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## The Effect of Inaportnet System Implementation and Application Operator Skills on Ship Service Performance at Ciwandan Port, Banten

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**Abstract:** In supporting the performance of ship services using the inaportnet system at the Port of Ciwandan Banten, there are still many problems that arise in the company related to the implementation of the inaportnet system and operator skills. These problems are the frequent occurrence of system errors when the inaportnet system is being used and the lack of application operator skills in using the inaportnet system, resulting in the ship's service performance being not optimal. Based on these problems, the authors conducted an analysis to determine whether there was an effect of implementing the inaportnet system and application operator skills on the performance of ship services at the Ciwandan Port of Banten. The type of research used is quantitative method. Data collection was carried out by questionnaires which were distributed directly to 60 respondents, namely inaportnet service users in the KSOP Class I Banten working area with a total of 27 statements. In looking for the results of the calculations the author uses the SPSS 26 program and performs several data analyzes, namely: validity test, reliability test, and homogeneity test, correlation coefficient analysis, coefficient of determination analysis, regression analysis, t-test and f-count. Conclusions in this study were carried out by comparing the data obtained from the answers of existing respondents. Based on the acquisition of questionnaire data and data processing, the results showed that the application of the system and operator skills together proved to be positive and significant on the performance of ship services with a calculated F value > F table, which was  $85,419 > 3.16$ . The author describes several solutions to improve the performance of ship services, namely by increasing the performance of the inaportnet system, increasing operator skills by conducting training, and providing competent application operators to maximize company performance.

**Keywords:** Implementation of the Inaportnet System, Operator Skills, Service Performance

### INTRODUCTION

The development of science and technology in Indonesia is quite rapid and significant, marked by progress in various important sectors. One of them is seen in the economic and

business sectors. Currently, many companies and government agencies are starting to use technology-based information systems to support operational activities for companies and their businesses. The use of information technology-based information systems in various business and organizational activities is needed to improve company efficiency and productivity while increasing its competitiveness in the global market era. However, it should also be understood that the system will only work effectively if it is developed synergistically with the company's overall business strategy, not just as an accessory or a complement. Thus the company can utilize the information system optimally to increase the effectiveness and efficiency of its operations.

The Ministry of Transportation has implemented the use of information technology in the process of serving ships and goods at ports. Based on the Regulation of the Minister of Transportation of the Republic of Indonesia number PM 157 of 2015 states that: "in order to provide ship services effectively and efficiently involving agencies and stakeholders at the port. with a single integrated internet-based service system, it is necessary to stipulate a Ministerial Regulation concerning the Implementation of Inaportnet for ship and goods services at ports".

Inaportnet is an internet/web-based single electronic service system to integrate standard port information systems in physically serving ships and goods from relevant agencies and stakeholders at ports. This system aims to make the service of ships and goods at the port more effective and efficient. With this single service system, it can be seen the completeness of the legal ship documents used in the process of requesting ship and goods services, including the obligation to pay Non-Tax State Revenue (PNBP). To access the inaportnet system, a special portal has been provided, namely <http://inaportnet.dephub.go.id>. By accessing the web, service users can apply for ship and goods services and input documents only once through the web. This is one of the benefits of implementing the inaportnet system, namely single submission.

One of the implementations of inaportnet in ports is the Ciwandan Port of Banten. Ciwandan Port Banten is an international port located in Banten which is included in the KSOP Class I Banten working area. This port is a port chain that is connected to national, regional and international logistics chains. The implementation of the initial inaportnet system in Banten has been implemented since 2017 starting from the Ciwandan and Cigading ports. Over time, the implementation of inaportnet will be expanded to all ports in the KSOP Class I Banten working area.

The implementation of the inaportnet system is intended to provide convenience for service users in ship services. However, based on the author's field observations, it was found that the application of inaportnet at the Port of Ciwandan Banten was not yet fully effective, especially in providing ship services.

According to Mahmudi (2010) service performance is influenced by several factors consisting of 5 (five) factors, namely: Personal/individual factors, including: knowledge, skills, abilities, self-confidence, and commitments possessed by each individual; Leadership factors, including: quality in providing encouragement, direction, and support provided by managers and team leaders; Team factors, including: the quality of support and enthusiasm given by teammates, trust in fellow team members, cohesiveness and closeness of team members; System factors, including: work systems, work facilities or infrastructure provided by the organization, organizational processes and performance culture within the organization; Contextual (situational) factors, including: pressures and changes in the external and internal environment.

Based on the author's field observations, it was found that there were several obstacles and obstacles in the use of the inaportnet system at the Port of Ciwandan Banten. One of them is that there is a system error caused by an internet connection that is less stable due to

many people accessing the inaportnet system service. In addition, the lack of updates to computer equipment causes system errors to occur.

