



ANALYSIS OF THE LEVEL OF SERVICE USER SATISFACTION WITH SERVICES AT GILIMANUK CROSSING PORT DURING THE COVID-19 PANDEMIC IN 2021

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Abstract

Gilimanuk Crossing Port is a crossing port that has a very important role for the community, especially on the island of Bali and Java as a moving bridge that connects the road network that is cut off due to the waters to transport passengers, goods, and vehicles. Based on the observations, there are several problems in existing conditions at Gilimanuk Crossing Port, namely waiting rooms and gangways that do not function properly, pedestrians who enter / disembark the ship still through trestle, lack of facilities for passengers with special needs, and lack of attention of officers to maintain health protocols of passengers at Gilimanuk Crossing Port. The methods used to analyze problems are Importance Performance Analysis and Customer Satisfaction Index based on aspects of Tangibility, Reliability, Responsiveness, Assurance, and Emphaty. The results of the analysis obtained a passenger satisfaction index of 61.5% and there are 5 (five) service attributes in quadrant I in the cartesius diagram importance performance analysis which is a priority to be improved and improved quality. The results of the analysis of the study include officers at Gilimanuk Crossing Port are less assertive with service users who violate health protocols such as not keeping their distance, not washing their hands and neglecting to use masks; There are still pedestrian passengers passing through the trestle so that there is a lack of security and safety of passengers and vehicles; Lack of hand washing facilities /handsanitizer; There are no facilities available for passengers with special needs to get on /off the ship.

Keywords: Transportation; Port; crossing; satisfaction; service; customers; pandemic; quality; diagram; servqual.

1. Introduction

Gilimanuk Crossing Port is a crossing port that has a very important role for the community, especially on the island of Bali and Java as a moving bridge that connects the road network that is cut off due to the waters to transport passengers, goods, and vehicles. Gilimanuk Crossing Port is a crossing port managed by PT. ASDP Indonesia Ferry (Persero) Ketapang Branch that connects Java island and Bali Island. The port operates for 24 hours and currently has 7 (Seven) piers consisting of 3 (Three) Moveable Bridge Piers (MB), 1 (One) Pontoon Pier and 3 (Three) LCM Pier (Landing Craft Machine).



Based on The Minister of Transportation Regulation No. 39 of 2015 on Passenger Service Standards of Crossing Transportation, the Government intends to standardize service users at the port so that the port is expected to be able to serve service users well, especially in terms of safety, security, comfort, convenience, reliability and regularity, as well as equality for users of crossing transportation services. Transportation services compete to provide satisfaction for every service user because the service aspect is very important for the development of the company's business. Satisfaction can be felt by service users after comparing reality with the expectations of service users. Every company must strive to provide optimal service, because the creation of service user satisfaction can benefit. The benefits obtained include the creation of a good relationship between the company and service users and service users make transportation a top priority. In the midst of the Covid-19 pandemic requires people to adapt in everyday life, this adaptation also applies to the implementation of services at Gilimanuk Crossing Port. Government policy to prevent the spread of the Covid-19 virus has been issued one of them is circular letter of the Head of Task Force No. 12 of 2021 on the provisions of travel of domestic people in the Covid-19 pandemic certainly has an impact on passenger service standards at the port. Adaptations that can be done include providing services directly using Personal Protective Equipment (APD) such as masks or faceshields, applying social distancing by providing distance in passenger queues and waiting rooms, and providing handsanitizer/ hand washing.

In writing this final task, the author got into trouble on existing conditions at Gilimanuk Crossing Port, namely waiting rooms and gangways that do not function properly, pedestrians who enter / disembark the ship still through trestle, lack of facilities for passengers with special needs, and lack of attention of officers to maintain the health protocols of passengers at Gilimanuk Crossing Port. Through good service quality, there will be an increase in service users followed by increased profits. According to Lovelock and Wright (2005) there are five general criteria or standards that determine the quality of a service, namely Tangibility, Reliability, Responsiveness, Assurance, and Emphaty.

The purpose of this study is to find out the analysis of passenger satisfaction levels of service at Gilimanuk Crossing Port in 2021 in terms of Reliability, Responsiveness, Assurance, Empathy, and Tangibles based on the Customer Satisfaction Index and to find out the analysis of the grouping of Gilimanuk Crossing Port services in the kartesius Importance Performance Analysis quadrant.

