

# Employee Productivity: Analysis of Job Satisfaction and Work Engagement in Industry Shipping Line

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## ABSTRACT

The purpose of this paper is to analyze work engagement, job satisfaction, and employee productivity in the shipping industry, and provide practical guidance to companies in this sector to improve performance. This research uses quantitative methods with data analysis techniques using SPSS 24 to find the influence between variables and simultaneously. The object of research is shipping companies with a sample of 43 employees, by random sampling The Job Satisfaction variable has a positive effect on the Employee Productivity variable, the Engagement variable has no effect on Employee Productivity, and simultaneously Satisfaction (X1), and Work Engagement (X2) variables simultaneously have a positive effect on Employee Productivity (Y). These results represent the results in the shipping field. The contribution of the results of this study can be used as a reference for other researchers in the future.

### **INTRODUCTION**

The shipping industry, as one of the key sectors in global transportation, plays an important role in the delivery of goods between countries. To achieve high levels of productivity, it is important to understand employee work engagement and job satisfaction in the context of shipping, as both have a direct impact on organizational performance. The shipping industry plays a central role in international trade, serving as the primary means of shipping goods between continents. (Casaca & Loja, 2020; Elmay et al., 2022) As global trade grows, the shipping industry faces challenges that involve maintaining high levels of operational efficiency, improving safety standards, and reducing environmental impact. A key factor in overcoming these challenges is employee productivity. The shipping industry provides services to various sectors of the economy, including shipping goods, the tourism sector, and even the exploration of natural resources at sea (Kravchuk, 2022). According to the International Maritime Organization (IMO), around 80% of global trade is measured by the volume of goods transported by sea, and nearly 70% of the total value of world trade is conducted through shipping channels. This is why performance and productivity in this industry have a very significant economic impact. In the face of intensifying global competition as international trade grows, shipping companies are constantly looking for ways to improve their productivity (Jiang et al., 2023).

According to (Jaman et al., 2022; Megha, 2015) Work engagement is a concept that encompasses employees' commitment, satisfaction, and dedication to their jobs. Research has indicated that employees who feel engaged in their work are more likely to achieve higher levels of productivity (Irene, 2021; Jawabri et al., 2022). It creates a strong bond with the company's goals, motivates employees, and improves work quality (Gomathy, 2022; Schuck & Wollard, 2013). In the risky and highly coordinated environment of the shipping industry, work engagement can have a significant impact (Parmenas, 2022). It can be the difference between a smooth-running operation and the emergence of potential problems. Therefore, understanding employee engagement levels and strategies to improve them can help shipping companies achieve higher levels of efficiency, reduce risk, and improve customer service (Bhattacharya, 2014).

Research results from (Riyanto et al., 2021) Studies have shown that employees who feel engaged and satisfied with their work are more likely to perform highly, make positive contributions to work teams, and achieve better results. Therefore, a deep understanding of the level of work engagement and job satisfaction in the context of the shipping industry is key to improving employee productivity and achieving competitive advantage (Witemeyer et al., 2013). In line with research from (Jawabri et al., 2022) Job satisfaction is one aspect that supports work engagement, employees who feel satisfied with their jobs tend to be more engaged, they have positive perceptions of their working conditions, relationships with co-workers, and management, job satisfaction is also associated with improved work quality and motivation.

In the shipping industry, there is an interesting empirical phenomenon related to employee productivity levels. Some shipping companies report high productivity levels, while others report low productivity levels face constraints in achieving optimal results. This phenomenon can often be linked to the level of work engagement and job satisfaction of employees. Employees who feel engaged and satisfied with their work may tend to be more productive, while those who feel otherwise may experience a decrease in productivity.

There is a gap in the understanding of the extent to which work engagement and job satisfaction directly affect employee productivity in the context of the shipping industry. To address this gap, a thorough analysis of work engagement, jobs satisfaction and employee productivity in the context of the shipping industry is required, which will provide practical direction for companies in this sector. The purpose of this paper is to analyze work engagement, job satisfaction and employee productivity in the shipping industry, and provide practical guidance to companies in this sector to improve performance.

The novelty of this paper lies in its comprehensive approach to the analysis of work engagement, job satisfaction, and employee productivity in the context of the shipping industry. In addition, the emphasis on the shipping industry as a case study provides specific insights in relating such factors to the unique challenges within the sector. Through an in-depth investigation, this paper contributes to the understanding of how to improve employee performance and efficiency in a shipping industry that has a significant economic impact at a global level.

So the purpose of this paper is to analyze work engagement, job satisfaction, and employee productivity in the shipping industry, and provide practical guidance to companies in this sector to improve performance.

## THEORETICAL REVIEW

## Job Satisfaction on Employee Productivity

According to (Kuchina & Maistro, 2022) that employee productivity is a metric that gauges the quantity of work accomplished by an employee within a specific timeframe. It serves as an indicator of how efficiently and effectively an employee full fills tasks and contributes to the attainment of organizational objectives. Employee engagement and job satisfaction are elements that have the potential to boost employee productivity. Employees who experience engagement and job satisfaction are more inclined to operate at an elevated standard, provide beneficial contributions to their teams, and attain superior outcomes (Sumaryono, 2022).

