

# Optimizing Human Capital in Industry 5.0: A Structural Analysis of the Effects of Work Ethics, Motivation, and Job Satisfaction on Employee Performance

Nenah Sunarsih \* , Irmawaty , and Andriyansah 

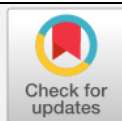
Department of Management, Faculty of Economics and Business, Indonesia Open University,  
South Tangerang City, Banten Province, 15437, Indonesia

\* Corresponding Author: [nenah@ecampus.ut.ac.id](mailto:nenah@ecampus.ut.ac.id)

## ARTICLE INFO

### Publication Info:

Research Article



### How to cite:

Sunarsih, N., Irmawaty, I., & Andriyansah, A. (2025).  
*Optimizing Human Capital in Industry 5.0: A Structural Analysis of the Effects of Work Ethics, Motivation, and Job Satisfaction on Employee Performance*. Society, 13(1), 114-131.

DOI: [10.33019/society.v13i1.791](https://doi.org/10.33019/society.v13i1.791)

Copyright © 2025. Owned by author (s), published by Society.

OPEN  ACCESS



This is an open-access article.  
License: Attribution-NonCommercial-ShareAlike  
(CC BY-NC-SA)

Received: February 4, 2025;

Accepted: March 1, 2025;

Published: March 5, 2025;

## ABSTRACT

The emergence of Industry 5.0, which integrates advanced technology with a human-centered approach, has significantly reshaped organizational dynamics. This transformation underscores the critical role of human resources in sustaining organizational competitiveness. Employee performance is not solely determined by output quantity but also by output quality. Employees must operate effectively and efficiently to optimize organizational performance. This study examines the impact of work ethic, motivation, and job satisfaction on employee performance. The research population comprises all employees at Indonesia Open University (IOU), with the sample drawn from IOU's central office and the Bandung and Yogyakarta regional offices, yielding 179 valid responses. A quantitative approach utilizing Structural Equation Modeling-Partial Least Squares (SEM-PLS) was employed for data analysis. The findings indicate that work ethic has a significant positive effect on employee performance – employees with a stronger work ethic exhibit higher performance levels. Conversely, motivation and job satisfaction do not exhibit a statistically significant effect on employee performance. Collectively, work ethic, motivation, and job satisfaction explain 56.4% of employee performance variance, while the remaining 43.6% is influenced by other external factors beyond the study's scope.

**Keywords:** Employee Performance; Human Capital Optimization; Industry 5.0; Job Satisfaction; Motivation; Work Ethic

## 1. Introduction

The emergence of Industry 5.0, characterized by a human-centered and technology-driven society, has reinforced the strategic function of human resources (HR). The role of HR is to optimize and develop an organization's or industry's human capital to enhance overall contributions to organizational success. Optimal employee performance is not solely determined by output quantity but also by output quality. Employees must work effectively and efficiently to deliver the best performance for their organizations. In the current era, high-performing employees are those who can leverage artificial intelligence (AI) to transform big data across various domains and utilize the Internet of Things (IoT) as a strategic tool for performance optimization.

Employee performance refers to an individual's achievements, assessed based on organizational standards that determine recognition and support for employees to encourage optimal and satisfactory performance (Nurhayati & Atmaja, 2021). Performance is defined as the extent to which employees achieve work-related goals. Several challenges related to employee performance include weak work ethics, low motivation, and insufficient job satisfaction, all of which negatively impact productivity. A poor work ethic hinders employees from delivering optimal results, while low motivation leads to a lack of enthusiasm and perseverance when facing challenges. Similarly, low job satisfaction results in disengagement, reducing employees' willingness to exert effort in their tasks.

Several factors influence employee performance, including work ethic, motivation, and job satisfaction. Prior studies have indicated that these factors positively and significantly affect employee performance, as demonstrated in a study on employees at the Indonesian Red Cross (PMI) in Malang City (Wardana et al., 2023). Fundamentally, a strong work ethic enhances employee performance. Work ethic refers to a set of positive behaviors rooted in cooperation, core values, and full commitment to professional principles. Every organization requires employees with a high work ethic, as dedication and perseverance are essential for institutional growth and market competitiveness (Simanjuntak, 2020; Zakaria, 2021). Previous studies have confirmed the positive relationship between work ethic and employee performance (Musfirah, 2024; Tangkudung & Taroreh, 2021).

Motivation is another critical factor influencing employee performance. Employees who are highly motivated tend to exert more effort and mental focus in achieving organizational goals. Meeting employees' motivational needs fosters job satisfaction and facilitates improved performance outcomes (Deci et al., 2017; Forson et al., 2021; Nusraningrum et al., 2024). Prior research has established a direct relationship between work motivation and employee performance (Alfathan & Winata, 2022). Specifically, work motivation—measured through discipline, teamwork, security, and satisfaction—has a positive and significant impact on performance (Musfirah, 2024). Similarly, job satisfaction plays a role in influencing work outcomes. Employees who experience high job satisfaction are more likely to perform optimally in completing their tasks. Job satisfaction is broadly defined as an employee's general attitude toward their work, reflecting the discrepancy between the recognition they receive and their expected level of appreciation (Ahmed et al., 2016; Locke, 1976; Prihadini et al., 2021; Rodrigo et al., 2022).

This study investigates the extent to which work ethic, motivation, and job satisfaction influence employee performance and how these factors interact to shape organizational outcomes. Understanding the significance of these variables is essential for developing effective HR strategies aimed at improving employee performance and overall organizational productivity. Therefore, this study aims to provide empirical evidence regarding the role of

work ethic, motivation, and job satisfaction in determining employee performance and to analyze their collective impact on organizational effectiveness.

## 2. Theoretical Study

Mahirah and Setiani conducted a study employing survey research and multiple linear regression analysis to examine the effects of work motivation, job satisfaction, and work ethic on employee performance (Mahirah & Setiani, 2022). Their findings indicate that work motivation has a positive and statistically significant effect on employee performance, suggesting that employees with higher motivation tend to achieve better work outcomes. However, while job satisfaction also exhibited a positive relationship with employee performance, its effect was not statistically significant, implying that increased job satisfaction does not necessarily translate into improved performance. Additionally, their study found that work ethic has a significant positive impact on employee performance, reinforcing the idea that employees with a strong work ethic are more likely to perform better. Overall, their research suggests that work motivation, job satisfaction, and work ethic collectively contribute to variations in employee performance, highlighting their role as essential factors in human resource management.