2. Research Methods

This research uses quantitative research. The method used in this study uses data analysis in the form of numbers and is used as an analysis of observational data. Data is divided into two, namely primary and secondary data, primary data is data obtained directly from the source or based on direct observations in the field in the form of observations, calculations and documentation, while secondary data is data obtained indirectly or data obtained in a ready-made form and has been processed by other parties in the form of data from literature and instituisional. Used analytical methods to process data and solve problems, namely research instruments in the form of questionnaires, instrument trial analysis in the form of validity and reliability tests, data analysis techniques in the form of analysis of the level of conformity of Importance and Performance variables, Diagrams of Importance Performance Analysis (IPA), overall satisfaction levels of attributes based on Customer Satisfaction Index (CSI).



3. Results And Discussions

a. Overview of Research Objects

Jembrana Regency is one of the districts located in Bali Province which has an area of 841.80 Km² (14.93% of Bali island area) consisting of 5 (Five) subdistricts, 41 (Forty-One) villages, and 10 (Ten) villages. The district is located between 8° 09' 58" to 8° 28' 02" South Latitude and between 114° 26' 28" to 115° 51' 28" East Longitude. This regency has a boundary, among others, the Northern boundary, namely Buleleng Regency, the Southern border, namely the Indian Ocean, the Eastern boundary, Tabanan Regency, and the western boundary, the Bali Strait. (Jembrana Regency in Numbers 2021).

Gilimanuk Crossing Port, there are 50 (fifty) Ro / Ro type ships (Roll On Roll Off) recorded in The Ship Data 2021 at the Gilimanuk Port Crossing Service Unit Office, but within 1 day of schedule or on 24 hours of service, only 32 ships carry out services, while ships that take schedule off, carry out repairs and docking do not carry out services.

b. Level of Service User Satisfaction

Analisa Customer Satisfaction Index

To get the results of the Customer Satisfaction Index, the first step is to look for the average value of interest and performance.

Service Indicators	No	Attribute	Average Performance Satisfaction Level (MSS)	Average Interest Level (MIS)
1	2	3	4	5
Tangible (Physical Evidence)	A1	Safety equipment facilities (light fire extinguishers, evacuation line instructions, sprinklers and smoke detection alarms) are available and easy to see	2,44	3,66
	A2	There are criminal deterrent facilities (CCTV) available	2,40	3,44
	A3	Security/order officers are on good duty	1,79	3,85
	A4	Security disruption information is available and easy to access	2,27	3,59
	A5	The waiting room is available and works well.	2,14	3,46
	A6	Toilets are clean and odorless	2,09	3,65
	A7	Mushola facilities are available and adequate	2,52	3,67
	A8	The lighting of the passenger facility is functioning properly	2,69	3,55
	A9	Kitchen/Canteen/Cafeteria	2,69	3,54
	A10	Service information is available and easy to view.	2,14	3,43
	A11	Gangway facilities are available and functioning properly	2,24	3,87
	A12	Facilities are available for	2,25	3,87



		passengers with special needs		
	A13	Health facilities (Medical rooms) are available and adequate	2,54	3,76
	A14	Handwashing/handsanitizer facilities are available	2,03	3,77
Realibility (Reliability)	A15	Ease of online ticket purchase process	2,62	3,67
	A16	The process of getting on a ship is fast and safe	2,66	3,66
	A17	Timeliness of departure and arrival	2,65	3,66
Responsiveness	A18	Officers are ready to help if the customer is having difficulty.	2,69	3,69
	A19	The responder provides the information needed by the customer	2,72	3,74
Assurance (Guarantee)	A20	Passengers have a sense of security while at Gilimanuk Port	2,82	3,77
	A21	Officers have a good knowledge of the service at Gilimanuk Port	2,81	3,76
	A22	Officers apply health protocols (Check the passenger's body temperature, make sure the passenger wears a mask)	2,43	3,98
Emphaty (Individual Attention)	A23	Officers at Gilimanuk port are willing to answer and hear complaints or questions and respond to the needs of passengers.	2,87	3,77
	A24	Officers are quick in serving ticket purchases	2,41	3,60
	A25	The officer is friendly and cheap smile in providing service	2,67	3,54
Total			61,55	91,98

After looking for the average value of interest and performance, then create Weight Factors (WF). This weight represents the percentage of THE MIS value per attribute against the total MIS of the entire attribute.

