Terhadap Kinerja SDM Di Era Digital," J. Publ. Ilmu Manaj., vol. 2, no. 4, pp. 108–123, 2023, [Online]. Available: <https://doi.org/10.55606/jupiman.v2i4.2739>
- [12] Bunga Amira and Muhammad Irwan Padli Nasution, "Pemanfaatan Kecerdasan Buatan (Ai) Dalam Meningkatkan Efisiensi Dan Pengembangan Usaha Mikro,Kecil Dan

- Menengah (Umkm)," J. Ris. Manaj., vol. 1, no. 4, pp. 362-371, 2023, doi: 10.54066/jurma.v1i4.1354.
- [13] Siti Masrichah, "Ancaman Dan Peluang Artificial Intelligence (AI)," Khatulistiwa J. Pendidik. dan Sos. Hum., vol. 3, no. 3, pp. 83-101, 2023, doi: 10.55606/khatulistiwa.v3i3.1860.
- [14] Y. Novita and R. Zahra, "Penerapan Artificial Intelligence ( AI ) untuk Meningkatkan Efisiensi Operasional di Perusahaan Manufaktur : Studi Kasus PT XYZ," J. Manaj. dan Teknol., vol. 1, no. 1, pp. 11-21, 2024.
- [15] A. A and Rahyono, "Pengaruh Kepemimpinan Dan Komunikasi Terhadap Kinerja Karyawan," journal.stiejayakarta.ac.id, 2021.
- [16] M. R. Iryadana, G. Sartika, A. Gunawan, F. Tialonawarmi, and A. Muslimat, "Pengaruh Komunikasi Dan Kerjasama Tim Terhadap Kepuasan Kerja Yang Berdampak Pada Kinerja Karyawan," Sci. J. Reflect. Econ. Accounting, Manag. Bus., vol. 7, no. 3, pp. 839-851, 2024, doi: 10.37481/sjr.v7i3.908.
- [17] A. P. Sudaryanto and S. Hanny, "Manajemen Sumber Daya Manusia Sektor Publik Menghadapi Kemajuan Kecerdasan Buatan (Artificial Intelligence)," Musamus J. Public Adm., vol. 6, no. 1, pp. 513-521, 2023, doi: 10.35724/mjpa.v6i1.5402.
- [18] M. Sobron and Lubis, "Implementasi Artificial Intelligence Pada System Manufaktur Terpadu," Semin. Nas. Tek. UISU, vol. 4, no. 1, pp. 1-7, 2021, [Online]. Available: <https://jurnal.uisu.ac.id/index.php/semnastek/article/view/4134>
- [19] T. Wahyudi, "Studi Kasus Pengembangan dan Penggunaan Artificial Intelligence (AI) Sebagai Penunjang Kegiatan Masyarakat Indonesia," Indones. J. Softw. Eng., vol. 9, no. 1, pp. 28-32, 2023, [Online]. Available: <https://ejournal.bsi.ac.id/ejurnal/index.php/ijse>
- [20] F. P. A. Ramadhini, A. Pebrianggara, M. R. Yulianto, and R. E. Febriansah, "Artificial intellegence (AI), digital marketing, and popularity on purchase intention of virtual concert Korean girlband AESPA," COSTINGJournal Econ. Bus. Account., vol. 7, no. 3, pp. 5627-5642, 2024.
- [21] C. V. W. Contractor, "Menumbuhkan Budaya Kerja Profesional Dalam Lingkungan Proyek," vol. 4, no. 2, pp. 4319-4323, 2025.
- [22] R. Pahlepi, R. A. L. Gaol, A. A. Setiawan, A. S. Dewi, and T. Josiah, "Pengaruh Pembagian Kerja Terhadap Kinerja Karyawan Pada Unit Departement Operasional Inbound Pt. Jne Cabang Bandar Lampung," SENTRI J. Ris. Ilm., vol. 2, no. 12, pp. 5324-5340, 2023, doi: 10.55681/sentri.v2i12.1929.
- [23] I. Kania and W. Widiawati, "Pengaruh Pembagian Kerja Terhadap Kinerja Pegawai di UPTD Pasar Cisirupan Dinas Perindustrian dan Perdagangan Kecamatan Cisirupan Kabupaten Garut," J. Pembang. dan Kebijak. Publik, vol. 10, no. 2, pp. 23-32, 2019, doi: 10.36624/jpkp.v10i2.67.
- [24] E. P2, "No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する 共分散構造分析 Title," no. Table 10, pp. 4-6, 2024.
- [25] Djuari, I. Kristiawati, J. Prastyorini, and Mudayat, "Pengaruh Karakteristik Individu, Komunikasi dan Kerjasama Tim Terhadap Kinerja Karyawan Pada PT. Aperindo Prima Mandiri Surabaya," J. Adm. Bisnis (JUTRANIS), vol. 1, no. 1, pp. 1-19, 2024.
- [26] N. Oktober, "Pengaruh Komunikasi, Kerjasama Tim Dan Reward Terhadap Kinerja Karyawan Mcdonald ' s Sri Ratu Kediri Erika Novya Lestari Taufik Akbar Universitas islam