Similarly, a study utilized survey research and multiple regression analysis to investigate the influence of work ethic, job satisfaction, and achievement motivation on employee performance at the Pinrang Regency Regional Development Planning Agency. Their findings revealed that work ethic has a positive and significant effect on employee performance ( $\beta = 0.295$ ,  $p = 0.036$ ), indicating that employees who demonstrate strong ethical behavior in the workplace tend to achieve higher performance levels. Additionally, job satisfaction exhibited a positive but statistically insignificant influence ( $\beta = 0.307$ ,  $p = 0.018$ ), suggesting that although job satisfaction may enhance workplace morale, it does not necessarily contribute to significant improvements in employee performance (Yusri et al., 2021). Meanwhile, achievement motivation exerted a positive and significant effect on employee performance ( $\beta = 0.275$ ,  $p = 0.006$ ), emphasizing the role of personal ambition and goal-setting in enhancing work outcomes. Collectively, work ethic, job satisfaction, and achievement motivation explained 61.0% of the variation in employee performance, with job satisfaction being identified as the most dominant factor, despite its effect remaining statistically insignificant ( $\beta = 0.275$ ,  $p = 0.018$ ). These findings suggest that while work ethic and achievement motivation are critical drivers of employee performance, the role of job satisfaction in directly influencing work outcomes remains less clear.

### 2.1. Employee Performance

Employee performance refers to the extent to which employees successfully execute their assigned duties and responsibilities. It encompasses both quality and quantity of work, as well as the ability of employees to meet the standards and expectations established by the organization. Employee performance is a measurable outcome of an individual's work, serving as a benchmark for success within an institution (Muthoni Nduati & Wanyoike, 2021; Omar et al., 2022; Szabó et al., 2017).

Performance is generally influenced by motivation and ability, as these factors determine an employee's effort and competence in achieving desired results (Alshammari & Asaari, 2024). It also involves a strategic assessment of an organization's effectiveness, often measured by customer satisfaction levels and overall contributions to the company's objectives. Employee

performance is assessed in terms of quality and quantity, reflecting how well employees complete their tasks within a specified time frame (Suryani et al., 2022).

Optimal performance is achieved when an employee meets or exceeds organizational standards, thereby contributing to the attainment of institutional goals. Improving employee performance has a direct impact on an organization's growth and competitiveness, particularly in dynamic and unstable business environments. Employee performance is shaped by multiple factors, including intrinsic workforce characteristics and external environmental conditions within the organization. Among these, motivation and work discipline have been identified as key determinants of employee performance (Kristianti et al., 2021).

## **2.2. Work Ethic**

Employees with a strong work ethic are highly motivated to achieve their goals, which in turn enhances their job satisfaction and overall performance. A strong work ethic is positively correlated with higher employee performance, as individuals who demonstrate dedication and perseverance tend to contribute more effectively to organizational success (Al-Nashash et al., 2018; Panigrahi & Al-Nashash, 2019).

Work ethic encompasses a set of positive work behaviors, characterized by cooperation, strong interpersonal relationships, fundamental values, and a full commitment to professional responsibilities. A high work ethic should be an inherent characteristic of every employee, as organizations rely on dedication and hard work to sustain growth and remain competitive. Without a strong work ethic, organizations may struggle to adapt, expand, and capture market share (Simanjuntak, 2020).

The relationship between work ethic and employee performance is generally positive and significant; however, its direct impact on performance may vary in magnitude. Some studies indicate that while a strong work ethic contributes to improved performance, its effect may be relatively weak when compared to other influencing factors such as motivation and job satisfaction (Grabowski et al., 2021).

## **2.3. Work Motivation**

Work motivation is a critical factor in achieving optimal performance, as it refers to the internal conditions that drive individuals to take action toward specific goals (Wang et al., 2024). Motivation plays a central role in shaping employee performance, as it influences the willingness and effort employees put into their tasks.

As one of the key determinants of employee performance, motivation represents an individual's intrinsic drive to engage in activities that lead to goal attainment. Organizations consistently strive to enhance employee performance, and an essential component of this effort is providing effective motivational strategies to encourage productivity. Without sufficient motivation, employees may struggle to meet performance standards or exceed expectations, as their internal drive and engagement are not adequately nurtured (Idrus et al., 2021).

## **2.4. Job Satisfaction**

Job satisfaction refers to an employee's emotional state regarding their work, encompassing feelings of happiness, fulfillment, or dissatisfaction (Marnisah, 2020). It reflects an individual's perception of work-related experiences, including recognition, work environment, and compensation. According to the Equity Theory, introduced by Edward Lawler, dissatisfaction arises when employees perceive a discrepancy between the



compensation they receive and what they believe others in similar positions earn. This perceived inequity can lead to lower job satisfaction and decreased motivation.

Hasibuan categorizes job satisfaction into three types (Hasibuan, 2020). First, intrinsic job satisfaction is derived from aspects of the job itself, such as recognition, role placement, workplace interactions, and the availability of proper work equipment and a conducive environment. Second, extrinsic job satisfaction is influenced by factors outside the job, including salary, benefits, and financial compensation, which enable employees to meet their personal and financial needs. Lastly, combined job satisfaction represents a balance between intrinsic and extrinsic factors, where employees feel satisfied when there is fair compensation aligned with their job performance.

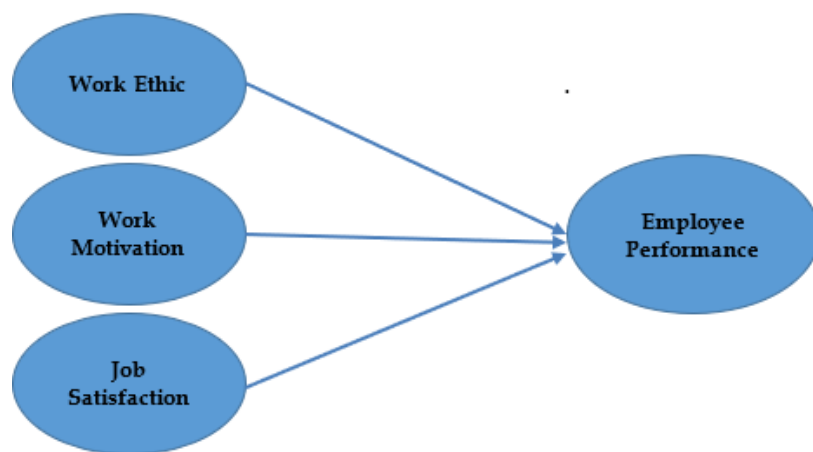
Previous study identifies several key indicators for measuring job satisfaction (Aziz et al., 2020). One of the primary factors is the job itself, where clearly defined job descriptions contribute to employee satisfaction by providing a sense of control over work responsibilities. Wages and incentives are also significant factors, as discrepancies in salary perception can lead to variations in job satisfaction among employees. Promotions affect job satisfaction differently; promotions based on seniority tend to result in lower satisfaction compared to those based on performance and merit. Additionally, supervision and technical support from managers play a crucial role in employee engagement, as supportive leadership fosters a more satisfying work experience. The workgroup environment also impacts job satisfaction, as collaborative and communicative teams can enhance workplace morale, whereas dysfunctional teams may negatively affect satisfaction levels. Lastly, working conditions, including clean, safe, and comfortable environments, are essential in creating a positive workplace atmosphere, thereby influencing employee motivation and productivity.

