Analysis Of The Influence Of Greenport Implementation On Service User Satisfaction At Pt Terminal Teluk Lamong Gresik Through The Image Of The Port Business Body

Djuliyanto[1*], Desman Adi[2], Aditya Putra Pratama[3], Wardoyo Dwi Kurniawan[4]

[1,2,3,4] Maritime Higher Education, Jakarta, Indonesia
*Corresponding Author:
Email: djuliyanto954@gmail.com

Abstract.
Teluk Lamong Terminal is the first semi-automatic terminal in Indonesia with environmentally friendly technology. Teluk Lamong Terminal was built as an implementation of the Tanjung Perak Port Development which is equipped with loading and unloading equipment using modern technology. This research aims to determine and develop the effect of implementing Greenport on service user satisfaction through the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal. The research strategy used in this research is quantitative with an explanatory research approach. The research sample was 155 service users at PT. Lamong Gresik Bay Terminal. The analysis tool used is SPSS for instrument testing and SEMPLS with SmartPLS to answer the problem formulation. The results of the research show that there is a significant positive influence of the application of Greenport on the image of the Port Business Entity. There is a significant positive influence of the application of Greenport on service user satisfaction. There is a significant positive influence of the image of the Business Entity on the satisfaction of service users. The image of the Port Business Entity is able to mediate the implementation of Greenport on satisfaction of service users at PT. Lamong Gresik Bay Terminal. It can be concluded that both directly and indirectly there is an influence of the implementation of Greenport on service user satisfaction through the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.

Keywords : *Port Business Entity Image, User Satisfaction services, and Implementation of Greenport.*

I. INTRODUCTION

Ports are key infrastructure in international trade, and the development of global ports has a significant impact on economic connectivity between countries. Indonesia, as an archipelagic country, has a strategic position in global trade routes, and the development of ports in Indonesia also influences the competitiveness of the national economy. Awareness of the importance of sustainable port management is increasing. The Ecoport concept emphasizes environmentally friendly management practices to maintain the ecosystem around the port. This emphasis on environmental aspects is an important part of the modern port development strategy.The Coordinating Ministry for Maritime Affairs and Investment (Marinves) is targeting the development of 149 ports into green ports and smart ports by 2024. The 149 ports consist of 112 ports under Pelindo and 37 ports under a number of agencies, including the private sector and the Ministry of Transportation. To date, the assessment process carried out by IDSurvey, namely PT Indonesian Classification Bureau (Persero) and PT Sucofindo for 10 ports has been completed. This means that there are already 10 ports that have been certified as green ports and smart ports. The green port and smart port facilities can be seen in the following picture:

Fig 1.1. Criteria green port and smart port
Source: Ministry of Maritime Affairs and Fisheries (2023)

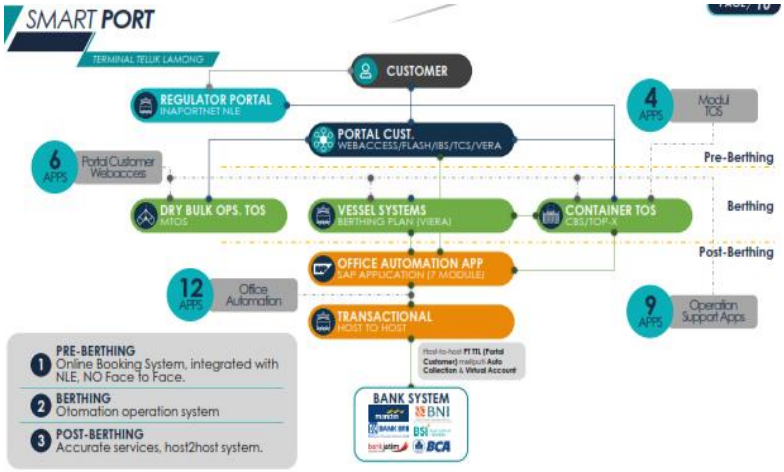
There are 112 under Pelindo and 37 under various agencies, including the Ministry of Transportation, the private sector and so on. I hope everything can be completed within the next 2 years. Efforts to meet Green Port and Smart Port standards so that Indonesian ports are able to compete on the international stage. Apart from targeting 149 ports to have green port and smart port status by 2024. He said, next year he hopes that 149 ports will be digitalized. Currently there are only 14 ports that have digitalized.

Identification of these problems becomes the basis for developing sustainable solutions. Problems in Greenport can include various things, such as:

1. Environmental problems, such as air and water pollution.
2. Difficulty in waste management.
3. Issues of sustainability and use of natural resources.
4. Social and economic impact on local communities.

The implementation of smart technology in port operations (Smartport) has a significant impact on efficiency and security. However, problems related to Smartport implementation need to be identified to ensure the sustainability and successful implementation of this technology. There is a picture of the smartport facilities at the Teluk Lamong Terminal.

Fig 1.3. Smartport at Teluk Lamong Terminal



Source: Teluk Lamong Terminal (2023)

Smartport problems usually involve:

1. Cybersecurity and data leak risk.
2. Integration and dependency on complex technologies.
3. Efficient and secure data management.
4. Adaptation to the latest technological developments.

The implementation of Greenport at PT Terminal Teluk Lamong is believed to have an influence on service user satisfaction. The relationship between the implementation of this concept and the company image can provide insight into how these aspects contribute to service users' positive perceptions of PT Terminal Teluk Lamong. Based on the description that has been presented, the researcher is interested in taking the title THE INFLUENCE OF GREENPORT IMPLEMENTATION ON SERVICE USER SATISFACTION AT PT TERMINAL TELUK LAMONG GRESIK THROUGH THE IMAGE OF THE PORT BUSINESS AGENCY.

II. LITERATURE REVIEW

2.1. Customer satisfaction

Customer satisfaction is defined as "a person's feelings of pleasure or disappointment resulting from comparing a product's perception of performance or results with his or her expectations" (Kotler et al., 2018). The theory of consumer behavior according to the microeconomic theory approach assumes that every consumer will try to obtain maximum satisfaction. They will try to continue purchasing a product if they have received satisfaction from the product they have consumed (Firmansyah, Anang, 2018).

2.2. Company Image

According to Ardianto (2016) corporate image is an impression that an organization has in total and comes from behavior and reputation. Abdel-Salam et al. (2010), namely the general impression left in the minds of customers as a result of a collection of feelings, ideas, attitudes and experiences with the company that are stored in memory. Corporate image is an impression that an organization has as a result of a collection of feelings, ideas, attitudes and experiences.

