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Analysis Of The Level Of Service User Satisfaction With Services At The Bakauheni Ferry Port

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Abstraksi

Bakauheni Port is a crossing port located in Bakauheni District, South Lampung Regency which has an area of 452,458 m2 (Transportation Research and Development Agency, Ministry of Transportation, 2010). Based on the functional character of the Bakauheni port, it is included in the National Route, which is a route that connects the two provincial capitals. The Bakauheni - Merak crossing port is one of the most congested crossing ports. Bakauheni - Merak port is separated by the Sunda Strait which has a distance of about 33.6 km which can be reached in 120 minutes while loading and unloading ships takes 45 minutes.

Based on observations in the field, there are several services that have not been carried out properly, so that service users feel dissatisfied and uncomfortable while they are at the Bakauheni Ferry Terminal. The method used to analyze existing problems is the Customer Statisfaction Index and Importance Performance Analysis. Based on the results of the analysis, it was found that the passenger satisfaction index was 64.9% and there were 4 service attributes in quadrant I that had to be improved and improved.

Based on the results of the analysis, it is concluded that there are several service attributes that do not run optimally, these service attributes include safety equipment facilities (APAR, evacuation route instructions), CCTV, waiting rooms, health facilities.

Keywords: Passenger Services, Passenger Perception, Passenger Satisfaction Level,

1. Problem Formulation

Based on the observations that have been made at the research location, the writer needs several problem formulations, as follows:

a. What is the level of passenger satisfaction at the regular terminal with the service quality of the Bakauheni Ferry Terminal in terms of Reliability, Responsiveness, Assurance, Empathy and Tangibles aspects?

b. What services need to be improved according to passenger expectations?

Method of collecting data

The writing of this Mandatory Working Paper uses several approaches in obtaining data as reference and comparison. This approach is adapted to the conditions and location where the object is located. The methods of approach used in this study are:

2. Primary Data

Primary data is data that is obtained directly from the source or based on direct observations in the field. The methods used in primary data collection are:

a. Observation Method

Observation is a way of collecting data by making direct observations carefully and in accordance with the current situation. The author uses this method by observing and taking

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direct documentation about the current conditions at the Bakauheni Ferry Terminal. The data obtained is the passenger perception data using questionnaires and passenger services based on the Customer Statisfaction Index.

b. Calculation Method

In this method, the task of the surveyor is to count / count the number of objects in a certain period of time by using tools (such as counters, etc.) or with the help of a straight line. The data obtained are in the form of quantitative data and are generally very accurate and can be accounted for if done properly. In this method the surveyors observe and perform calculations regarding the rise and fall of passengers and vehicles.

3. Secondary Data

Secondary data is data that the researcher does not collect by himself. Secondary data is obtained from various agencies related to the object of research which is then processed and recapulated so that it becomes one standard data. The methods used to collect secondary data include:

a. Literature Method (Literature)

Methods derived from literature or books in the Palembang River and Lake Transportation Polytechnic library and other books related to this research.

b. The Institutional Method

This method is related to data collected from various agencies involved in this study. The data collected from various agencies related to research, namely:

1). PT ASDP (Persero) Bakauheni Branch

2). BPTD Region VI Bengkulu and Lampung Provinces

4. Analysis Methods

Analysis Method of Questionnaire Validity Test

The validity test was conducted to determine whether the resulting questionnaire was able to provide accurate data or not. The questionnaire test was conducted 2 times, first to 30 respondents it was declared valid, then the second test to make sure the questionnaire was accurate to 57 respondents.

