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The Influence of Tug Tugboat Services and Vessel Document Readiness On The Productivity of The MT Akra 102 Vessel Agency Agencyd By PT Transuta Lintas Samudera, Merak Branch

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Abstract: This study aims to determine the effect of tugboat services and ship document readiness on the productivity of the MT Akra 102 Ship Agency, which is represented by PT Transuta Lintas Samudera, Merak Branch. PT. Transuta Lintas Samudera is a shipping company engaged in shipping agency services for domestic and foreign ships in the Merak Port area. There are several problems with delays in the berthing of foreign ships that occurred at the Port of Banten. An example is the ship MT. AKRA 102 which is routinely agented every time it comes to the Merak Port area. PT Transuta Lintas Samudera, Merak Branch is one of the companies engaged in ship agency services. There is a phenomenon of non-fulfillment of MT ship productivity targets. AKRA 102 expected by the company with what happened in the field. Especially in June, August, October and December in 2021 and in May and June in 2022 which was caused by delays in pilot tugboat services and readiness of ship documents. This can affect consumer confidence in agency companies which can lead to reduced company income. The approach method used in this study uses a quantitative approach. The target population in this study were ship agents, ship owners, jetty masters and company employees with a sample of 45 respondents. The sampling technique in this study uses saturated samples, research uses quantitative data types. Quantitative data obtained from this study is data from the results of respondents' answers presented in the form of a Likert scale. Data collection techniques by distributing questionnaires or questionnaires directly to respondents. The data statistical method used is descriptive statistics and SPSS version 25.0.

Keyword: Tug Tugboat Service, Ship Document Readiness, Ship Agency Productivity.

INTRODUCTION

PT Transuta Lintas Samudera Merak Branch has an operational team whose duties and functions are as executor of activities in the field, namely arranging ship clearance documents, assisting port officers in the process of docking ships and ship departure processes at the port. In line with the development of ports in Indonesia, do not forget the role of shipping agents as bridges for economic distribution. In line with the development of ports in Indonesia, do not forget the role of shipping agents as bridges for economic distribution.

According to the results of previous research from Harmaini Wibowo (2010), there are several factors that affect the performance of agency companies, namely loading and unloading productivity, scout ship requests, weather and the length of time for document processing. Productivity in the loading and unloading process is the speed of loading and unloading companies in moving containers from vessels to trailers and vice versa using container units per hour. In addition to the productivity of loading and unloading, another thing that is no less important that affects the delay of ships to the pier is the demand for pilot boats. Scouting is a pilot activity in assisting the ship's captain, so that navigation can be carried out safely, orderly and smoothly by providing information about the condition of local waters which is important for the safety of ships and passengers (KM. 24 of 2002).

The problem formulation contains article questions that must be explained in the discussion and answered in the conclusion.

METHOD

Population

The population is a generalization area consisting of objects or subjects with certain quantities and characteristics set by researchers to study and then draw conclusions (Sugiyono, 2016: 135). The population is also not just the amount that exists in the object or object being studied, but includes all the characteristics or properties possessed by the subject or object. The population in this study consisted of 51 people consisting of: Ship Agent; Ship Crew; Ship Owners; Jet Master; & Company employees.

Saturated Sample

Saturated sample is a sampling technique when all members of the population are used as samples. This is done if the population is relatively small. Another term for a saturated sample is a census, where all members of the population are sampled. (Sugiyono, 2013:122). The sample in this study was 45 people based on the slovin formula.

Measurement Scale

Questionnaire is a list that contains a series of questions about a problem or area to be studied. To obtain data, questionnaires were distributed to respondents (people who answered the questions asked for research purposes), especially in survey research. According to Sugiyono (2013: 132-133) the Likert scale is used to regulate attitudes, opinions, and perceptions of a person or group of people about social phenomena. The Likert scale is used by researchers to measure a person's perception or attitude. This scale assesses the attitude or behavior desired by the researchers by asking several questions to the respondent, then the respondent is asked to provide a choice of answers or responses to the measurement scale provided. The rating scale for the statement is as follows:

Table 1. Likert scale as a benchmark

No	Information	Score
1	Strongly Agree (SS)	5
2	Agree (S)	4
3	Disagree (KS)	3

4	Disagree (TS)	2
5	Strongly Disagree (STS)	1

Analysis Techniques Data

Statistical analysis of the data in this study used the SPSS *(Statistical Product and Service Solution) version* 25 is an application program used to perform calculations statistics using a computer. The advantage of this program is that we can do it statistical calculations quickly from the simple to the complex, which if done quickly manual will take more time. according to Jonathan Sarwono (2006:1) The following is technique analysis data Which used in research This is Analysis Coefficient Correlation, Analysis Regression linear Simple, Analysis Coefficient Determination and Testing hypothesis.