2.3. *Greenport*

According to Sasono (2021) a port is a place consisting of land and surrounding waters with certain limits as a place for government and industrial economic activities which are used as a place for berthing activities, boarding and descending of passengers, loading and unloading of goods which has complete facilities related to safety in shipping. and organizing various supporting activities for ports and transportation facilities.

2.4. Framework

Service user satisfaction is a subjective evaluation of the extent to which service users are satisfied with the services provided by the port. This can be influenced by various factors, including operational efficiency, service quality, facility availability, and others.Company image is the perception that service users have of the company's reputation and identity. A company's image can be influenced by the sustainable practices (such as Greenport) and advanced technologies (such as Smartport) adopted by the company.

*Greenport*is an approach that focuses on sustainable practices in port operations. This includes the use of environmentally friendly technologies, efficient waste management, emission reduction and other green practices in port activities. The implementation of Greenport at PT Terminal Teluk Lamong, Gresik, will include efforts such as the use of renewable energy, good waste management and environmental protection around the port.The thinking framework is a conceptual model of how theory relates to various factors that have been identified as important problems, so the research thinking framework can be seen in Figure 2.1 below:

This framework of thinking can be described as follows:

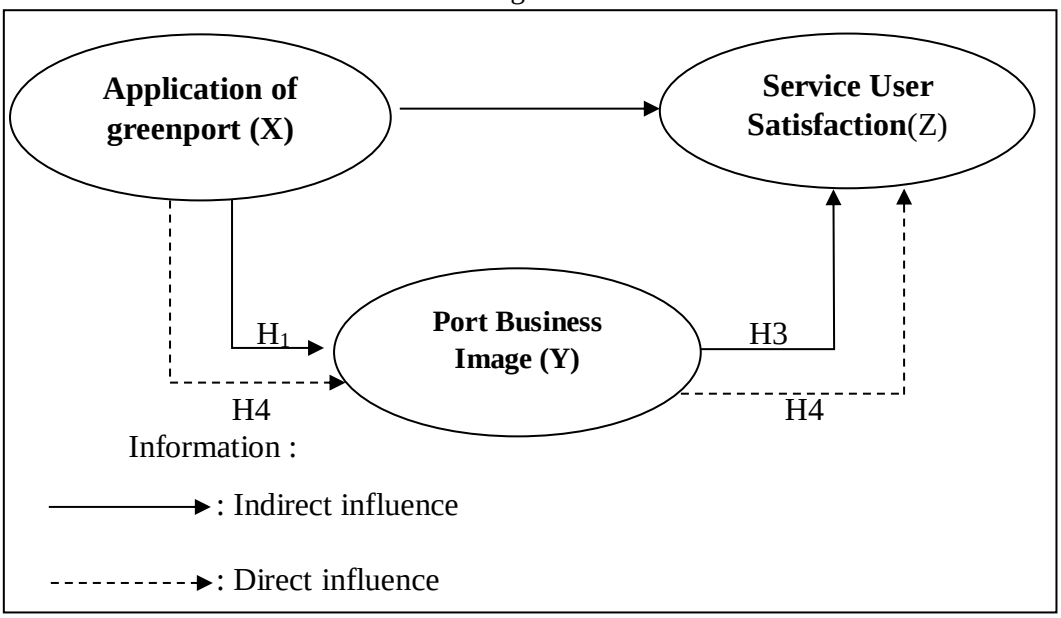


Fig 2.1. Conceptual Framework

2.5. Hypothesis

A hypothesis is a temporary statement that needs to be proven true or not (Umar, 2013:67). The hypotheses put forward in this research are:

H1 Suspected implementation *Greenport* influence the image of the Port Business Entity at PT Terminal Teluk Lamong Gresik

H2 Suspected implementation *Greenport* influence on service user satisfaction at PT Terminal Teluk Lamong Gresik

H3 It is suspected that the image of the Port Business Entity influences the satisfaction of service users at PT Terminal Teluk Lamong Gresik

H4 Suspected implementation *Greenport* influence on service user satisfaction through the image of the Port Business Entity at PT Terminal Teluk Lamong Gresik

III. METHODS

3.1. DesignStudy

The research strategy used in this research is a research strategy with an associative strategy and a quantitative approach. Associative research according to Sugiyono, (2019: 65) is research that aims to determine the relationship between two or more variables. In quantitative research, data analysis is an activity where all data sources and other respondents are collected.

3.2. Population and Sample

According to Sugiyono, (2019) population is a generalized area and consists of objects or subjects with certain numbers and characteristics that have been determined by researchers to be investigated and conclusions drawn.Sugiyono, (2019: 126) states that "the area of generalization consisting of objects or subjects that have certain qualities and characteristics determined by research to be studied and then conclusions drawn is called population".In this research, the population is differentiated between the general population and special populations. The special population in this research is the population or region that is the target of the research. The general population in this research is all service users of PT Terminal Teluk Lamong, while the special population in this research is all users of PT Terminal Teluk Lamong services at Tanjung Perak Port, totaling 155 people from 7 or 6 people each from 23 shipping companies. line, EMKL and Freight Forwarders, Trucking Companies, and Consigne as service users.

Table 3.2. Research Population

No	COMPANY	Respondent
Shipping lines		
1	PT Temas Shipping	7
2	PT Meratus Line	7
3	PT Cosco Shipping Lines Indonesia	7
4	PT Sinokor Merchant Marine	7
5	OOCL	7
EMKL and Freight Forwarders		
1	PT Antar Benua Cahaya	7
2	PT Oirgantara Surya Persada	7
3	PT Perwinda Transcotama	7
4	PT Putra Bhakti lkutubo	7
5	PT Korman Wahana Transindo	7
6	PT Artha Berkat Mulia	7
7	PT Awan Samudera Lestari	7
8	PT Delta Mitra Semesta	7
Trucking Company		
1	PT Berkah Multi Cargo	7
2	PT. Build Transportation Facilities	7
3	PT. Indra Jaya Swastika	7
4	PT. Tungya PerkasaF.F	7
Consigne		
1	PT Wilmar Nabati Indonesia	6
2	PT Tjiwi Komia Paper Factory Tbk	6
3	PT. Indonesian Paper Factory	6
4	PT. The Holy Sun	6
5	PT. IMR ARC STEEL	6
6	PT Segar Kumalam Persada	6

The sampling technique used in this research was obtained using a nonprobability sampling technique with saturated sampling. Researchers used this sampling technique because the population was 155 customers or port service users. According to Riduwan (2012: 64), "saturated sampling is a sampling technique when the

entire population is used as a sample and is also known as a census". So saturated sampling was carried out with a sample of 155 service users. Sampling was taken by a number of companies involved in activities at the Teluk Lamong Terminal

3.3. Data Processing and Data Analysis Techniques

Researchers used data analysis in the form of descriptive data analysis using Smart PLS software. version 4.0. Researchers chose to use this software so that calculation results could be obtained better and more easily.