### **3. Research Methodology**

This study employs Structural Equation Modeling (SEM) with the Partial Least Squares (PLS-SEM) approach to analyze the relationships between variables. The research utilizes primary data collected through a questionnaire survey. The study population consists of employees at Indonesia Open University (IOU), with the sample selected using a purposive sampling technique. The research was conducted at the IOU central office and its regional offices in Bandung and Yogyakarta, with a total of 179 respondents participating in the survey.

To evaluate the measurement model, several key tests were conducted, including the convergent validity test, discriminant validity test, and reliability test. Convergent validity assesses the correlation between indicators within a construct, measured through outer loadings and Average Variance Extracted (AVE) values. Outer loadings indicate the strength of the correlation between an indicator and its corresponding latent variable. A construct is considered valid if the factor loading exceeds 0.7 (Sarstedt et al., 2022). If some indicators display a loading factor below 0.7, they are removed from the model, and the estimation process is repeated to improve validity.

This study aims to analyze the effects of work ethic, motivation, and job satisfaction on employee performance. Conceptually, the relationships between these variables are illustrated in Figure 1:



**Figure 1. Thinking Framework**

The research hypotheses are formulated as follows:

H1: Work ethic has a significant effect on employee performance.

H2: Motivation has a significant effect on employee performance.

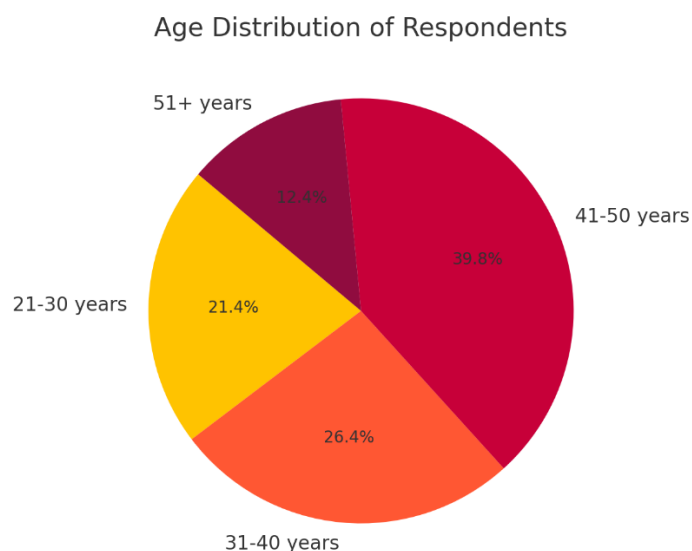
H3: Job satisfaction has a significant effect on employee performance.

H4: Work ethic, motivation, and job satisfaction collectively have a significant effect on employee performance.

## **4. Results and Discussion**

### **4.1. Respondent Characteristics**

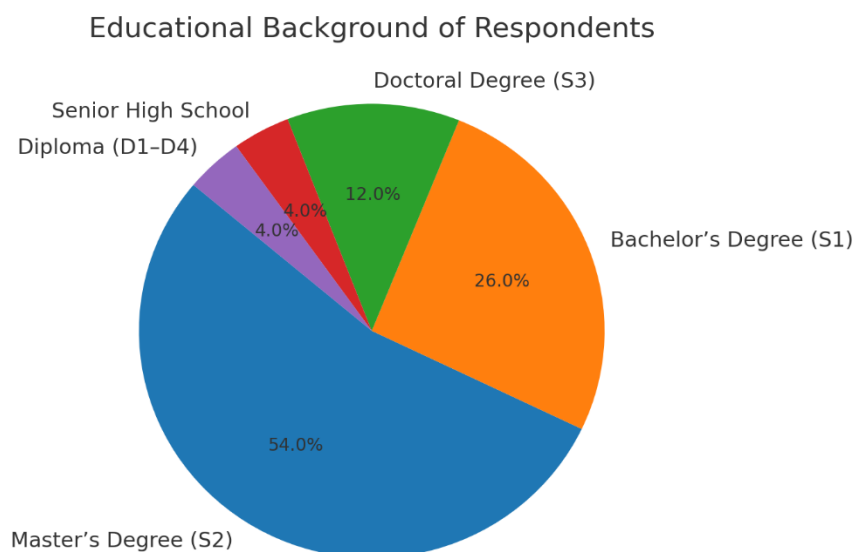
An analysis of respondents' age distribution (**Figure 2**) indicates that the majority belong to the 41–50-year age group (39.8%), followed by those aged 31–40 years (26.4%). Respondents in the 21–30-year age group accounted for 21.4%, while only 12.4% of respondents were aged 51 years and above.



**Figure 2. Age Distribution of Respondents**

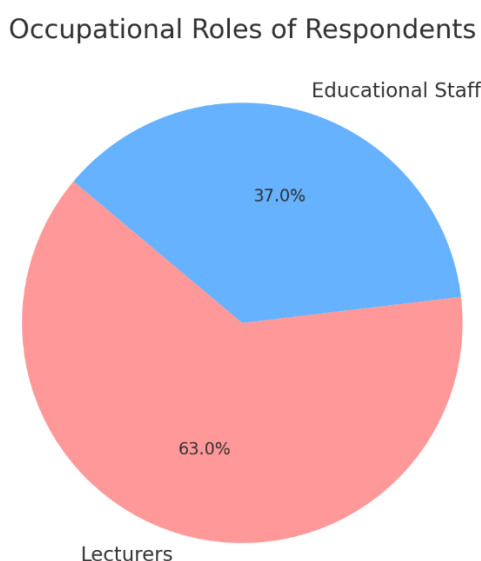
An analysis of respondents' educational background (**Figure 3**) shows that more than half hold a master's degree (S2) at 54%, followed by 26% who possess a bachelor's degree (S1).