No.Atribut	Average Interest Level (MIS)	Weight Factors (WF)%
1	2	3
A1	3,66	3,98
A2	3,44	3,74
A3	3,85	4,19
A4	3,59	3,90
A5	3,46	3,76
A6	3,65	3,97
A7	3,67	3,99
A8	3,55	3,86
A9	3,54	3,84



A10	3,43	3,73
A11	3,87	4,21
A12	3,87	4,20
A13	3,76	4,09
A14	3,77	4,10
A15	3,67	3,99
A16	3,66	3,97
A17	3,66	3,98
A18	3,69	4,02
A19	3,74	4,07
A20	3,77	4,10
A21	3,76	4,09
A22	3,98	4,33
A23	3,77	4,10
A24	3,60	3,92
A25	3,54	3,85
Total	91,98	100,00

After getting the next Weight Factors value, which is to look for weight score (WSI) results.

No.Atribut	(WF)%	(MSS)	(WSI)
1	2	3	4
A1	3,98	2,44	9,73
A2	3,74	2,40	8,96
A3	4,19	1,79	7,52
A4	3,90	2,27	8,85
A5	3,76	2,14	8,03
A6	3,97	2,09	8,29
A7	3,99	2,52	10,05
A8	3,86	2,69	10,38
A9	3,84	2,69	10,34
A10	3,73	2,14	7,98
A11	4,21	2,24	9,44
A12	4,20	2,25	9,44
A13	4,09	2,54	10,38
A14	4,10	2,03	8,32
A15	3,99	2,62	10,46
A16	3,97	2,66	10,57
A17	3,98	2,65	10,57
A18	4,02	2,69	10,82
A19	4,07	2,72	11,04
A20	4,10	2,82	11,57
A21	4,09	2,81	11,47
A22	4,33	2,43	10,50
A23	4,10	2,87	11,75
A24	3,92	2,41	9,45
A25	3,85	2,67	10,27
Total	100,00	61,55	246,19



CSI values are obtained by using the following formulas:

$$CSI = \sum_{k=1}^p \frac{WS_i}{HS(4) \times 100\%}$$

HS = Hight Score (Highest Likert scale used on questionnaires)

$$CSI = \sum \frac{246,19}{4 \times 100 \%} = 61,55\%$$

The level of passenger satisfaction with service quality performance is 61.55%. Passenger satisfaction criteria are in the satisfied category.

c. Importance and Performance Analysis

In this study, questionnaires were distributed to 349 respondents in accordance with the results of sample calculations. The results of the processing questionnaire are carried out on each item then searched the average of the number of items to obtain the value of importance and performance level (performance).

No. Atribut	Total Performance Score (Xi)	Total Interest Score (Yi)
1	2	3
A1	853	1278
A2	836	1201
A3	626	1345
A4	792	1252
A5	743	1208
A6	728	1275
A7	879	1281
A8	938	1240
A9	939	1234
A10	746	1198
A11	782	1352
A12	784	1349
A13	886	1313
A14	709	1315
A15	914	1282
A16	928	1276
A17	926	1279
A18	940	1289
A19	948	1305
A20	984	1317
A21	979	1313
A22	847	1389
A23	1000	1316
A24	842	1258
A25	931	1236

The first stage in the Importance Performance Analysis method is:

- A. Determines the level of conformity between the level of performance and the level of importance of the quality of the attributes studied through the comparison of performance scores with interest scores



No. Attribute	Total Performance Score (Xi)	Total Interest Score (Yi)	Level of Conformity (Tki)(%)
A1	853	1278	66,74
A2	836	1201	69,61
A3	626	1345	46,54
A4	792	1252	63,26
A5	743	1208	61,51
A6	728	1275	57,10
A7	879	1281	68,62
A8	938	1240	75,65
A9	939	1234	76,09
A10	746	1198	62,27
A11	782	1352	57,84
A12	784	1349	58,12
A13	886	1313	67,48
A14	709	1315	53,92
A15	914	1282	71,29
A16	928	1276	72,73
A17	926	1279	72,40
A18	940	1289	72,92
A19	948	1305	72,64
A20	984	1317	74,72
A21	979	1313	74,56
A22	847	1389	60,98
A23	1000	1316	75,99
A24	842	1258	66,93
A25	931	1236	75,32

