

CSI (Customer Satisfaction Index) and IPA (Importance Performance Analysis) of Speed Rum Harbort in Tidore Island City

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ABSTRACT

The city of Tidore Islands is a city whose characteristics are islands, in order to be accessible to other places it has developed itself in the port sector. Where in its development, researchers see the need for community perception as an external basis for determining the development priority scale. This research aims to analyze customer satisfaction and analyze the attributes corrected by Speed Rum Harbor. The sampling method used is accidental sampling and the analysis methods used are Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA). The results showed that Customer satisfaction measurement is 55,51%, it means that customers are quite satisfied. Attributes that need to be improved are of the toilet and waiting room.

INTRODUCTION

The city of Tidore Islands is a city whose characteristics are islands, in order to be accessible to other places it has developed itself in the port sector. Where in its development, researchers see the need for community perception as an external basis for determining the development priority scale.

Based on research, for the city of Tidore Islands, the Rum speedboat port has been designated as a crossing port. At the Rum speedboat port, which is one of the ports with the most activity in the Tidore Islands, there are still lacking port facilities, for example public toilets are available but cannot be used because they are not properly maintained, the water is drained. often jammed so the toilet smells, the toilet door is broken. damaged, as well as the existing waiting room. If it rains with wind, water will enter and wet the waiting room.

The lack of existing port infrastructure and the inadequate utilization of existing facilities will affect the work programs of regional governments, especially the transportation department, in prioritizing port development to meet maritime passenger service standards. On the other hand, it is unlikely that regional financial conditions will have an impact on the budget allocation ceiling obtained by the transportation agency each year to carry out activities, so a priority order is needed in improving existing port facilities (which in this research focuses on the community's views.

Based on the description above, the focus of the research is to obtain the priority level for developing maritime transportation infrastructure based on public perception by referring to passenger service standards on ferry crossings. harbor.

THEORETICAL REVIEW

Ferry Transport Passenger Service Standards

In compiling indicators for the quality of passenger service, the author compiled them based on passenger service standards for ferry transport on ships (applies to pioneer routes) Minister of Transportation Regulation No. 39 of 2015 includes 4 service quality variables, namely: safety services, security services, comfort services, convenience/affordability services, which are adjusted as stated by Tjiptono (1997) to include 5 service quality variables, namely: reliability, responsiveness, assurance, empathy and tangible.

Experimental Design

This research was conducted in Tidore Island City. The choice of research location was carried out deliberately.

This research was conducted at the Rum speed boat port which is a busy port in the Tidore archipelago. The sampling method was carried out using the accidental sampling method, namely to determine samples based on people they meet or anyone who is using the port. The number of samples taken was 80 respondents, so the data was more accurate.

Each user is selected as a respondent but must pass first filtering stage. The category of user data taken is users who have previously traveled via the Rum speed boat port.

In this questionnaire, a Likert scale is used variable measurement. With a Likert scale, the variable to be described becomes an indicator variables in the application of the instrument can contain questions or approval.

Calculation of Customer Satisfaction Index (CSI)

The methods used in this research are Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA).

The stages of analyzing the Customer Satisfaction Index done is:

a) using the following equation:

$$MIS = \frac{\sum yi}{n} \tag{1}$$

$$MIS = \frac{\sum xi}{n} \tag{2}$$

Description: n = number of respondents

yi = i-value of importance attribute

xi = i-value performance attribute

To calculate the Mean Importance Score (MIS) and Mean Satisfaction Score (MSS).

b) Calculate the Weighted Factor (WF) Mean Importance Score function using equality:

$$WFi = \frac{MISi}{Total MISi} \tag{3}$$

Description: MISi = Mean Importance score i

c) Calculating the Weighted Score (WS), using the equation:

$$WSi = MSSi \cdot WFi \tag{4}$$

Description: MSSi = Mean Satisfaction Score-i WFi = Weighted Factor-i

d) Calculate the Weighted Average Total (WAT), using the following equation:

$$WAT = WSa1 + WSa2 + \dots + WSan \tag{5}$$

Description: WSa = Weighted Score

e) Obtain the Customer Satisfaction Index (CSI) value using the following equation:

$$CSI = \frac{WA}{HS} \cdot 100\% \tag{6}$$

Description: WA = Weighted Average

HS = Highest Scale (maximum scale)

The criteria for classifying CSI values are shown in Table 1.