Additionally, 12% have obtained a doctoral degree (S3), while 4% hold a senior high school diploma (equivalent to secondary education), and another 4% have a diploma (D1-D4).



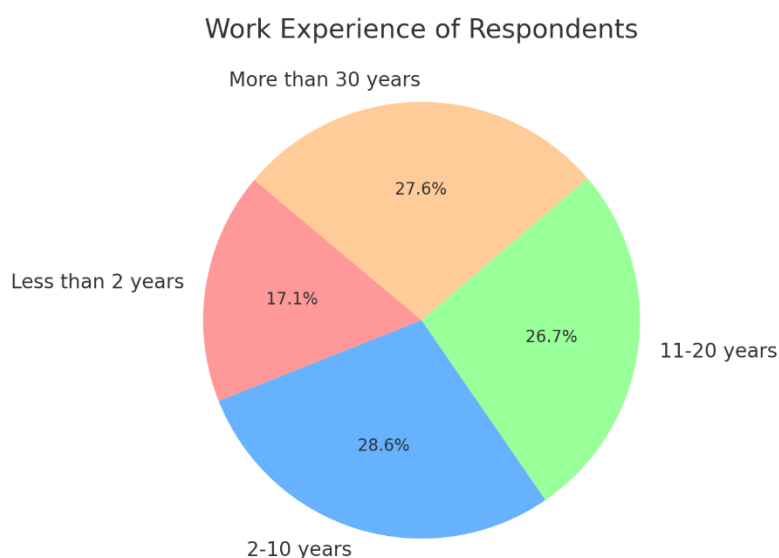
**Figure 3. Educational Background of Respondents**

An analysis of respondents' occupational roles (**Figure 4**) reveals that the majority (63%) are lecturers, while the remaining 37% consist of educational staff.



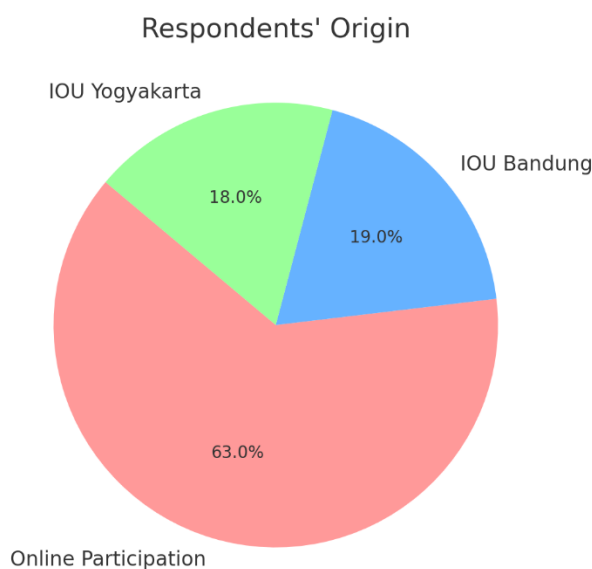
**Figure 4. Occupational Roles of Respondents**

An analysis of respondents' work experience (**Figure 5**) indicates a diverse range of years of service. The largest proportion (28.6%) have worked for 2–10 years, closely followed by those with over 30 years of experience (27.6%). Additionally, 26.7% of respondents have 11–20 years of experience, while 17.1% are relatively new employees with less than 2 years of service.



**Figure 5. Work Experience of Respondents**

An analysis of respondents' origins (**Figure 6**) shows that the majority (63%) participated in the study online, while 19% were affiliated with Indonesia Open University (IOU) in Bandung, and 18% were from IOU in Yogyakarta.



**Figure 6. Respondents' Origin**

#### 4.2. Analysis SEM-PLS

In the initial estimation (**Figure 7**), several loading factor values fell below 0.7, specifically for x1.1.2, x1.1.4, x1.2.6, and x1.3.5. As a result, these indicators were excluded from the model and the estimation was recomputed to ensure validity.



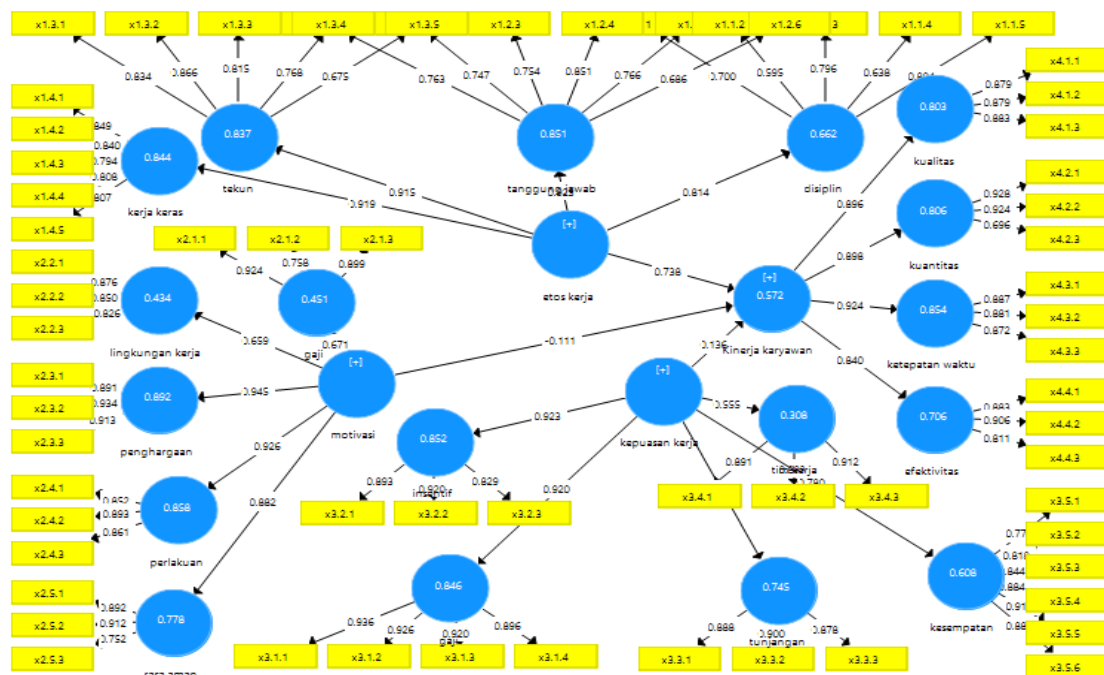


Figure 7. Initial Estimation of Loading Factor Values

After re-estimation, the loading factor values were greater than or equal to 0.7, as presented in **Figure 8** and **Table 1**. This confirms that each indicator effectively measures the corresponding latent variable, ensuring the validity of the model.