In determining whether an item is feasible or not, a significance test for the correlation coefficient is usually carried out at the 0.05 significance level, meaning that an item is considered valid if it is significantly correlated with the total score. To test this validity using the SPSS version 24 program. This analysis was carried out. by correlating each item's score with the total score. The total score is the sum of all items. Question items that have a significant correlation with the total score indicate that these items are able to provide support in revealing what they want to reveal. If r count ≥ r table (2-sided test with sig. 0.05) then the instrument or question items have a significant correlation to the total score (declared valid). Product Moment Correlation Formula:

$$rxy = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{(N\sum x^2 - (\sum x)^2)(N\sum y^2 - (\sum y)^2)}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

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Analysis Method of Questionnaire Reliability Test

In research, reliability is the extent to which the measurement of a test remains consistent after being repeated on the subject and in the same conditions. Research is considered reliable if it provides consistent results for the same measurement. Unreliable if repeated measurements give different results. Testing the reliability of the instrument using the Alpha Cronbach formula because this research instrument is in the form of a questionnaire and a multilevel scale. Alpha Cronbach's formula is as follows:

$$r11 = \left(\frac{n}{n-1}\right)\left(1 - \frac{\sum \sigma_t^2}{\sigma_t^2}\right) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

Analysis Methods of the Number of Research Samples

Determination of the sample, namely the passengers at the regular terminal based on the total passengers during the 14 days of the study so that there were 7072 passengers who then took the sample using a random sampling technique where each member of the population had the same opportunity to be selected as a sample. The sample in this study were all regular terminal passengers at the Bakauheni Ferry Terminal. The Slovin formula is used to determine the number of samples from a passenger population at the regular terminal. The Slovin formula is a formula for calculating the minimum number of samples if the behavior of a population is not known with certainty. The calculation of the Slovin formula is as follows:

$$n = \frac{N}{1+N.e^2} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

Analysis Using Importance Performance Analysis Method

In this case, a 4-level Likert scale is used to assess the level of performance and customer interests, IPA is done by calculating the total performance score and the interests / expectations of passengers for port services. The calculation of the average performance score and the average interest score will be mapped in the Important Performance cartesian quadrant. Quadrant I (top priority), quadrant II (maintain performance), quadrant III (low priority) and quadrant IV (excessive).

Proposed Troubleshooting

In solving the problem, it will focus on quadrant one because it is a top priority or something that is considered an important passenger but the service is not satisfactory, therefore the port manager must improve or improve the quality of service on the attributes that are in quadrant one and refer to the PM reference. 39 of 2015 concerning Minimum Service Standards for Ferry Passengers.

1) Type of Safety Service

a) Light Fire Extinguisher (APAR)

Based on the results of observations of the causes of fire when viewed from the source of the fire caused by electrical installations. When viewed from the operating side, the continuous activity of electric currents and heat has a huge potential to trigger fires. The type of fire extinguisher used is Dry Chemical Powder which is a versatile fire extinguisher because it is effective for extinguishing fires in almost all fire classes such as class A, B and C and the CO2 type fire extinguisher which is very suitable for class B fires (flammable liquid materials) and C (live electrical installation).

Anticipating this, Port Management should have provided a means of early prevention from fire hazards. At least 1 unit of APAR with a capacity of 9 Kg of Dry Chemical Powder, 1 unit of

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APAR Wheeled Trolley with a capacity of 50 Kg of Dry Chemical Powder, and 1 unit of APAR Wheeled Trolley with a capacity of 9 Kg of CO2.

In addition, it is necessary to pay attention to the placement of each tube of the Light Fire Extinguisher. Each unit of the fire extinguisher should be labeled with a sticker that is easily visible and legible. Placed at every access exit, access down the emergency staircase or a place that is considered strategic, easy to reach in an effective time.
if the fire extinguisher is placed outdoors or outdoors, it is required to store it in the fire extinguisher box. The APAR box here serves to protect the fire extinguisher from exposure to extreme weather directly.

b) Evacuation route

The evacuation route is a continuous and unobstructed route from any point in the building to the gathering point. Evacuation routes must be designed clearly and practically to make the evacuation process easier, faster and safer. The Port Manager must create an evacuation map depicting evacuation routes and gathering points which are installed in locations that are easy to see or find. This evacuation map should include the location of the nearest exit, meeting point and emergency equipment (such as fire extinguishers, first aid kits, automated external defibrillators (AEDs), and spill kits (a set of tools to deal with a spill, whether body fluids or chemicals). The existence of an evacuation map to a meeting point location that is well designed, clear, and practical at least will make it easier for service users to save themselves quickly during an emergency.