Table 1. CSI Value Criteria

CSI Value (%)	CSI Criteria
81 - 100	Very Satisfied
66 -80	Satisfied
51 - 65	Quite Satisfied
35 - 50	Less Satisfied
0 - 34	Satisfied

Calculation of Importance Performance Analysis (IPA)(10)(11)(12)

The total value of performance level and importance is obtained by adding up assessment score given by the respondent. The calculation results are displayed in the form of a Cartesian diagram. Each attribute is positioned in the diagram based on the average score, which is the average performance assessment score (X) indicates the position of an attribute on the X axis, while position. One of the attributes in Y is indicated by its average importance score (Y). The Cartesian diagram is a space divided into four parts and bounded by two lines that intersect perpendicularly at the point (a, b)

METHODOLOGY

Population and Sample

The population in this study were users of the Rum Tidore Islands speed boat port. The participants answered a survey questionnaire administered by the researcher. The sampling method was carried out using the accidental sampling method, namely to determine samples based on people they meet or anyone who is using the port. The number of samples taken was 80 respondents

Respondents	Number of Respondents
Users of the Rum	80
Total:	80

Materials/Instrument

The survey instrument in this research is a questionnaire whose variables are adjusted to the Minister of Transportation Regulation no. 39 of 2015 with the following indicators: safety information & facilities, health information & facilities, security, security officer, security breach information, lighting, reliability/Regularity, ticket sales service, comfort, the waiting room, toilet , prayer rooms, lighting, temperature control facility, convenience/affordability, service information

Design and Procedure

After the competitive research committee of the leading university approved the research, the researcher prepared the research instruments used in data collection. The researcher submitted the modified questionnaire for finalization. After that, panel members or experts validate the questionnaire. The researcher personally administered the questionnaire and gave instructions to the respondents, who were users of the Rum speed boat port in the city of Tidore Islands, and took the questionnaire after responding. Next, the researcher analyzes all the results and interprets them. This research uses a type of descriptive research whose main tool is a questionnaire created by researchers. This research uses a descriptive research design method to determine the level of port user satisfaction and port performance

RESULTS

Customer Satisfaction Index (CSI)

The Customer Satisfaction Index (CSI) value of Rum Speed Boat Harbor is 55.51%. The Customer Satisfaction Index (CSI) value is obtained by dividing the

Total Weighting value by the maximum scale used in this research (maximum scale 5), then multiplying by 100%. Based on the satisfaction index, the Customer Satisfaction Index (CSI) value of 55.51% is in the range of 51% - 65%, which means that in general the Speed Boat Rum Harbor user satisfaction index is in the "quite satisfactory" criteria.

Table 2. Customer Satisfaction Index (CSI) Analysis

Attribute	MIS	Importance WF	MSS	WS
Safety information & facilities	3.35	6.26	2.71	16.97
Health information & facilities	3.28	6.12	2.24	13.69
Security	3.28	6.12	2.61	15.98
Security officer	3.23	6.02	2.35	14.16
Security breach information	3.29	6.14	2.18	13.36
Lighting	3.38	6.30	3.16	19.94
Reliability/Regularity	3.63	6.77	2.10	14.22
Ticket sales service	3.78	7.05	1.34	9.431
Comfort	3.38	6.30	1.40	8.826
The waiting room	3.36	6.28	1.98	12.4
Toilet	3.55	6.63	1.34	8.869
Prayer room	3.09	5.77	2.41	13.91
Lighting	3.06	5.72	2.34	13.37
Temperature control facility	3.09	5.77	2.35	13.55
Convenience/ Affordability	3.54	6.61	2.71	17.92
Service information	3.29	6.14	2.51	15.43
Total	53.54	100,00	35.73	17.08
WAT				222.03
CSI				55.51

The user satisfaction index value of the Rum speed boat port is in the criteria of being quite satisfied, the Rum speed boat port must improve its performance because of the User Satisfaction value index (CSI) of 55.51% means that there are still 44.49% of users who are not fully registered satisfied with Rum speed boat port.

Importance Performance Analysis (IPA)

Improving attribute performance to increase satisfaction with each attribute cannot be done simultaneously, because resources are limited. This limitation causes the Rum speed boat port to allocate existing resources to improve the performance of attributes that provide greater benefits to the level of total satisfaction. Attributes that need to be prioritized are attributes that have a high level of importance for users, but whose level of performance is still considered low by users.

The average value of the level of importance is 3.35 and the average value of the level of performance is 2.21. These two values will be the center line, because the diagram is divided into four parts and rounded up by two lines that intersect perpendicular to points (a, b) on the Cartesian diagram. The importance of Performance Analysis (IPA) is that the Cartesian diagram will be divided into four quadrants. Each quadrant in a Cartesian diagram describes a different situation.

