

# Analysis of the Effect of Job Evaluation, Workload and Competence on Employee Performance of PT Pelindo Jasa Maritim Region 4 Makassar Area

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**Abstract.** *This research aims to investigate how the following variables contribute to employee performance in PT Pelindo Jasa Maritim Region 4 in Makassar: job evaluation, workload and competence. The research design utilized was a quantitative and associative research design. The sample was comprised of 67 employees of PT Pelindo Jasa Maritim Region 4. Analysis Data were analyzed with multiple linear regression with SPSS. The results show that job evaluation, workload, and competence have partially positive and statistically significant influence on the performance of the employees. Of all the variables, competence was the most significant predictor of performance. These three variables combined together explain 74.4 percent of the variance in employee performance, with the remaining 25.6 percent explained by other factors that were not considered in this study.*

**Keywords:** *Job Evaluation, Workload, Competence, Employee Performance*

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## INTRODUCTION

Human resources are one of the most vital organizational resources since they consist of individuals, who are equipped with the necessary skills, competencies and motivation to achieve corporate goals. According to Sukmara (2024), Khemraj (2023) and Anggraini et al. (2024) human resource management is a collection of procedures that can attract, train, inspire, and preserve a capable and productive workforce. Human resources are a critical factor in determining the success of an organization; the performance of the organization is dependent not only on technology and business strategy, but also the competence, motivation, and good administration of HR (Elena, 2012; Sutrisno et al., 2023; Agustian et al. 2023).

When the quality of human resources is high then they automatically deliver on their tasks efficiently thus improving organizational performance. Empirical research by Goyal & Akhilesh (2007) and Abbas et al. (2024) indicate the presence of intellectual capital, emotional capital and social capital as human resources. In a highly competitive business world, there is a strategic need to enhance the performance of employees in every organization, including state-owned business-like PT Pelindo Jasa Maritim.

Efficiency of operation, quality of service and competitiveness of corporations all depend on the optimal performance of the employees (Junaidi, 2022; Adebajo et al., 2020). The organizations, therefore, have to control the internal factors influencing the productivity of the employees in a systematic and quantifiable way. One of such factors is job evaluation. Through

proper job evaluation processes, organizations are well placed to ensure that the employees are placed in positions that match their qualifications and duties.

Poor job appraisal can lead to unbalanced workload, dissatisfaction and lack of motivation among the employees. In addition, workload imbalance is a cause of psychological and physical stress that may reduce employee focus, job interest, and even work quality. An actual and balanced workload should be planned to be consistent with individual abilities and organizational goals. The third important aspect is the competence of the employees which includes the knowledge, technical skills and attitude towards work. Skilled workers can effectively and efficiently accomplish tasks and adjust to the changes and challenges of the workplace.

Job evaluation is an elemental part of human resource management which is used to determine the relative value of a job within an organization. According to empirical studies by different scholars, a properly structured job-evaluation system improves the efficiency of organizations, creates job satisfaction, and boosts the overall performance of employees. Mondy and Martocchio (2016) will argue that effectively organized job-evaluation systems can help to match the roles and responsibilities of the employees with the strategic goals of the company.

Proper job appraisals help organizations to balance between the pay and workload, thus enhancing increased productivity and satisfaction of the employees. On the other hand, poor implementation of the job evaluation process can lead to workload disparities, employee perceived undervaluation, high turnover rates and low performance. As Sutrisno et al. (2023) shows in the logistics industry, companies that have clear job-evaluation systems and aligning workloads gain a 20-30 per cent increase in their performance over the operations of those that do not.

Armstrong (2021) also reasons that job assessment should be in line with employee competencies and should promote professional growth. Anything that places a person in a position that is not suited to his/her skill set is bound to reduce efficiency and to increase work stress. Besides job evaluation, there is another salient determinant of employee performance; workload. According to Gibson et al. (2019) the concept of workload refers to the intensity of work that is allocated to individual or collective unit and it encompasses the physical, cognitive and affective requirements of the performance of organizational work.

Workload may be examined within the framework of the operational environment of PT Pelindo Makassar in a variety of main dimensions, namely, the degree of physical efforts involved in work, i.e. logistics operations, loading and unloading of ship, port management, the complexity of administrative work, decision making, and pressure of strict production goals; the time-related aspects of work, i.e. the working time of employees under the pressure of strict deadlines; the level of difficulty associated with the supervisory activities that presuppose the coordination of the work of various divisions at Effective workload management instills more efficiency in the employees without causing them to become fatigued and reduce their productivity.

Competence refers to combination of knowledge, ability and professional attitudes which employees need to have in order to perform their responsibilities effectively. Congruence between the competencies of employees and the demands of their jobs improves individual and group organizational performance. The competency level demonstrates a significant effect on employee performance, which makes it an essential factor of the efficiency of the work and services provided by PT Pelindo Jasa Maritim.

We expect the competency alignment to the tasks assigned to enhance the service efficiency and strengthen corporate competitiveness. The empirical data presented by Rahayu et al. (2024) indicate that the factor of human-resource competency in the Indonesian port industry is one of the critical components in enhancing global competitiveness and effectiveness of operational performance. Nevertheless, not every employee now has the necessary technical, managerial, and digital skills that could help them remain current with the evolving situation in the modern

maritime sector. Lack of specific training and development programs breeds incompetency gap that can hamper the competitive position of the organization.

The shipping business is faced with unending human-resource management issues. Suboptimal job analysis may lead to inequalities in work assignments, which may undermine work motivation. Productivity and effectiveness may be reduced due to the lack of skill and experience in those staff whose skills and experience are misaligned with the job demand. The causes of such misalignments are often based on an evaluation system that is based on seniority or other subjective models instead of competency.

In the absence of a clear, data-driven job-evaluation system, the sharing of work assignments runs the risk of being unfair by nature, thus de-motivating employees and creating job dissatisfaction. Imbalanced workload has a negative impact on stress levels and job satisfaction in employees and eventually reduces performance and it may also lead to failure to achieve organizational goals. Some of the employees face work overload, others face underutilization, which leads to burnout, occupational stress, and low productivity and motivation.