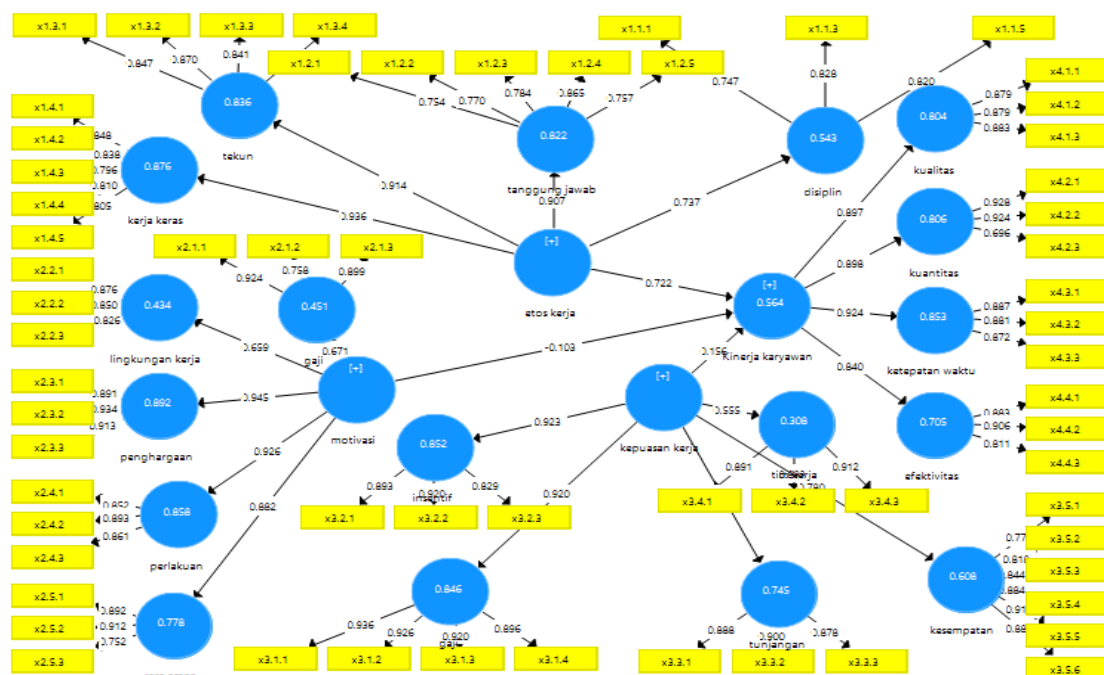


Figure 8. Re-Estimation of Loading Factor Values

**Table 1. First and Second Estimated Outer Loading Values**

Variable	Indicator	Statement	Outer Loading (First Estimation)	Outer Loading (Second Estimation)
Work ethic	Discipline	x1.1.1	0.700	0.747
		x1.1.2	0.595	-
		x1.1.3	0.796	0.828
		x1.1.4	0.638	-
		x1.1.5	0.804	0.820
	Responsibility	x1.2.1	0.763	0.754
		x1.2.2	0.747	0.770
		x1.2.3	0.754	0.784
		x1.2.4	0.851	0.865
		x1.2.5	0.766	0.757
		x1.2.6	0.686	-
	The sea	x1.3.1	0.834	0.847
		x1.3.2	0.866	0.870
		x1.3.3	0.815	0.841
		x1.3.4	0.768	0.783
		x1.3.5	0.675	-
	Hard Work	x1.4.1	0.849	0.848
		x1.4.2	0.840	0.838
		x1.4.3	0.794	0.796
		x1.4.4	0.808	0.810
		x1.4.5	0.807	0.805
Motivation	A Fair Salary	x2.1.1	0.915	0.924
		x2.1.2	0.775	0.758
		x2.1.3	0.896	0.899
	Work Environment	x2.2.1	0.875	0.876
		x2.2.2	0.851	0.850
		x2.2.3	0.827	0.826
	Award	x2.3.1	0.893	0.891
		x2.3.2	0.934	0.934
		x2.3.3	0.911	0.913
	Fair Treatment	x2.4.1	0.855	0.852
		x2.4.2	0.893	0.893
		x2.4.3	0.858	0.861
	Feel Safe	x2.5.1	0.885	0.892
		x2.5.2	0.903	0.912

Variable	Indicator	Statement	Outer Loading (First Estimation)	Outer Loading (Second Estimation)
		x2.5.3	0.774	0.752
<b>Job Satisfaction</b>	Salary	x3.1.1	0.936	0.936
		x3.1.2	0.925	0.926
		x3.1.3	0.920	0.920
		x3.1.4	0.897	0.896
	Incentives	x3.2.1	0.892	0.893
		x3.2.2	0.922	0.920
		x3.2.3	0.828	0.829
	Allowance	x3.3.1	0.884	0.888
		x3.3.2	0.900	0.900
		x3.3.3	0.882	0.878
	Solid Work Team	x3.4.1	0.885	0.891
		x3.4.2	0.889	0.883
		x3.4.3	0.914	0.912
	Opportunity to Advance	x3.5.1	0.782	0.772
		x3.5.2	0.828	0.818
		x3.5.3	0.852	0.844
		x3.5.4	0.875	0.884
		x3.5.5	0.912	0.918
		x3.5.6	0.879	0.887
<b>Employee performance</b>	Quality	x4.1.1	0.878	0.879
		x4.1.2	0.880	0.879
		x4.1.3	0.883	0.883
	Quantity	x4.2.1	0.923	0.928
		x4.2.2	0.920	0.924
		x4.2.3	0.710	0.700
	Punctuality	x4.3.1	0.887	0.887
		x4.3.2	0.881	0.881
		x4.3.3	0.872	0.872
	Effectiveness	x4.4.1	0.879	0.883
		x4.4.2	0.903	0.906
		x4.4.3	0.819	0.811

The next step in convergent validity testing is assessing reliability. A variable is considered valid if the Average Variance Extracted (AVE) value is greater than 0.5, indicating that the construct explains at least 50% of the variance in its indicators (Sarstedt et al., 2022). As shown in **Table 2**, the AVE values for all latent variables range from 0.564 to 0.665, exceeding the 0.5 threshold. This confirms that all latent variables meet the validity criteria.

