Effect of Operator Performance and Effectiveness Unloading Equipment on Container Handling at Terminal on Domestic Containers

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Abstract

Terminal domestic containers is one of the companies that engaged in port services. To increase handling effectiveness, reliable operator performance and equipment readiness are required. The type of research used is associative research with a quantitative approach. The population in this study are equipment operators who work at Terminal on Domestic Container while the samples taken are 80 operators. The type of data used in this research is quantitative. Sources of data used obtained primary data. Data collection techniques were carried out by distributing questionnaires. The analysis technique used is multiple linear regression analysis. The results of this study indicate that (1) operator performance has a partial significant effect on container handling. (2) Loading and unloading equipment has a significant effect on container handling.

Keywords
Operator Performance, Unloading, Equipments, Container, Handling.

1. Introduction
Indonesia is the largest and only archipelagic country in which two-thirds or 63% of its territorial area is in the form of water. As the largest archipelagic nation, Indonesia needs a broad and well-developed maritime sector so that it can help the country achieve its economic, social and political goals.
According to Tjiptono (2014: 295) distribution sector are things that become organizational expectations that perform all the functions needed to flow services and transportation or products from sellers to consumers or final buyers. Because it is more profitable to transport goods and services by sea than land or air transportation, it can load large volumes of goods at low cost. Economic factors needed in sea transportation must be able to meet several requirements, namely high speed, large loading capacity, ease of unloading or fast ship turnaround time.

In addition, sea transportation activities cannot be separated from the nature of people's livelihoods in most of the Indonesian archipelago. Turning on sea transportation can not only facilitate the flow of goods and passengers from one area to another, but also develop sources of livelihood for the people in general. In the development of sea transportation infrastructure, apart from being a means of connecting one island to another, it is also a driving force for a movement of social and economic activities in the export and import of goods and other activities, the area is a port.

With the background as described above, the role of human resources (HR) is supported by equipment that supports the importance of carrying out an activity at the port, thus raising the title "Performance Operators and Loading and Effectiveness Unloading Equipment to improve Container Handling at Terminal on Domestic Container".

2. Literature Review
2.1 Performance Operators
Operator performance is defined as an ability or expertise possessed by employees of a company in a particular field according to their field such as a skilled and skilled forklift operator or Reach Stacker (RS) operator to

operate the tool. According to Hasibuan (in Karimah 2012) employees or employees are people who sell services (mind or energy) and get compensation whose amount has been determined in advance. According to Subri (in Karimah 2012) employees or employees are residents of working age (aged 15-64 years) or the total population in a country that produces goods and services if there is a demand for them.

A. Definition of Work

According to Sedarmayanti (2011: 260) reveals that performance is a translation of performance, which means the work of a worker, a management process or an organization as a whole, where the results of the work must be shown concrete and measurable evidence (compared to predetermined standards).

Performance is a result of work produced by an employee defined to achieve the expected goals.

B. Definition of performance management

According to Kreitner and Angelo Kinicki (2014: 246) the notion of performance management (performance management) is a company system in which managers integrate goal activities, monitoring and evaluation, providing feedback and training, and rewarding continuously. From the management above it can be said that, where managers and their employees manage a process to plan, unify or review objectives or in order to provide overall management for the organization. Performance management is an ongoing process of setting goals, assessing progress and providing guidance and feedback to ensure that each is achieving their goals and careers. A professional organization will not be able to realize a good performance management without strong support from all components of the company's management and of course the shareholders.

C. Performance management cycle

The management cycle consists of 3 phases, namely planning, coaching, and evaluation. Planning, is the phase of defining and discussing the roles, responsibilities, and expectations that are determined. Planning in the coaching phase, where employees are mentored and developed, directs their efforts through support, feedback, and rewards. Performance evaluation is assessed and compared with the expectations set in the performance plan. individual performance improvement that contributes and coordinates directly on the performance of an organization. To implement it must be in accordance with the goals and strategies of the working group. The following are the goals and strategies of the working group:

1) Provide direction for employees to work smoothly.
2) Identify and develop the individual skills of employees who are worthy and achievers for the organization.
3) Provide a means to measure employee performance.