Not only that, unequal distribution of workloads may cause delays in the port services, deteriorating the quality of services, and creating inefficiencies in the maritime logistics processes. As Rydstedt & Lundh (2010) and Şendilmen & Kececi (2024) research depicts, high working loads in the maritime industry are often linked to increased employee burnout which can be explained by the lack of control of the working pressure. García-Campayo *et al.* (2016) argue that workloads that are too high lead to burnout, and those that are too low cause demotivation and ennui.

The motivation of the researchers to carry out this study can be traced back to the internal issues that facing PT Pelindo Jasa Maritim, which is a subholding company of PT Pelindo (Persero), after the amalgamation of PT Pelabuhan Indonesia I, Pelabuhan Indonesia II, Pelabuhan Indonesia III, and Pelabuhan Indonesia IV. PT Pelindo Jasa Maritim is a company with a complicated organizational structure which includes various hierarchies. The first issue that has been noted in this organization is the difference in responsibility and power between a number of positions.

Some jobs are filled with workers that are not fully eligible in the job requirements, thus impacting negatively operational efficiencies and decision making. Furthermore, job assessments are not always based on detailed analysis of actual workload, and competences of employees, which creates the mismatch between personal qualifications and job requirements. This can reduce the overall efficiency in the running of the company. Practically, many organizations, such as the state-owned companies as PT Pelindo Jasa Maritim Region 4 Makassar Area, face the challenges of controlling and optimizing the individual performance.

Another common thing in these settings is the assignment of workers to jobs that do not perfectly fit their education, experience and skills. This imbalance may trigger a work inefficiency, low productivity, and low job satisfaction. Non-objective job ratings also foster inequalities in distributing duties and compensation, thus fueling shortcomings in performance. Employees at the ports, maritime services, among other areas of operation, are regularly subjected to high workloads and this is in both the quantity and intensity of workloads. Stress, fatigue and poor performance is caused by workloads that are beyond the capacity of employees.

On the other hand, workloads that are too light can also be the cause of demotivation. These dynamics expose the need to have balanced workload to maintain the optimum functioning of employees. The introduction of digital transformation, the system of services based on technologies, and the high level of requirements towards the safety and quality of services, increases the competency demands of employees. However, the lack of persistence in competence

is a major challenge specifically on the side of employees who have not been properly trained to address the changing requirements of their job descriptions.

The lack of an organized reward system or overall feedback on the work outcomes is another salient factor that affects the employee performance. Work motivation will decline when performance measures are not implemented fairly or rewarded. Also, since there is a lack of a collaborative work culture, inefficient communication between work units, and poor conflict management also hinder the enhancement of individual performance of the best level. Such phenomena and challenges indicate that no single interventions can be used to improve employee performance. It requires a comprehensive approach, which includes equitable job appraisal system, managing workload proportionately and developing competencies in an ongoing manner. Being an organization that rests in the field of maritime and port services, PT Pelindo Jasa Maritim is marked by a chaotic and tense work atmosphere.

The workload of employees in some work units is usually heavy, particularly in operational pilotage services and towing services. Some employees experience severe fatigue due to the shift-based work system combined with the need to work in extreme weather conditions which are inherent to the ports. Besides, the workloads are not evenly distributed among multiple divisions, which implies that some employees will experience work overload, and others will be underutilized. Unmanaged workloads may have negative effects on employee motivation, wellbeing and performance which explains the need to study the impact of workloads on organizational performance.

The competency question deals with a long-standing gap between the competencies of the employees and the requirements of the modern maritime industry, especially in the areas of the digital technology and IT-based logistics management. The existing human resource training and development programs need to be enhanced in line with better responding to the challenges of an increasingly competitive port industry. In the case of PT Pelindo Maritim, all three variables, job evaluation, workload, and competency, have a direct influence on employee performance. Adequate job appraisals help to create a more efficient organizational design, quicker decision-making process and fairer distribution of work. Optimized workload management will result in greater employee productivity, decreased turnover and efficiency of port services. Improving the competency of employees enhances the quality of services, increases customer satisfaction and strengthens the competitiveness of the company in the maritime industry.

## **METHODS**

### **Research Design**

This study employs a quantitative explanatory cross-sectional research design developed to examine the extent to which job evaluation, workload, and competence influence variations in employee performance. An explanatory approach is methodologically appropriate because the study aims not merely to identify correlations but to empirically test theoretically derived directional hypotheses regarding the structural determinants of performance. The cross-sectional nature of the design, in which data are collected at a single point in time, allows for efficient measurement of organizational conditions while acknowledging limitations in establishing temporal causality. The design reflects the logic of positivist inquiry, assuming that organizational phenomena such as job evaluation systems, workload levels, and individual competencies operate as measurable constructs whose relationships can be statistically estimated. The choice of multiple regression analysis as the analytical foundation is therefore aligned with the study's purpose: to quantify the predictive strength of each independent variable and assess their combined influence on performance outcomes among employees in PT Pelindo Jasa Maritim Region IV Makassar.

## **Research Location and Time**

The research was conducted at PT Pelindo Jasa Maritim Region IV Makassar, a maritime service organization operating within a complex, multi-unit structure encompassing operational divisions, administrative sections, and supervisory functions. This organizational architecture makes it a relevant site for examining job evaluation, workload, and competence dynamics due to role diversity and differentiated job demands. Data collection was carried out from May to June 2025. During this period, research activities included preparation of ethical permissions, refinement of research instruments, coordination with organizational management, and execution of data collection procedures. Although earlier drafts mentioned interviews and observations, these techniques were not systematically integrated into the analytical framework and are therefore omitted in this refined methodology to maintain coherence and methodological transparency. The study relies exclusively on structured questionnaire responses, supported only by non-analytic organizational documents used for contextual understanding.