**Table 2. Average Variance Extracted (AVE) Values**

Latent Variable	Average Variance Extracted (AVE)
Work Ethic	0.564
Work Motivation	0.665
Job Satisfaction	0.636
Employee Performance	0.651

Next, discriminant validity is assessed to determine the degree to which an indicator uniquely represents its intended construct. A model demonstrates good discriminant validity when the square root of the AVE (measured using the Fornell-Larcker Criterion) is greater than the correlations between that construct and other variables (Fornell & Larcker, 1981; Henseler et al., 2015; Voorhees et al., 2016).

**Table 3. Fornell-Larcker Criterion Values**

Latent Variable	Employee Performance	Work Ethic	Job Satisfaction	Motivation
Employee Performance	<b>0.807</b>			
Work Ethic	0.583	<b>0.751</b>		
Job Satisfaction	0.840	0.270	<b>0.798</b>	
Motivation	0.746	0.404	0.351	<b>0.815</b>

Based on **Table 3**, the square root of AVE for each latent variable is greater than its highest correlation with any other variable. For instance, the employee performance variable has an AVE root value of 0.807, while its highest correlation with another variable is 0.746 (motivation). This confirms that the model meets the discriminant validity criteria for all latent variables, including work ethic, job satisfaction, and motivation.

Next, reliability testing is conducted using Cronbach's Alpha and Composite Reliability (CR) values. A construct is considered reliable if its Cronbach's Alpha exceeds 0.7 (Fornell & Larcker, 1981) and its Composite Reliability (CR) is also greater than 0.7 (Sarstedt et al., 2022). As shown in **Table 4**, the Cronbach's Alpha values range from 0.936 to 0.952, while the Composite Reliability (CR) values range from 0.939 to 0.953. Since all values exceed 0.7, it confirms that each latent variable meets the reliability criteria.

**Table 4. Cronbach's Alpha and Composite Reliability Values**

Latent Variable	Cronbach's Alpha	Composite Reliability (CR)
Employee Performance	0.940	0.941
Work Ethic	0.940	0.941
Motivation	0.936	0.939
Job Satisfaction	0.952	0.953

### 4.3. Structural Model

Structural model testing is conducted to assess the influence of constructs and the coefficient of determination ( $R^2$  value). The  $R^2$  value for employee performance is 0.564 (56.4%), indicating that work ethic, motivation, and job satisfaction collectively explain 56.4% of the

variance in employee performance. The remaining 43.6% ( $1 - R^2$ ) is attributed to other external factors that are not included in the model.

This confirms that work ethic, motivation, and job satisfaction have a moderate explanatory power in predicting employee performance, while additional factors contribute to the unexplained variance.

**Table 5.  $R^2$  and Adjusted  $R^2$  Values**

Construct	$R^2$ Value	Adjusted $R^2$ Value
Employee Performance	0.564	0.557
Discipline	0.543	0.540
Effectiveness	0.705	0.704
Salary	0.846	0.845
Salary (Repeated)	0.451	0.448
Incentives	0.852	0.851
Hard Work	0.876	0.875
Opportunity	0.608	0.606
Punctuality	0.853	0.853
Quality	0.804	0.803
Quantity	0.806	0.805
Work Environment	0.434	0.431
Recognition	0.892	0.892
Fair Treatment	0.858	0.857
Sense of Security	0.778	0.776
Responsibility	0.822	0.821
Work Ethics	0.836	0.835
Work Team	0.308	0.304
Allowance	0.745	0.743

#### 4.4. Hypothesis Testing

The next stage involves hypothesis testing to determine whether each hypothesis is accepted or rejected. This is assessed using the p-value at a significance level ( $\alpha$ ). If  $p\text{-value} < \alpha$ , the null hypothesis ( $H_0$ ) is rejected, indicating that the independent variable has a significant effect on the dependent variable.

**Table 6. Path Coefficients and Hypothesis Test Results**

Path Diagram	Coefficient ( $\beta$ )	T-Statistic	P-Value	Conclusion
Work Ethic $\rightarrow$ Employee Performance	0.722	14.811	0.000***	<b>H<sub>1</sub> Accepted</b>
Motivation $\rightarrow$ Employee Performance	-0.103	1.188	0.236	<b>H<sub>2</sub> Rejected</b>
Job Satisfaction $\rightarrow$ Employee Performance	0.156	1.706	0.089	<b>H<sub>3</sub> Rejected</b>

Significance level:  $\alpha = 1\%$



Based on **Table 6**, the p-value for work ethic is 0.000, which is less than 0.05, leading to the acceptance of  $H_1$ . This confirms that work ethic has a significant positive effect on employee performance. Employees with a strong work ethic tend to perform better, as they demonstrate greater commitment and dedication. These findings are consistent with previous studies, which also reported a significant relationship between work ethic and employee performance (Heranto et al., 2021; Judge & Bono, 2001; Judge & Ilies, 2002; Sandhu et al., 2017).

Conversely, the p-value for motivation is 0.236, which is greater than 0.05, meaning  $H_2$  is rejected. Previous finding indicates that motivation does not significantly influence employee performance (Roos et al., 2022). Several factors may explain this result:

- 1) External Factors  
Economic challenges can impact motivation levels, even if organizations attempt to enhance work motivation.
- 2) Mismatch Between Motivation and Task  
Employees who are driven by intellectual challenges may not perform optimally if assigned routine and unchallenging tasks.
- 3) Unfavorable Working Conditions  
A lack of recognition, career advancement opportunities, or supportive leadership may hinder motivation from translating into higher performance.
- 4) Individual Differences  
Employees have varying motivational drivers. If institutional motivation strategies do not align with personal needs, the impact on performance may be limited.  
Since motivation is a complex factor influenced by multiple variables, it does not always directly correlate with employee performance.

Similarly, the p-value for job satisfaction is 0.089, which is greater than 0.05, leading to the rejection of  $H_3$ . This indicates that job satisfaction does not significantly influence employee performance (Judge et al., 2001). Several factors may explain why job satisfaction does not directly impact performance:

- 1) Individual Priorities  
Employees may be satisfied with their job but prioritize other life aspects, which may reduce their work focus.
- 2) External Conditions  
Personal or health-related challenges can hinder performance, even when job satisfaction is high.
- 3) Mismatch Between Satisfaction and Challenge  
If a job lacks intellectual stimulation or career development opportunities, satisfaction may not lead to higher performance.
- 4) Organizational and Management Factors  
Poor leadership, communication issues, or workplace conflicts may reduce the positive effect of job satisfaction on performance.
- 5) Career Expectations  
An employee satisfied with their current job may still have unmet career progression expectations, leading to stagnant performance levels.