3.3.1. Descriptive Analysis

Sugiyono (2017:142) states that Descriptive Analysis is a statistical method for analyzing data by describing or describing data without intending to generalize conclusions that apply to the general public.Descriptive statistics in this research were obtained from respondents through a questionnaire that had been given and processed into a picture in descriptive form to provide information about the characteristics or characteristics of the main research variables.

3.3.2. Statistical Analysis of Data

The instrument testing method in the research is a validity and reliability test using smart PLS 4.0 software with the partial least squares (PLS) method to make it easier to manage data correctly and can also be measured with the specified number of samples (100). Partial Least Square PLS can also be used to explain whether or not there is a relationship between variables. The purpose of Partial Least Square (PLS) is to help researchers to obtain latent variable values for prediction purposes.

1. Evaluation of the Outer Model Measurement Model

According to Ghozali (2018:51) Validity tests are used to determine whether a research questionnaire is valid or not. A questionnaire is said to be valid if the questions in the questionnaire are able to reveal something that will be measured by the questionnaire.In evaluating the Outer Model measurement model, in this modeling there are three tests that must be met, namely convergent validity, discriminant validity and composite reliability.

Validity test

The validity test is used to measure whether the research instrument (statement in the form of a questionnaire) can be used to measure what should be measured Sugiyoni (2017). If the validity value is greater or higher, the more valid the research is.

a. Convergent validity

Convergent validity is a validity test for reflective indicators that can be carried out using the correlation between the indicator value and the construct value. Measurement with reflective indicators shows that there is a change in an indicator in a construct if other indicators in the same construct change. According to Ghozali (2018: 25), a correlation can be said to meet convergent validity if it has a loading value of more than 0.7. The output shows that the loading factor provides a value above the recommended value, namely 0.7, Communality > 0.5 and Average Variance Extracted (AVE) > 0.5. So that the indicators used in this research have met convergent validity.

b. Discriminant Validity

Discriminant Validity is a cross loading value in order to determine adequate discriminant constructs by knowing that the comparison of loading values for the targeted construct is greater than the loading values for other constructs. Ghozali (2014).Cross loading is the first approach in assessing discriminant validity, namely by looking at the cross loading value. If the loading value of each item on the construct is greater than the cross loading value, it shows that the latent construct predicts the size of their block better than the size of other blocks.

Reliability Test

The reliability test is to measure a questionnaire which is an indicator of a variable or construct Ardista (2021). A questionnaire is said to be reliable if the respondent's answer to a statement is constant or stable. In SEM-PLS analysis, measuring reliability is carried out in two ways, namely Cronbach's alpha and composite reliability.

a. Cronbach's alpha Cronbach's alpha is a group of indicators that measure a variable that has good reliability based on the Cronbach's alpha value. The Cronbach's alpha value is said to be reliable if the Cronbach's alpha value for each variable is above 0.60 Janadari et al., (2018).

b. Composite reliability is a group of indicators that measure a variable as having good reliability based on the composite reliability value. The composite reliability value is said to be reliable if the composite reliability value for each variable is above 0.70 Janadari et al, (2018).

2. Inner Model Analysis (Structural Model Evaluation)

Inner model analysis is also known as structural model analysis, testing the inner model aims to identify and see the relationship between exogenous and endogenous variables in a study. Evaluation of the structural model in SEM with PLS was carried out by carrying out the R-squared test (R2) and significance testing by estimating path coefficients. Ghozali (2018: 27). Changes in the R-Squares value are used to assess the influence of certain independent variables on the dependent variable whether they have a substantive influence.

a. Coefficient Determination

The Determination Coefficient (R2) is a value that shows the magnitude of the relationship or correlation between variables Fathussyaadah & Ratnasari (2019). The range of r-squared values is between 0 < R2 < 1. If it is closer to the number I, the stronger the relationship and vice versa. The coefficient of determination used is the r-squared value because it is more reliable when evaluating the regression model.
The R-Squared value can increase or decrease if an independent variable is added to the model. The Coefficient of Determination (R2) value is said to be good with a score of 0.75, the value said to be moderate has a score of 0.50, while the value said to be weak has a score of 0.25. Ghozali (2014).

b. Path Coefficient

Done using comparing t count with t table. Comparison of t count and t table is used to determine whether or not there is an influence between variables. The calculated t value was obtained from the results of boot strupping using the Smart PLS application. Testing using boot straps also aims to minimize the problem of abnormalities for researchers.The path coefficient value provides a significant level in hypothesis testing. The path coefficient score aimed at using the t-statistic value must be above 1.96 for a hypothesis above 1.96. To test the hypothesis in this study, a p-value of a = 5% and a t-statistic value of 1.96 are used to determine the criteria for accepting or rejecting the hypothesis, namely Ha is accepted and HO is rejected when the t statistic is 1.96. The hypothesis is declared acceptable if the P value is <0.05

3. Hypothesis test

Hypothesis testing is a statement about a population whose truth needs to be tested. By taking a sample from that population, the statistical results from the sample are used to test the population's statement. Probability value with a p-value of less than 0.05 or 5%. The t-table value is more than 1.96 so the hypothesis criterion is when the t-statistical value is greater than Ghozali's (2014) t-table.An influence hypothesis tests whether one variable has a direct (unmediated) effect on another variable. If the path coefficient is positive, increasing one variable usually increases the other variable. Statistically, a rejected hypothesis can be calculated through its significance level. If the path coefficient is negative, this indicates that when there is an increase in one variable, there is usually a decrease in the value of the other variable.
In this research, the significance level or confidence level chosen is 5% or 0.05, meaning the possibility of making an error in the decision and 95% is the correct decision. The significance of the relationship between variables can be seen from the T-statistics value => 1.96 at a significance level = <0.05 Hairetal (2019). The following is a description of hypothesis testing as follows:
Ho: This means that there is no significant influence of the independent variable on the dependent variable.
H1: This means that there is a significant influence of the independent variable on the dependent variable.

The following is a description of the decision making criteria, namely:

a. If the p-value is > 0.05 then there is no significant influence of the independent variable on the dependent variable. This means accepting H0 and rejecting H1.

b. If the p-value <0.05 then there is a significant influence between the independent variable and the dependent variable. This means accepting H1 and rejecting H0.