In the implementation of the inaportnet system, reliable and high-skilled employees are needed in their respective fields. To get reliable and quality human resources in their field, it is generally necessary to carry out a training process or develop their skills. So in this case the company needs to improve the quality of its employees, especially in the field of information technology to support the implementation of inaportnet implementation at ports.

## RESEARCH METHOD

The author conducted the research when the author carried out land practice in the Ciwandan Port area of Banten starting from August 2020 to February 2021. The research was conducted by the author at the Port of Ciwandan Banten which is included in the work area of KSOP Class I Banten. In the preparation of this thesis the author uses quantitative methods. The data that the author uses is quantitative data, there are two types of data, namely:

a. Primary data

According to Sugiyanto (2010:137) states that primary sources are data sources that directly provide data to data collectors. Data obtained from interviews, questionnaires distributed to respondents.

b. Secondary Data

According to Sugiyanto (2010:137) Secondary data is a data source that does not directly provide data to data collectors, for example through other people or through documents. Secondary data is ready-made data obtained from reading scientific literature that has a close relationship with the object of research, which is related to the Application of the Inaportnet System and Application Operator Skills on Ship Service Performance at the Port of Ciwandan Banten.

To obtain data in this study, the authors used the following methods: Observation; Questionnaire; Literature review; Documentation. According to Arikunto (2006) Purposive Sampling is a technique of taking samples not based on random, regional or strata, but based on considerations that focus on certain goals. In this case the author chose to use the Purposive Sampling Technique because the subject of this research focuses on users of inaportnet services with an age range of 18-60 years, especially in the Banten Port work area and for the number of users of inaportnet services as many as 60 people.

## FINDINGS AND DISCUSSION

### Data Description

#### Company overview

The port of Banten is located in the Sunda Strait, west coast of Java Island at a position: 06°01'03"LS -105°57'04"E, history records the presence of Banten Province which cannot be separated from the existence of the Old Banten Port which was once an international port in the 15th century. Banten, which is still in the form of a city, becomes a transit point for trade routes between countries, foreign ships arriving at the oldest port in Java.

Along with the development of the era, the Port of Banten is growing rapidly so that it becomes one of the largest commercial ports in Indonesia, its presence is increasingly recognized in the national and international maritime world with the increasing number of ship visits as a destination for docking and anchoring ships. Banten Port is included in the KSOP Class I Banten working area.

Vision: The creation of excellent service to support the smooth sea transportation at the Port of Banten as the backbone of economic life in the province of Banten.

Mission: Provide effective and efficient services that meet national and international standards; Provide effective and efficient services that meet national and international standards; Improve supervision of operational activities in the Port environment.

### **Description of Respondents' Responses regarding the Implementation of the Inaportnet System and Application Operator Skills on Ship Service Performance.**

In this study, the authors used 3 variables, namely the X1 variable (implementation of the inaportnet system), X2 (application operator supervision) and Y variable (ship service performance). In analyzing the data of this study, the authors used a data collection method using a questionnaire given to 60 respondents who were inaportnet service users who were in the Banten Harbor area. The following is a description of each variable:

#### **System Deployment (X1)**

The following is a response from the analysis of the X1 variable (implementation of the inaportnet system) based on the dimensions and indicators that have been determined. Variable system implementation consists of 6 indicators, namely: input, output, constraints, feedback, environment, and goals. The respondent's assessment analysis consists of 9 statement items, the following are the results of the respondents' answers that have been made:

#### **System Implementation Indicator No. 1**

It can be seen that the input indicators with the distribution of respondents' answers on the strongly agree (SS) scale are 34 people, the respondents' answers on the agree (S) scale are 23 people, the respondents' answers with a doubtful scale (RR) are 3 people, and none of them answered with a scale of disagree (TS) and strongly disagree (STS).

#### **System Implementation Indicator No. 2**

It can be seen that the output indicators with the distribution of respondents' answers on the scale of strongly agree (SS) are 26 people, the answers of respondents on the scale of agree (S) are 29 people, the answers of respondents with a scale of doubt (RR) are 5 people, and none answered with a scale of disagree (TS) and strongly disagree (STS).

#### **System Implementation Indicator No. 3**

It can be seen that the limit indicator with the distribution of respondents' answers on the strongly agree (SS) scale is 29 people, the respondents' answers on the agree (S) scale are 27 people, the respondents' answers with a doubtful scale (RR) are 4 people, and none of them answered with a scale of disagree (TS) and strongly disagree (STS).

#### **System Implementation Indicator No. 4**

It can be seen that the feedback indicator with the distribution of respondents' answers on a scale of strongly agree (SS) is 25 people, respondents' answers on a scale of agree (S) are 26 people, respondents' answers with a scale of doubt (RR) are 7 people, respondents with a scale of disagree (TS) amounted to 2 people and no one answered strongly disagree (STS).