D. Employee performance plan

Employee performance is the result of work in quality and quantity achieved by an employee in carrying out in accordance with the responsibilities given to him (Mangkunegara, 2009: 18). There are several aspects that really need to be understood and understood by fund employees or organizations or work units, namely:

1) Clarity of duties or work that is the responsibility of an employee.
2) Clarity of expected results from a job or function,
3) And the time needed to complete the work so that the expected results can be realized and in accordance with what is expected.

Every employee must realize that work produces results. Performance can be in the form of products, namely goods or services and forms of behavior or behavior, behavior, goals, objectives and organizational goals.

E. Performance Improvement Planning

Work improvement planning is a management technique to improve performance that prioritizes power analysis on the driving and controlling forces in order to determine strategies and activities and coordination steps in order to achieve an organizational goal. The following are the requirements for activities in work planning, namely:

1) Determine the main objectives;
2) Determine the activities to be carried out;
3) The time it takes to make it happen;
4) Arrangements for the implementation of how human resources (HR) will be given the responsibility to implement it.

Basically a plan is a technique or approach to continuous or continuous performance improvement. In this way it is hoped that it will continue to improve the performance and contribution of each employee and work unit to the overall goals of an organization.

2.2 Container Loading Equipment

A. Definition of Equipment

According to Wibowo tax (August 02, 2018) Equipment or equipment used by the company, both at the office and where the production process takes place.

From this definition, the notion of equipment is a tool or bias in the form of a useful place to support the work. The term equipment in accounting refers to machinery, furniture as well as office equipment, vehicles,

computers, as well as electronic devices and heavy machinery. The rapid development of technology makes scientists in the world unceasing to make new breakthroughs in the world of technology. As well as supporting equipment for unloading activities, the systems are increasingly sophisticated.

B. Unloading Process

According to Sasono (2012-131) Unloading activities are activities to unload imported goods or inter-island or inter-island goods from the ship using cranes and ship slings to the nearest land at the edge of the ship, which is commonly called a pier, then from the pier by using lorries, forklifts, or strollers, are loaded and arranged into the nearest warehouse designated by the port administrator, while the activity is the other way around. From this definition, it can be said that loading and unloading is loading and unloading goods from ships onto trucks on land and then transferred to warehouses.

The mechanism for loading and unloading activities from the ship is then arranged in the warehouse to avoid damage to the warehouse space. Then the doors may be unloaded again and loaded onto trucks waiting outside the warehouse to be sent to factories or import warehouses outside the port area.

C. Scope of Loading and Unloading Implementation

The scope of unloading activities according to the Decree of the Minister of Transportation No.88AL.305Phb-85 concerning unloading companies and ships confirms that the scope of loading and unloading activities at ports includes:

1) Stevedoring activities, namely unloading services from ships, docks, barges, trucks or loading everything from the dock. Barges, trucks into the ship's hold using a ship crane.
2) Cargodoring activities, namely service activities in the form of work removing sling extracts from the ship's hull above the pier, arranged in line I warehouse or goods field or vice versa.
3) Delivery Receipt Activities, namely service activities in the form of work taking from the stockpile where the goods are in the line I warehouse or goods storage field or vice versa.

Based on the type of loading and unloading activities at the port, it can be seen that the scope of activities for loading and unloading goods at the port consists of three forms of activities for moving goods from and ships.