Enhancing human resource management strategies, including investments in professional growth, fostering collaboration, and promoting work-life balance, holds the potential to enhance employee engagement and productivity. Furthermore, implementing ergonomic work processes and efficiency-enhancing measures can potentially enhance employee productivity across different industries (Wangechi, 2014). A research conducted within manufacturing companies in Port Harcourt, Nigeria, discovered that emotional

job satisfaction has a positive and significant impact on employee productivity ((Ph.D) & DAYE, 2019). Research conducted revealed that job satisfaction significantly affects employee productivity (Putri & Sumartik, 2022).

Study from (Purbey, 2020) Job satisfaction plays a crucial role in strengthening employee engagement. When employees are content with their work, they are more likely to be engaged, maintain favorable views of their working environment, relationships with colleagues, and management, and are more prone to operating at an elevated standard, contributing positively to outcomes. and achieving superior Furthermore, implementation of ergonomic work process design and efficiency-enhancing elements has the potential to enhance employee productivity in a range of industries (Zen, 2023). Hence, it can be inferred that job satisfaction is a critical factor that has an impact on employee productivity. Enhancing human resource management methods and refining work processes have the potential to boost job satisfaction and, consequently, employee productivity in diverse sectors, including the shipping line industry. The hypothesis in this study is stated

H1: There is a significant and positive influence between Job Satisfaction variables and Employee Productivity.

## Work Engagement on Employee Productivity

From proprietary research (Bhattacharya, 2014) state a study conducted among Indian officers within the shipping industry revealed that employee engagement significantly influences the retention of seafarers and their productivity. A research investigation into job quality and work engagement in the cruise industry established a positive correlation between work engagement, job quality, and job satisfaction. Additionally, it was observed that work engagement has a substantial effect on employee performance and productivity (Gomathy, 2022). Research examining the influence of employee engagement on organizational productivity within United Methods on Relief Services established that employee engagement directly impacts the organization's production levels. Furthermore, it is interconnected with customer satisfaction and the financial success of the organization (Irene, 2021).

In a study offering a historical viewpoint on employee engagement, a working description of employee engagement was suggested, and it was observed that consistently engaged employees demonstrate higher levels of productivity, profitability, safety, well-being, and reduced likelihood of departing from their employer (Schuck & Wollard, 2013). The enhancement of human resource management practices and work processes has the potential to positively impact work engagement and, as a result, employee productivity in the shipping industry. The hypotheses in this study are as follows:

H2: There is a significant and positive influence between Work Engagement variables and Employee Productivity.

#### **METHODOLOGY**

This research uses quantitative methods with data analysis techniques using SPSS 24 in finding the influence between variables and simultaneously. The object of research in shipping companies with a sample of 43 employees, by random sampling.

### **RESULTS**

Based on the data collected, both primary and secondary, an overview of the research findings is obtained. This data has been processed using the data collection tools. According to the predetermined number of respondents, a total of 43 questionnaires were distributed and returned in full, After sorting the questionnaires, it was determined that they met the criteria and were suitable for analysis. Subsequently, data analysis and interpretation were carried out using SPSS 24.00 for Windows software to address the research questions formulated earlier. The research results provide insights into each of the variables studied, namely Job Satisfaction  $(X_1)$ , Work Engagement  $(X_2)$ , on Employee Productivity (Y), especially in shipping company. This knowledge is detailed in the following section of the data description.

Table 1. Validity Test Results Iob Satisfaction Variable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	37	1	2.3	2.3	2.3
	39	1	2.3	2.3	4.7
	40	5	11.6	11.6	16.3
	41	2	4.7	4.7	20.9
	42	2	4.7	4.7	25.6
	43	5	11.6	11.6	37.2
	44	6	14.0	14.0	51.2
	45	4	9.3	9.3	60.5
	46	7	16.3	16.3	76.7
	47	4	9.3	9.3	86.0
	49	3	7.0	7.0	93.0
	50	3	7.0	7.0	100.0
	Total	43	100.0	100.0	

Source :SPSS 24, 2023

The validity test results for the variables indicate that out of the 43 questionnaires distributed, all 100% were found to be valid. This suggests that the next steps in the data analysis process can be continued.

Table 2. Validity Test Result
Work Engagement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	37	1	2.3	2.3	2.3
	40	3	7.0	7.0	9.3
	41	5	11.6	11.6	20.9
	42	4	9.3	9.3	30.2
	43	5	11.6	11.6	41.9
	44	3	7.0	7.0	48.8
	45	7	16.3	16.3	65.1
	46	4	9.3	9.3	74.4
	47	9	20.9	20.9	95.3
	50	2	4.7	4.7	100.0
	Total	43	100.0	100.0	

Source :SPSS 24, 2023

The validity test results for the variables indicate that out of the 43 questionnaires distributed, all 100% were found to be valid. This suggests that the next steps in the data analysis process can be continued.