## **Population and Sampling Technique**

The target population comprises all 67 employees of PT Pelindo Jasa Maritim Region IV Makassar. Owing to the relatively small and accessible population size, a census sampling approach was employed, allowing all members of the population to participate as respondents. This strategy enhances inferential accuracy by eliminating sampling error that may arise from probabilistic selection. Nevertheless, this methodology acknowledges that census sampling does not fully eliminate the possibility of internal heterogeneity, particularly given the organization's departmental and hierarchical distinctions. Employees in operational divisions may experience different workload intensities, role expectations, and evaluation structures compared with administrative personnel, creating the potential for clustered response patterns. While demographic and unit-based differences were not modeled explicitly in the regression analysis, their possible influence represents a methodological limitation that is recognized to ensure transparency in interpreting the findings.

## **Research Instruments**

Data were collected using a structured questionnaire composed of four scales measuring job evaluation, workload, competence, and employee performance. Each scale consists of seven items measured on a five-point Likert response format ranging from "strongly disagree" to "strongly agree." To enhance the methodological rigor of the instrument, a multi-stage development process was undertaken. First, items were constructed based on established theoretical indicators from human resource management, job demands literature, competency models, and performance measurement frameworks. Second, three experts two academic specialists in human resource management and one practitioner with experience in organizational evaluation conducted a content validation review to assess clarity, representativeness, and conceptual alignment. Their input led to refinement of several items to increase face and content validity. Third, a pilot test involving five employees from an organization with similar characteristics was conducted to identify ambiguous wording and assess the internal consistency of each scale. The pilot results supported the reliability and clarity of the items, enabling finalization of the instrument. The questionnaire was self-administered and designed to minimize respondent burden and reduce the likelihood of satisficing behavior.

## **Research Variables**

The study investigates four core variables: job evaluation (X1), workload (X2), competence (X3), and employee performance (Y). To avoid conceptual overlap and reduce common method bias, each construct is operationally defined with clear theoretical boundaries. Job evaluation refers to organizational mechanisms that determine the relative value of a position, including clarity of job descriptions, alignment between authority and responsibility, and fairness in internal equity systems. Workload is defined as the quantitative and temporal demands imposed

on employees, such as task volume, deadline pressure, and work-hour intensity, without conflating these demands with performance outputs. Competence represents the knowledge base, technical proficiency, interpersonal skills, and judgment required for effective job execution. Employee performance is conceptualized behaviorally, capturing task quality, quantity, timeliness, persistence under pressure, and reliability. These refinements ensure that the constructs measured correspond directly to theoretical expectations and that each variable serves a unique analytical function within the model.

### Data Collection Techniques

Data collection was conducted using a structured questionnaire distributed directly to all employees during working hours with the approval of unit supervisors. Respondents were given sufficient time to complete the questionnaire independently to minimize social desirability bias and reduce potential response contamination. Supervisors did not handle the completed questionnaires to avoid any perceived pressure or influence on employee responses. Prior to analysis, all returned questionnaires underwent screening for completeness, response patterns, and coding accuracy. As clarified earlier, interviews and observations were not used in the study due to their absence from the analytical model, and their removal from this section ensures methodological coherence. Documentary materials, such as organizational reports and structural charts, were consulted only for descriptive and contextual purposes and not as primary data sources.

### Data Analysis Techniques

Quantitative data were analyzed using SPSS 25 through several sequential stages designed to ensure analytical validity. Descriptive statistics were first generated to summarize demographic characteristics and depict central tendencies and variability in each construct. Prior to regression estimation, classical assumption tests were performed to ensure compliance with the underlying statistical requirements. Normality of residuals was examined using the Kolmogorov–Smirnov test; multicollinearity was assessed through tolerance values and Variance Inflation Factors; linearity was evaluated through partial regression plots; independence of residuals was checked using the Durbin–Watson statistic; and homoscedasticity was examined through residual scatterplots. These diagnostic procedures were necessary given the modest sample size, which increases the risk of model instability and inflated significance values. Hypothesis testing involved the use of t-tests to assess the significance of individual regression coefficients and F-tests to evaluate the simultaneous influence of all independent variables on employee performance. The coefficient of determination ( $R^2$ ) was used to estimate the proportion of variance in performance explained by the model. The cross-sectional and self-report nature of the data introduces limitations, including potential common method variance and the inability to draw definitive causal conclusions. Nonetheless, the analytical framework provides a robust basis for identifying patterns of influence among the variables studied.

## RESULTS AND DISCUSSION

Table 1. Respondents' Demographic Characteristics

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	52	77.6 %
	Female	15	22.4 %
Age	< 25 years	10	14.9 %
	25 – 34 years	19	28.4 %
	35 – 44 years	28	41.8 %
	≥ 45 years	10	14.9 %
Education	Senior High School (or equivalent)	8	11.9 %
	Diploma (D3)	15	22.4 %
	Bachelor (S1)	35	52.2 %

	Postgraduate (S2)	9	13.5 %
Years of Service	< 1 year	5	7.5 %
	1 – 5 years	20	29.9 %
	6 – 10 years	24	35.8 %
	> 10 years	18	26.8 %
Total		67	100 %

The demographic information about the respondents within PT Pelindo Jasa Makassar 4 Area reveals that most of them are male workers (77.6 per cent), which is also in line with the nature of the occupation, i.e. physically demanding and field-based activities, which traditionally are favored by male workers. On age, the age-wise group of 35-44 years covers the highest proportion of 41.8 percent of the respondents, indicating that most of the employees are in full productive age, and can actively play their role as well as face training and change in the organization. Concerning educational qualifications, over 50 percent of the respondents hold a bachelor degree (52.2 0 -1 ), then diploma graduates (22.4 0 -1 ) and post graduates (13.5 0 -1 ). It spreads out that the labor force is fairly well-educated and thus contributes to professional competence and complies with the requirements of job evaluation systems and workloads. Regarding tenure, employees who have 6-10 years of service experience the highest percentage of 35.8, and the percentage with the experience of above ten years is 26.8, which means that the organization is equipped with a workforce of high experience level. The merging of a male dominated, productive, well educated, and experienced labor force proves a strong possibility of meeting the organizational performance goals, and at the same time giving a representative foundation of evaluating the impacts of job evaluation, workload and competence on employee performance.