B. For quadrant analysis i.e. calculating the average assessment of interest and performance levels for each attribute

No. Attribute	Total Performance Score (Xi)	Total Interest Score (Yi)	Average Performance Level (Xi)	Average Interest Level (Yi)
A1	853	1278	2,44	3,66
A2	836	1201	2,40	3,44
A3	626	1345	1,79	3,85
A4	792	1252	2,27	3,59
A5	743	1208	2,14	3,46
A6	728	1275	2,09	3,65
A7	879	1281	2,52	3,67
A8	938	1240	2,69	3,55
A9	939	1234	2,69	3,54



A10	746	1198	2,14	3,43
A11	782	1352	2,24	3,87
A12	784	1349	2,25	3,87
A13	886	1313	2,54	3,76
A14	709	1315	2,03	3,77
A15	914	1282	2,62	3,67
A16	928	1276	2,66	3,66
A17	926	1279	2,65	3,66
A18	940	1289	2,69	3,69
A19	948	1305	2,72	3,74
A20	984	1317	2,82	3,77
A21	979	1313	2,81	3,76
A22	847	1389	2,43	3,98
A23	1000	1316	2,87	3,77
A24	842	1258	2,41	3,60
A25	931	1236	2,67	3,54
Total	21480	32101	61,55	91,98

- C. Calculates the total conformity rate (Tki Total) between X (Performance) and Y (expectations)

$$Tki \text{ Total} = \frac{\sum X_i}{\sum Y_i} \times 100\%$$

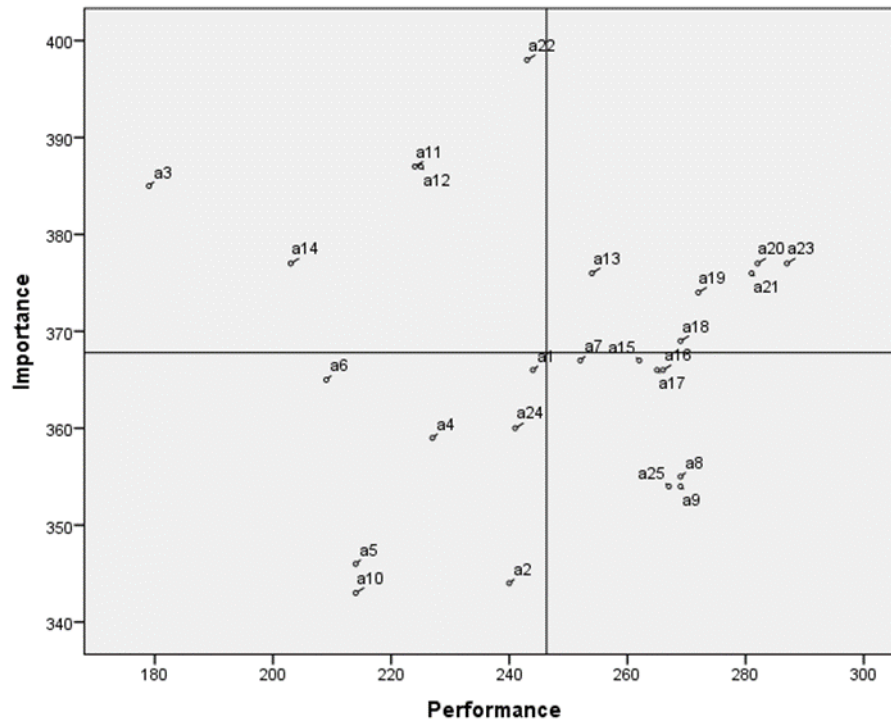
$$Tki \text{ Total} = \frac{22039}{32431} \times 100\%$$

$$Tki \text{ Total} = 67,96 \%$$

- D. Questionnaire Quadrant Analysis

The value cuts perpendicular to the horizontal axis, i.e. the axis that reflects the performance of the attribute (X) or the perception of the passenger. While the value cuts perpendicular to the vertical axis, i.e. the axis that reflects the importance of the attribute (Y) or passenger expectations. $\bar{X}_i \bar{Y}_i$