#### **System Implementation Indicator No. 5**

It can be seen that the feedback indicator with the distribution of respondents' answers on the strongly agree (SS) scale is 29 people, the respondents' answers on the agree (S) scale are 24 people, the respondents' answers with a doubtful scale (RR) are 6 people, the answers of respondents with a scale of disagree (TS) no one answered and the answers of respondents with a scale of strongly disagree (STS) amounted to 1 person.

### **System Implementation Indicator No. 6**

It can be seen that the environmental indicators with the distribution of respondents' answers on a scale of strongly agree (SS) amounted to 35 people, respondents' answers on a scale of agree (S) amounted to 21 people, respondents' answers with a scale of doubt (RR) amounted to 2 people, respondents' answers with a scale of disagree (TS) totaled 2 people and no one answered strongly disagree (STS).

### **System Implementation Indicator No. 7**

It can be seen that the goal indicator with the distribution of respondents' answers on the scale of strongly agree (SS) is 29 people, the answers of respondents on the agree scale (S) are 25 people, the answers of respondents with a scale of doubt (RR) are 6 people, and none answered with a scale of disagree (TS) and strongly disagree (STS).

### **System Implementation Indicator No. 8**

It can be seen that the goal indicator with the distribution of respondents' answers on a scale of strongly agree (SS) is 36 people, respondents' answers on a scale of agree (S) are 21 people, respondents' answers with a scale of doubt (RR) are 3 people, and none answered with a scale of disagree (TS) and strongly disagree (STS).

### **System Implementation Indicator No. 9**

It can be seen that the objective indicator with the distribution of respondents' answers on the scale of strongly agree (SS) is 31 people, the answers of respondents on the scale of agree (S) are 23 people, the answers of respondents with a scale of doubt (RR) are 6 people, and none answered with a scale of disagree (TS) and strongly disagree (STS).

### **Operator Skills (X2)**

The following is a response from the analysis of the Application Operator Skills Variable (X2) based on the dimensions and indicators that have been determined.

#### **Operator Skill Indicator No. 1**

It can be seen that the indicator of proficiency with the distribution of respondents' answers on the scale of strongly agree (SS) is 27 people, the answers of respondents on the scale of agree (S) are 29 people, the answers of respondents with a scale of doubt (RR) are 4 people, and none answered with a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 2**

It can be seen that the indicator of proficiency with the distribution of respondents' answers on a scale of strongly agree (SS) is 27 people, respondents' answers on a scale of agree (S) are 30 people, respondents' answers on a scale of doubt (RR) are 3 people, and none answered with a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 3**

It can be seen that the indicator of the ability to complete work with the distribution of respondents' answers on a scale of strongly agree (SS) amounted to 27 people, respondents' answers on a scale of agree (S) amounted to 28 people, respondents' answers with a scale of doubt (RR) amounted to 4 people, respondents' answers with a scale of disagree (TS) amounted to 1 person and no one answered with a scale of strongly disagree (STS).

#### **Operator Skill Indicator No. 4**



It can be seen that the indicator of the ability to complete work with the distribution of respondents' answers on a scale of strongly agree (SS) amounted to 26 people, respondents' answers on a scale of agree (S) amounted to 29 people, respondents' answers with a scale of doubt (RR) amounted to 5 people, and no there are respondents who answered with a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 5**

It can be seen that the indicator of accuracy with the distribution of respondents' answers on the scale of strongly agree (SS) is 34 people, the answers of respondents on the scale of agree (S) are 20 people, the answers of respondents with a scale of doubt (RR) are 6 people, and there are no respondents. who answered on a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 6**

It can be seen that the indicator of experience with the distribution of respondents' answers on a scale of strongly agree (SS) is 28 people, respondents' answers on a scale of agree (S) are 28 people, respondents' answers with a scale of doubt (RR) are 4 people, and there are no respondents. who answered with a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 7**

It can be seen that the indicator of the ability to control oneself with the distribution of respondents' answers on a scale of strongly agree (SS) is 26 people, respondents' answers on a scale of agree (S) are 28 people, respondents' answers with a scale of doubt (RR) are 6 people, and no respondents answered with a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 8**

It can be seen that the indicator of confidence with the distribution of respondents' answers on the scale of strongly agree (SS) is 29 people, the answers of respondents on the scale of agree (S) are 27 people, the answers of respondents with a scale of doubt (RR) are 4 people, and none respondents who answered with a scale of disagree (TS) and strongly disagree (STS).

#### **Operator Skill Indicator No. 9**

It can be seen that the indicator of commitment with the distribution of respondents' answers on the scale of strongly agree (SS) amounted to 24 people, respondents' answers on the scale agreed (S) amounted to 30 people, respondents' answers with a scale of doubt (RR) amounted to 5 people, respondents' answers with a scale of disagree (TS) amounted to 1 person and no one answered with a scale of strongly disagree (STS).