P-value or Probability Value is an opportunity or probability value which shows the probability that data will be collected in the population, namely 5% or 0.05, meaning the possibility of making an error decision and 95% is the correct decision.

IV. RESULTS AND DISCUSSION

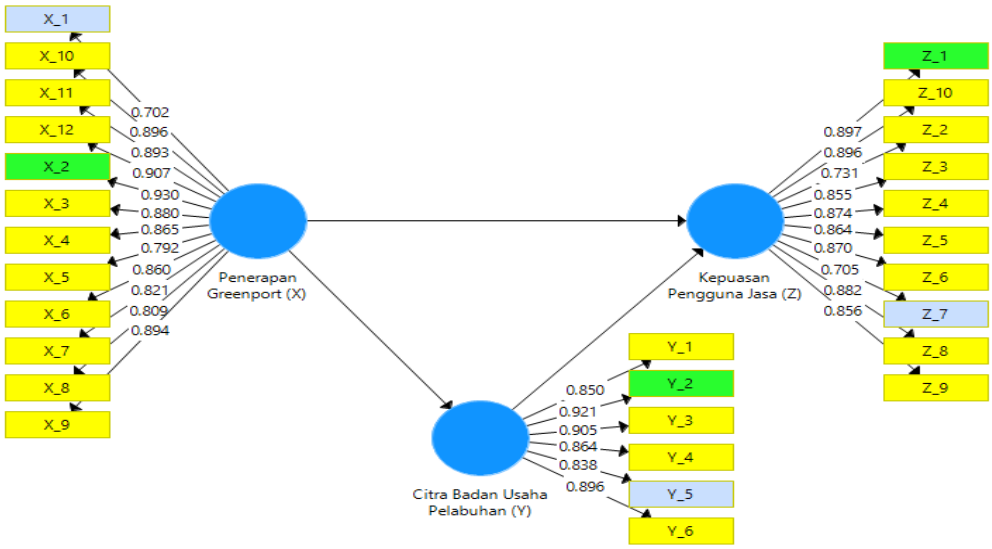
4.1. Research result

To test the influence of intervening variables, the path analysis method is used, which is an extension of multiple linear regression analysis, or path analysis is the use of regression analysis to estimate causal relationships between variables (casual model) that have been previously determined based on theory and determine the pattern of relationships between three or more variables. and cannot be used to confirm or reject a hypothesis.The statistical method used to test the hypothesis in this research is Partial Least Square (PLS). PLS is an alternative method of analysis using variance-based Structural Equation Modeling (SEM). The advantage of this method is that it does not require assumptions and can be estimated with a relatively small sample size.In Structural Equation Modeling there are two types of models formed, namely the measurement model (outer model) and the structural model (inner model).

The measurement model explains the proportion of variance of each manifest variable (indicator) that can be explained in the latent variable. Through the measurement model, it will be known which indicators are dominant in forming latent variables. After the measurement model for each latent variable has been described, the next step is to describe the structural model which will examine the influence of each exogenous latent variable on the endogenous latent variable. In this research, there are 28 manifest variables and 3 latent variables, namely the implementation of Greenport (X) which is measured by 12 manifest variables, the image of the Port Business Entity (Y) which is measured by 6 manifest variables, Service user satisfaction (Z) which is measured by 10 variables manifest.The tool used is the Smart PLS Version 3.2.9 program which is specifically designed to estimate structural equations on a variance basis.

4.1.1. Measurement Analysis (Outer Model)

*Outer Model*carried out to assess the validity and reliability of the model. The Outer Model with reflexive indicators is evaluated through Convergent Validity and Discriminant Validity of the indicators forming the latent construct and Composite Reliability for the indicator block.



Source: Smart PLS Program Output (2023)

Fig 4.1. Outer Model

From the results of the loading factor data processing which can be seen in Figure 4.1 above, it is said to be valid, meaning that it has fulfilled the rule of thumb, which means that the loading factor value for each indicator has a value greater than 0.7. Below is an explanation of the loading factor values for each indicator which has the largest and lowest values.The Greenport implementation indicator which has the largest loading factor value is in the statement X_2 of 0.930. Meanwhile, the lowest indicator is at X_1 of

0.702. This shows that each indicator of Greenport implementation is valid in measuring the construct so that it can be used in research.The Port Business Entity image indicator which has the largest loading factor value is in the Y_2 statement of 0.921. Meanwhile, the lowest indicator is at Y_5 at 0.838. This shows that each Port Business Entity image indicator is valid in measuring the construct so that it can be used in research.The service user satisfaction indicator that has the largest loading factor value is in the Z_1 statement of 0.897. Meanwhile, the lowest indicator is at Z_7 at 0.705. This shows that each indicator of service user satisfaction is valid in measuring the construct so that it can be used in research.Validity test is a test used to show the extent to which the measuring instrument used measures what is being measured. Validity test is used to measure whether a questionnaire is valid or not.

1. Validity test

1) *Convergent Validity*

Convergent validity aims to determine the validity of each relationship between indicators and their constructs or latent variables. The convergent validity of the measurement model with reflexive indicators is assessed based on the correlation between the item score or component score and the latent variable score or construct score estimated with the PLS program.*Rule of Thumb*which is usually used to assess convergent validity, namely the loading factor value must be more than 0.70, however, at the scale development stage research, loadings of 0.50 to 0.60 are still acceptable (Ghozali, 2016: 74). To see the results of the loading factor, see table 4.1

Table 4.1. Outer Loadings

	Body Image Port Business (Y)	**Satisfaction Service User (Z)**	**Application *Greenport*(X)**
X_1			0.702
X_10			0.896
X_11			0.893
X_12			0.907
X_2			0.930
X_3			0.880
X_4			0.865
X_5			0.792
X_6			0.860
X_7			0.821
X_8			0.809
X_9			0.894
Y_1	0.850		
Y_2	0.921		
Y_3	0.905		
Y_4	0.864		
Y_5	0.838		
Y_6	0.896		
Z_1		0.897	
Z_10		0.896	
Z_2		0.731	
Z_3		0.855	
Z_4		0.874	
Z_5		0.864	
Z_6		0.870	
Z_7		0.705	
Z_8		0.882	
Z_9		0.856	

Source: Smart PLS Program Output (2023)

Based on table 4.1, it shows that variable indicators whose loading value is greater than 0.70 have a high level of validity, so they meet convergent validity. Thus the analysis continues with the Average Variance Extracted (AVE) test and the Discriminant Validity test.