Job satisfaction and employee performance are complex, multifaceted phenomena, and their relationship may vary across different organizational settings and contexts.

## 5. Conclusion

The findings of this study indicate that work ethic has a significant positive influence on employee performance. Employees with a strong work ethic tend to demonstrate higher levels of productivity and efficiency, contributing positively to overall organizational performance. Conversely, motivation and job satisfaction do not exhibit a statistically significant effect on employee performance.

The combined influence of work ethic, motivation, and job satisfaction accounts for 56.4% of the variance in employee performance, as indicated by the  $R^2$  value. The remaining 43.6% is influenced by external factors beyond the scope of this model. These findings highlight the critical role of work ethic in shaping employee performance, while also suggesting the need for further research to explore additional determinants that may contribute to employee productivity and organizational success.

## 6. Acknowledgment

The authors express sincere gratitude to all individuals and parties who provided support, assistance, and valuable contributions to this research.

## 7. Declaration of Conflicting Interests

The authors have declared no potential conflicts of interest regarding this article's research, authorship, and/or publication.

## References

- Ahmed, U., Majid, A. H. A., & Zin, M. L. M. (2016). Meaningful Work and Work Engagement: A Relationship Demanding Urgent Attention. *International Journal of Academic Research in Business and Social Sciences*, 6(8), 116–122. <https://doi.org/10.6007/IJARBS/v6-i8/2264>
- Al-Nashash, H. M., Panigrahi, S. K., & Darun, M. R. Bin. (2018). Do Work Ethics Improves Employee Job Satisfaction? Insights from Jordanian Banks. *International Journal of Academic Research in Business and Social Sciences*, 8(11). <https://doi.org/10.6007/IJARBS/v8-i11/4936>
- Alfathan, Z. A., & Winata, H. (2022). Pengaruh Motivasi Dan Etos Kerja Terhadap Kinerja Guru. *Jurnal Pendidikan Manajemen Perkantoran*, 7(2), 225–240. <https://doi.org/10.17509/jpm.v7i2.46956>
- Alshammari, F. M. M., & Asaari, M. H. B. A. H. (2024). The Impact of Ability, Motivation and Opportunity-Enhancing SHRM on Employee Performance: Moderating Role of Digital Transformation. *International Journal of Religion*, 5(3), 399–412. <https://doi.org/10.61707/msmys475>
- Aziz, N., Mustafi, M. A. A., & Hosain, M. S. (2020). Factors Affecting Job Satisfaction: An Exploratory Analysis among Public Bank Employees in Selected Cities of Bangladesh. *Asian Journal of Economics, Business and Accounting*, 1–22. <https://doi.org/10.9734/ajeaba/2020/v20i330324>
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-Determination Theory in Work Organizations: The State of a Science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 19–43. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable

- Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Forson, J. A., Ofosu-Dwamena, E., Opoku, R. A., & Adjavon, S. E. (2021). Employee motivation and job performance: a study of basic school teachers in Ghana. *Future Business Journal*, 7(1), 30. <https://doi.org/10.1186/s43093-021-00077-6>
- Grabowski, D., Chudzicka-Czupala, A., & Stapor, K. (2021). Relationships between work ethic and motivation to work from the point of view of the self-determination theory. *PLoS ONE*, 16(7 July), e0253145. <https://doi.org/10.1371/journal.pone.0253145>
- Hasibuan, M. S. P. (2020). *Manajemen Sumber Daya Manusia*. PT. Bumi Aksara.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Heranto, Tamsah, H., Munir, A. R., Putri, I. S., Chairul Basrun Umanailo, M., Lekatompessy, J. E., & Yusriadi, Y. (2021). The influence of work ethics and work experience on employee performance through job satisfaction at the regional secretariat of central mamuju regency. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 5(8), 3336–3343. <https://doi.org/10.46254/sa02.20210908>
- Idrus, I., Hakim, H., & Kamaruddin, Y. (2021). Pengaruh Motivasi Kerja Dan Disiplin Kerja Terhadap Kinerja Karyawan. *Journal Industrial Engineering & Management (JUST-ME)*, 2(2), 46–52. <https://doi.org/10.47398/just-me.v2i2.658>
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits - Self-esteem, generalized self-efficacy, locus of control, and emotional stability - With job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80–92. <https://doi.org/10.1037/0021-9010.86.1.80>
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, 87(4), 797–807. <https://doi.org/10.1037/0021-9010.87.4.797>
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376–407. <https://doi.org/10.1037/0033-2909.127.3.376>
- Kristianti, L. S., Affandi, A., Nurjaya, N., Sunarsi, D., & Rozi, A. (2021). Pengaruh Motivasi Dan Disiplin Kerja Terhadap Kinerja Pegawai Pada Dinas Pariwisata Purwakarta. *Jurnal Ilmiah PERKUSI*, 1(1), 101. <https://doi.org/10.32493/j.perkusi.v1i1.9987>
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1343). Rand McNally.
- Mahirah, A. M., & Setiani, S. (2022). Pengaruh Motivasi Kerja, Kepuasan Kerja dan Etos Kerja Terhadap Kinerja Karyawan di PT Surya Indah Food Multirasa Jombang. *AL-MANHAJ: Jurnal Hukum Dan Pranata Sosial Islam*, 4(2), 457–472. <https://doi.org/10.37680/almanhaj.v4i2.1864>
- Marnisah, L. (2020). *Manajemen SDM Berbasis Revolusi Industri 4.0*. Deepublish.
- Musfirah, A. (2024). Pengaruh Motivasi dan Etos Kerja terhadap Kinerja Pegawai. *Sawerigading: Journal Public Administration*, 2(1), 1–14. <https://ojs.unsamakassar.ac.id/jpa/article/view/362>
- Muthoni Nduati, M., & Wanyoike, R. (2021). Employee Performance Management Practice and Organizational Effectiveness. *International Academic Journal of Human Resource and Business Administration*, 3(10), 361–378. [https://iajournals.org/articles/iajhrba\\_v3\\_i10\\_361\\_378.pdf](https://iajournals.org/articles/iajhrba_v3_i10_361_378.pdf)

