Jurnal Penelitian Ilmu Ekonomi dan Keuangan Syariah
Volume. 4, Nomor. 4, November 2026
e-ISSN :2988-134X ; p-ISSN :2988-148X; Hal. 142-160
DOI: https://doi.org/10.59059/jupiekes.v4i4.3529
Tersedia: https://journal.staiypiqbaubau.ac.id/index.php/jupiekes

A Conceptual Framework for Employee Performance in the Maritime Logistics Industry: Employee Engagement and Work Life Balance as Determinants of Job Satisfaction

Tito Peter Leonando[1], Fitri Rezeki[2*], Tri Ngudi Wiyatno[3]
[1-3] Universitas Pelita Bangsa, Indonesia
Email: tito.202310030@mhs.pelitabangsa.ac.id[1] , fitri_rezeki@pelitabangsa.ac.id[2], tringudi@pelitabangsa.ac.id[3]*

**Corresponding Author: fitri_rezeki@pelitabangsa.ac.id[2]*

Abstract. This study aims to examine the influence of Employee Engagement and Work Life Balance on Employee Performance through the mediating role of Job Satisfaction in the maritime logistics industry. The research employs an explanatory quantitative approach with a causal design, using a structural model to test the relationships among variables. Data were collected from 348 employee respondents selected through purposive sampling and analyzed using Structural Equation Modeling (SEM) based on Partial Least Squares (PLS). The findings show that all constructs Employee Engagement, Work Life Balance, Job Satisfaction, and Employee Performance meet the criteria for reliability and validity. The values of Cronbach's Alpha, rho_A, Composite Reliability, and AVE are above the established thresholds, confirming that the measurement instruments are both consistent and valid. Furthermore, the R Square results indicate that Job Satisfaction ($R^2 = 0.802$) and Employee Performance ($R^2 = 0.863$) are strongly explained by the predictor variables, emphasizing the significant role of Employee Engagement, Work Life Balance, and Job Satisfaction in influencing the outcomes. Model fit indices, including SRMR, d_ULS, d_G, Chi-square, and NFI, demonstrate that the Estimated Model is consistent with the Saturated Model, thereby confirming the adequacy of the proposed structural model. Overall, the study concludes that the developed model is valid, reliable, and demonstrates a good level of fit, providing strong empirical evidence for the relationships among Employee Engagement, Work Life Balance, Job Satisfaction, and Employee Performance in the maritime logistics industry.

Keywords: Employee Performance; Job Training; Maritime Logistics Industry; Transformational Leadership; Work Engagement.

1. INTRODUCTION

The maritime logistics industry is a strategic component of national distribution systems and international trade, particularly in Indonesia, where archipelagic geography makes maritime transport essential for interregional connectivity and the movement of goods (Aydoğan, 2021; Friedrich et al., 2020; Pratiwi, 2024). This role has become increasingly significant due to the fact that Indonesia's port activities not only serve domestic distribution but are also directly linked to international trade flows. With respect to international shipping activities, data concerning cargo loading and unloading at Indonesian ports indicates a substantial increase during the 2010–2024 period. The volume of cargo unloaded increased from 65,641 thousand tons in 2010 to 162,411 thousand tons in 2024. Concurrently, the volume of foreign cargo loading exhibited a persistent upward trend, increasing from 233,222 thousand tons in 2010 to 405,236 thousand tons in 2024, notwithstanding the occasional fluctuations experienced in certain years. As demonstrated in Figure 1, this finding underscores the pivotal

Naskah Masuk: 14 Agustus 2026; Revisi: 11 September 2026; Diterima: 09 Oktober 2026; Terbit: 01 November 2026

role that Indonesian ports play in facilitating export-import activities and preserving connectivity within global supply chains.

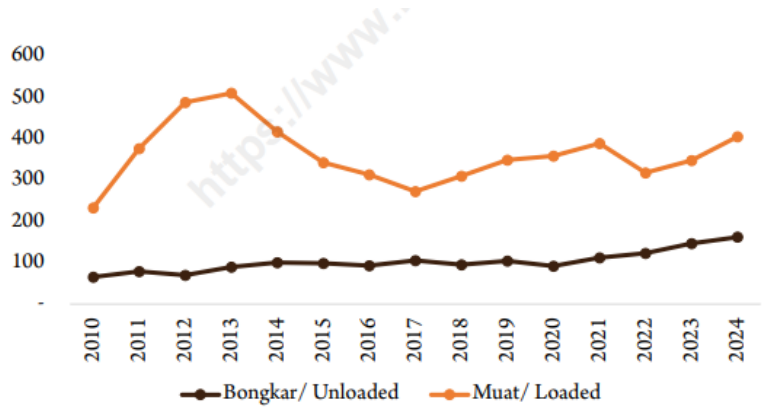


Figure 1. International Maritime Cargo Handling at Indonesian Ports, 2010–2024.

Source: Central Bureau of Statistics.

In addition to the escalating levels of international shipping activity, cargo handling for domestic shipping and inter-island maritime transport have also demonstrated an upward trend. The volume of domestic cargo unloading exhibited a marked increase, rising from 221,675 thousand tons in 2010 to 396,727 thousand tons in 2024. Concurrently, the volume of domestic cargo loading exhibited an increase from 182,486 thousand tons in 2010 to 434,055 thousand tons in 2024. As demonstrated in Figure 2, this increase is particularly evident in the last three years, indicating a growing need for domestic distribution via sea routes. Given Indonesia's status as an archipelagic nation, this trend reinforces the role of maritime logistics as the backbone of national connectivity and inter-regional distribution.