2. *Discriminant Validity*

Discriminant validity is used to ensure that each concept of each construct or latent variable is different from other variables. According to Latan and Ghozali (2012), a model has good discriminant

validity if the correlation value of the construct with the measurement item is greater than the correlation value with other constructs. The table below shows the discriminant validity results of the research model by looking at the cross loading value.

Table 4.2. *Cross Loading*

	Body Image Port Business (Y)	**Satisfaction Service User (Z)**	**Application *Greenport*(X)**
X_1	0.634	0.700	0.702
X_10	0.867	0.861	0.896
X_11	0.807	0.818	0.893
X_12	0.840	0.865	0.907
X_2	0.884	0.910	0.930
X_3	0.863	0.785	0.880
X_4	0.765	0.799	0.865
X_5	0.751	0.751	0.792
X_6	0.785	0.799	0.860
X_7	0.741	0.757	0.821
X_8	0.732	0.772	0.809
X_9	0.868	0.864	0.894
Y_1	0.850	0.756	0.827
Y_2	0.921	0.897	0.872
Y_3	0.905	0.895	0.855
Y_4	0.864	0.774	0.838
Y_5	0.838	0.771	0.814
Y_6	0.896	0.854	0.812
Z_1	0.890	0.897	0.850
Z_10	0.811	0.896	0.864
Z_2	0.658	0.731	0.703
Z_3	0.789	0.855	0.806
Z_4	0.857	0.874	0.832
Z_5	0.819	0.864	0.849
Z_6	0.853	0.870	0.825
Z_7	0.647	0.705	0.617
Z_8	0.834	0.882	0.871
Z_9	0.841	0.856	0.822

Source: Smart PLS Program Output (2023)

Based on the data presented in table 4.2 above, it can be seen that each indicator in the research variable has the largest cross loading value on the variable it forms compared to the cross loading value on the other variables. Based on the results obtained, it can be stated that the indicators used in this research have good discriminant validity in compiling their respective variables.

3. *Average Variance Extracted (AVE)*

*Convergent validity*It can also be seen from the Average Variance Extracted (AVE) value. In this research, the AVE value for each construct was above 0.5 (Ghozali, 2016). Therefore, there are no convergent validity problems in the model tested. The results of the Average Variance Extracted value can be seen in table 4.3

Table 4.3. *Average Variance Extracted*

	Average Variance Extracted (AVE)
Port Business Entity Image (Y)	0.773
Service User Satisfaction (Z)	0.715
Application of Greenport (X)	0.733

Source: Smart PLS Program Output (2023)

From Table 4.3 it is known that the AVE value for each construct is above 0.5. Therefore, there is no problem of convergent validity in the model tested so that the construct in this research model dacan be said to have good discriminant validity.

4. Reliability Test

*Outer model*Apart from being measured by assessing convergent validity and discriminant validity, it can also be done by looking at the reliability of the construct or latent variable which is measured by looking

at the composite reliability value of the indicator block that measures the construct. The PLS output results for the composite reliability and Cronbach alpha values can be seen in the following table:

Table 4.4. *Composite Reliability*

Variable	*Composite Reliability*	*Rule of Thumb*	Conclusion
Application of Greenport (X)	0.970	0.7	Reliable
Port Business Entity Image (Y)	0.953	0.7	Reliable
Service User Satisfaction (Z)	0.961	0.7	Reliable

Source: Smart PLS Program Output (2023)

Table 4.4 of the model shows that the composite reliability value for all constructs is above 0.70. Thus it can be concluded that all constructs have good reliability in accordance with the required minimum value limits (Ghozali, 2016:75) *Outer model*Apart from being measured by assessing convergent validity and discriminant validity, it can also be done by looking at the reliability of the construct or latent variable which is measured by looking at the Cronbach alpha value of the indicator block that measures the construct. A construct is declared reliable if the Cronbach alpha value is greater than 0.60.

Table 4.5. *Cronbach's Alpha*

Variable	***Cronbach's Alpha***	***Rule of Thumb***	**Conclusion**
Application of Greenport (X)	0.966	0.6	Reliable
Port Business Entity Image (Y)	0.967	0.6	Reliable
Service User Satisfaction (Z)	0.955	0.6	Reliable

Source: Smart PLS Program Output (2023)

Based on the table above, it can be concluded that the variables Greenport Implementation (X), Service User Satisfaction (Z), andPort Business Entity Image (Y)declared reliable because it has a Cronbach's alpha value above 0.6. Thus it can be concluded that all good reliability constructs comply with the required minimum value limits.

4.1.2. Structural Model Analysis or Inner Model

Inner model or structural model testing is carried out to see the relationship between constructs, significance values and R-square of the research model. The structural model was evaluated using R-square for the t-test dependent construct as well as the significance of the structural path parameter coefficients. The analysis stages carried out in the structural model evaluation are seen from several indicators, namely:

1. Q- Square

*Q-square*can be seen in the blindfolding calculation results in the construct cross validated redundancy section. The results of these calculations can be seen in table 4.6. following.

Table 4.6. Results*blindfolding*

	SSO	**SSE**	**Q^2 (=1-SSE/SSO)**
Port Business Entity Image (Y)	930,000	292,820	0.685
Service User Satisfaction (Z)	1550,000	495,887	0.680
Application of Greenport (X)	1860,000	1860,000	

Source: Smart PLS Program Output (2023)

From the calculation results in table 4.6. Q2 values are 0.685 and 0.680. Because the Q2 value is more than zero, the model has fulfilled predictive relevance where the model has been reconstructed well.

***2.* Goodness of Fit (GoF) Assessment**

Apart from that, based on data processing that has been carried out using the SmartPLS 3.0 program, the Model Fit values are obtained as follows:

Table 4.7. Fit Models

	Saturated Model	**Estimated Model**
SRMR	0.068	0.068
d_ULS	1,901	1,901
d_G	2,561	2,561
Chi-Square	18571,664	18571,664
NFI	0.205	0.205

Source: Smart PLS Program Output (2023)

The goodness of fit test results of the PLS model in Table 4.7 below show that an NFI value of 0.205 means FIT. Thus, from these results it can be concluded that the model in this study has a high goodness of fit and is suitable for use to test research hypotheses.