In detail, the Cartesian Importance Performance Analysis (IPA) diagram is depicted in the following image.

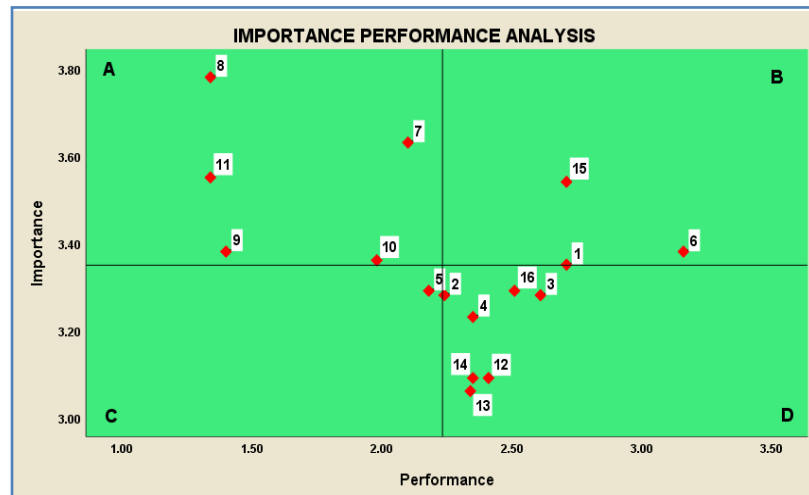


Figure 1. Diagram of the importance performance

Information: (5)

1. Safety information & facilities
2. Health information & facilities
3. Security
4. Security officer
5. Security breach information
6. Lighting
7. Reliability/Regularity
8. Ticket sales service
9. Comfort
10. The waiting room
11. Toilet
12. Prayer room

13. Lighting
14. Temperature control facility
15. Convenience/Affordability
16. Service information

Mapping on a Cartesian diagram based on level of importance and level of performance allows ports to make improvements to attributes that are considered very important by users, both in the short and long term. The increase in this attribute depends on each position variables in four quadrants.

Quadrant I in the Cartesian Importance Performance Analysis (IPA) diagram shows the level of importance of an attribute that is considered very important by users, but the performance shown by this attribute is considered still low or not optimal. Attributes in quadrant I must be the port's main priority in improving its performance so that it can meet and increase user satisfaction. Based on the picture, there are the attributes Reliability/Regularity, Ticket sales service, Comfort, The waiting room, Toilet in this quadrant.

Quadrant II in the Cartesian Importance Performance Analysis (IPA) diagram contains attributes that are considered important by users and whose performance levels are in line with user expectations, therefore the performance of these attributes must be maintained by the port. The attributes included in this quadrant are Safety information & facilities, Lighting, Convenience/Affordability.

Quadrant III in the Cartesian Importance Performance Analysis (IPA) diagram describes attributes that are considered less important by users and whose performance level is found to be less good. The priority for improving attributes in this quadrant is low, because it is considered less important for users. The following attributes fall into this quadrant: Security breach information.

Quadrant IV in the Cartesian Importance Performance Analysis (IPA) diagram contains attributes that are considered less important to users, but the level of performance is also considered important excessive. The following attributes are included in this quadrant: Health information & facilities, Security, Security officers, Prayer room, Lighting, Temperature control facilities, Service information.

CONCLUSIONS AND RECOMMENDATIONS

Measuring customer satisfaction with attributes at Rum Speed Boat Harbor was 55.51%, meaning the customer is quite satisfied. The attributes that need to be maintained are the attributes in quadrant II (Safety information and facilities, Lighting, Convenience/Affordability). The attributes that need to be improved are the attributes in the quadrants IV (Health information & facilities, Security, Security officers, Prayer room, Lighting, Temperature control facilities, Service information).

FURTHER STUDY

Suggestions for further research that can be proposed for the development of the thesis entitled 'CSI (Customer Satisfaction Index) and IPA

(Importance Performance Analysis) of Speed Rum Harbort in Tidore Island City' is to deepen it by focusing on specific aspects that affect customer satisfaction. Perhaps further research could be conducted to explore more detailed factors, such as service quality, service speed, or other aspects that significantly influence customers' perceptions of their satisfaction at the harbor. In addition, incorporating comparative analysis with similar harbors or conducting periodic customer satisfaction surveys may provide greater insight into trends and potential improvements needed to enhance service quality at Speed Rum Harbort in Tidore Island City.

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