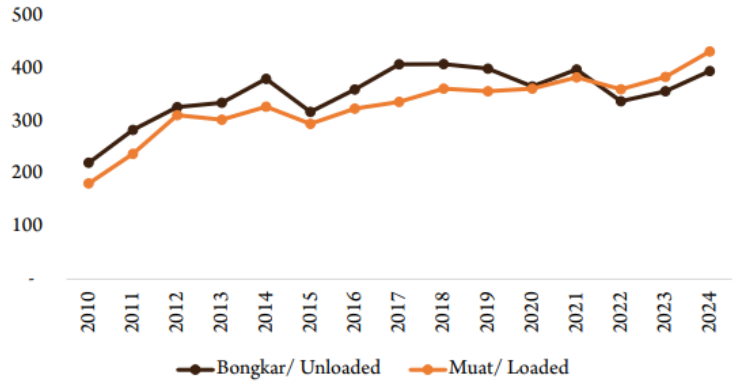


Figure 2. Inter-Island Maritime Cargo Handling at Indonesia's Major Ports, 2010–2024.

Source: Central Bureau of Statistics.

This operational pressure is particularly evident in regions with the highest cargo handling activity. DKI Jakarta is a pivotal region within the national maritime logistics system, characterized by its substantial volume of cargo handling, encompassing both domestic and international shipping activities. According to data from the five provinces with the highest cargo handling activity, DKI Jakarta recorded 33.81 million tons of domestic unloading and 19.54 million tons of domestic loading. For the context of international shipping, DKI Jakarta recorded 37.42 million tons of unloading and 25.13 million tons of loading. As demonstrated in Figure 3, the data reveal that Jakarta occupies a pivotal role within the national maritime logistics system. Consequently, the efficacy of human resource performance in this sector is a paramount factor in ensuring the seamless flow of distribution and logistics services.

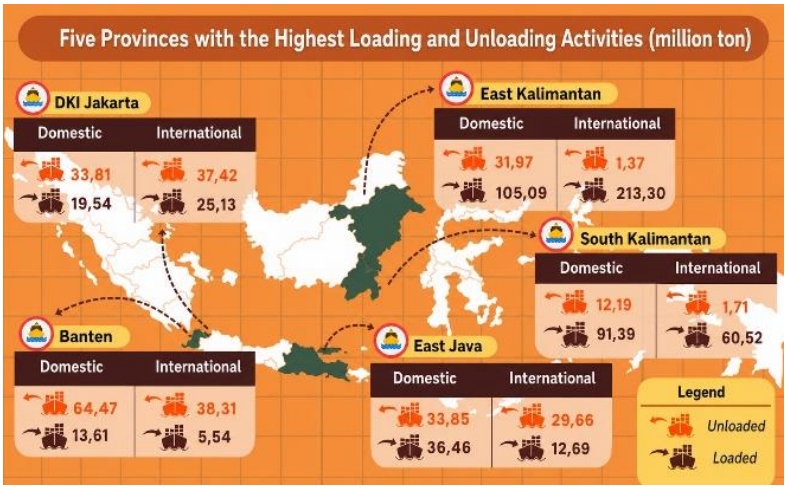


Figure 3. The Five Provinces with the Highest Cargo Handling Activity.

Source: Central Bureau of Statistics.

This increase in maritime logistics activity has significant operational implications. The intricacies inherent in maritime logistics, which encompasses shipping, port management, information system integration, document management, and cross-stakeholder coordination, necessitate a high level of organizational performance and consistent operational precision (Karakasnaki, 2024; Koca, 2024). Attention to detail, punctuality, and accountability when managing critical logistics data and documents are not yet fully optimized. This can lead to distribution delays and increased operational costs (Kikoti, 2024; Wallius, 2021). Even minor errors when entering item numbers, weights, quantities, container numbers, bill of lading information, vessel arrival dates, voyage numbers, destination countries, or ports can result in delivery delays, supply chain disruptions, and legal and reputational risks. Therefore, the success of the maritime logistics industry is determined not only by infrastructure, technology,

and information systems, but also by the quality of the human resources directly involved in operational processes (Au-Yong-Oliveira, 2024; Rezeki et al., 2023).

In such situations, the issue of employee performance becomes paramount and demands attention. Employees in the maritime logistics industry are expected to demonstrate precision, discipline, responsibility, coordination skills, and punctuality in completing their work. A decline in employee performance has the potential to impact a number of key factors, including company efficiency, the smoothness of distribution, logistics costs, and the reliability of service to customers. Consequently, an augmentation in loading and unloading operations necessitates a workforce that is able to perform tasks with precision, expediency, and uniformity (Koca, 2024).

However, the increase in maritime logistics activity has not always been accompanied by optimal employee performance(Hussien, 2025; Kessler, 2020). This situation is also reflected in the performance and employee job satisfaction of Jakarta's maritime industry, which has shown a downward trend in recent years (Hussien, 2025). Preliminary data from maritime logistics and shipping companies in Jakarta indicate that average employee performance declined from 55.75% in 2022 to 52.89% in 2023, and improved only marginally to 53.91% in 2024. This decline is evident in several key indicators, including work quality, work quantity, timeliness, teamwork, and attendance. This discrepancy suggests a discrepancy between the mounting operational demands of the maritime logistics industry and the employees' capacity to fulfill those demands.

Table 1. Preliminary Data on Employee Performance in the Context of Maritime Logistics/Shipping Companies in Jakarta, 2022–2024.