Table 2. Descriptive Statistics of Variables

Variable	Item Statement	Mean	Std. Deviation
<b>Job Evaluation (X1)</b>	My tasks and responsibilities are clear and well-defined.	4.01	0.84
	My position provides challenges appropriate to my abilities.	4.27	0.77
	The authority given is aligned with my job responsibilities.	4.30	0.63
	My workload is appropriate to standards and not excessive.	4.09	0.67
	My position clearly contributes to achieving organizational goals.	4.15	0.82
	The reward and compensation system matches my responsibilities.	3.78	0.93
	I receive adequate support in carrying out my job duties.	4.15	0.84
	<b>Total (X1)</b>		28.75
<b>Workload (X2)</b>	I often feel exhausted due to high job volume.	4.06	1.22
	My tasks often have tight deadlines.	3.96	0.94
	The number of tasks I receive matches my capacity.	3.61	1.07
	I have sufficient time to complete my tasks.	4.15	1.03
	I often have to take work beyond office hours.	4.03	0.94
	I feel pressured due to the large amount of work to be completed.	4.12	1.11

	My job interferes with my work-life balance.	3.88	0.99
	<b>Total (X2)</b>	27.81	5.84
<b>Competence (X3)</b>	I have a high level of competence and keep up with developments.	3.43	0.58
	I have broad knowledge that helps others in decision-making.	3.46	0.66
	I am confident and capable of making good decisions.	3.45	0.72
	I can identify and solve problems that arise in my work.	3.46	0.66
	I can coordinate tasks according to established procedures.	3.45	0.72
	I can communicate and collaborate with the team when needed.	3.43	0.58
	I can respond quickly and accurately to requests or inquiries.	3.48	0.77
	<b>Total (X3)</b>	24.16	2.71
<b>Employee Performance (Y)</b>	I can complete more work than the set standard.	3.66	0.62
	My work always meets company targets.	3.88	0.77
	I can complete work with higher quality than the standard.	3.94	0.72
	I complete tasks thoroughly and neatly.	3.76	0.78
	I always strive to complete tasks on time according to the target.	4.06	0.80
	I try to complete tasks faster than the required time.	3.72	0.71
	I can maintain productivity even under pressure.	3.88	0.71
	<b>Total (Y)</b>	30.72	3.13

Table 2 shows the descriptive statistics of the entire research variables, i.e. job evaluation, workload, competence and employee performance. The findings show that the variable of job evaluation (X1) has had a total mean score of 28.75 and standard deviation of 3.76, which implies that employees tend to view their tasks, responsibilities, and authority as well-established and effective in meeting the organizational goals, but the variables concerning reward and compensation received slightly lower scores. The job evaluation (X1) results show that the perception of clarity and alignment are mostly positive among the employees though the aspects relating to rewards need a more detailed analysis. Workload (X2) had an overall mean of 27.81, with a much greater standard deviation of 5.84, which indicates that despite the workers admitting that their work is heavy, with numerous deadlines and many tasks that spill over to the outside, the employees still find it satisfactory that they have enough time to accomplish the tasks under a normal situation.

In competence (X3), the mean score was 24.16 and standard deviation of 2.71. This shows that employees believe that they have sufficient competence specifically in decision-making, problem-solving, and teamwork, despite the fact that the mean values are quite moderate values as compared to other variables, meaning that competence is still an area where further development is possible. Finally, employee performance (Y) was the variable that received the highest overall mean of 30.72 and a standard deviation of 3.13 indicating that employees mostly satisfy and sometimes surpass their performance expectations, deliver quality work, and remain productive even when under stress. In general, the descriptive statistics show that employees regard their job evaluation and workload to be rather balanced, their competence to be adequate

yet to be improved, and their performance as the one that met the organizational expectations regularly. These results give a preliminary account of the variables that were later analyzed using regression analysis

Table 3. Validity Test Results of Research Instruments

Variable	Item Code	r-calculated	r-table	Result
Job Evaluation (X1)	X1.1	0.569	0.244	Valid
	X1.2	0.782	0.244	Valid
	X1.3	0.693	0.244	Valid
	X1.4	0.431	0.244	Valid
	X1.5	0.797	0.244	Valid
	X1.6	0.763	0.244	Valid
	X1.7	0.703	0.244	Valid
Workload (X2)	X2.1	0.804	0.244	Valid
	X2.2	0.886	0.244	Valid
	X2.3	0.755	0.244	Valid
	X2.4	0.733	0.244	Valid
	X2.5	0.857	0.244	Valid
	X2.6	0.676	0.244	Valid
	X2.7	0.909	0.244	Valid
Competence (X3)	X3.1	0.386	0.244	Valid
	X3.2	0.628	0.244	Valid
	X3.3	0.774	0.244	Valid
	X3.4	0.628	0.244	Valid
	X3.5	0.774	0.244	Valid
	X3.6	0.386	0.244	Valid
	X3.7	0.400	0.244	Valid
Employee Performance (Y)	Y1	0.694	0.244	Valid
	Y2	0.694	0.244	Valid
	Y3	0.694	0.244	Valid
	Y4	0.694	0.244	Valid
	Y5	0.694	0.244	Valid
	Y6	0.694	0.244	Valid
	Y7	0.694	0.244	Valid

According to the outcomes of the validity test shown in Table 4.9, all questionnaire items in the four variables Job Evaluation (X1), Workload (X2), Competence (X3), and Employee Performance (Y) have correlation coefficient values (recalculated) that are greater than the critical value of r-table (0.244). In particular, the Job Evaluations variable (X1) included seven items, the recalculated coefficients of which were in a range of 0.431 to 0.797, and all of them exceeded the required limit. Similarly, Workload variable (X2) that has seven items showed better validity scores, which range between 0.676-0.909. The Competence variable (X3) also provided good results with item values of 0.386 to 0.774 all above the necessary minimum. Lastly, the Employee: Performance variable (Y) held the same outcomes as all seven items showed the same recalculated value of 0.694 which is significantly above the r-table value. These results mean that all the items used in the questionnaire are valid and can assess the constructs that should be measured. As a result, the entire research instrument itself can be valid and reliable to further statistical analysis, thus ensuring that the data obtained will be credible and represent the variables studied.