RESULTS AND DISCUSSION

Ship Agency Productivity

Productivity is generally defined as the relationship between output (goods or services) and input (labor, materials, money). Productivity is a measure of productive efficiency. A comparison between output and input results. Input is often limited by labor, while output is measured in physical units, form, and value. The following are some of the dimensions and indicators presented in the table, including:

Table 2. Ship Agency Productivity Dimensions and Indicators

No	Dimensions	Indicator
1	Number of Ships	Number of ships Mt akra102 handled by the ship agency according to the company's target of 4 ships/month.
		The company's income is affected by the productivity of the mt akra 102 ship agency.
2	Customer satisfaction	Customer/ship owner satisfaction depends on the productivity level of the MT Akra 102 shipping agency. The ship is satisfied with the tugboat service and the readiness of ship documents that are efficient and according to company standards. Agent knowledge and skills can affect the productivity of the mt akra 102 ship agency.
3	Communication	Always coordinate and communicate the activities of a ship to the parties involved who will carry out mooring activities.
4	Operational Services	Certainty and clarity of information conveyed to customers.
		Responsive to questions or requests for customer information.
5	Cost Efficiency	The productivity of the mt akra 102 ship agency is influenced by good tugboat service. The productivity of the mt akra 102 ship agency is influenced by the speed in document readiness and clarence of mt akra 102 ship documents. Maximizing the time used in carrying out ship services and ship document readiness to increase ship agency productivity. The productivity of the ship agency is affected by tugboat services and the readiness of the ship's documents together according to company standards .

Tugboat Service

Delivery is any action or activity or appearance or benefit offered by each party to another party that is basically intangible, and does not result in ownership of the means that produce the service. Scouting is a pilot activity in assisting the ship's captain, so that navigation can be carried out safely, orderly and smoothly by providing information about the condition of local waters which is important for the safety of the ship and passengers (KM.

24 of 2002), while pilot officers are natural sailors who meet the requirements determined by the government to carry out scouting task activities. There are several dimensions and indicators, namely:

Table 3. Tug Tugboat Service Dimensions and Indicators

No	Dimensions	Indicator
1	Availability	Increase the number of tugboats available to meet demand. Pilot tugboats rarely experience significant delays or interruptions in providing services. Implementation of good tugboat services is a supporting aspect for agents in achieving company targets.
2	Efficiency	The time needed by tugboats to complete tugboats tends to be efficient. Tug tugboats can handle a large number of vessels with high productivity.
3	To safety	The rate of accidents or incidents that occur during tugboat service is low. The tugboats and their equipment are in good condition and well maintained.
4	Quality	Always communicate and coordinate with scouting parties on an ongoing basis so that they can carry out docking activities. Tug tugboat crews have sufficient skills and knowledge to perform their duties. The service quality of tugboats affects the satisfaction of service users and the smoothness of the ship clearance process.

Vessel Document Readiness

Ship documents (ship's documents) are documents that must be owned by and must be on board the ship, which documents state the perfection of the ship in various functions. There are several dimensions and indicators, namely:

Table 4. Ship Document Readiness Dimensions and Indicators

No	Dimensions	Indicator
1	The completeness of document	Vessel identity documents, such as ship certificates, sailing permits, and ship ownership documents, are fully available. The validity period of the ship documents is still valid and not expired. The agent has completed and uploaded the inapornet system which is used for the ship clearance process. Good ship document readiness is one aspect of the smoothness and ease of work for ship agents.
2	Communication	Communication between agents, ships and authorities related to document clearance went well. Ship owners or ship agents are satisfied with the quality of the document clearing services provided. Questions or requests for additional information from authorities regarding document clearance are answered in a timely and complete manner. The agent has coordinated with immigration, port quarantine, customs, and KOP regarding ship clearance.
3	Time	The time required for processing ship clearance documents is in accordance with the specified target. The process of clearing ship documents took place without significant obstacles or delays.

Analysis Coefficient Correlation

KOEFISIEN KORELASI ANTARA PENGARUH X_1, X_2, DAN Y		
Variabel	**Koefisien Korelasi (r)**	**Interval**
$X_1 \rightarrow Y$	$rX_1Y = 0{,}699$	**Kuat**
$X_2 \rightarrow Y$	$rX_2Y = 0{,}955$	**Sangat Kuat**

The correlation coefficient obtained from data processing with the SPSS 25 program is as following:

The value of the correlation coefficient between influence pe tugboat service (X1) with variable agency productivity (Y) obtained results calculation correlation on as big 0.69 9 _ This shows that it has a strong influence that is in the interval (0.60 – 0.80) , And For mark coefficient correlation between ship document readiness (X2) with ship agency productivity variable (Y) then the calculation results are obtained 0.955 this has a very strong influence in the interval (0.80 – <1).