Indicator	**Average Employee Performance Percentage**		
	2022	**2023**	**2024**
Work Quality	58,60	59,53	53,92
Work Quantity	56,32	50,88	52,46
Timeliness	56,14	51,58	50,88
Teamwork	54,04	48,77	54,74
Attendance	53,68	53,68	57,54
Average	55,75	52,89	53,91

Source: Compiled from preliminary survey data from shipping companies in Jakarta, 2022–2024.

As illustrated in Table 1, employee performance indicators are not yet fully stable and often do not meet the operational requirements of the maritime logistics industry. This situation underscores the need to focus on employee performance in the maritime logistics industry,

particularly in terms of work quality, timeliness, teamwork, and attendance factors that are directly linked to data accuracy, interdepartmental coordination, and service speed.

A substantial body of extant research has demonstrated a correlation between employee engagement and work–life balance, on the one hand, and employee performance, on the other. This correlation manifests in both direct and indirect ways, with job satisfaction serving as an intervening variable in the relationship between engagement and performance. Nevertheless, the resulting empirical findings continue to exhibit inconsistencies, particularly within the context of the maritime logistics industry (Autsadee, 2023; Lafta, 2025). This inconsistency suggests a lack of clarity regarding the mechanisms underlying the relationships between employee engagement, work–life balance, job satisfaction, and employee performance (Canavesi, 2022; Saks, 2022; Schaufeli, 2021). Furthermore, the characteristics of the maritime logistics industry which involves high operational pressure, the risk of data errors, demands for timeliness, and the need for cross-party coordination call for a more thorough examination of the relationships among these variables.

Research shows that employee engagement and work–life balance impact performance, directly and through job satisfaction. However, the empirical findings remain inconsistent, particularly in the context of the maritime logistics industry (Autsadee, 2023; Lafta, 2025). This inconsistency suggests a lack of clarity regarding the mechanisms underlying the relationships between employee engagement, work–life balance, job satisfaction, and employee performance (Canavesi, 2022; Saks, 2022; Schaufeli, 2021). In addition, the characteristics of the maritime logistics industry namely, the high operational pressure, the risk of data errors, the demand for timeliness, and the need for cross-party coordination call for a more thorough examination of the relationships among these variables.

This study is directed to explain the factors influencing employee performance in the maritime logistics industry by examining the relationships among employee engagement, work–life balance, job satisfaction, and employee performance. The proposed approach is carried out by developing and testing a conceptual framework that identifies both direct and indirect effects among the variables. This framework is expected to provide empirical evidence for formulating adaptive and applicable human resource management strategies to improve employee performance and reduce the risk of operational errors, logistics delays, and increased logistics costs in the maritime logistics industry (Aydoğan, 2021; Nusinow, 2020). The present study proposes a conceptual framework for employee performance in the maritime logistics industry. The proposed framework positions employee engagement and work–life balance as determinants of job satisfaction and employee performance. It is anticipated that this

framework will facilitate a more comprehensive and practical understanding, thereby providing a foundation for the formulation of adaptive and sustainable human resource management strategies within the maritime logistics industry (Alshaabani, 2022; Giao, 2020; Silva, 2023).

2. LITERATURE REVIEW

These performance issues are closely linked to employee engagement, work–life balance, and job satisfaction (Davidescu, 2020; Kessler, 2020). Employees who exhibit high levels of engagement tend to demonstrate heightened levels of focus, dedication, responsibility, and a strong commitment to achieving results. Conversely, a lack of engagement has been shown to adversely affect the quality of task execution and, consequently, employee performance. Conversely, the issue of work-life balance assumes paramount importance in the context of maritime logistics. The nature of maritime logistics work is characterized by high time pressure, the necessity of coordinating with multiple parties, and a significant risk of errors. A disparity between professional obligations and personal demands has been demonstrated to diminish energy levels, concentration, and job satisfaction, thereby exerting a detrimental effect on employee performance (Canavesi, 2022; Lee, 2022; Palumbo, 2020; Tejero, 2021).

Job satisfaction also plays a key role in explaining the relationship between behavioural factors and employee performance. In a professional setting characterized by the imperative for punctuality, accuracy, and effective coordination, employees who experience job satisfaction tend to exhibit a heightened commitment to maintaining work quality and achieving operational targets. Job satisfaction, therefore, can be conceptualized as a psychological mechanism that mediates the influence of employee engagement and work–life balance on employee performance in the maritime logistics industry.

3. RESEARCH METHOD

This study employed SmartPLS 4 software with a partial-least-squares based structural equation modelling (SEM-PLS) approach for the data analysis (Lafta, 2025). First, a descriptive analysis was performed to identify trends in respondents' answers regarding indicators of employee engagement, work-life balance, job satisfaction, and employee performance, based on mean values on a five-point Likert scale (Autsadee, 2023). This stage aimed to provide an empirical overview of the conditions of the research variables prior to testing the structural relationships among them (Saks, 2022; Schaufeli, 2021). Subsequently, the analysis evaluated the measurement model (outer model) and the structural model (inner

model). Convergent validity, discriminant validity, and construct reliability were tested in the outer model using factor loadings, average variance extracted (AVE), Cronbach's alpha, and composite reliability. The inner model was evaluated using R-square (R^2), f-square (f^2), and significance tests for path coefficients via the bootstrapping technique at a 5% significance level. Overall model fit was tested using predictive relevance (Q^2), SRMR, NFI, and d_ULS and d_G indicators to ensure an adequate fit of the model in explaining the relationships among the research variables in the maritime logistics industry.