D. Loading and Unloading Terms

The terms of loading and unloading at the port are:

1) Watchman is the implementer of goods security in Stevedoring, Cargodoring, and Receiving or Delivery activities.
2) Slack is a comparison between the performance that may be achieved with the actual performance.
3) Lifo Term or Liner In Free Out is a qualification of the price fee from port to port including the cost to load the goods onto the ship at the port of origin, but does not include unloading the goods at the port of destination.
4) Filo Term or Free In Liner Out is a Freight rate that includes moving and loading costs and if required storage and packaging costs.
5) Setback is concentration in the middle of the ship.
6) Hogging is cargo at the ends of the ship.
7) Bulky is a large volume of cargo but light load.
8) Overstowwing is the piling of cargo on board the ship, but the cargo that is piled up for the next port is above the loadings of the earlier port of unloading.
9) Shifting is the activity of moving cargo in the same hold or to a different hold or by land. Or it could be Shifting is the activity of moving containers from one block or slot to another block or slot according to the purpose, heavy, medium, or light.
10) Lashing or Unlashing is binding or strengthening the load or otherwise freeing the binding or strengthening the load.
11) Unloading is cargo on board. This process separates the cargo in the hold and prevents the shift of cargo due to the movement of the ship.
12) Sweeping is collecting scattered loads.
13) Bagging or UnBagging is the outpouring of outpouring into sacks or vice versa, namely opening the sacks and their cargo.
14) Restowage is the activity of rearranging cargo in palms.
15) Sorting is the work of selecting or separating mixed cargo or damaged cargo.

E. Loading and Unloading Equipment

According to Lasse (2014: 128) the definition of loading and unloading is that unloading equipment is a production tool that works to bridge the ship with the terminal. Productive tools shorten “parking” periods. The means of unloading and the time of the ship in port relate to each other asymmetrically. Tools can be the cause of something, namely the time the ship is in port.

Meanwhile, according to Bambang Triadmodjo (2016: 343) the procurement of equipment for container handling needs to pay attention to several factors, including operating costs, loading and unloading systems, equipment reliability, availability of spare parts, and technology used. By taking into account all the factors above, it will have an impact on the development of container handling at the port so as to facilitate container handling activities.

2.3 Cargo Handling

Cargo Handling is a service activity for cargo or goods that go out and enter through the port, including loading and unloading of ships, transferring from the side of the hull to the place of stockpiling or storage, arranging and organizing and storing the goods and handing them over to the owner of the goods, or otherwise received from the owner, arranged and arranged in the storage area, transferred from the storage area to the side of the ship and loaded in the cargo hold. Several conditions that can support the implementation of cargo handling, among others:

a. Good planning.
b. The existence of a workforce that is qualified and knowledgeable, experienced and skilled and is an expert in their field;
c. The existence of equipment that is sufficient and ready to use;
d. The existence of continuous guidance and instructions;
e. Good and well-coordinated operation;
f. Strict implementation supervision and under direct supervision by superiors;
g. There is a management that is responsive to the situation in the field.

A. Container Cargo handling Activities

In the process of handling or handling container cargo at the port, the activities included are:

1) Receiving: is the activity of moving Containers from the hinterland or outside through the gate to the Container Yard (CY) or the next field to be stacked or stacked in blocks.
2) Loading: Container movement activity from CY or field to dock to ship to be loaded.
3) Unloading or Discharge: is the activity of container movement from the ship to the Container Yard (CY) through the Gate out to the hinterland.
4) Delivery: Container movement activity from CY through gate out to hinterland.
5) Stevedoring: is the work of unloading containers from the ship's hold onto the Chassis or dock or vice versa by using ship cranes or land cranes.
6) Trucking / Haulage: is the work of transporting containers using the chassis in the port work area from the ship's hull to the Container Yard (CY) and vice versa.
7) Relocation: the work of moving Containers from a block /slot/row/tier to another block/slot/row/tier in the Container Yard (CY) with the aim of grouping the Container in one place or emptying the residence.
8) Transshipment: is the work of unloading the Containers from the first transport ship, arranged and stacked in the Container Yard (CY) and loaded onto the second transport ship.
9) Reefer Monitoring: is the work of monitoring the electricity supply capacity and temperature in the Reefer Container.

B. Container

Containers are containers or boxes that meet the technical requirements in accordance with the International For Standardization (ISO) as a tool or device for transporting goods that can be used in various modes, ranging from road mode to container trucks, trains, and container ships.