3. R Square (R2)

In assessing the structural model with PLS, we start by looking at the R-Square value for each endogenous latent variable as the predictive power of the structural model. Changes in the R-Square value can be used to explain the influence of certain exogenous latent variables on whether endogenous latent variables have a substantive influence. R-Square values of 0.75, 0.50, and 0.25 can be concluded that the model is strong, moderate and weak (Ghozali, 2016). To see the R-Square value, see table 4.24

Table 4.8. R Square Results

	R Square	R Square Adjusted
Port Business Entity Image (Y)	0.905	0.904
Service User Satisfaction (Z)	0.967	0.967

Source: Smart PLS Program Output (2023)

Based on Table 4.8. above shows that the R Square value for the Port Business Entity image variable is 0.905. These results explain that the percentage of the image of the Port Business Entity is 90.5%. Based on this, the results of the R2 calculation show that the value is strong. This means that the Greenport implementation variable influences the image of the Port Business Entity by 90.5% and the remaining 9.5% is influenced by other variables.Meanwhile, the R Square value for the service user satisfaction variable is 0.967. These results explain that the percentage of service user satisfaction is 96.7%. Based on this, the results of the R2 calculation show that the value is strong. This means that the variables implementing Greenport and the image of the Port Business Entity influence service user satisfaction by 96.7% and the remaining 3.3% is influenced by other variables.

4. Hypothesis Testing Results (Bootstrapping)

Model evaluation is carried out by looking at the significance value to determine the influence of variables through a bootstrapping procedure. Hypothesis testing in this research was carried out by looking at T-Statistics and P-Values. The hypothesis is declared accepted if the T-Statistics value is > 1.96 (ttable value) and P-Values < 0.05. The following are the results of the Path Coefficients influence:

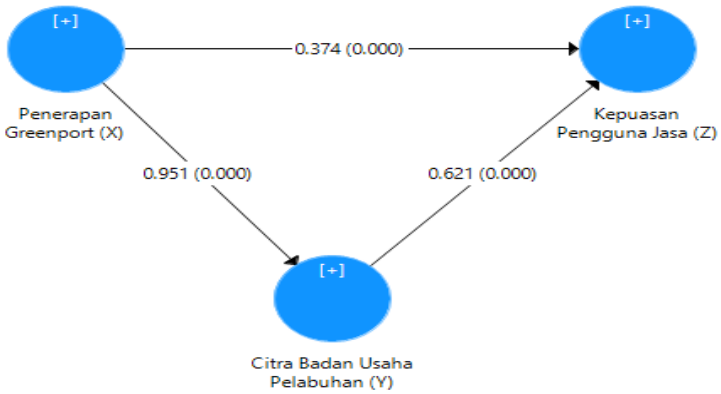


Fig 4.2. Bootstrapping results

Table 4.9. Influence and Impact

	Direct Influence and Indirect Influence	Coefficient Parameter	*T-Statistics*	*P-Values*	Results
H1	Application of Greenport (X) -> Port Business Entity Image (Y)	0.951	92,862	0,000	Accepted
H2	Application of Greenport (X) -> Service User Satisfaction (Z)	0.374	8,473	0,000	Accepted
H3	Port Business Entity Image (Y) -> Service User Satisfaction (Z)	0.621	14,090	0,000	Accepted
H4	Implementation of Greenport (X) -> Port Business Entity Image (Y) -> Service User Satisfaction (Z)	0.591	14,405	0,000	Accepted

Source: Smart PLS Program Output (2023)

Based on Table 4.9. above shows that the seven hypotheses are influential and all are accepted because the T-Statistics value is > 1.96 P-Values < 0.05. Based on Table 4.9 above, it shows that:

1. Hypothesis 1: The effect of implementing Greenport on the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.

Based on Table 4.9 above, it shows that the effect of implementing Greenport on the image of Port Business Entities is positive with a parameter coefficient of 0.951which shows that the direction of influence between the implementation of Greenport on the image of the Port Business Entity is positive at 0.951 meaningif there is an increaseimplementation of Greenportby 1 unit, improves the image of the Port Business Entity by 0.951. Furthermore, based on T-Statistics H1, it is 92.862 which is greater than the level or 92.862 > 1.96 and the P-value is 0.000 which is smaller than the real level or 0.000 < 0.05. This shows that the effect of implementing Greenport on the image of the Port Business Entity is significant. Therefore, it can be concluded that H1 is accepted, so there is a positive and significant influence of the implementation of Greenport on the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.

2. Hypothesis 2: The effect of implementing Greenport on service user satisfaction at PT. Lamong Gresik Bay Terminal.

Based on Table 4.9 above, it shows that the effect of implementing Greenport on service user satisfaction with a parameter coefficient of 0.374which shows that the direction of influence between the implementation of Greenport on service user satisfaction is positive, meaning 0.374if there is an increaseimplementation of Greenportby 1 unit, increaseservice user satisfactionof 0.374. Furthermore, based on T-Statistics H2 of 8.473 which is greater than the level or 8.473 > 1.96 and P-values of H3 which is 0.000 which is smaller than the real level or 0.000 < 0.05, this shows that the effect of implementing Greenport on service user satisfaction is significant . Therefore, it can be concluded that H3 is accepted, so there is a positive and significant influence of the implementation of Greenport on service user satisfaction at PT. Lamong Gresik Bay Terminal.

3. Hypothesis 3: The influence of the image of the Port Business Entity on service user satisfaction at PT. Lamong Gresik Bay Terminal.

Based on Table 4.9 above, it shows that the influence of the image of the Port Business Entity on service user satisfaction is positive with a parameter coefficient of 0.621which shows that the direction of influence is betweenthe image of the Port Business Entity on service user satisfactionis positive at 0.621 meaningIf there is an increase in service user satisfaction by 1 unit, the image of the Port Business Entity will improve by 0.621. Furthermore, based on T-Statistics H3, it is 14.090 which is greater than the level or 14.090 > 1.96 and the P-values of H5 is 0.000 which is smaller than the real level or 0.000 < 0.05. This shows that the influence of the image of the Port Business Entity on service user satisfaction is significant. Therefore, it can be concluded that H5 is accepted, so there is a positive and significant influence on the image of the Port Business Entity on service user satisfaction at PT. Lamong Gresik Bay Terminal.

4. Hypothesis 4: The effect of implementing Greenport on service user satisfaction through the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.

Based on Table 4.25. shows that the effect of implementing Greenport on service user satisfaction through the image of the Port Business Entity is positive with a parameter coefficient of 0.591which shows that the direction of influence is betweenapplication of Greenport to service user satisfaction through the image of the Port Business Entityis positive at 0.591 meaningif there is an increase in the implementation of Greenport through service user satisfaction by 1 unit, it will improve the image of the Port Business Entity by 0.591.Next based on*T-Statistics*H4 is 14.405 greater than the level or 14.405 > 1.96 and the P-values of H4 are 0.000 smaller than the real level or 0.000 < 0.05. This shows that the effect of implementing Greenport on service user satisfaction through the image of the Port Business Entity is significant . Therefore, it can be concluded that H6 is accepted, so there is an influence of the implementation of Greenport on service user satisfaction through the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.