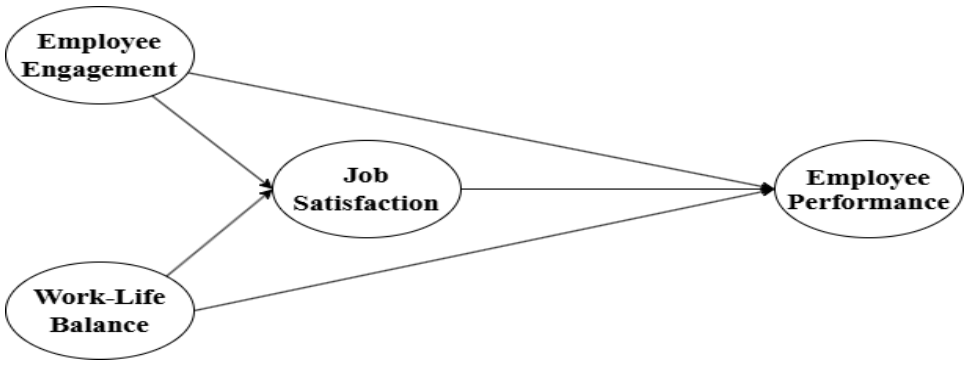


Figure 4. Schematic diagram of Employee Performance in the Maritime Logistics Industry.

4. RESULT AND DISCUSSION

Result

The present study employs the SEM-PLS approach to investigate the relationships among employee engagement, work-life balance, job satisfaction, and employee performance in the maritime logistics industry. The ensuing Results and Discussion section is where the findings of the analytical investigation are articulated. The findings are interpreted based on statistical results and compared with relevant theoretical and empirical studies to provide comprehensive insights. It is hypothesized that the results will address the research objectives and hypotheses formulated in the introduction.

Measurement Test

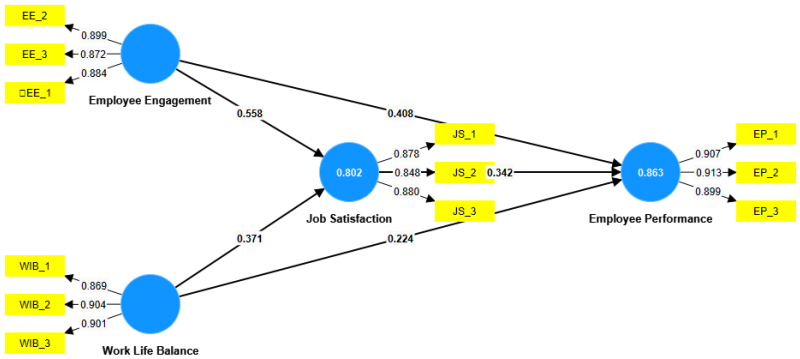


Figure 5. Outer Loading**.**

The resulting data from the outer loading test (Figure 5) show that all indicators of the constructs, namely Employee Engagement (EE), Work–Life Balance (WLB), Job Satisfaction (JS), and Employee Performance (EP), are valid. This is based on the data processing results, where all indicators have factor loading values above the threshold of 0.70. Specifically, the Employee Engagement indicators (EE_1, EE_2, and EE_3) have loading values ranging from 0.872 to 0.899. The Work–Life Balance indicators (WLB_1, WLB_2, and WLB_3) show loading values between 0.869 and 0.904. Meanwhile, the Job Satisfaction indicators (JS_1, JS_2, and JS_3) have loading values ranging from 0.848 to 0.880. Similarly, the Employee Performance indicators (EP_1, EP_2, and EP_3) show load values between 0.899 and 0.913. Thus, all indicators used in this study meet the criteria for convergent validity, indicating that the measurement instruments are reliable and appropriate for further analysis in the structural model.

Table 2. Construct Reliability and Validity.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employee Engagement	0,862	0,862	0,916	0,784
Employee Performance	0,891	0,892	0,933	0,822
Job Satisfaction	0,838	0,838	0,902	0,755

As illustrated in Table 2, the variables Employee Engagement, Employee Performance, and Job Satisfaction were found to be highly reliable. Cronbach's alpha values ranged from 0,838 to 0,891, indicating strong internal consistency in the measurement instruments. These results are further supported by rho_A values ranging from 0,838 to 0,892, confirming the robust reliability of each construct.

Furthermore, the Composite Reliability values for all variables ranged from 0,902 to 0,933, approaching 1. This reflects a high level of measurement consistency and indicates that the instrument is reliable. The Average Variance Extracted (AVE) values range from 0,755 to 0,822, with all values exceeding the minimum threshold of 0,50. This indicates that each construct explains more than 50% of the variance in its respective indicator. Therefore, it can be concluded that the instruments used to measure Employee Engagement, Employee Performance, and Job Satisfaction meet the criteria for construct validity and reliability.

Table 3. Collinearity statistics (VIF).

	VIF
EE_2	2,411
EE_3	2,074
EP_1	2,637
EP_2	2,877
EP_3	2,458
JS_1	2,096
JS_2	1,784
JS_3	2,100
WLB_1	2,021
WLB_2	2,650
WLB_3	2,480
EE_1	2,182

The findings of the collinearity statistics test indicate that all indicators possess a Variance Inflation Factor (VIF) value below the threshold of 5. The lowest VIF value was found in indicator JS_2 at 1.784, while the highest VIF value was found in indicator EP_2 at 2.877. These findings suggest that multicollinearity issues among the indicators in the measurement model are not present. Consequently, each indicator is regarded as having the capacity to measure its respective construct without excessive correlation with other indicators. This allows the model to be utilized for the subsequent stage of analysis.