After gaining the weight of performance and the importance of attributes and average values of performance and interests then the values are plotted into the quadrant of cartesius. Grouping attributes on the quadrant according to the image



E. Decision

Based on the results of data analysis using SPSS version 22, the following quadrant of importance performance has been obtained:

Quadrant I (Top Priority)	Quadrant II (Maintain performance)
Item number: 3,11,12,14,22	Item number: 13,19,20,21,23
Quadrant III (Low Priority)	Quadrant IV (Excessive)
Item number: 1,2,4,5,6,10,24	Item number: 7,8,9,15,16,17,18,25

a. Quadrant I (Top Priority)

The attributes in this quadrant are considered very important by passengers but the service is not satisfactory. Portmanagement must prioritize and focus on improving the services in this quadrant to improve the quality of port services.

- 1) Attribute 3: Security/order officers are on good duty
- 2) Attribute 11: Gangway facilities are available and function properly
- 3) Attribute 12: Facilities available for passengers with special needs
- 4) Attribute 14: Hand washing /handsanitizer facilities are available
- 5) Attribute 22: Officers apply health protocols (Check the passenger's body temperature, make sure the passenger wears a mask)



b. Quadrant II (Maintain Achievement)

The attributes in quadrant II are considered very important by passengers and the service performance is satisfactory. Port managers must maintain the quality of service.

- 1) Attribute 13: Health Facilities (Medical rooms) are available and adequate
- 2) Attribute 19: The response officer provides the information needed by the customer
- 3) Attribute 20: Passengers have a sense of security while at Gilimanuk Crossing Port
- 4) Attribute 21: {etugas has a good knowledge of service at Gilimanuk Crossing Port
- 5) Attribute 23: Officers at Gilimanuk Crossing Port are willing to answer and hear complaints or questions and respond to the needs of passengers

c. Quadrant III (Low Priority)

In this statement there are faktor-factors that are considered to have a low level of perception or actual performance and are not too important and or not too expected by passengers so that port managers do not need to prioritize or pay more attention to these factors.

- 1) Attribute 1: Safety equipment facilities (light fire extinguishers, evacuation path instructions, sprinklers and smoke detection alarms) are available and easy to see
- 2) Attribute 2: Criminal deterrent facilities (CCTV) are available
- 3) Attribute 4: Security interference information is available and easy to access
- 4) Attribute 5: Waiting room is available and works properly
- 5) Attribute 6: Toilets are clean and odorless
- 6) Attribute 10: Service information is available and easy to view
- 7) Attribute 24: Officers are ready to serve ticket purchases

d. Quadrant IV (Redundant)

The attributes that are in this quadrant are considered not too important by passengers but the service is satisfactory. Port managers are advised not to make the attributes in quadrant IV a priority in improving the quality of port service.

- 1) Attribute 7: Mushola facilities are available and adequate
- 2) Attribute 8: Passenger facility lighting lights function properly
- 3) Attribute 9 : Kitchen/canteen/cafeteria available
- 4) Attribute 15: Ease of online ticketing process
- 5) Attribute 16: The process of boarding a ship fast and safely
- 6) Attribute 17: Timeliness of departure and arrival of the ship
- 7) Attribute 18: Officers are ready to help if the customer is having difficulties
- 8) Attribute 25: Officers are friendly and cheap smile in providing service

4. CONCLUSION

Based on the results of the analysis and discussion that has been outlined earlier, it can be concluded as follows:

A. Customers Satisfaction Index

From the results of the analysis of the level of passenger satisfaction with the quality of Gilimanuk Crossing Port services in 2021 in terms of Reliability, Responsiveness, Assurance, Empathy, and Tangibles based on the Customer Satisfaction Index, it was found that the percentage of passenger assessment of Gilimanuk Crossing Port service was 61.5% and fell into the satisfied category.