Analysis Regression linear Double

Multiple linear regression tests are used to determine the relationship between two or more independent variables with a sufficiently large dependent variable exactly expressed in a straight line. To determine the strength of the influence arising from Variable X to Y variable

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.559	1.566		2.272	.028
	Pelayanan Kapal Pandu Tunda	.090	.050	.105	1.775	.083
	Kesiapan Dokumen Kapal	.820	.055	.884	14.891	.000

a. Dependent Variable: Produktivitas Keagenan Kapal

Based on the results of the calculations performed, it is obtained that a is equal to 3, 559 ; b 1 of 0.09 0 and b 2 equal to 0.8 20 form of multiple linear regression equation as following: $\hat{Y}$ = 3,559+ _ _ 0.090 X 1 _ + 0.8 20 X 2

Analysis Coefficient Determination

The determining coefficient analysis is for find out how much the contribution of the influence variable enforcement prohibition export rock coals (X) to performance agency (Y)

KOEFISIEN DETERMINASI PENGARUH X1, X2, DAN Y	
Variabel	**Koefisien Determinasi**
X1→ Y	**R^2 = 0,489 KD = 48,9%**
X2 →Y	**R^2 = 0,913 KD = 91,3%**
X1 & X2 →Y	**R^2 = 0,919 KD = 91,9%**

Based on calculation on, can seen mark coefficient determination (R Square) as big 0.919 _ or (91.9 %) . Matter This showing that there is positive influence between tugboat service (X1) and ship document readiness (X 2) to ship agency productivity (Y) of 91.9 % on MT. AKRA 102 , while the rest is equal to 8 . 1 % is another factor that is not in thorough by the author.

Results Test Hypothesis

Analysis This used For test is variables X And variables Y have influence Which significant or no.

UJI T DAN UJI F VARIABEL X1, X2, DAN Y		
Variabel	T hitung / F hitung	T tabel / F tabel
X1 → Y	t = 6,416	2,018
X2 →Y	t =21,182	2,018
X1 & X2→ Y	f =237,130	3,24

Value _ sig For influence tugboat service (X 1) to ship agency productivity (Y) is as big 0.000 < 0.05 And mark t count > t table 6,416 > 2.0 18 . So that can d concluded that hypothesis accepted Because there is influence positive competence to satisfaction Work crewman boat. Value _ sig for influence readiness of ship documents (X 2) on the productivity of the ship agency (Y) is 0.0 0 < 0.05 and the value of t count > t table 21.182 > 2.0 18 . So that can concluded that hypothesis accepted Because there is influence compensation to satisfaction Work crewman boat. Results processing data on table on is known that value sig as big 0.000 <0.05, and F count of 237 .1 30 > 3.24 , then the hypothesis is accepted. It means variable tugboat service And ship documents preparation own influence positive to agency productivity boat.

CONCLUSION

Based on the results of the analysis and discussion of research on influence Tugboat pilot service (X 1) and ship document readiness (X 2) are good on MT ship agency productivity. AKRA 102 (Y) on PT . Transuta Lintas Samudera Branch of Merak which is supported by existing data, it can be concluded as follows:

1. Pilot tugboat services have proven to have a positive and significant effect on the productivity of the MT ship agency. AKRA 102 which is represented by PT. Transoceanic Transuta Merak Branch with Regression equation for influence tugboat service (X 1) on the productivity of the ship agency (Y) obtained $\hat{Y}$ = 1 3.320 + 0.5 94 X 1 , r 1 = 0.489 and t count 6,416 > t table 2.0 18. The most dominant dimension in the tugboat service variable is the dimension Availability with the most reflective Indicator is The Implementation of Delay Guide Services to Support Company Achievements with an average value of 4.04 and the most dominant dimension in the MT Ship Agency Productivity variable. AKRA 102 is the dimension of Communication with the most reflective indicator being Ship Coordination with an average value of 3.91.
2. The readiness of ship documents has proven to have a positive and significant effect on MT ship agency productivity. AKRA 102 which is represented by PT. Transoceanic Transuta Merak Branch with Regression equation for influence Readiness of Ship Documents (X 2) on Ship Agency Productivity (Y) obtained $\hat{Y}$ = 4.623 + 0.885 X 2 , r 2 = 0.913 and t count 21,182 > t table 2.0 18. The most dominant dimension in the Vessel Document Readiness variable is the dimension Communication with the indicator that reflects the most is Clearance Service Quality with an average value of 3.71 and the most dominant dimension in the MT Ship Agency Productivity variable. AKRA 102 is the dimension of Communication with the most reflective indicator being the dimension of Communication with the most reflecting indicator being Ship Coordination with an average value of 3.91.

3. Pilot tugboat services and ship document readiness have together proven to have a positive and significant effect on the productivity of the MT ship agency. AKRA 102 with the regression equation for the effect of tugboat service and Vessel Document Readiness jointly on Ship Agency Productivity (Y) is obtained $\hat{Y}$ = 3,559+ _ _ 0.090 X 1 _ + 0.8 20 X 2 , and the contribution of R^2 = 91.9% with n F count 237,130 > F table 3 , 24 . The variable that most dominantly affects the Productivity of the MT Ship Agency. AKRA 102 is a Vessel Document Readiness variable with a regression coefficient value in the structural equation of 0.885 which is higher than 0.594 of the tugboat service variable.

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