Model Structure Test

Table 4. Structural Model Testing.

	R Square	R Square Adjusted
Employee Performance	0,863	0,862
Job Satisfaction	0,802	0,800

As illustrated in the table 4 the Employee Performance and Job Satisfaction variables can explain the variance in the model. Both have a very strong ability to do so. The R^2 value for Employee Performance is 0,863, with an adjusted R^2 of 0,862. These findings suggest that approximately 86.3% of the variance in Employee Performance can be attributed to the included predictors, with minimal adjustment required given the number of existing predictors.

The Job Satisfaction variable has an R-squared value of 0,802 and an adjusted R-squared value of 0,800. This indicates that the model can explain approximately 80.2% of the variance in Job Satisfaction, with minor adjustments related to the number of predictors. The

elevated R-squared and adjusted R-squared values for both variables highlight their significant contribution to explaining the majority of the variance in the model.

This model is also considered well-specified as evidenced by the negligible discrepancy between the R-squared and adjusted R-squared values, although there is still room for improvement by adding additional predictor variables. Overall, these results confirm that Employee Performance and Job Satisfaction play a significant role in explaining the variability in the structural model.

Hypothesis Testing

Table 5. Path Coefficients.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Employee Engagement -> Employee Performance	0,408	0,409	0,056	7,321	0,000
Employee Engagement -> Job Satisfaction	0,558	0,559	0,048	11,692	0,000
Job Satisfaction -> Employee Performance	0,342	0,340	0,068	4,998	0,000
Work Life Balance -> Employee Performance	0,224	0,225	0,049	4,538	0,000
Work Life Balance -> Job Satisfaction	0,371	0,370	0,053	6,966	0,000
Employee Engagement -> Job Satisfaction -> Employee Performance	0,191	0,190	0,044	4,361	0,000
Work Life Balance -> Job Satisfaction -> Employee Performance	0,127	0,125	0,028	4,544	0,000

The results of the hypothesis testing presented in Table 5 show that all direct and indirect relationships examined in the model are statistically significant, as indicated by T-statistics greater than 1.96 and P-values below 0.05.

The first hypothesis examined the effect of employee engagement on employee performance. The results show a positive and significant effect, with an original sample coefficient of 0.408, a T-statistic of 7.321, and a P-value of 0.000 ($p < 0.001$). These findings indicate that higher employee engagement is associated with higher employee performance. Therefore, the hypothesis proposing a positive effect of employee engagement on employee performance is supported.

The second hypothesis examined the effect of employee engagement on job satisfaction. The results reveal a positive and significant relationship, with a path coefficient of 0.558, a T-statistic of 11.692, and a P-value of 0.000 ($p < 0.001$). This result indicates that employee engagement contributes positively to employees' job satisfaction. Thus, the hypothesis is supported.

The third hypothesis investigated the effect of job satisfaction on employee performance. The results demonstrate a positive and significant effect, as indicated by a path coefficient of 0.342, a T-statistic of 4.998, and a P-value of 0.000 ($p < 0.001$). This finding suggests that higher job satisfaction contributes to improved employee performance. Therefore, the hypothesis is supported.

The fourth hypothesis examined the effect of work-life balance on employee performance. The results indicate a positive and significant relationship, with a path coefficient of 0.224, a T-statistic of 4.538, and a P-value of 0.000 ($p < 0.001$). This finding suggests that better work-life balance is associated with higher employee performance. Thus, the hypothesis is supported.

The fifth hypothesis assessed the effect of work-life balance on job satisfaction. The analysis shows a positive and significant effect, with a path coefficient of 0.371, a T-statistic of 6.966, and a P-value of 0.000 ($p < 0.001$). This result indicates that employees who experience a better balance between their work and personal lives tend to report higher levels of job satisfaction. Therefore, the hypothesis is supported.

In addition to the direct effects, the results also demonstrate significant indirect effects through job satisfaction. The indirect effect of employee engagement on employee performance through job satisfaction is positive and significant, with a coefficient of 0.191, a T-statistic of 4.361, and a P-value of 0.000 ($p < 0.001$). This finding indicates that job satisfaction significantly mediates the relationship between employee engagement and employee performance.

Similarly, the indirect effect of work-life balance on employee performance through job satisfaction is positive and significant, with a coefficient of 0.127, a T-statistic of 4.544, and a P-value of 0.000 ($p < 0.001$). This result confirms that job satisfaction also significantly mediates the relationship between work-life balance and employee performance.

Overall, the hypothesis testing results demonstrate that employee engagement and work-life balance have positive and significant direct effects on both job satisfaction and employee performance. Job satisfaction also has a positive and significant effect on employee performance. Furthermore, job satisfaction significantly mediates the effects of both employee engagement and work-life balance on employee performance. These findings indicate that employee performance is influenced not only directly by employee engagement and work-life balance but also indirectly through increased job satisfaction.

Discussioin

The findings of this study indicate that employee engagement, work–life balance, and job satisfaction are important factors in explaining employee performance within the maritime logistics industry. The R^2 value of 0.863 for employee performance indicates that 86.3% of the variance in employee performance can be explained by employee engagement, work–life balance, and job satisfaction, while the remaining 13.7% is explained by other factors outside the research model. Meanwhile, the R^2 value of 0.802 for job satisfaction indicates that employee engagement and work–life balance explain 80.2% of the variance in job satisfaction. These findings demonstrate that employee performance in the maritime logistics industry is determined not only by technical and operational aspects but also by employees' behavioural and psychological conditions. This finding is consistent with Lafta, (2025), who emphasizes the importance of improving operational performance in maritime logistics, as well as Autsadee, (2023), who highlights human resource development as a critical issue in the development of the maritime industry.