#### **Ship Service Performance (Y)**

The following is a response from the analysis of the Y variable based on the dimensions and indicators that the author has determined.

#### **Ship Service Performance Indicator No. 1**

It can be seen that the indicators of physical appearance (tangible) with the distribution of respondents' answers on the strongly agree (SS) scale are 21 people, the respondents'

answers on the agree (S) scale are 32 people, the respondents' answers with a doubtful scale (RR) are 6 people, respondents with a scale of disagree (TS) amounted to 1 person and no one answered with a scale of strongly disagree (STS).

### **Ship Service Performance Indicator No. 2**

It can be seen that the indicators of physical appearance (tangible) with the distribution of respondents' answers on the scale of strongly agree (SS) amounted to 23 people, respondents' answers on the agree scale (S) amounted to 31 people, respondents' answers with a scale of doubt (RR) amounted to 6 people, and no one answered with a scale of disagree (TS) and strongly disagree (STS).

### **Ship Service Performance Indicator No. 3**

It can be seen that the reliability indicator with the distribution of respondents' answers on the strongly agree (SS) scale is 30 people, the respondents' answers on the agree (S) scale are 26 people, the respondents' answers with a doubtful scale (RR) are 4 people, and none of them answered with a scale of disagree (TS) and a scale of strongly disagree (STS).

### **Ship Service Performance Indicator No. 4**

It can be seen that the reliability indicator with the distribution of respondents' answers on the scale of strongly agree (SS) is 25 people, the answers of respondents on the agree scale (S) are 28 people, the answers of respondents with a scale of doubt (RR) are 7 people, and none of them answered with a scale of disagree (TS) and a scale of strongly disagree (STS).

### **Ship Service Performance Indicator No. 5**

It can be seen that the indicator of responsibility with the distribution of respondents' answers on the scale of strongly agree (SS) is 33 people, the answers of respondents on the scale of agree (S) are 20 people, the answers of respondents with a scale of doubt (RR) are 7 people, and none answered with a scale of disagree (TS) and a scale of strongly disagree (STS).

### **Ship Service Performance Indicator No. 6**

It can be seen that the indicator of assurance assurance with the distribution of respondents' answers on a scale of strongly agree (SS) is 25 people, respondents' answers on a scale of agree (S) are 22 people, respondents' answers with a scale of doubt (RR) are 11 people, respondents' answers with disagree scale (TS) amounted to 2 people and no one answered with a strongly disagree scale (STS).

### **Ship Service Performance Indicator No. 7**

It can be seen that the assurance assurance indicator with the distribution of respondents' answers on the strongly agree (SS) scale is 29 people, the respondents' answers on the agree (S) scale are 27 people, the respondents' answers with the doubtful scale (RR) are 4 people, and none. who answered with a scale of disagree (TS) and a scale of strongly disagree (STS).

### **Ship Service Performance Indicator No. 8**

It can be seen that the assurance assurance indicator with the distribution of respondents' answers on the strongly agree (SS) scale is 34 people, the respondents' answers on the agree (S) scale are 24 people, the respondents' answers with the undecided scale (RR) are 2 people, and none. who answered with a scale of disagree (TS) and strongly disagree (STS).

### Ship Service Performance Indicator No. 9

It can be seen that the assurance indicator with the distribution of respondents' answers on the strongly agree (SS) scale is 29 people, the respondents' answers on the agree (S) scale are 26 people, the respondents' answers on the undecided scale (RR) are 5 people, and none who answered with a scale of disagree (TS) and a scale of strongly disagree (STS).

### Description of Essay Answer Result Data

In your opinion, is the implementation of inaportnet at the port effective? If not, what should be improved? Based on the respondents' answers, it can be seen that there are 48 respondents or 80% of respondents who answered that it was effective and 12 respondents or 20% of respondents who answered that it was not effective. So it can be concluded that the respondents or service users agree that the implementation of the portnet system at the port has been fully effective.

In your opinion, what factors affect the effectiveness of services using the inaportnet system? Based on the short answers answered by the respondents, it can be concluded that the factors that affect the effectiveness of services using the system are HR factors, operator performance and skills, internet network connections, delays in the inaportnet application system, and ship service time using the system.

### Validity test

This validity test is used to determine the level of validity of a questionnaire used in data collection. The questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire (Ghozali, 2013: 52). The significant test was carried out by comparing the calculated  $r$  value with the  $r$  table value for degree of freedom ( $df = n - 2$ ), in this case the number of samples. The number of samples ( $n$ ) in this study was 60, so the magnitude of  $df$  was  $60 - 2 = 58$ , with a significance level of 5%.