Table 4. Reliability Test Results

Variable	Cronbach's Alpha	N of Items
Job Evaluation	0.804	7
Workload	0.904	7
Competence	0.759	7
Employee Performance	0.773	7

The reliability test results in Table 4.13 show that the Cronbach Alpha coefficient of each of the variables under test exceeds the traditional value of 0.70. Specifically, the results of Job Evaluation were a coefficient of 0.804, Workload 0.904, Competence 0.759 and Employee Performance 0.773. Since all four variables meet the measure of reliability that is set, it can be assumed that the research instrument exhibits a reasonable level of internal consistency. As a result, questionnaire items can be considered with high reliability in measuring the intended constructs, and the data extracted with the help of the instrument can be deemed reliable in further statistical analysis.

Table 5. Normality Test Results

One-Sample Kolmogorov-Smirnov Test	Unstandardized Residual
N	67
Normal Parameters: Mean	0.0000000
Std. Deviation	2.42051620
Most Extreme Differences: Absolute	0.062
Positive	0.062
Negative	-0.062
Test Statistic	0.062
Aseem. Sig. (2-tailed)	0.200c, d
a. Test distribution is Normal.	
b. Calculated from data.	
c. Lilliefors Significance Correction.	
d. This is a lower bound of the true significance.	

According to the findings of the Kolmogorov-Smirnoff test given in Table 4.14, the significance was found to be 0.200, which has gone beyond the traditional mark of 0.05. This result implies that the remaining data are normally distributed. The conclusion is supported by the fact that the values plotted on the Normal Probability Plot are clustering along the diagonal line thus supporting the assumption of normality. The regression model therefore passes the test of normality that is required in the subsequent analysis.

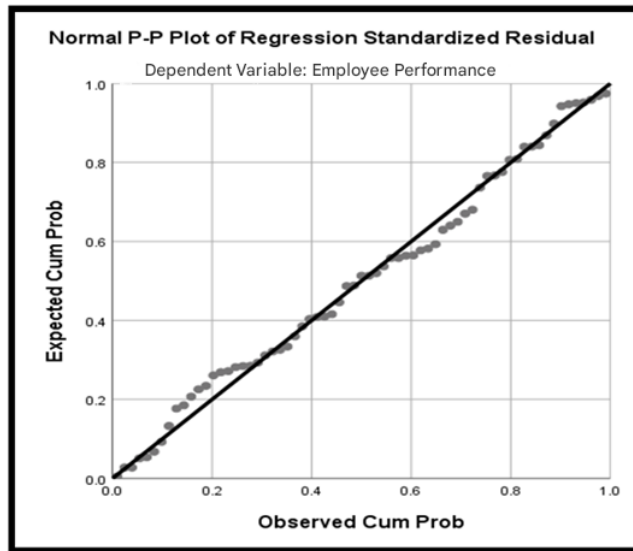


Figure 1. PP-Plot

The PP-Plot graph shows the data spread out and follows a diagonal line, thus concluding that the data is normally distributed.

Table 6. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)	—	—
Job Evaluation	0.830	1.204
Workload	0.837	1.195
Competence	0.848	1.179
a. Dependent Variable: Employee Performance		

Table shows that tolerances of the independent variables Job Evaluation, Workload, and Competence are greater than 0.10 with the corresponding VIFs being less than 10, which indicates that there is no multicollinearity in the regression model. Therefore, the type of variables that have been included in this research may be considered statistically non-dependent, and the regression model may be considered acceptable to proceed with further analysis.

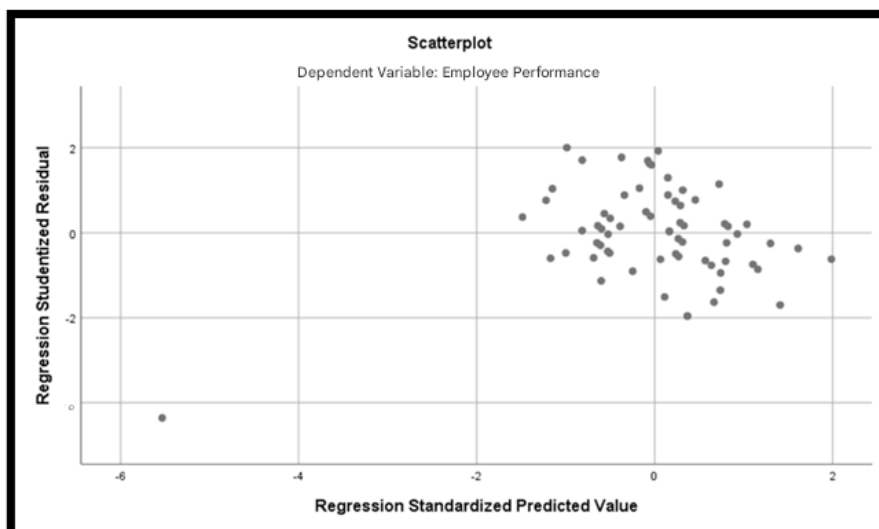


Figure 2. Scatterplot of Heteroskedasticity Test

Based on Figure 2, the scatterplot shows that the residual points are randomly distributed and spread both above and below the zero line on the Y-axis, without forming any distinct or regular pattern. This indicates that heteroskedasticity does not occur in the regression model. Therefore, it can be concluded that the independent variables Job Evaluation, Workload, and Competence do not exhibit heteroskedasticity problems when predicting Employee Performance.