The first finding indicates that employee engagement has a positive and significant effect on employee performance, with a path coefficient of 0.408, a T-statistic of 7.321, and a P-value of 0.000 ($p < 0.001$). This result indicates that higher levels of employee engagement are associated with higher employee performance. In the maritime logistics industry, employees are required to demonstrate accuracy, speed, responsiveness, and effective coordination in carrying out operational activities. Employees who are highly engaged are therefore more likely to demonstrate greater focus, responsibility, dedication, and commitment in completing their tasks. This finding is consistent with Saks, (2022), who explains that employee engagement is an important factor in encouraging employees to contribute more effectively to organizational objectives. The result also supports Schaufeli, (2021), who emphasizes that work engagement is characterized by energy, dedication, and absorption in one's work.

The second finding demonstrates that employee engagement has a positive and significant effect on job satisfaction, with a path coefficient of 0.558, a T-statistic of 11.692, and a P-value of 0.000 ($p < 0.001$). Among the direct relationships examined in the model, this relationship has the largest path coefficient, indicating that employee engagement is the strongest direct predictor of job satisfaction. Employees who are actively engaged in their work tend to develop more positive psychological relationships with their tasks, responsibilities, and organizations. Engagement enables employees to perceive their work as meaningful and encourages stronger emotional involvement in organizational activities. This finding

corroborates Canavesi, (2022), who demonstrates that employee engagement is associated with a more positive work experience. Similarly, Wang, (2020) shows that employee engagement and job satisfaction play important roles in explaining employees' attitudes toward their work. In the maritime logistics industry, employee engagement can therefore serve as an important foundation for enhancing job satisfaction because engaged employees perceive their roles as meaningful contributions to organizational and operational effectiveness.

The third finding indicates that job satisfaction has a positive and significant effect on employee performance, with a path coefficient of 0.342, a T-statistic of 4.998, and a P-value of 0.000 ($p < 0.001$). This finding suggests that higher job satisfaction is associated with improved employee performance. In a maritime logistics environment characterized by strict deadlines, data accuracy requirements, and intensive coordination among various parties, satisfied employees are more likely to maintain work quality, comply with operational standards, and complete tasks effectively and on time. This result is consistent with Kessler, (2020), who demonstrates that job satisfaction can be associated with changes in organizational performance. Davidescu, (2020) also support this finding by demonstrating the relationship between job satisfaction and employee performance within the framework of sustainable human resource management.

The fourth finding indicates that work–life balance has a positive and significant effect on employee performance, with a path coefficient of 0.224, a T-statistic of 4.538, and a P-value of 0.000 ($p < 0.001$). Although the magnitude of this relationship is smaller than the effect of employee engagement on employee performance, work–life balance remains an important factor in supporting employee performance. Maritime logistics activities frequently involve time pressure, demands for accuracy, irregular workloads, and continuous coordination. When employees are able to maintain an appropriate balance between their professional responsibilities and personal lives, they are better able to preserve their physical and psychological energy, concentration, and work stability. These findings are consistent with Palumbo, (2020), who explains that working arrangements can affect employees' work–life balance, and Tejero, (2021), who demonstrate an association between work–life balance and work productivity.

The fifth finding shows that work–life balance has a positive and significant effect on job satisfaction, with a path coefficient of 0.371, a T-statistic of 6.966, and a P-value of 0.000 ($p < 0.001$). This result demonstrates that employees who are able to maintain an appropriate balance between work and personal life tend to experience greater job satisfaction. In the maritime logistics industry, demanding schedules, administrative responsibilities, coordination

across different parties, and the potential consequences of operational errors may create considerable psychological pressure. An appropriate work–life balance can help employees manage these demands and reduce the likelihood of excessive fatigue and burnout. This finding is consistent with Chambel, (2023), who demonstrate that organizational support for managing work and family responsibilities can reduce burnout and improve positive work-related outcomes. The result also supports Davidescu, (2020), who emphasize the relationship between work flexibility, job satisfaction, and employee performance.

In addition to the direct relationships, the findings demonstrate that job satisfaction significantly mediates the relationship between employee engagement and employee performance. The indirect effect of employee engagement on employee performance through job satisfaction has a coefficient of 0.191, a T-statistic of 4.361, and a P-value of 0.000 ($p < 0.001$). This finding indicates that employee engagement improves performance not only directly but also indirectly by increasing employees' job satisfaction. Employees who are more engaged are more likely to experience positive feelings toward their jobs, and this higher level of satisfaction subsequently contributes to improved performance. Because the direct effect of employee engagement on employee performance remains significant while its indirect effect through job satisfaction is also significant, the results indicate a partial mediating role of job satisfaction. Thus, job satisfaction represents an important psychological mechanism through which employee engagement is translated into higher employee performance.

Similarly, job satisfaction significantly mediates the relationship between work–life balance and employee performance. The indirect effect has a coefficient of 0.127, a T-statistic of 4.544, and a P-value of 0.000 ($p < 0.001$). This result suggests that work–life balance can improve employee performance both directly and indirectly through enhanced job satisfaction. Employees who are able to balance work responsibilities with their personal lives are more likely to experience positive attitudes toward their jobs, which subsequently encourages better performance. Since both the direct effect of work–life balance on employee performance and its indirect effect through job satisfaction are statistically significant, job satisfaction also plays a partial mediating role in this relationship. Therefore, work–life balance contributes to performance not merely by maintaining employees' energy and concentration but also by creating more satisfying work experiences.