4.2. Discussion and Research Findings

Based on the loading factor results, it shows that the Greenport implementation indicator which has the largest loading factor value is in statement X_2 "I feel that the air quality around this port is quite good at 0.930". Meanwhile, the lowest indicator is at X_1 "I am confident that this port has adopted measures to reduce its carbon footprint" of 0.702.The Port Business Entity image indicator which has the largest loading factor value is in the statement Y_2 "This port provides clear and transparent information regarding its operational processes" of 0.921. Meanwhile, the lowest indicator is at Y_5 "I feel that this port is active in listening to and responding to feedback from customers" of 0.838.The service user satisfaction indicator that has the largest loading factor value is the statement Z_1 "I feel satisfied with my experience at Teluk Lamong Terminal so I will use the service again" of 0.897. Meanwhile, the lowest indicator is at Z_7 "I feel that Teluk Lamong Terminal provides a complete choice of products and services" of 0.705.

The analysis of hypothesis testing shows the following results:

Table 4.10. Summary of Research Hypothesis Results

	Research Hypothesis	Results
H1	There is an influence of the implementation of Greenport on the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal	*Positive and Significant*
H2	There is an influence of implementing Greenport on service user satisfaction at PT. Lamong Gresik Bay Terminal.	*Positive and Significant*
H3	There is an influence on the image of the Port Business Entity on service user satisfaction at PT. Lamong Gresik Bay Terminal	*Positive and Significant*
H4	The image of the Port Business Entity is able to mediate the implementation of Greenport on service user satisfaction at PT. Lamong Gresik Bay Terminal	*Positive and Significant*

1. PenThe Effect of Greenport Implementation on the Image of Port Business Entities

From the results of the SEMPLS analysis research, namely that the hypothesis H1 is accepted, there is a positive and significant influence of the implementation of Greenport on the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.The application of Greenport or green port is a concept where port operations are designed and implemented by paying attention to environmental sustainability. The aim of this concept is to reduce negative impacts on the surrounding environment, such as greenhouse gas emissions, water pollution and damage to marine ecosystems. This includes the use of environmentally friendly technology, good waste management, as well as efforts to increase energy efficiency.The image of the Port Business Entity, in this case PT. Lamong Gresik Bay Terminal, refers to the positive or negative perception and image that the community, government and other related parties have of the port. A good image can increase trust and support from various parties, including customers, business partners and the general public.Implementing Greenport can reduce negative impacts on the environment, such as air and water pollution. These steps can improve the port's image in the eyes of people who care about the environment. If PT. The Lamong Gresik Bay Terminal complies with international standards in terms of the environment, this can improve the company's reputation at the global level. A positive image as a port that cares about the environment can increase the trust of business partners and customers.

The application of green technology and practices in port operations can increase operational efficiency. This can create an image of the port as an innovative and efficient entity, which can support positive perceptions among business partners and other stakeholders. Active involvement in sustainable initiatives and programs, such as the use of renewable energy, wise waste management and environmental conservation, can create an image of the port as a leader in sustainable development.Implementing Greenport can create better relations with the government and local communities. Active involvement in environmental conservation efforts can increase support from the government and society, which in turn can shape a positive image. It is important to remember that the implementation of Greenport must be consistent and

measurable in order to have a significant impact on the company's image. Continuous evaluation of environmental performance and positive response to input from various parties can help strengthen the relationship between Greenport implementation and the image of the Port Business Entity

2. PenThe effect of Greenport implementation on service user satisfaction

From the results of the SEMPLS analysis research, hypothesis H2 is accepted, so there is a positive and significant influence of the implementation of Greenport on service user satisfaction at PT. Lamong Gresik Bay Terminal.The application of green technology and practices in port operations can increase service efficiency. More efficient processes, such as environmentally friendly goods management and distribution, can reduce waiting times and costs, which in turn can increase service user satisfaction. If the implementation of Greenport brings positive changes in terms of energy use and fuel efficiency in heavy equipment and transport vehicles, this can reduce transportation costs. These cost reductions can be passed on to service users, increasing the value of the service and their satisfaction.Service users, especially those with high environmental awareness, may place more value on companies that are committed to green practices. Effective implementation of Greenport can create a positive image in the eyes of service users, and this can influence their satisfaction because they feel they are contributing to environmental conservation efforts. Ports that implement green practices can gain a good reputation in the industry.

Service users may prefer to use services from companies that are considered environmentally responsible. A good reputation can create trust and satisfaction for service users.Green practices such as good waste management and use of the latest technology can improve service quality. Service users will feel more satisfied if they feel that the services provided by PT. The Lamong Gresik Bay Terminal is not only efficient but also pays attention to environmental safety and welfare. The implementation of Greenport can reflect the company's involvement in sustainability efforts and transparency in its operations. Clear communication regarding the green steps taken can build trust and increase service user satisfaction. It is important to note that sustainability and adopting green practices is not just about image, but also about social and environmental responsibility. A truly effective implementation of Greenport requires full company involvement, as well as active support and participation from all relevant parties, including service users, to achieve a significant positive impact. Regular evaluation and feedback from service users can help PT. Teluk Lamong Gresik Terminal to continue to improve their green practices and increase service user satisfaction

3. PenThe effect of the image of the port business entity on service user satisfaction

From the results of the SEMPLS analysis research, namely that hypothesis H3 is accepted, there is a positive and significant influence on the image of the Port Business Entity on service user satisfaction at PT. Lamong Gresik Bay Terminal.The influence of the image of the Port Business Entity, in this case PT. Teluk Lamong Gresik Terminal, regarding service user satisfaction can play a key role in shaping positive or negative perceptions and experiences for service users. A good image can increase the level of trust of service users towards PT. Lamong Gresik Bay Terminal. Service users tend to feel more comfortable and safe using services from companies that have a good reputation. A positive image can reflect a commitment to quality service and professionalism. Service users may feel more satisfied if they have the perception that the Port Business Entity provides services with a high level of professionalism.A good image is also related to openness and effective communication from the Port Business Entity. If information about operational schedules, service changes, or port-related issues is communicated well to service users, this can increase their satisfaction. A positive image can have an impact on perceptions of ease of access and quality of facilities provided by PT. Lamong Gresik Bay Terminal. Service users will be more satisfied if they feel that the facilities provided are in accordance with their needs and meet the expected quality standards.