Table 7. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	7.252	2.140	-	3.389	0.001
Job Evaluation (X1)	0.213	0.056	0.266	3.796	0.000
Workload (X2)	0.228	0.050	0.317	4.553	0.000
Competence (X3)	0.956	0.085	0.781	11.278	0.000

The results of the regression analysis suggests that the intercept value of 7.252 means that once the predictors job evaluation, workload, and competence are held constant at zero, employee performance would be 7.252. Moreover, there is a regression coefficient of 0.266 with a p-value value of 0.000 ( $< 0.05$ ). This statistically significant finding indicates that a single unit of job evaluation increases employee performance by a statistically significant 0.266 units, all other things being equal. Similarly, the regression coefficient of workload is 0.317 with p-value of 0.000 (or less than 0.05), which means that a one-unit of workload increase is equivalent to 0.317 units of increase in employee performance, assuming other things being equal. Competence has the highest effect size of all three predictors, with a regression coefficient of 0.781 and regression p-value of 0.000 (less than 0.05). Therefore, competence emerges to be the strongest variable since one unit change in competence translates to a one-unit change in the employee performance other variables remaining constant. In brief, the results show that job evaluation, workload, and competence are all positively and significantly related to employee performance, but the most significant impact is that of competence.

Table 8. t-Test Results

Model	t-value	Sig.
(Constant)	3.389	0.001
Job Evaluation	3.796	0.000
Workload	4.553	0.000
Competence	11.278	0.000

Results of the independent samples t -test reveal that the t-value of Job Evaluation is 3.796 ( $p < 0.001$ ), thus, showing that Job Evaluation has a statistically significant positive relationship with Employee Performance. Such an outcome supports the theoretical hypothesis put forward by Osman et al. (2024) which suggests that explicit definition of job structures and regular appraisals promote motivation of employees to perform at the expectations of the organization. The t-value of the variable Workload was 4.553 ( $p < 0.001$ ), meaning that it has a significant effect on Employee Performance as well. Empirical findings indicate that balanced workload encourages productivity and heavy workload has a negative impact on performance. In turn, efficient workload management comes out as a crucial driver of maximizing the performance outcomes of individuals. Lastly, Competence has the largest t-value of 11.278 ( $p < 0.001$ ), which means that it has the strongest and the strongest effect on Employee Performance amongst the predictors that were studied. This is in line with the results presented by Kurz & Bartram (2002), who argue that competency in terms of skill sets, knowledge and work attitudes forms the pillars upon which optimum job performance is achieved.

Table 9. F-Test Results (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1123.492	3	374.497	61.014	0.000
Residual	386.687	63	6.138		
Total	1510.179	66			

According to the findings in Table 9, the F-value is 61.014 with a significance level of 0.000 that is lower than the traditional alpha of 0.05. The results of the study indicate that the constructs of Job Evaluation, Workload and Competence when analyzed together, have a statistically significant impact on Employee Performance. The statistics suggest that performance of the employees does not depend on a single variable but on the combination of the structured job evaluation, balanced work load and competence sufficiency. These observations therefore highlight that there is the need to include various aspects of human resource management in order to promote optimal organizational performance.

Table 10. Results of the Determination Coefficient Test (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863a	0.744	0.732	2.47748

Table 10 confirms that the coefficient of determination (R<sup>2</sup>) is 0.744, which indicates that 74.4 percent of the variation in Employee Performance is explained by the three independent variables: Job Evaluation, Workload, and Competence. The other 25.6 of the variance is likely to be exogenous elements that are not part of the mentioned model, e.g., leadership, intrinsic motivation, work environment, and organizational culture. The adjusted R<sup>2</sup> value of 0.732 is another evidence that, upon the consideration of the number of predictors, the explanatory power of the model is still high and consistent which proves the effectiveness of the regression model in explaining and predicting Employee Performance.

Table 11. Hypothesis Test Results

Hypothesis	Sig. Value	Conclusion
<b>H1</b> Job Evaluation has a positive and significant effect on employee performance at PT Pelindo Jasa Maritim Region 4 Makassar.	0.000	Accepted
<b>H2</b> Workload has a positive and significant effect on employee performance at PT Pelindo Jasa Maritim Region 4 Makassar.	0.000	Accepted
<b>H3</b> Competence has a positive and significant effect on employee performance at PT Pelindo Jasa Maritim Region 4 Makassar.	0.000	Accepted
<b>H4</b> Job Evaluation, Workload, and Competence simultaneously have a positive and significant effect on employee performance at PT Pelindo Jasa Maritim Region 4 Makassar.	0.000	Accepted

According to the results of the hypothesis test presented in Table 4.20, all hypotheses of research (H1-H4) are accepted. The significance value (Sig.) of 0.000, which is lower than the standard alpha of 0.05, shows that the independent variables under analysis have a positive and significant impact on employee performance, separately, and in combination. As far as Job Evaluation (H1) is concerned, better job evaluations have a positive and significant implication on employee performance. Equally, the Workloads (H2) was determined to have a positive, and significant influence on the employee performance indicating that balanced and properly controlled workloads improve the productivity. Furthermore, Competence (H3) affects the process positively and significantly as well, which also highlights the role of the competencies of employees in playing the role of optimal performance. In simultaneous test (H4) Job Evaluation, Workload and Competence were observed to have a positive and significant impact on Employee

Performance. The research model is therefore sound and suitable in explaining the important factors that affect the performance of employees at PT Pelindo Jasa Makassar Region 4 Makassar.

#### **The Effect of Job Evaluation on Employee Performance at PT Pelindo Jasa Maritim Region 4, Makassar Area**

The regression analysis results indicate that job evaluation has a positive and statistically significant impact on employee performance in PT PGasgo–Makassar Area 44. Pelindo Jasa. The calculated t-value of 3.796 with the significance value of 0.000 ( $< 0.05$ ) supports this conclusion as that better implementation of job evaluation is related to better employee performance. Job evaluation is a process in which the relative worth of a specific position is calculated with respect to other positions in an organization and it is very important in ensuring that there is a fair organizational structure, a proper system of compensation and the roles and responsibilities of a certain position are well defined. The results support the human resource management theory proposed by Chakraborty & Biswas (2019) according to which job evaluation is an inseparable element of HR planning as it influences salary models, career paths, and internal equity perceptions of employees.