In general, a container is a package that is specially designed with a certain size, can be used repeatedly, is used to store and load what is in it safely and efficiently. the philosophy behind containers is to wrap or carry cargo in the same crates and all can transport goods as a unit, be it a ship, fire, truck, or other means of transport, and can transport them quickly, safely, and efficiently. or if possible can be door to door.

C. Size of Container

The size of the container based on the International Standard Organization (ISO) which has been determined the size of the container is as follows:

1) 20 feet container
   Outside size: 20” (length) x 8 (width) x 8.6
   (height) or 6,058 x 2,438 x 2,591 M.
   Inside size : 5,919 x 2,340 x 2,380 M.
   Capacity:Cubic Capacity: 33 cbm
   Pay Load : 22.1 ton
2) 40 feet container
   Outside size: 40” (length) x 8 (width) x 8.6

(height) or 12,192 x 2,438 x 5,291 M.
Inside size: 12,045 x 2,309 x 2,379 M.
Capacity:Cubic Capacity: 67.3 cbm
Pay Load: 27,396 tons

3) Container size 45 feet
Outside size: 40" (length) x 8 (width) x 9.6
(height) or 12,192 x 2,438 x 2,926
Inside size : 12,056 x 2,347 x 2684 M.
Capacity: Cubic Capacity: 76 cbm.
Pay Load: 29.6 tons.

The size of the cargo in cargo or container ship loading in TEU (Twenty Foot Unit). Therefore, the size of the container starts from 20 feet long, then one container of 20 is expressed as 1 TEU and a container of 40 is expressed as 2 TEU or often also expressed in FEU(Forty Units Equivalent).

D. Type of Container

The types of containers according to Engkos Kosasih and Hananto Soewedo (2009:114) are divided into several types, namely:

1) General Cargo Container is a container used to transport general cargo.
2) Special Ventilated Container is a container used to transport wet, smelly or perishable cargo.
3) Open Top or Side Container is a container made of steel to transport heavy equipment, machinery, tractors, and so on. Loads from above and from the side of the container.
4) Flat Rack Container is a container with a strong and sturdy floor that is used to transport heavy machinery or equipment.
5) Dry Bulk Container is a container used to transport bulk.
6) Tank Container is a tank that is protected with an iron frame to transport liquid or gas cargo.
7) Refrigerated Container is a container equipped with a refrigeration machine to transport goods such as fruits, meat and vegetables.

E. Container Status

In the transportation of containers from one country to another, the container has 2 (two) statuses, namely as follows:

1) Full Container Load (FCL)
Its characteristics are;
   a. Contains cargo from one consignor and is delivered to one consignee;
   b. The container is stuffed (stuffed) by the shipper and the container has been loaded at the Container Yard (CY) at the loading and unloading port;
      i. At the port of unloading, the container is picked up by the consignee at CY and unstuffed or stripped by the consignee;
      ii. The shipping company is not responsible for damage and loss of goods in the container.
2) *Less Than Container Load* (LCL)
Its characteristics are;
   a. Containers contain cargo from several senders and are shown for multiple consignees;
   b. The cargo is received in bulk and stuffed at the Container Freight Station (CFS) by the shipping company;
   c. At the port of unloading the container is unstuffed or stripped at CFS by the shipping company and delivered to several recipients in a breadbulk state;
   d. The company is responsible for damage and loss of goods transported in containers.
   e. In the container transportation mode, there are several combinations of FCL/LCL, LCL/FCL, LCL/LCL, and FCL/FCL.