- Kadiri indikator pelayanan yang masih kurang memuaskan para pelanggan . Misalnya masih pesanan mereka,” vol. 1, no. 4, 2023.
- [27] I. A. Wana and A. R. Syamsuri, “YUME : Journal of Management Pengaruh Kepemimpinan Transformasional, Komunikasi dan Kerjasama Tim terhadap Kinerja Pegawai pada Badan Perencanaan Pembangunan Daerah Penelitian dan Pengembangan Provinsi Riau,” vol. 8, no. 2, pp. 1017–1029, 2025.
- [28] M. S. Rahayu and R. Rushadiyati, “Pengaruh Lingkungan Kerja Dan Karakteristik Individu Terhadap Kinerja Karyawan SMK Kartini,” *J. Adm. dan Manaj.*, vol. 11, no. 2, pp. 136–145, 2021, doi: 10.52643/jam.v11i2.1880.
- [29] H. Basri, “Pengaruh OCB dan Motivasi Kerja Terhadap Kinerja Karyawan PT. Batara Titian Kencana (Xtrans) Cabang Menteng - Jakarta Pusat,” *Ilmu Ekon. Manaj. dan Akunt.*, vol. 1, no. 1, pp. 42–52, 2020, doi: 10.37012/ileka.v1i1.145.
- [30] W. D. Desty Febrian, M. Al Faruq Abdullah, M. Ekhsan, D. Hikmah Perkasa, and E. Lika Kabdiyono, “Kepemimpinan, Beban Kerja Dan Burnout Terhadap Kinerja Karyawan Perusahaan Garment Di Kabupaten Tangerang,” *journal.ipm2kpe.or.id*, vol. 15, no. 1, pp. 37–48, 2024.
- [31] E. Widiyasari and S. Padmantyo, “Pengaruh Kemampuan Karyawan, Kompetensi Dan Motivasi Terhadap Kinerja Karyawan Di Pt. Indo Jelly Gum Karanganyar,” *J. Ilm. Manajemen, Ekon. Akunt.*, vol. 7, no. 2, pp. 1245–1257, 2023, doi: 10.31955/mea.v7i2.3124.
- [32] J. Jurnal, I. Mea, P. Kompetensi, and T. I. Dan, “Pengaruh Kepemimpinan Transaksional, Kepuasan Kerja, Ketidajelasan Peran Dimediasi Oleh Komitmen Organisasi Terhadap Kinerja Karyawan Rs. Efarina Etahamgroup,” *journal.stiemb.ac.id*, vol. 8, no. 3, pp. 681–700, 2023.
- [33] E. Susanto, “Pengaruh Kepemimpinan terhadap Kinerja Karyawan Pada Perusahaan,” *Edukatif J. Ilmu Pendidik.*, vol. 4, no. 6, pp. 7851–7857, 2022, doi: 10.31004/edukatif.v4i6.4247.
- [34] F. N. S. L. Qodriah, “PENGARUH PENGALAMAN KERJA DAN DISIPLIN KERJA TERHADAP KINERJA KARYAWAN PADA UD. SHAHILA JAYA FOOD,” *J. Account. Bus. Stud.*, vol. 07, no. 01, pp. 25–37, 2022.
- [35] M. Chaidir, D. Irawan, and Benardi, “Strategi Pemasaran Digital: Memahami Perjalanan Konsumen di Era Digital,” *J. Int. Penelit. dan Manaj. Ilm.*, vol. 4, no. 4, pp. 356–363, 2024, doi: 10.53866/jimi.v4i4.650.
- [36] G. A. Mustikasari, T. Akbar, and E. Syahputra, “Pengaruh Motivasi Kerja, Komunikasi dan Lingkungan Kerja Non Fisik Terhadap Kinerja Driver Maxim di Kediri,” *Pop. J. Penelit. Mhs.*, vol. 2, no. 4, pp. 62–72, 2023, doi: 10.58192/populer.v2i4.1396.
- [37] E. Sukmawati, S. L. Ratnasari, and Z. Zulkifli, “Pengaruh Gaya Kepemimpinan, Komunikasi, Pelatihan, Etos Kerja, Dan Karakteristik Individu Terhadap Kinerja Karyawan,” *J. Dimens.*, vol. 9, no. 3, pp. 461–479, 2020, doi: 10.33373/dms.v9i3.2722.

---

**Mochammad Azharuddin Haidi**

Muhammadiyah University of Sidoarjo, Indonesia

Email: [moch.azharuddin@gmail.com](mailto:moch.azharuddin@gmail.com)

**\*Kumara Adji (Corresponding Author)**

Muhammadiyah University of Sidoarjo, Indonesia

Email: [adji@umsida.ac.id](mailto:adji@umsida.ac.id)

---

---

**Sumartik**

Tunku Abdul Rahman University of Management and Technology (TARUMT), Malaysia

Email: [sumartik1@umsida.ac.id](mailto:sumartik1@umsida.ac.id)

**Khoong Tai Wai**

Tunku Abdul Rahman University of Management and Technology (TARUMT), Malaysia

---