Testing the validity of each item used item analysis, which correlated each score for each item with a total score which is the sum of each item score and the value can be seen in the processing results using SPSS 26.0 in the item total statistics table in the corrected item-total correlation column. A statement is declared valid if the calculated value which is the corrected item-total correlation value (in SPSS 26.0) is greater than  $r_{table}$ . To find this out, the author uses the Bivariate Pearson correlation method (Pearson Moment Product). In this case, the  $r_{table}$  is 0.2542. If the result of  $r_{count}$  is greater than  $r_{table}$ , namely 0.2542, then the data can be said to be valid. The results of the validity test can be seen in the following table:

### Inaportnet System (X1)

Table 1. Validitas Variabel Penerapan Sistem Inaportnet (X1)

Validitas Butir-Butir Pernyataan Kuesioner			
No item	Corrected Item Total Correlation ( $r_{hitung}$ )	$r_{tabel}$	Validitas
item 1	0,501	0,254	<b>VALID</b>
item 2	0,800	0,254	<b>VALID</b>
item 3	0,666	0,254	<b>VALID</b>
item 4	0,690	0,254	<b>VALID</b>
item 5	0,624	0,254	<b>VALID</b>
item 6	0,480	0,254	<b>VALID</b>
item 7	0,725	0,254	<b>VALID</b>
item 8	0,588	0,254	<b>VALID</b>
item 9	0,692	0,254	<b>VALID</b>



In the table above, the  $r_{table}$  is 0.254 with  $\alpha = 0.05$ . After being compared with  $r_{count}$ , it can be proven that all statements are valid.

### Application Operator Skills (X2)

#### Application Operator Skills Variable Validity Test Results (X2)

In the table above, the  $r_{table}$  is 0.254 with  $\alpha = 0.05$ . After being compared with  $r_{count}$ , it can be proven that all statements are valid.

**Table 2. Variable Validity Test Results (X2)**

<b>Validitas Butir-Butir Pernyataan Kuesioner</b>			
<b>No item</b>	<b>Corrected Item Total Correlation (<math>r_{hitung}</math>)</b>	<b><math>r_{tabel}</math></b>	<b>Validitas</b>
item 1	0,666	0,254	<b>VALID</b>
item 2	0,745	0,254	<b>VALID</b>
item 3	0,821	0,254	<b>VALID</b>
item 4	0,833	0,254	<b>VALID</b>
item 5	0,765	0,254	<b>VALID</b>
item 6	0,805	0,254	<b>VALID</b>
item 7	0,783	0,254	<b>VALID</b>
item 8	0,730	0,254	<b>VALID</b>
item 9	0,710	0,254	<b>VALID</b>

### Ship Service Performance (Y)

#### Application Operator Skills Variable Validity Test Results (X2)

In the table above, the  $r_{table}$  is 0.254 with  $\alpha = 0.05$ . After being compared with  $r_{count}$ , it can be proven that all statements are valid.

**Table 3. Variable Validity Test Results (X2)**

<b>Validitas Butir-Butir Pernyataan Kuesioner</b>			
<b>No item</b>	<b>Corrected Item Total Correlation (<math>r_{hitung}</math>)</b>	<b><math>r_{tabel}</math></b>	<b>Validitas</b>
item 1	0,724	0,254	<b>VALID</b>
item 2	0,731	0,254	<b>VALID</b>
item 3	0,744	0,254	<b>VALID</b>
item 4	0,746	0,254	<b>VALID</b>
item 5	0,737	0,254	<b>VALID</b>
item 6	0,797	0,254	<b>VALID</b>
item 7	0,796	0,254	<b>VALID</b>
item 8	0,762	0,254	<b>VALID</b>
item 9	0,744	0,254	<b>VALID</b>

In the table above, the  $r_{table}$  is 0.254 with  $\alpha = 0.05$ . After being compared with  $r_{count}$ , it can be proven that all statements are valid.

### Reliability Test

The reliability test aims to determine whether the data collection tool basically shows the accuracy, stability, or consistency of the tool in revealing certain symptoms from a group of individuals, even though it is carried out at different times.

In determining the level of reliability of a research instrument, generally reliability in the range  $> 0.60$  to  $0.80$  is good, and in the range  $> 0.80$  to  $1.00$  is considered very good (Santoso, 2001:227). To determine the reliability of the question items, the variables were tested with the SPSS 26.00 computer program using the Cronbach's Alpha formula.

### Variable Reliability Test Results Inaportnet System Implementation (X1)

Table 4. Reliability Statistics	
Cronbach's Alpha	N of Items
0,817	9

Based on the table above, it can be concluded that the Cronbach Alpha value is 0.817 > 0.60, so the questionnaire is declared reliable.