2.4 Relation Between Variables

Relation Between Operator Performance Variables and Container Handling

According to my research, heavy equipment operators have a duty to complete tough jobs using heavy equipment that humans cannot. Therefore, heavy equipment operators must be strong and tough in order to be reliable. Riduwan Purnomo, Freddy J Rumambi (1 March 2016 69-102).
H1 : Operator Performance Has A Positif Effect On Container Handling

Relationship Between Variables of Loading and Unloading Equipment and Container Handling

According to my research, the performance of an employee is an increase in one's work or one's overall level of success during a certain period in carrying out tasks compared to various possibilities, such as work standards,

targets or criteria that have been determined in advance and have been mutually agreed upon. Or in other words, performance is a work spirit, whether the results are good or not, depending on each individual. Riduwan Purnomo, Freddy J Rumambi (2016).
H2 : Unloading Equipment Has A Positif Effect On Container Handling

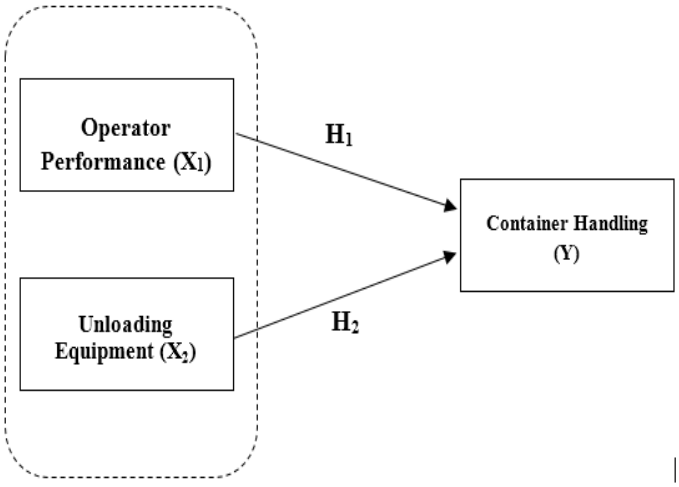

Figure 1. Research Model

3. Research Methods

3.1 Population and Samples

A. Population

Population according to Sugiyono (2010:117) population is a generalization consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions.

B. Sample

According to Sugiyono (2010:118) The sample is part of the number and characteristics possessed by the population.
To take the number of samples, in this study the researchers used the slovin formula, namely by setting certain considerations or criteria that must be met by the samples used were employees of Terminal on Domestic Container.
To calculate the number of samples to be used, the formula that will be used by Slovin is:

$$n = \frac{N}{1 + Ne^2}$$

Description :

N	=	Number of Population
n	=	Number of Sample
e	=	Percentage of inaccuracy 10%
n	=	$\frac{698}{1+698\ x\ 0{,}1^2}$ = 79,8 =80 employees

a. Quantitative Method

Quantitative Method is a systematic scientific study of parts and phenomena and their relationships.

According to Sugiyono (2013:13) quantitative research methods can be interpreted as research methods based on the philosophy of positivism, which is used to examine certain populations or samples, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative/ statistics with the aim of testing the established hypotheses.
Definition of Operational Variables:

Performance (X1)
1) Quality of work;
2) Quantity of work;
3) Time Utilization
4) Cooperation

b. Equipment (X2)
1) Availability
2) Reliability
3) Maintenance

c. Container Handling (Y)
1) Effectiveness
2) Efficiency

4. Data Analysis and Discussion

4.1 Validity and Reliability Test

4.1.1 Validity Test

The validity test used to measure the validity of a questionnaire is carried out by comparing the calculated r_{value} (Pearson's product moment correlation) with the r_{table} value for degrees of freedom (df) = n-2, in this case the number of samples. In this study, the number of samples (n) = 80 and the magnitude of df can be calculated as 80-2 = 78, with df 78 and alpha = 0.05 obtained r_{table} with two-sided test = 0.2199. If r_{count} is greater than rtable and deserves to be positive, then the question item or indicator is valid Imam Ghozali (2013:42). The calculation results for each variable can be seen in Table 1, Table 2, and Table 3.