Table 3. Validity Test Result Employee Productivity Variable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	35	2	4.7	4.7	4.7
	37	1	2.3	2.3	7.0
	38	1	2.3	2.3	9.3
	39	2	4.7	4.7	14.0
	40	7	16.3	16.3	30.2
	41	3	7.0	7.0	37.2
	43	3	7.0	7.0	44.2
	44	4	9.3	9.3	53.5
	45	2	4.7	4.7	58.1
	46	9	20.9	20.9	79.1
	47	3	7.0	7.0	86.0
	48	1	2.3	2.3	88.4
	49	3	7.0	7.0	95.3
	50	2	4.7	4.7	100.0
	Total	43	100.0	100.0	

Source :SPSS 24, 2023

## Multiple Regression Analysis

Table 4. Multiple Regression Analysis Test Results

Coefficients<sup>a</sup>

Coefficients						
				Standardiz		
				ed		
		Unstan	dardized	Coefficient		
		Coeff	ficients	s		
			Std.			
	Model	В	Error	Beta	T	Sig.
1	(Constant)	13.075	9.762		1.339	.188
	Work Engagement	.255	.216	.183	1.179	.245
	Job Satisfaction	.432	.191	.350	2.258	.029

a. Dependent Variable: Employee Productivity

Source :SPSS 24, 2023

Based on the calculation results above the coefficients table, it can be identified that the regression equation is as follows:

$$Y = 13.075 + 0.55X_1 + 0.432 X_2$$

It can be explained as follows:

- a. Constant Value a = 13.075, it means that if the Job Satisfaction, Work Engagement variable is zero then Employee Productivity is negative by 13.075.
- b. Job Satisfaction regression coefficient b1 = 0.255, it means that if the value of Job Satisfaction increases by one, the value of Employee Productivity will also increase by 0.022.
- c. Work Engagement regression coefficient b2 = 0.55, it means that if the value of Work Engagement increases by one, the value of Employee Productivity will also increase by 0.55.

#### T-test

a. Effect of Job Satisfaction (X1) on Employee Productivity (Y)

Based on the coefficients table above, the t count value for the Job Satisfaction (X1) variable is 2.258, while the t table value for N=43 is 2.021. So 2.258 > 2.021, then H0 is rejected and Ha is accepted, it can be stated that Job Satisfaction (X1) has a significant effect on Employee Productivity (Y).

b. Effect of Work Engagement (X2) on Employee Productivity (Y)

Based on the coefficients table above, the t count value for the Work Engagement (X2) variable is 5.282, while the t table value for N = 158 is 1.962. So 1.179> 1.962, it can be concluded that partially the Work Engagement (X2) variable has a negative effect on Employee Productivity (Y).

#### F Test

Table 5. F Test Result ANOVA<sup>a</sup>

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	137.666	2	68.833	5.304	.009 <sup>b</sup>
	Residual	519.078	40	12.977		
	Total	656.744	42			

- a. Dependent Variable: Employee Productivity
- b. Predictors: (Constant), Job Satisfaction, Work Engagement

Source :SPSS 24, 2023

From the results of the table above for the ANOVA test, the F count value is 5,187 which is greater than F table, it can be said that Job Satisfaction (X1), Work Engagement (X2) together or simultaneously have a positive effect on Employee Productivity (Y).

## **Determination Coefficients**

Table 6. Model Summary Model Summary

			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.458a	.210	.170	3.602

a. Predictors: (Constant), Job Satisfaction, Work Engagement

Source :SPSS 24, 2023

From the results of the table above, testing is carried out jointly between the three variables and based on the Model Summary table, the R Square result is 0.210, this shows that by 21%, the Job Satisfaction (X1), Work Engagement (X2) variables simultaneously have a positive effect on the performance of the three variables. Employee Productivity (Y) while the rest is influenced by other factors not examined.

#### DISCUSSION

The results above state that Job Satisfaction (X1) has a significant effect on Employee Productivity (Y), Work Engagement (X2) variables negatively affect Employee Productivity (Y), and Job Satisfaction (X1), Work Engagement (X2) variables simultaneously have a positive effect on Employee Productivity (Y) while the rest is influenced by other factors not examined.

This paper is true as it is with the results calculated according to empirical conditions and data obtained by researcher.

### CONCLUSIONS AND RECOMMENDATIONS

The Job Satisfaction variable has a positive effect on the Employee Productivity variable, the Work Engagement variable has no effect on Employee Productivity, and simultaneously the Job Satisfaction (X1), Work Engagement (X2) variables simultaneously have a positive effect on Employee Productivity (Y). These results represent the results in the shipping field.

The contribution of the results of this study can be used as a reference for other researchers in the future.

#### **FURTHER STUDY**

This paper provides evidence and results in the field of shipping with visible results.

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