### Reliability Test Results of Application Operator Skill Variables (X2)

Table 5. Reliability Statistics	
Cronbach's Alpha	N of Items
0,909	9

Based on the table above, it can be concluded that the Cronbach Alpha value is 0.909 > 0.60, so the questionnaire is declared reliable.

### Results of Reliability Test for Ship Service Performance Variables (Y)

Table 6 Reliability Statistics	
Cronbach's Alpha	N of Items
0,903	9

Based on the table above, it can be concluded that the Cronbach Alpha value is 0.903 > 0.60, so the questionnaire is declared reliable.

### Homogeneity Test

Homogeneity test is a test of whether or not the variances of two or more distributions are equal. Homogeneity test is usually used as a requirement in independent analysis of sample T Test and ANOVA.

Table 7. Test of Homogeneity of Variances					
		Levene	df1	df2	Sig.
		Statistic			
Hasil X1 dan X2	Based on Mean	1.384	1	118	.242
	Based on Median	1.049	1	118	.308
	Based on Median and with adjusted df	1.049	1	116.436	.308
	Based on trimmed mean	1.519	1	118	.220

### Correlations Test

The correlation test aims to determine the level of closeness of the relationship between one independent variable (X) to one dependent variable (Y). The value of the correlation coefficient ranges from (-1 R 1). If it is close to 1 then the relationship is getting closer, on the contrary, if it is close to 0 then the relationship is getting weaker.

Based on the table above, it can be seen that the value of the multiple correlation coefficient between the influence of the application of the inaportnet system (X1) and ship service performance (Y) is obtained at 0.639 which shows a strong influence and is in the interval (0.60-0.799), then the correlation coefficient value between application operator

skills (X2) and ship service performance (Y) of 0.686 which shows a strong influence in the interval (0.60-0.799).

### **Regression Test**

#### **a) Regression of X1 against Y (Simple)**

T count > T table = valid

The effect of X1 on Y is  $0.000 < 0.05$  and the t value is  $6.324 > 2.002$ . so it can be concluded that H0 is rejected and H1 is accepted which means there is an influence between X1 on Y.

Based on the results of the calculations carried out, it was obtained that a was 9,807 and b was 0,740. The form of a simple linear regression equation is as follows:

$$\hat{Y} = 9.807 + 0.740X_1$$

From the regression equation, it can be seen that the effect of the application of the inaportnet system on the performance of ship services is unidirectional (positive), this is indicated by the regression coefficient or the value of b in the regression equation which shows a positive number of 0.740 which means that every increase in the application of the inaportnet system 1 units will be followed by an increase in ship service performance of 0.740 units. On the other hand, if the implementation of the inaportnet system decreases by 1 unit, the ship's service performance will tend to decrease by 0.740 units. And the value of the coefficient a (intercept) is 9,807 which means that if there is no application of the inaportnet system (X=0), it is estimated that the ship's service performance is 9,807 units.

#### **b) Regression of X2 against Y (Simple)**

T count > T table = valid

for the effect of X2 on Y is  $0.000 < 0.05$  and the t value is  $13,401 > 2.002$ . so it can be concluded that H0 is rejected and H2 is accepted which means that there is an influence between X2 on Y.

Based on the results of the calculations carried out, it was obtained that a was 4.254 and b was 0.887. The form of a simple linear regression equation is as follows:

$$\hat{Y} = 4,254 + 0,887X_2$$

From the regression equation, it can be seen that the effect of application operator skills on ship service performance is unidirectional (positive), this is indicated by the regression coefficient or the value of b in the regression equation which shows a positive number of 0.887 which means that every increase in operator skills is 1 unit. will be followed by an increase in ship service performance of 0.887 units. On the other hand, if the operator's skills decrease by 1 unit, the ship's service performance will tend to decrease by 0.887 units. And the value of the coefficient a (intercept) is 4.254, which means that if there is no application operator skill (X=0), it is estimated that the ship's service performance is 4.254 units.

#### **c) Regeresi Linier Berganda (X1 dan X2 terhadap Y)**

Based on the results of calculations using SPSS 26.00, it is obtained that a is 2.640 and b1 is 0.102 and b2 is 0.825. The form of the multiple linear regression equation is as follows:

$$Y = 2.640 + 0.102X_1 + 0.825X_2$$

From the regression equation above, it can be seen that the effect of implementing the inaportnet system on the performance of ship services at the Ciwandan Port of Banten is unidirectional (positive), this can be seen in the regression coefficient or the value of b1 which shows a positive number of 0.102, which means every increase of 1 unit in the implementation of the inaportnet system will be followed by an increase in ship service performance at the Port of Ciwandan Banten by 0.102 units. Vice versa, if the

implementation of the inaportnet system decreases by 1 unit, the ship's service performance will tend to decrease by 0.102 units.