Overall, the findings indicate that employee engagement has a stronger direct influence than work–life balance on both job satisfaction and employee performance. Employee engagement has a coefficient of 0.558 in predicting job satisfaction and 0.408 in predicting employee performance, whereas work–life balance has coefficients of 0.371 and

0.224, respectively. These results suggest that the behavioural pathway associated with employee engagement plays a particularly important role in explaining job satisfaction and employee performance in the maritime logistics industry. Nevertheless, work–life balance remains an essential factor because it significantly contributes to both outcomes and also generates an indirect effect on employee performance through job satisfaction.

The mediation findings further strengthen the role of job satisfaction as a psychological mechanism within the research model. Employee engagement and work–life balance significantly influence job satisfaction, while job satisfaction subsequently has a significant influence on employee performance. The indirect effects of 0.191 for employee engagement and 0.127 for work–life balance demonstrate that part of the influence of these two antecedent variables on employee performance operates through employees' satisfaction with their jobs. These findings are consistent with Kessler, (2020) and Davidescu, (2020), who identify job satisfaction as an important factor associated with employee and organizational performance. Therefore, improving employee performance in the maritime logistics industry requires not only technical and operational improvements but also greater attention to employees' engagement, work–life balance, and job satisfaction.

From a managerial perspective, these findings highlight the strategic importance of human resource management in supporting operational efficiency in maritime logistics companies. Employees who are disengaged, dissatisfied, or unable to maintain an appropriate balance between their work and personal lives may experience reduced concentration, motivation, and consistency. Such conditions may increase the possibility of data inaccuracies, operational delays, communication problems, and ineffective coordination. Consequently, maritime logistics companies need to develop human resource strategies that strengthen employee engagement, maintain manageable workloads, support work–life balance, and create working conditions that foster greater job satisfaction.

This study also addresses inconsistencies in previous research by demonstrating that employee engagement, work–life balance, and job satisfaction have positive and significant effects on employee performance, while simultaneously demonstrating the mediating role of job satisfaction. The main contribution of this study is the development and empirical examination of an integrated conceptual framework in which employee engagement and work–life balance function as antecedents of both job satisfaction and employee performance, while job satisfaction serves as an important mediating mechanism. Accordingly, the findings confirm that employee performance in the maritime logistics industry should not be understood solely as a technical or operational issue. Rather, it is also strongly associated with behavioural

and psychological factors, thereby emphasizing the need for adaptive and sustainable human resource management strategies.

5. CONCLUSION

This study concludes that employee engagement, work–life balance, and job satisfaction play important roles in explaining employee performance in the maritime logistics industry. The findings show that employee engagement has a positive and significant effect on employee performance and job satisfaction. This indicates that employees who are more engaged tend to demonstrate stronger focus, responsibility, dedication, and commitment in carrying out operational tasks, which ultimately improves their performance and satisfaction at work.

Work–life balance also has a positive and significant effect on employee performance and job satisfaction. This finding indicates that employees who are able to maintain a balance between work demands and personal life tend to have better psychological conditions, higher satisfaction, and stronger work performance. In the maritime logistics industry, where employees face high operational pressure, time sensitivity, and demands for accuracy, work–life balance becomes an important factor in maintaining employee energy, concentration, and consistency.

Furthermore, job satisfaction has a positive and significant effect on employee performance. This confirms that employees who are satisfied with their work are more likely to maintain work quality, timeliness, teamwork, and responsibility. The findings also show that job satisfaction significantly mediates the relationship between employee engagement and employee performance, as well as the relationship between work–life balance and employee performance. Since the direct effects of employee engagement and work–life balance on employee performance also remain significant, job satisfaction acts as a partial mediator in both relationships. Thus, improving employee performance in the maritime logistics industry requires not only technical and operational improvements, but also integrated human resource management strategies that strengthen employee engagement, support work–life balance, and enhance job satisfaction.

Overall, this study provides empirical support for the proposed conceptual framework by showing that employee engagement and work–life balance are significant determinants of job satisfaction and employee performance. The results contribute to the human resource management literature in the maritime logistics context and offer practical implications for

companies to develop adaptive and sustainable HR strategies aimed at improving employee performance in a high-pressure operational environment.

REFERENCES

Alshaabani, A. (2022). Impact of Diversity Management on Employees' Engagement: The Role of Organizational Trust and Job Insecurity. *Sustainability Switzerland*, *14*(1). https://doi.org/10.3390/su14010420

Autsadee, Y. (2023). Evolution and Current Trends of Human Resource Development in the Maritime Industry through performance analysis and science mapping procedures. *Journal of Maritime Research*, *20*(2), 148–161. https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85169707327&origin=inward

Au-Yong-Oliveira, M. (2024). The NEXUS Story and its Stakeholder Analysis: Digitalising Multimodal Logistics and the Associated Value Chain Worldwide. *Proceedings of the European Conference on Innovation and Entrepreneurship Ecie*, *19*(1), 71–80. https://doi.org/10.34190/ecie.19.1.2700

Aydoğan, E. (2021). HRM practices and organizational commitment link: maritime scope. *International Journal of Organizational Analysis*, *29*(1), 260–276. https://doi.org/10.1108/IJOA-02-2020-2038