Table 1. Operator Performance Variable Validity Test Results

Indicator	R_{count}	r_{table}	Summarize
$X_{1.1}$	0,358	0,219	Valid
$X_{1.2}$	0,422	0,219	Valid
$X_{1.3}$	0,459	0,219	Valid
X_{1-4}	0,679	0,219	Valid
X_{1-5}	0,493	0,219	Valid
X_{1-6}	0,370	0,219	Valid
X_{1-7}	0,469	0,219	Valid
X_{1-8}	0,330	0,219	Valid
X_{1-9}	0,708	0,219	Valid

Source: results of data processing using SPSS 23.0, 2021

Table 2. Variable Validity Test Results for Loading and Unloading Equipment

Indicator	R_{count}	r_{table}	Summarize
$X_{2.1}$	0,381	0,219	Valid
$X_{2.2}$	0,408	0,219	Valid
$X_{2.3}$	0,523	0,219	Valid
$X_{2.4}$	0,751	0,219	Valid
$X_{2.5}$	0,523	0,219	Valid
X_{2-6}	0,408	0,219	Valid
X_{2-7}	0,439	0,219	Valid
X_{2-8}	0,320	0,219	Valid
X_{2-9}	0,655	0,219	Valid

Source: results of data processing using SPSS 23.0, 2021

Table 3. Results of the Validity Test of Container Handling Variables

Indicator	R_{count}	r_{table}	Summarize
Y_1	0,310	0,219	Valid
Y_2	0,419	0,219	Valid
Y_3	0,548	0,219	Valid
Y_4	0,741	0,219	Valid
Y_5	0,513	0,219	Valid
Y_6	0,408	0,219	Valid
Y_7	0,464	0,219	Valid
Y_8	0,306	0,219	Valid
Y_9	0,675	0,219	Valid

Source: results of data processing using SPSS 23.0, 2021

Based on the test in the table above shows that the results of testing the validity of indicators from all independent variables and variables, have values from all indicators > from rtable and in accordance with the provisions that have been set, this means that all question items from both independent and variable variables are overall valid and can be used in research.

4.1.2 Reliability Test

The reliability test was carried out using the One Shot method, which is the measurement only once and then the results are compared with other questions or measuring the correlation between the answers to the questions. SPSS 23.0 provides facilities to measure reliability with statistical tests Cronbach Alpha > 0.60 Imam Ghozali (2013: 47) From the results of the reliability test, the Cronbach alpha value can be seen below.

Table 4. Reliability Test

Variable	Cronbach Alpha	Criteria	Summarize
P Operators Performance (X_1)	0,733	>0,60	Reliable
Loading and Unloading Equipment (X_2)	0,863	>0,60	Reliable
Container Handling (Y)	0,785	>0,60	Reliable

Source: results of data processing using SPSS 23.0, 2021

From the results of the reliability test in Table 4.10, it is known that the performance variables of operators, loading and unloading equipment, and container handling are all reliable, because each variable has a Cronbach's alpha value > 0.60. Thus these variables can be analyzed further.

4.2 Classical Assumtion Test

4.2.1 Normality Test

The normality test aims to test whether the regression model of the dependent variable and the two variables have a normal distribution or not. Results Based on Kolmogorov Smirnov's calculation of the residual regression using the SPSS 23.0 program, the following results were obtained:

Table 5. Normality Test Results

	Unstandardized Residual
Kolmogorov-Smirnov Z	3,838
Asymp. Sig. (2-tailed)	0,200

Source: results of data processing using SPSS 23.0, 2021

Because the significance value of 0.200 is more than it is said that the residue is normally distributed. Then the assumption of normality is met.

4.2.2 Heteroscedasticity Test

Heteroscedasticity means that the variation (variance) of the variables is not the same for all observations. The way to find out the symptoms of heteroscedasticity is by using the glejser test. With the glejser test, we can find out whether in the regression model there is an inequality of variance from observations to other observations. Then the results of the glejser test can be seen as follows:

Table 6. Heteroscedasticity Test

Independent Variable	Sig	Criteria
Operator Performance	0,861	Heteroscedasticity does not occur
Loading and Unloading Equipment	0,275	Heteroscedasticity does not occur

Source: results of data processing using SPSS 23.0, 2021

4.2.3 Multicollinearity Test

Multicollinearity test is used to test the presence or absence of correlation between independent variables (independent). To be able to determine whether there is multicollinearity in the regression model in this study is to look at the value of VIF (Variance Inflantion Factor) and tolerance. The tolerance and VIF values can be seen in Table 7 below:

Table 7. Multicollinearity Test Results

Variable	VIF	Tolerance
Operator Performance	8,905	0,112
Loading and Unloading Equipment	8,905	0,112

Source: results of data processing using SPSS 23.0, 2021

Based on Table 4.12 above, it can be seen that there is no variable that has a VIF value > 10 and a tolerance value < 0.10 which means that there is no correlation between variables more than 95% so it can be said that in the model there is no multicollinearity.