From the regression equation above, it can be seen that the influence of application operator skills on ship service performance at the Ciwandan Port of Banten is unidirectional (positive), this can be seen in the regression coefficient or  $b_2$  value which shows a positive number of 0.825, which means every increase of 1 unit in application operator skills will be followed by an increase in ship service performance at the Ciwandan port of Banten by 0.825 units. Vice versa, if the skill of the application operator has decreased by 1 unit, the ship's service performance will tend to decrease by 0.825 units.

The value of a coefficient is 2.640, which means that if there is no application of the inaportnet system and application operator skills ( $X_1$  and  $X_2 = 0$ ), it is estimated that the performance of ship services at the Ciwandan Port of Banten is 2,640 units and shows positive results.

### **F TEST**

The results of data processing in Table 4.52 it is known that the  $F_{count}$  value of 85,419 is greater than  $F_{table}$  of 3.16 with a significance value of 0.000 then the hypothesis is accepted. This means that the variables of the application of the inaportnet system and the skills of the operator have a positive influence on the performance of ship services.

### **Coefficient of Determination Test**

#### **The coefficient of determination $X_1$ against $Y$**

By looking at the results of the above calculation where  $R$  square is 0.408 or 40.8%. This shows the magnitude of the positive influence of the application of the system on the performance of ship services by 40.8% while the remaining 59.2% is the influence of other factors.

#### **The coefficient of determination $X_2$ against $Y$ .**

By looking at the results of the above calculation where  $R$  square is 0.746 or 74.6%. This shows the magnitude of the positive influence of operator skills on ship service performance of 74.6% while the remaining 25.4% is the influence of other factors.

#### **Coefficient of determination $X_1$ and $X_2$ to $Y$**

With the results of the above calculation where  $R$  square is 0.750 or 75%. This shows the magnitude of the positive influence of the implementation of the inaportnet system and operator skills on service performance by 75% while the rest is the influence of other factors.

### **Troubleshooting**

This study seeks to obtain an overview of the effect of the application of the inaportnet system and application operator skills on the performance of ship services at the Ciwandan Port of Banten. From the test results obtained the following discussion:

#### **Effect of Inaportnet System Implementation on Ship Service Performance**

The effect of implementing the inaportnet system on ship service performance has a positive and significant effect with a regression coefficient of 0.639 with the regression equation  $X_1$  against  $Y$  (simple) the value =  $9.807 + 0.740X_1$ . From the simple linear regression equation, it can be seen that if the application of the inaportnet system increases by one unit, the performance of ship services at the Port of Ciwandan Banten will increase by 0.740 units. The first hypothesis in this study shows that the  $t_{count}$  value of 6.324 is greater than  $t_{table}$  of 2.002, which means that the application of the system has a positive effect on

ship service performance, so the first hypothesis is accepted. With the most dominant indicator reflecting the system objective indicator with an average value of 4.55, while the lowest indicator is the feedback indicator which has an average value of 4.33. This means that the ship's service performance will be better if the implementation of inaportnet is good too.

### **The Effect of Application Operator Skills on Ship Service Performance**

The effect of operator skills on ship service performance has a positive and significant effect with a regression coefficient of 0.864 with the regression equation  $X_2$  against  $Y$  (simple) the value of  $= 4.254 + 0.887X_2$ . From the simple linear regression equation, it can be seen that if the skill of the operator increases by one unit, the ship's service performance at the Port of Ciwandan Banten will increase by 0.887 units. The second hypothesis in this study shows the  $t_{count}$  value of 13,401 is greater than  $t_{table}$  of 2,002, which means that application operator skills have a positive effect on ship service performance, so the second hypothesis is accepted. The most dominant dimension reflecting is the skill dimension with the application operator accuracy indicator which has an average value of 4.47, while the lowest dimension is the personality dimension with the commitment indicator which has an average value of 4.28. This means that the higher the skill of the application operator in using the inaportnet system, the higher and better the ship service performance will be

### **The Effect of Implementing the Inaportnet System and the Skills of Application Operators Together on Ship Service Performance**

The effect of the application of the inaportnet system and the skills of the application operator together on the performance of ship services has been proven to have a positive and significant effect. Regression equations  $X_1$  and  $X_2$  to  $Y$  (double) obtained the value of  $= 2.640 + 0.102X_1 + 0.825X_2$ . From the regression equation, it can be seen that the value of  $b_1$  which shows a positive number is 0.102 units, which means that if the application of the inaportnet system increases by one unit, it will be followed by an increase in ship service performance at the Ciwandan Port of Banten by 0.102 units. Likewise, if the application of the inaportnet system has decreased by one unit, then service performance will tend to decrease by 0.102 units.

From the regression equation, it can be seen that the effect of operator skills on ship service performance is unidirectional (positive), this is shown in the value of  $b_2$  in the regression equation which shows a positive number of 0.825 units which means that every increase in operator skills one unit will be followed by an increase in performance. service of 0.825 units. Likewise, if the operator's skills decrease by one unit, the service performance will tend to decrease by 0.825 units.