Job evaluation helps the organization to establish the relative value of each job. With a thorough grasp of the complexity and responsibilities and contribution of a job, companies can create remuneration systems that are fairer within the company and competitive within the industry. A built-in fair system will mean that employees with more responsibility and challenging work should be compensated with a system of their worth, and external competitiveness will allow the organizations to recruit and retain experienced employees as they will be compensated according to the current rates in the market. Without effective job evaluation, the remuneration patterns can be unjust and beget negativity, and the turnover levels can rise. As Mathis and Jackson point out, job evaluation forms part of the strategic human resource planning. Using it, organizations are able to align their structural design with overall business strategy, find the key high-value jobs, and support focused training and competency development through it. Job evaluation in this sense is the basis of HR policies that affect compensation, career development, recruitment, and employee retention. The logic behind this suggestion is that job evaluation is not an administrative activity but a strategic tool that has a direct impact on salary structure, career progression and how fairness is perceived in the workplace. Companies that do not consider job evaluation are bound to experience challenges in having a clear cut, sustainable HR management system.

According to the conclusion made by Chakraborty & Biswas (2019): Job evaluation is a very important instrument in human resource planning because it determines pay structures, career pathways and internal equity perceptions amongst employees. When job appraisal is done in a transparent and objective manner, employees gain a clear idea of what they do and what they bring to the workplace, which increases their motivation and obligation to their job. This feeling of equity and contentment, in its turn, has a positive influence on performance. At PT Pelindo Jasa Maritim Region 4, Makassar region effective job evaluations can be used to: enhance the effectiveness of job placement; design a remunerations system that is sensitive to the workload and responsibility; and identify developmental needs that are specific to individual jobs. In this context therefore, the job evaluation analysis shows that understanding of roles and responsibilities in the organization is admirable especially with regard to authority, work challenges and support. Nevertheless, the compensation system deserves particular consideration since the views on this dimension are relatively weak in relation to other dimensions and are characterized by a higher employee opinion variance.

## **The Effect of Workload on Employee Performance at PT Pelindo Jasa Maritim Region 4 Makassar**

As per the outcome of a multiple linear regression, the t-value obtained was 4.553 and the significance level was 0.000 ( $<0.05$ ) at the workload variable. This means that there is a positive and significant influence of Workload on Employee Performance in PT Pelindo Jasa Maritim Region 4 Makassar Area. The descriptive analysis revealed that the respondents were more likely to experience high workload, both regarding volume, time pressure and work-life balance. This finding also suggests that, even with rather adequate completion time, the workload assigned to certain respondents still surpassed their abilities. The workload theory described in the NASA-TLX Model is the interplay of task demands and individual abilities with working conditions which may influence performance and psychological well-being. Quantitative demands (too much work) and qualitative demands (the work is too hard or complicated) can be the causes of high workload. In this research, the indicators of fatigue and work pressure had high scores which proved that the respondents were subjected to both types of demands.

This observation is consistent with a study conducted by Chinguwo (2023) which established that work loads are a significant source of job stress among employees especially when work involves extra-hours dedication. A study carried out by Herrera-Ballesteros et al. (2025) also validates the fact that overworking, in turn, may cause work-related fatigue, reduced motivation, and broken work-life balance. The fact that the indicator work interferes with personal life balance scores high (mean = 3.88) in the framework of the current study suggests the possibility of work-life conflict. Proposed by Glavin & Schieman (2012), Role Theory is the interpretation that workloads tend to cause role conflict, particularly in the case when work and personal or family demands collide. This is consistent with the condition of respondents who were forced to engage in extra devices of work (mean = 4.03) that can instigate emotional lethargy and decrease workplace satisfaction. Human resource management wise, high workloads should be controlled by ensuring proportionality in the distribution of tasks, reviewing of deadline policies, and providing support in terms of time management training and stress management programmers. This initiative is in line with the ILO (International Labor Organization) proposals that have stressed on the need to balance work and individual capabilities in order to sustain productivity in the long term.

When the workloads are too high, stress and fatigue, as well as a lack of motivation, may occur; when the workloads are too light, boredom and disengagement may occur. Consequently, the workloads have to be adjusted to the ability and skill of employees. When employees experience work overload, both in its quantitative form (there are too many tasks), and in the qualitative form (the tasks are far beyond their abilities), several adverse effects can occur: High job stress is a common situation when employees are under excessive pressure, which will affect their concentration and their emotional stability. Stress in the workplace can cause burnout, in which physical and mental strength is soon exhausted, making endurance and focus low. Therefore, the employees are likely to lose motivation and performance, getting overwhelmed and losing the drive to meet their targets. In the long run, it may also increase the rate of turnover, as employees will be searching out healthier workplace conditions. When this kind of work overload continues, it not only negatively affects the health of individuals, but also reduces organizational productivity.

In order to draw a perfect balance, the workload should be matched to the personal capacity and competence of employees. Individual capacity is the physical, mental, and psychological capability of managing certain tasks whereas competence is the knowledge, skills, and work experience. Workloads can be difficult but achievable when they are adjusted in this way, without being too demanding to spur self-growth. This type of alignment also makes sure that the workload is being done in accordance with organizational objectives so that employees are able to do what they can best based on the roles and responsibilities. Furthermore, even workloads will contribute to intrinsic motivation as employees feel competent and challenged to

put in their best. The workload management is specifically important in a work environment such as PT Pelindo Jasa Maritim where the intensity of operations is especially high. The lack of balance in workflow may cause disruptions in coordination of operations and can result in a decrease of the quality of port service delivery. The job of the employees in this company can be considered in a number of dimensions.

First, working hours and shifts: the operational staff are often on shifts, which include night shifts. Working hours longer than the usual eight hours per day could lead to physical exhaustion and lack of concentration. Second, physical workload: loading and unloading, supervision in the field, operating heavy equipment needs much physical energy and may cause fatigue, injuries, or the loss of stamina in the long term. Third, mental and psychological workload: administrative and managerial employees are exposed to the pressure of targets, accuracy of data, time and responsibility of making fast decisions, and complicated service contact with port users. Lastly is the social workload where employees have to deal with several stakeholders, business partners, service users as well as community and thus they have to keep the image of the company and also deal with conflict on the ground.