5 Results of Data Analysis

5.1 Multiple Linear Regression

Analysis of the data used in this study is multiple linear regression which is used to determine that there is no effect of the performance of operators and unloading equipment on container handling.

Based on the results of data calculations with the help of the SPSS 23.0 computer program for windows, the multiple linear regression equation is obtained in Table 8.

Table 8. Multiple Linear Regression Analysis Results

		B	Std. Error	Beta
	(Constant)	,047	,670	
	Operator performance	,211	,046	,221
	Loading and Unloading Equipment	,789	,049	,779

Source: results of data processing using SPSS 23.0, 2021

Based on the above calculations, the following significant multiple linear regression equations were obtained:

$$\mathbf{Y = 0{,}047 + 0{,}211X_1 + 0{,}789X_2}$$

Description :

Y = Container Handling

X_1 = Operator Performance

X_2 = Loading and Unloading Equipment

The interpretation of the regression model above is as follows:

1. The resulting constant (a) of 0.047 indicates that the value of container handling (Y) is 0.047 if the performance of the operator (X1) and unloading equipment (X2) is constant.
2. The operator performance coefficient (β1) of 0.211 indicates that if the operator's performance variable (β1) increases by one unit, it will result in an increase in container handling of 0.211.
3. The loading and unloading equipment coefficient value (β2) is 0.789, indicating that if the loading and unloading equipment variable (β2) increases by one unit, it will result in an increase in container handling of 0.253.

5.2 Analysis of Correlation Coefficient (R) and Coefficient of Determination (R^2)

Table 9. Correlation Coefficient And Coefficient Of Determination

R	R Square	Adjusted R Square
0,990	0,980	0,978

Source: results of data processing using SPSS 23.0, 2021

The value of the correlation coefficient (R) shows how closely the relationship between the operator performance variable (X1) and loading and unloading equipment X2)) with the dependent variable of container handling, the value of the correlation coefficient is 0.990. This value indicates that the relationship between operator performance variables (X1) and loading and unloading equipment (X2) with container handling variables is very strong because it is located between 0.80-1.00.
The value of the coefficient of determination or R2 is used to measure how far the model's ability to explain the variation of the dependent variable or container handling variable (Y). The results of the SPSS calculation obtained a value of R2 = 0.980, which means that 98.0% of container handling can be explained by the operator performance variable (X1) and loading and unloading equipment (X2). While 2% influence other variables outside the model under study. For example:

5.3 Hypothesis Testing

In connection with the formulation of the problem and the proposed hypothesis as described in the previous section, it can be explained that the influencing variables are operator performance (X1) and unloading equipment (X2). And in this study the variable is container handling, namely Y.

1) t-Test (Partial Test)

The t-test is a test to determine the significant independent variables (operators and loading and unloading equipment) partially or define certain variables (container handling).

Table 10. T –Test

Variable	T_{count}	$t_{Sig.}$
Operator Performance (X_1)	4,535	0,000
Loading and Unloading Equipment (X_2)	15,997	0,000

Source: results of data processing using SPSS 23.0, 2021

a. H1 : Formulation of hypothesis for t test (partial) on Brand Image variable (X_1):

1) $H_0 : \beta_1 = 0$
$H_1 : \beta_1 \neq 0$
or
H_0 : The independent variable operator performance (X1) has no partial significant effect on container handling (Y).
H_1 : The independent variable operator performance (X1) has a significant partial effect on container handling (Y).