Canavesi, A. (2022). Servant Leadership and Employee Engagement: A Qualitative Study. *Employee Responsibilities and Rights Journal*, *34*(4), 413–435. https://doi.org/10.1007/s10672-021-09389-9

Chambel, M. J. (2023). Teleworking in times of COVID-19: the role of Family-Supportive supervisor behaviors in workers' work-family management, exhaustion, and work engagement. *International Journal of Human Resource Management*, *34*(15), 2924–2959. https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85129206000&origin=inward

Davidescu, A. A. M. (2020). Work flexibility, job satisfaction, and job performance among romanian employees-Implications for sustainable human resource management. *Sustainability Switzerland*, *12*(15). https://doi.org/10.3390/su12156086

Friedrich, L. A., Glegg, G., Fletcher, S., Dodds, W., Philippe, M., & Bailly, D. (2020). Using ecosystem service assessments to support participatory marine spatial planning. *Ocean & Coastal Management*, *188*, 105121. https://doi.org/https://doi.org/10.1016/j.ocecoaman.2020.105121

Giao, H. N. K. (2020). The impact of social support on job-related behaviors through the mediating role of job stress and the moderating role of locus of control: Empirical evidence from the Vietnamese banking industry. *Cogent Business and Management*, *7*(1). https://doi.org/10.1080/23311975.2020.1841359

Hussien, M. I. (2025). UNLOCKING THE FUTURE: HOW BLOCKCHAIN INFLUENCES SUSTAINABLE SUPPLY CHAIN PERFORMANCE: AN EMPIRICAL STUDY ON THE MARITIME INDUSTRY. *International Maritime Transport and Logistics Conference*, *14*, 650–680. https://doi.org/10.21622/MARLOG.2025.14.1.42

Karakasnaki, M. (2024). Exploring ethical leadership and green human resource management for social sustainable performance improvement: evidence from the Greek maritime industry. *Industrial and Commercial Training*, *56*(4), 328–342. https://doi.org/10.1108/ICT-01-2024-0002

Kessler, S. R. (2020). Job satisfaction and firm performance: Can employees' job satisfaction change the trajectory of a firm's performance? *Journal of Applied Social Psychology*, *50*(10), 563–572. https://doi.org/10.1111/jasp.12695

Kikoti, S. K. (2024). The nexus between institutional framework and employee performance in Tanzania's maritime sector. *International Review of Administrative Sciences*, *90*(1), 259–275. https://doi.org/10.1177/00208523231184617

Koca, Y. N. (2024). Are We Ready for Digitalisation? A Study of the Challenges and Barriers to Digitalisation and Technology Use in the Turkish Maritime Sector. *Polish Maritime Research*, *31*(2), 132–139. https://doi.org/10.2478/pomr-2024-0029

Lafta, H. S. (2025). The Impact of Green Maritime Logistics in Enhancing the Operational Performance of Iraqi Oil Ports. *International Journal of Transport Development and Integration*, *9*(1), 49–58. https://doi.org/10.18280/ijtdi.090105

Lee, Y. (2022). Linking internal CSR with the positive communicative behaviors of employees: the role of social exchange relationships and employee engagement. *Social Responsibility Journal*, *18*(2), 348–367. https://doi.org/10.1108/SRJ-04-2020-0121

Nusinow, D. P. (2020). Quantitative Proteomics of the Cancer Cell Line Encyclopedia. *Cell*, *180*(2), 387–402. https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85077916308&origin=inward

Palumbo, R. (2020). Let me go to the office! An investigation into the side effects of working from home on work-life balance. *International Journal of Public Sector Management*, *33*(6), 771–790. https://doi.org/10.1108/IJPSM-06-2020-0150

Pratiwi, M. A. (2024). Digital Human Resource Management in Maritime Enterprises. *Bio Web of Conferences*, *134*. https://doi.org/10.1051/bioconf/202413405003

Rezeki, F., Librianty, N., & Farhas, R. J. (2023). The Influence of Supervision and Organizational Culture on Employee Work Productivity through Organizational Commitment to Kimshafi Alung Cipta Ltd. ... *Industri Dan Logistik*. https://pdfs.semanticscholar.org/5421/09b005c40c36ed2a340e61fdc4f0aaebab27.pdf

Saks, A. M. (2022). Organization engagement: a review and comparison to job engagement. *Journal of Organizational Effectiveness*, *9*(1), 20–49. https://doi.org/10.1108/JOEPP-12-2020-0253

Schaufeli, W. (2021). Engaging Leadership: How to Promote Work Engagement? *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.754556

Silva, P. (2023). Employees' perception of corporate social responsibility and performance: the mediating roles of job satisfaction, organizational commitment and organizational trust. *Journal of Strategy and Management*, *16*(1), 92–111. https://doi.org/10.1108/JSMA-10-2021-0213

Tejero, L. M. S. (2021). Factors associated with work-life balance and productivity before and during work from home. *Journal of Occupational and Environmental Medicine*, *63*(12), 1065–1072. https://doi.org/10.1097/JOM.0000000000002377

Wallius, E. (2021). Preconceptions towards gamifying work: A thematic analysis of responses of a maritime logistics organization. *ACM International Conference Proceeding Series*, 128–133. https://doi.org/10.1145/3464327.3464368

Wang, C. (2020). Effects of professional identity on turnover intention in China's hotel employees: The mediating role of employee engagement and job satisfaction. *Journal of Hospitality and Tourism Management*, *45*, 10–22. https://api.elsevier.com/content/article/eid/1-s2.0-S1447677020301728