If Port Business Entities demonstrate commitment to sustainable practices, this can create a positive image among service users who care about environmental issues. Involvement in green practices can increase the satisfaction of service users who have high environmental awareness. A good image can help build the image that the Port Business Entity has the ability to handle problems and respond to complaints quickly and effectively. A good response to service users' problems or complaints can increase their satisfaction.A positive image can also be related to the perception that PT. Lamong Gresik Bay Terminal provides reasonable value for service fees. Cost transparency and clarity regarding tariff structures can

increase service user satisfaction regarding financial aspects. Companies must actively monitor and manage their image through communication strategies, good customer service, and involvement in sustainability initiatives. Evaluation of feedback from service users, as well as continuous improvement actions, can help PT. Teluk Lamong Gresik Terminal understands and meets the expectations of service users, thereby increasing their satisfaction and strengthening the company's image in the eyes of the public.

4. PenThe effect of Greenport implementation on service user satisfaction through the image of the port business entity

From the results of the SEMPLS analysis research, namely hypothesis H4 is accepted, there is an influence of the implementation of Greenport on service user satisfaction through the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal.The image of the Port Business Entity is one of the main factors that influences service users' perceptions of PT. Lamong Gresik Bay Terminal. If a company's image reflects a commitment to green practices and sustainability, this can be a positive basis for service user satisfaction. The implementation of Greenport shows PT's concern. Lamong Gresik Bay Terminal on the environment. If service users assess that the company has high social and environmental responsibility, this can increase their satisfaction because they feel they are contributing to environmental conservation efforts.
Ports that implement green practices tend to give an innovative and modern impression. The company's image as an entity that is at the forefront of technology and environmental awareness can provide a positive experience for service users and increase their satisfaction.

If Port Business Entities are considered as agents of positive change in protecting the environment, this can create trust and support from the community. Service users who feel proud to use services from a socially respected company can experience higher satisfaction.The importance of effective communication in creating a positive image cannot be ignored. PT. Teluk Lamong Gresik Terminal needs to communicate clearly and effectively regarding the Greenport steps taken. Transparent and open information can form positive perceptions among service users. Implementing Greenport can also create opportunities to adapt services to the needs and preferences of higher service users. If service users feel that the company cares about their sustainability and satisfaction, this can increase user satisfaction.*Greenport*which is successful can create mutual economic benefits where PT. Teluk Lamong Gresik Terminal and service users both benefit. This can provide a positive experience and increase service user satisfaction because they feel the added value of implementing green practices. By understanding the relationship between Greenport implementation, the image of the Port Business Entity, and service user satisfaction, PT. Teluk Lamong Gresik Terminal can design an integrated strategy to ensure that their sustainability efforts not only create a positive impact on the environment but also provide significant added value for service users.

V. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusion

1. Based on hypothesis testing where the T-Statistics H1 value of 92.862 is greater than the level or 92.862 > 1.96 and the P-value is 0.000 smaller than the real level or 0.000 < 0.05, this shows that the effect of implementing Greenport on the Agency's image Port Business is significant and H3 is accepted, so there is a positive and significant influence of the implementation of Greenport on the image of Port Business Entities at PT. Lamong Gresik Bay Terminal.
2. Based on hypothesis testing where the T-Statistics H2 is 8.473 greater than the level or 8.473 > 1.96 and the P-values H2 is 0.000 smaller than the real level or 0.000 < 0.05, this shows that the effect of implementing Greenport on service user satisfaction is significant and H2 is accepted, then there is a positive and significant effect of implementing Greenport on service user satisfaction at PT. Lamong Gresik Bay Terminal.
3. Based on hypothesis testing where the T-Statistics H3 is 14.090 greater than the level or 14.090 > 1.96 and the P-values H3 is 0.000 smaller than the real level or 0.000 < 0.05, this shows that the influence of the image of the Port Business Entity on satisfaction service users is significant and H3 is accepted, then there is a positive and significant influence on the image of the Port Business Entity on service user satisfaction at PT. Lamong Gresik Bay Terminal.

4. Based on hypothesis testing where the T-Statistics H4 is 14.405 greater than the level or 14.405 > 1.96 and the P-values H4 is 0.000 smaller than the real level or 0.000 < 0.05, this shows that the effect of implementing Greenport on service user satisfaction through the image of the Port Business Entity is significant and H4 is accepted, there is an influence of the implementation of Greenport on service user satisfaction through the image of the Port Business Entity at PT. Lamong Gresik Bay Terminal

5. ResultsThe R Square value for the Port Business Entity image variable is 0.905. These results explain that the percentage of the image of the Port Business Entity is 90.5%. Based on this, the results of the R2 calculation show that the value is strong. This means that the Greenport implementation variable influences the image of the Port Business Entity PT. Lamong Gresik Bay Terminal is 90.5% and the remaining 9.5% is influenced by other variables.

6. The resulting R Square value for the service user satisfaction variable is 0.967. These results explain that the percentage of service user satisfaction is 96.7%. Based on this, the results of the R2 calculation show that the value is strong. This means that the variables of Greenport implementation and the image of the Port Business Entity PT. Teluk Lamong Gresik Terminal has an influence on service user satisfaction of 96.7% and the remaining 3.3% is influenced by other variables.

5.2. Suggestion

The implementation of Greenport can have a significant influence on service user satisfaction, especially when mediated by the image of the Port Business Entity. The following are some suggestions for optimizing the effect of implementing Greenport and the image of the Port Business Entity:

1. The lowest loading factor results for implementing Greenport in X_1 "I am sure that this port has adopted measures to reduce its carbon footprint" PT. Teluk Lamong Gresik Terminal is holding an active education and communication campaign to service users and the general public regarding efforts to reduce the carbon footprint taken by PT. Lamong Gresik Bay Terminal. This could include exhibitions, seminars or social media campaigns to increase service users' understanding and confidence in the company's commitment to sustainability

2. The lowest loading factor results for the image of the Port Business Entity at Y_5 "I feel that this port is active in listening and responding to feedback from customers" preferably PT. Teluk Lamong Gresik Terminal is increasing and improving the system for collecting and responding to customer feedback. Providing a more effective and open communication channel to receive input, questions or complaints from service users. This can be done via online feedback forms, call centers, or social media platforms

3. The lowest loading factor results for service user satisfaction in Z_7 "I feel that Teluk Lamong Terminal provides a complete choice of products and services" should evaluate and develop strategies to increase the diversity of products and services offered by PT. Lamong Gresik Bay Terminal. Involving service users in determining their needs and preferences can help companies construct a portfolio that better suits service users' needs and increase their satisfaction.

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