Therefore, it is a natural side effect of the nature of the port industry that has led to the high workload observed in PT Pelindo Jasa Maritim. It is however manageable effectively by human resource management strategies, optimization of the work process and improvement of employee welfare. Conversely, proportional workload helps to meet the company targets and boosts the morale of the employees. These results demonstrate that management should assess frequently the workload distribution, balance work targets with employee capacities and resources and offer training on time management and stress management to the employees to enable them to cope with work stressors. Workload management not only motivates employees to be more productive and focused with their work, but it also leads to the overall effectiveness of the company directly.

#### **The Influence of Competence on Employee Performance at PT Pelindo Jasa Maritim Region 4, Makassar Area**

According to the results of the multiple linear regression, Competence variable provided a t-value of 11.278, and thus a p-value of 0.000 (less than 0.05). This means that Competence has a positive and statistically significant effect on Employee Performance in PT Pelindo Jasa Maritim Region 4 in Makassar. The variable has shown the greatest influence of the variables under study as higher competence of the employees would be linked to high performance. In this case, competence entails knowledge, skills and attitudes, which would enable successful task performance. The employees with the sufficient level of competence will be able to accomplish assignments effectively, make reasonable decisions, as well as fit in the dynamic nature of the environment, in which port operations operate, the speed and accuracy are the most important factors. Competence is defined by Hafeez & Essmail (2007) as a personal characteristic that is directly associated with the best performance, whereas knowledge updating is the vital aspect of the core competencies.

In general, the competency profile of the employees of PT 0 P. Pelindo is rather high. However, knowledge updating, communication, and coordination indicators should be developed even further. It is possible to use the competence enhancement framework set by Albareda-Tiana et al. (2024) to enhance competence by focusing on the continuous training, problem-based learning, and development of cross-departmental communication skills. These suggestions are in line with the findings provided by Le et al. (2026) who report a positive correlation between the enhanced competence and enhanced quality of port services. Ability is thus paramount in ensuring that employees do their tasks as well as help in attainment of organizational goals.

Competence does not just entail technical proficiency but it has a number of salient dimensions. Technical competence- This describes expertise in a specific occupational field, such as the ability to operate, use equipment, and follow the set procedures. The ability to plan,

organize, direct and control resources in order to fulfill the institutional goals is on the other hand managerial competence. Behavioral or social competence focuses on communication, teamwork, and professional behavior that is in congruence with the organizational culture. The two complementary dimensions come together to create employees who are effective and able to drive organizational change.

In the operational framework of PT-Pelindo, whose business is focused on port services, competence of employees is a strategic factor that determines the quality of service in shipping, handling of freights, and communication with various stakeholders- shipping lines, customs and logistics providers. The aptitude of problem solving, responsiveness and coordination efficacy are indicators of the capacity of employees to adjust to the dynamic nature of port operations. Ongoing self-improvement and new insights are necessary to stay abreast with technological changes in the maritime sector with regard to digital technology. Workers with strong competencies are able to provide services in professional sports, work as highly efficient, and with a minimum risk of error, as well as represent the reputation of the company in the service of the people.

In line with this, employee competencies development must be a strategic matter that is carried out systematically by means of training, job rotation, professional certification processes and promotion systems based on merit. The benefits of strengthening competencies to an organization are multifold: improving the competitiveness of the organization through competent services, innovation and efficient operation; increasing customer satisfaction and loyalty due to the consistent and professional service delivery, minimizing the costs associated with human error due the minimization of mistakes and the reinforcement of the image of the organization to the community, as competent human resources are valuable assets that portray professionalism and credibility to the customers, partners and the wider society.

#### **The Influence of Job Evaluation, Workload, and Competency on Employee Performance at PT Pelindo Jasa Maritim Region 4 Makassar**

Considering the findings of a multiple linear regression analysis, which is based on the data of the employee questionnaires, it has been established that Job Evaluation, Workload, and Competency have a positive and statistically significant effect on Employee Performance at PT Pelindo Maritim Region 4 Makassar. The coefficient of determination ( $R^2$ ) is 0.744 and this value implies that the three independent variables jointly explain 74.4 percent of the variance in employee performance. The other 25.6% can be assigned to the other factors not considered in the model, which include motivation, leadership, organizational culture or work environment. These results indicate that both an efficient job appraisal system, a reasonable workload distribution, and competence of employees have a strong influence on the performance of employees. This reinforces the idea of integrated human resource management whereby performance is not defined by one factor, but the combination of work structure (job evaluation), physical and psychological (workload) and individual capabilities (competency).

These three variables are important pillars of the creation of an efficient and productive work system as it is stated in accordance to the theories of Toke & Kalpande (2023). It is against this reason that the management of PT Pelindo Jasa Maritim should be able to ensure that job evaluations are done objectively and constantly, workloads are allocated equitably in accordance to the capability of the employees and competency development programmers are based on actual performance improvement instead of being an administrative exercise. The simultaneous management of these three factors will help the company to increase the quality of the maritime services available, as well as maintain the performance of high-performing employees over the long run.

## CONCLUSION

Job evaluation has a positive significant impact on performance of employees. Periodic, objective and transparent job reviews contribute to the improvement of performance as it increases employee understanding of job roles, duties and career paths. Employee performance is positively and significantly impacted by the workload. Balancing employees to their level of capacity and ability encourages productivity, reduce work related stress and maximize output. The competence has a positive and significant influence on employee performance, as it turned out to be the most influential variable. Knowledge, skills, and work attitudes, which are the elements of competence, have been proved to play a significant role in regulating the quality of tasks performed and the overall employee effectiveness. Together, job evaluation, workload, and competence explain 74.4% of the variation in employee performance; the remaining 25.6% is explained by the factors not included in the current research model.

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