B. Importance Performance Analysis

Services that need to be improved based on PM 39 of 2015 on Passenger Service Standards of Crossing Transportation at Gilimanuk Crossing Port in 2021 in accordance with passenger expectations are attributes that are in quadrant A, based on the results of research of important service attributes and received the highest assessment of their interests. This does not mean that the quality attributes of services that are in quadrants B, C, and D become unimportant, but managers should focus more on making improvements to quadrant A. Attributes that are in quadrant A include, Officers at Gilimanuk Crossing Port are less assertive with service users who violate Health protocols such as not maintaining distance, not washing hands and neglecting to use masks; There are still pedestrian passengers passing through the trestle so that there is a lack of security and safety of passengers and vehicles; Lack of hand washing/handsanitizer facilities; There are no facilities available for passengers with special needs to get on /off the ship.

5. SUGGESTION

Based on the results of the study and the conclusions that have been outlined, researchers found some indications of weaknesses about gilimanuk crossing port services. Therefore, there are several things that need to be considered in order to improve service at Gilimanuk Crossing Port, while saran input includes:

- A. In accordance with the conclusion of CSI which shows that passengers are satisfied with gilimanuk crossing port service, but the gap value of the quality of Gilimanuk Crossing Port service is still negative, of course this still needs evaluation and improvement about the extent of Gilimanuk Crossing Port service that has been provided in order to be improved again to be very satisfied in accordance with passenger expectations.
- B. Based on the results of mapping on the cartesius quadrant in Importance Performance Analysis (IPA) obtained five attributes in quadrant A main priority. Therefore, the port must prioritize the improvement of the skin of the six attributes so that the level of passenger satisfaction can increase.

6. REFERENCE

- [1] _____, 2008, Law Number 17, Shipping, President of the Republic of Indonesia, Jakarta.
- [2] _____, 2021, Government Regulation No. 31, Implementation of Shipping Field, President of the Republic of Indonesia, Jakarta.
- [3] _____, 2015, Regulation of the Minister of Transportation Number 39, Standards of Passenger Service of Crossing Transportation, Minister of Transportation of the Republic of Indonesia, Jakarta.
- [4] _____, 2021, Circular Letter Number 12, Domestic Travel Provisions in the Corona Virus Disease Pandemic 2019 (COVID-19), Chairman of the Covid-19 Handling Task Force, Jakarta.
- [5] Kotler, P. & Keller, K. L. "Marketing Management." (12th edition). Upper Saddle River: Pearson Education, Inc. 2006.
- [6] Lukman, Sampara. "Quality Management of Service." Yogyakarta: Nur Cahaya. 2000.
- [7] Parasuraman, A, Zeithml, Valarie A. And Berry, Leonard L. 1991. Refinement and Reassessment of the SERVQUAL Scale. Journal of retailing, Vol 67, No.4:420-450.



- [8] Prasetyo. 2016. "Quantitative Research Methods." Jakarta: Rajawali Pers.
- [9] Purnomo, Wirdha. - Riandadari, Dyah. Customer Satisfaction Analysis of Workshop With Ipa Method (Importance Performance Analysis) at Pt. Arina Parama Jaya Gresik. Surabaya. 2015.
- [10] Suharsimi, Arikunto. 2002. "Research Procedure." Jakarta: Rineka Cipta.
- [11] Sugiyono. 2011. "Quantitative Research Methods." Bandung: CV. Alfabet.
- [12] Tjiptono, F. Principles of Total Quality Service: Andi Offset. 2008.
- [13] Tjiptono, F. "Marketing strategy." Yogyakarta: Andi Offset. 2008.
- [14] Zeithaml, A.V., Berry L.L. dan Parasuraman, A. (1988), 'Communication and Control Processes in the Delivery of Service Quality', Journal of Marketing, Vol. 52:35-48.
- [15] Zeithaml, A.V., Berry L.L. dan Parasuraman, A. (1988), "The Nature and Determinants of Customer Expectations of Services," Journal of Academy Marketing Science, Vol. 21. No. 1:1-12.
- [16] Zeithaml, V.A., Parasuraman, A.A. & Berry, L.L. 1990. Delivering Service Quality: Balancing Customer Perception and Expectation. New York: The Free Press, p.19.