2) If the significance value of the independent variable operator performance (X1) on the t-test sig <0.05 or t-count > t-table, then there is an effect of X on Y. If the value of t-sig > 0.05 or t-count < ttable, there is no effect of the variable X against Y.

Based on Table 4.18 the T-test analysis is the magnitude of the tcount value on the operator performance variable (X1) is 4.535 with a significance level of 0.000. Because 4.535> 1.990 and 0.000 <0.05, it shows that H0 is rejected and H1 is accepted.

Conclusion: So that the independent variable operator performance (X1) has a significant partial effect on container handling (Y)

b. Formulation of hypothesis for t-test (partial) on variable loading and unloading equipment (X2):
   1) $H_0 : \beta_2 = 0$
      $H_1 : \beta_2 \neq 0$
      or
      H_0 : The independent variable loading and unloading equipment (X_2) has no partial significant effect on loading and unloading equipment (Y).
      H_1 : The independent variable loading and unloading equipment (X_2) has a significant partial effect on container handling (Y).
c. If the significance value of the independent variable loading and unloading (X2) in the t-test sig <0.05 or t-count> t-table, then there is an effect of variable X on variable Y. If the value of sig> 0.05 or t-count < t table then there is no the effect of variable X on Y.

Based on Table 4.18 the analysis of the T test is the magnitude of the value of tcount on the variable loading and unloading equipment (X2) is 15.997 with a significance of 0.000. Because 15.997>1.990 and 0.000 <0.05, it shows that H0 is rejected.

Conclusion: So that the independent variable loading and unloading equipment (X2) has a partial significant effect on container handling (Y).

5.4 Discussion

5.4 1 Effect of operator performance on container handling

Based on the hypothesis testing using the partial test (t test), the results show that the operator's performance (X_1) has an influence on container handling (Y). This can be seen from the significance value on the t-test of the operator performance variable (X1) of 0.000 or less than the significance level (α) of 0.05 and Tcount > Ttable of 4.535> 1.990. Based on this, the first hypothesis which reads "It is suspected that there is a partial effect of operator performance on container handling" is proven true and can be declared accepted.

The results of the analysis show that there is an effect of operator performance on container handling, meaning that the better the operator performance formed by Terminal on Domestic Container, the higher the container handling will be. In other words, operator performance can be shaped by the handling of containers built by Terminal on Domestic Container.

5.4.2 Effect of Loading and Unloading Equipment on Container Handling

Based on the hypothesis testing using the partial test (t test) it is found that loading and unloading equipment (X_2) has an influence on container handling (Y). This can be seen from the significance value of the t-test of the loading and unloading equipment variable (X_2) of 0.000 or less than the significance level (α) of 0.05 and Tcount > Ttable of 15.997 > 1.990. Based on this, the second hypothesis which reads "It is suspected that there is a partial effect of unloading equipment on the handling of containers at Terminal on Domestic Container " is proven to be true and can be accepted.

There is a partial effect if the performance of operators and loading and unloading with positive and significant performance. This means that the performance of the operator and equipment that is dismantled has a unidirectional relationship, then the performance of the operator and unloading equipment will increase or it can be said that there is no problem. (Journal of Magister Management Vol. 2 No 1, March 2016 35-68) by Amril1, Jerry M Logahan.

6. Conclusions

Based on the results of research and discussion in the previous chapter, several conclusions can be drawn to answer the formulation of the problem. Some of these conclusions consist of: (1) Operator performance has a significant partial effect on container handling of Terminal on Domestic Container, with a significance less than 0.05. Thus, the first hypothesis which reads "It is suspected that there is a partial effect of operator performance on container handling at Terminal on Domestic Container" is proven to be true and can be declared accepted, (2) Loading and unloading equipment has a partial significant effect on container handling at Terminal on Domestic Container, with a significance less than 0.05. Thus the second hypothesis which reads "It is suspected that there is a partial effect of loading and unloading equipment on container handling at Terminal on Domestic Container" is proven to be true and can be declared accepted.

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