Install K3 signs for the gathering point according to the standard for K3 signs. The collection point must be installed high enough so that it is not covered by pedestrians or passing vehicles and large enough to be seen in poor lighting conditions. Make sure the K3 signpost that you install meets ISO 7010 standards and it is recommended to use luminous or glow in the dark material which can light up / glow itself in dark conditions.

According to the PUPR Ministerial Regulation No.14 of 2017, the gathering point must meet technical requirements including:

1. The minimum distance of the assembly point from the building is 20 m to protect building users and visitors to the building from collapse or other hazards.
2. The gathering point can be either a road or an open space.
3. The location of the meeting point should not obstruct the access and maneuvering of fire engines.
4. Have access to a safer place, not obstructing and easily accessible by vehicles or medical teams.
5. Other requirements regarding the meeting point follow the provisions of laws and regulations regarding fire protection systems in buildings and the environment. Giving directions for the gathering point should also be located near the gathering point area which is directly visible from the exit. Installation of directions to the gathering point and the meeting point signs must be precise so that the location of the meeting point can be reached easily in a short time.

c) Health facilities (Medical room)

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Port Manager must provide officers who are alert 24 hours in handling if one day an accident occurs to passengers and provide a stretcher. Port Managers must be able to modify roster shifts to facilitate their management. One of them is to apply technology, at least in the form of software or application for roster processing for officers who will work shifts. Port Managers also need to convince prospective Officers that the shift arrangements made are also in accordance with legislation, namely not exceeding working hours per week, namely 40 hours.

2) Types of Security Services

a) Crime prevention equipment (CCTV)

Three things must be considered by the Port Manager when determining the point of location for the CCTV installation. First, the thing that must be considered in choosing a CCTV camera installation location is lighting. This lighting will affect the image quality produced by a CCTV camera. The light source can come from sunlight and lights around the CCTV. However, there is one thing you should know that it is not recommended to install a CCTV camera too close to the light. This results in the resulting image quality being unclear or blurry due to too bright lighting.

The second thing to consider in determining the location of the CCTV camera installation is placement. Camera placement is very important, because a mistake in determining the installation location means that you will not get any benefit from installing a CCTV camera. Install CCTV as needed. The Port Manager should not place the CCTV camera too low from the floor level and not too high from the roof surface.

Finally, it is just as important to pay attention when installing a CCTV camera is the surface of the CCTV installation location. We recommend that the walls and ceilings to be installed with a CCTV camera have a flat surface. Make sure the CCTV camera is not obstructed by various objects or other objects, so that the camera can monitor the room without being disturbed or covered by objects around it. That way, CCTV cameras can work and function effectively and optimally.

3) Type of Service Convenience

d) The waiting room

Port managers must add an air conditioner or fan, not only be given an air conditioner, the port manager must function as the function of an air conditioner or fan, because it would be useless if there is an air conditioner but it is not maximized in its use, then clean the waiting room regularly by scheduling the waiting room janitor every day so that service users feel comfortable while in the waiting room.

5. Conclusion

From the analysis, it can be concluded that:

a. The level of passenger satisfaction at the regular terminal with the service quality of the Bakauheni Ferry Terminal in terms of Reliability, Responsiveness, Assurance, Empathy, Tangibles aspects of 64.9% is included in the Satisfied category.

b. services that need to be improved in accordance with passenger expectations, namely focus on quadrant I because it is the main priority that must be repaired immediately, such as the type of safety, security and comfort services

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6. Advice

a. Port Managers can improve services on a high priority, namely adding types of fire extinguishers according to the trigger for fires, adding evacuation maps and making evacuation route information boards, replacing damaged CCTVs and correct CCTV placement, cleaning waiting rooms periodically, providing health workers who are alert and provide a stretcher.

b. Port Management appoints officers to regularly check service facilities in order to find out what aspects cause service users dissatisfaction