The variable application of the system and operator skills together on the performance of ship services has an  $R^2$  value of 0.866 with a  $f_{count}$  of 85,419 which is greater than  $f_{table}$  of 3.16, which means that the application of the system and operator skills has a positive effect on the performance of ship services, so the third hypothesis is accepted. The contribution of the coefficient of determination is 75%. The most dominant variable is the operator skill variable ( $X_2$ ) with the most reflecting dimension being the skill dimension with the application operator accuracy indicator which has an average value of 4.47, while the lowest dimension is the personality dimension with the commitment indicator having an average value. an average of 4.28. If in the implementation the process of implementing the inaportnet system is carried out properly with a high level of application operator skills, it can improve the performance of ship services.



## CONCLUSION AND SUGGESTIONS

### Conclusion

Based on the results of research and discussion, the authors can draw the following conclusions:

The application of the inaportnet system (X1) has been proven to have a positive and significant effect on the performance of ship services (Y) with a regression coefficient value of 0.639 and is evidenced by the large value of  $t_{count} 6.324 > t_{table} 2.002$  which means that the application of the inaportnet system has a positive effect on the performance of ship services, so the hypothesis first (H1) is accepted. The regression equation X1 against Y obtained the value of  $= 9.807 + 0.740X1$ . From the simple linear regression equation, it can be seen that if the application of the inaportnet system increases by one unit, it will be followed by an increase in ship service performance of 0.740 units. The indicator that most dominantly reflects is the system objective indicator with an average value of 4.55, while the lowest indicator is the feedback indicator which has an average value of 4.33.

Application operator skills (X2) have been proven to have a positive and significant effect on ship service performance (Y) with a regression coefficient value of 0.864 and evidenced by the large value of  $t_{count} 13,401 > t_{table} 2,002$ , which means operator skills have a positive effect on service performance, so hypothesis H2 is accepted. .

The regression equation X2 against Y obtained the value of  $= 4.254 + 0.887X2$ . From the simple linear regression equation, it can be seen that if the operator's skill increases by one unit, it will be followed by an increase in ship service performance of 0.887 units. The most dominant dimension that reflects is the skill dimension with the highest indicator, namely the operator accuracy indicator which has an average value of 4.47, while the lowest dimension is the personality dimension with the commitment indicator which has an average value of 4.28.

Testing together on the three variables proved positive and significant as evidenced by the large Fcount value of  $85,419 > F_{table}$  value of 3.16, which means that the application of the inaportnet system and operator skills have a positive effect on ship service performance, so the third hypothesis (H3) received. Regression equations X1 and X2 to Y (double) obtained the value of  $= 2.640 + 0.102X1 + 0.825X2$ . From the regression equation, it can be seen that if the application of the inaportnet system increases by one unit, it will be followed by an increase in ship service performance by 0.102 units or if the operator's skills increase by one unit, it will be followed by an increase in ship service performance by 0.825 units. The contribution of the coefficient of determination (R<sup>2</sup>) is 75%, this shows the magnitude of the positive influence of the application of the inaportnet system and operator skills on ship service performance by 75% while the remaining 25% is the influence of other factors.

The most dominant variable is the operator skill variable (X2) with the most reflecting dimension being the skill dimension with the application operator accuracy indicator which has an average value of 4.47, while the lowest dimension is the personality dimension with the commitment indicator having an average value. an average of 4.28.

### Suggestions

Based on the discussion of the results of this study, the authors provide several suggestions for related parties. The suggestions proposed in writing this thesis are:

To KSOP Class I Banten:

- a. KSOP Class I Banten office must maintain the most dominant indicator of the three variables and must increase the low indicators so that the application of the inaportnet system can be maximized.
- b. The KSOP Class I Banten office must coordinate with the Directorate General of Sea Transportation to pay attention to system performance by adding new features to the

inaportnet system to make it easier for service users to access the system and avoid system errors while in use. The system update process will encourage the performance of the inaportnet system to be better and can encourage the implementation of the inaportnet system in ship services at the port to be more effective and efficient.

- c. Improve operator skills by conducting socialization, training, and technical guidance on the application of the inaportnet system to employees/operators in order to increase their skills and insight in operating the inaportnet system so that ship service performance can take place more quickly and efficiently.
- d. Improving the performance of ship services by providing competent guards and system operators so that when the data input process takes place it can run well.

Intended For Employees:

- a. Cultivate enthusiasm and high enthusiasm in participating in training so that the company can advance for the better.
- b. Employees / system operators can more intensively communicate everything that happens during the ongoing ship service process to customers so that customers can feel satisfaction from the service system provided, so that ship services will increase if customers are satisfied with the services provided.

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