- Nurhayati, A., & Atmaja, H. E. (2021). Efektifitas Program Pelatihan dan Pengembangan Terhadap Kinerja Karyawan. *Kinerja: Jurnal Ekonomi Dan Manajemen*, 18(1), 24–30. <https://journal.feb.unmul.ac.id/index.php/KINERJA/article/view/7589>
- Nusraningrum, D., Rahmawati, A., Wider, W., Jiang, L., & Udang, L. N. (2024). Enhancing employee performance through motivation: the mediating roles of green work environments and engagement in Jakarta's logistics sector. *Frontiers in Sociology*, 9, 1392229. <https://doi.org/10.3389/fsoc.2024.1392229>
- Omar, S. N. Z., Che Cob, C. M. S., Sakarji, S. R., Thani, A. K. A., & Abu Bakar, A. (2022). A Preliminary Study of Factors Influencing on Employee Performance. *International Journal of Academic Research in Business and Social Sciences*, 12(1). <https://doi.org/10.6007/ijarbss/v12-i1/12234>
- Panigrahi, S., & Al-Nashash, H. M. (2019). Quality Work Ethics and Job Satisfaction: An Empirical Analysis. *SSRN Electronic Journal*, 20(168), 41–47. <https://doi.org/10.2139/ssrn.3515072>
- Prihadini, D., Nurbaity, S., Rachmadi, H., & Krishantoro, K. (2021). The Importance of Job Satisfaction to improve Employee Performance. *Technium Social Sciences Journal*, 18, 367–377. <https://doi.org/10.47577/tssj.v18i1.3059>
- Rodrigo, J. A. H. N., Kuruppu, C. L., & Pathirana, G. Y. (2022). The Impact of Job Satisfaction on Employee Performance: A Case at ABC Manufacturing Company. *Asian Journal of Economics, Business and Accounting*, 22(2), 1–9. <https://doi.org/10.9734/ajeaba/2022/v22i230541>
- Roos, M., Reale, J., & Banning, F. (2022). A value-based model of job performance. *PLOS ONE*, 17(1), e0262430. <https://doi.org/10.1371/journal.pone.0262430>
- Sandhu, M. A., Iqbal, J., Ali, W., & Tufail, M. S. (2017). Effect of Employee Motivation on Employee Performance. *Journal of Business and Social Review in Emerging Economies*, 3(1), 85–100. <https://doi.org/10.26710/jbsee.v3i1.182>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research* (pp. 587–632). Springer International Publishing. [https://doi.org/10.1007/978-3-319-57413-4\\_15](https://doi.org/10.1007/978-3-319-57413-4_15)
- Simanjuntak, P. A. (2020). Pengaruh Etos Kerja, Kepuasan Kerja, Sikap Kerja Dan Motivasi Kerja Terhadap Kinerja Pegawai Pada Kantor Pelayanan Pajak Pratama Medan Polonia. *JMB (Jurnal Manajemen Dan Bisnis)*, 2(1), 44–85. <https://doi.org/10.30743/jmb.v2i1.2358>
- Suryani, R., Wijayanto, G., Zulkarnain, Z., & Furwanti Alwie, A. (2022). The Effect of Service Quality and Employee Performance On Customer Satisfaction. *Devotion: Journal of Research and Community Service*, 4(1), 119–126. <https://doi.org/10.36418/dev.v4i1.356>
- Szabó, P., Míkva, M., Vaňová, J., & Marková, P. (2017). Employee Performance in the Context of the Problems of Measurement and Evaluation in Practice. *Research Papers Faculty of Materials Science and Technology Slovak University of Technology*, 25(41), 63–70. <https://doi.org/10.1515/rput-2017-0022>
- Tangkudung, C. A., & Taroreh, R. N. (2021). Pengaruh Gaya Kepemimpinan Transformasional, Etos Kerja Dan Budaya Organisasi Terhadap Kinerja Karyawan Pada Hotel Gran Central Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 9(1), 1382–1391. <https://ejournal.unsrat.ac.id/index.php/emba/article/view/33078>
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119–134. <https://doi.org/10.1007/s11747-015-0455-4>
- Wang, N., Luan, Y., & Ma, R. (2024). Detecting causal relationships between work motivation



- and job performance: a meta-analytic review of cross-lagged studies. *Humanities and Social Sciences Communications*, 11(1), 595. <https://doi.org/10.1057/s41599-024-03038-w>
- Wardana, A., Ruspitasari, W., & Handoko, Y. (2023). Pengaruh Kepuasan, Motivasi Dan Etos Kerja Terhadap Kinerja Pegawai Pmi Kota Malang. *Jurnal Ilmiah Riset Aplikasi Manajemen*, 1(1), 119–135. <https://doi.org/10.32815/jiram.v1i1.20>
- Yusri, M., Razak, M., & D, S. (2021). Pengaruh Etos Kerja, Kepuasan Kerja dan Motivasi Berprestasi Terhadap Kinerja ASN (Studi Kasus Pada Badan Perencanaan Pembangunan Daerah Kabupaten Pinrang). *Jurnal Manajemen Nobel Indonesia*, 2(1), 1–9. <https://ejurnal.stienobel-indonesia.ac.id/index.php/JMMNI/index1JMMNI>
- Zakaria, Z. (2021). The Influence of Work Ethic, Job Satisfaction, and Organizational Citizenship Behavior (OCB) on Work Productivity of State Elementary School Teachers in Mawar Village, Banjarmasin City. *Hut Publication Business and Management*, 1(1), 37–52. <http://hutpublication.com/index.php/HPBM/article/view/6>

---

### About the Authors

- 1) **Nenah Sunarsih** obtained her Master's degree from IPB University, Indonesia, in 2010. The author is an Assistant Professor at the Department of Management, Faculty of Economics and Business, Indonesia Open University.  
**Email:** [nenah@ecampus.ut.ac.id](mailto:nenah@ecampus.ut.ac.id)
- 2) **Irmawaty** obtained her Master's degree from IPB University, Indonesia, in 2012. The author is an Assistant Professor at the Department of Management, Faculty of Economics and Business, Indonesia Open University.  
**Email:** [irmawaty@ecampus.ut.ac.id](mailto:irmawaty@ecampus.ut.ac.id)
- 3) **Andriyansah** obtained his Doctoral degree from Diponegoro University, Indonesia, in 2018. The author is an Associate Professor at the Department of Management, Faculty of Economics and Business, Indonesia Open University.  
**Email:** [andri@ecampus.ut.ac.id](mailto:andri@ecampus.ut.ac.id)