



Tourists Perception Towards Tourist Satisfaction in Pangandaran Beach, West Java, Indonesia

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Authors' contributions

This work was carried out in collaboration among all authors. Author LR designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors BH and NG managed the analyses of the study. Author LR managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Pangandaran Regency has quite diverse tourist destinations ranging from beach tourism, cave tourism, cultural tourism and others. Pangandaran Beach is one of the tourist destinations in the Regency of Pangandaran, West Java, from sources of the Tourism Office and Pangandaran Culture it can be seen that the level of tourist visits to Pangandaran Beach from 2016 to 2017 has decreased for international tourists while experiencing an increase for domestic tourists. Therefore, it is necessary to conduct research aimed to determine the perceptions of tourists to improve the quality of management services in Pangandaran Beach tourist destination. The method used is the servqual method and PGCV (Potential Gain Customer Value). The servqual method aims to see the service quality attributes that need to be improved and the PGCV method aims to complete the analysis results of servqual by determining the priority of improvements that must be done based on the PGCV index.

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Based on the results of the analysis, there are 5 service quality attributes that need to be improved, such as attractions displayed, providing updated information about upcoming events, integrated information service center on children and lost items, sound notification of danger in the coastal area and the availability of integrated service posts around the beach.

Keywords: Servqual; PGCV; pangandaran beach.

1. INTRODUCTION

The development of the tourism sector in a country or region will attract other sectors because its products are needed to support the tourism industry. Regions that have a tourism sector will be greatly assisted in its development because it can bring in domestic and international tourists so that it can get income for the region. This revenue must be managed by the regional government and distributed evenly to the community in the form of roads, bridges, public buildings and others. If local revenue is managed well and distributed as a whole it will smooth the pace of economic growth in the area.

Development of millennial era destinations must pay attention to efficient and effective publication strategies. Effective promotion media are now through unlimited social media. Ninin et al (2017) found a tourism destination development strategy that must be designed comprehensively covering key elements consisting of obstacles, programs, stakeholders and expected changes [1]. Hasibuan et al (2017) show that the development of a destination is influenced by the effectiveness of publications and tourist preferences that must be responded by the destination manager [2]. Sulistyadi et al (2018) said that the development of a beach destination must be carried out comprehensively related to community-based tourism and carrying capacity of a destination [3]. Hasibuan et al (2019) state that the utilization of the economic potential of a destination can be optimized while taking into account aspects of ecology, social and governance. Utilization of economic potential includes use value and non-use value [4].

One of the tourist destinations in West Java that attracts tourists is in the area of Pangandaran Regency. Pangandaran Regency has quite diverse tourist destinations ranging from beach tourism, cave tourism, cultural tourism and others [6]. As for the main assets owned by Pangandaran Regency is beach tourism. Coastal tourism in Pangandaran Regency includes Pangandaran Beach, Batu Hiu Beach, Batu Karas Beach, Krapyak Beach and many more

beaches in Pangandaran Regency. The number of tourists visiting can be seen in the Table 1.

Table 1. Level of tourist visits to pangandaran beach

Tourist	2016	2017
International	3.804	3.094
Domestic	1.399.156	2.020.932
Total	1.402.960	2.024.026

Source: Office of Pangandaran Tourism and Culture

From the Table 1 it can be seen that the level of tourist arrivals to Pangandaran Beach from 2016 to 2017 has decreased for foreign tourists while experiencing an increase for domestic tourists. For this reason, research is needed to determine the level of satisfaction of Pangandaran beach tourists. - tourism supporting components (attractions, accessibility, amenities).

2. METHODS

Data collection was obtained by distributing questionnaires to tourists at Pangandaran beach. Data processing used the Service Quality (Servqual) method and the Potential Gain Customer Value (PGCV) method. The Servqual method is intended to measure service quality through the difference (GAP) between tourists' perceptions and expectations of service quality [5,7,9,10,12]. This method consists of two main steps, namely getting tourist perceptions of the quality of services provided and customer expectations of service quality [13,14]. The PGCV method to complement the analysis results from Servqual by determining the priority of improvements that must be made by the tourist destination manager through the PGCV index number [10,11].

3. RESULTS AND DISCUSSION

3.1 Servqual

Analysis using the servqual method by looking at the gap between the level of performance in

Pangandaran beach tourist destinations and the level of tourist expectations so that it can be determined what services are a problem and must be corrected.

3.2 Tangible

- Tourists are not satisfied with the services provided in Tangible dimensions numbers 1, 2 and 3, namely the existence of water surfing tours, attractions that are displayed, and easy access to tourist destinations with a gap value of servqual -1, 12, -1, 36, -1.09 which means the service is not satisfactory. Therefore, the management must make improvements regarding the services of surfing water tours, attractions that are displayed, and easy access to tourist destinations.
- Tourists are not satisfied by the services provided in Tangible dimensions' numbers 4, 5 and 6, namely boats as supporting facilities, directions to reach Pangandaran Beach tourist destinations, and swimwear sales facilities, with servqual scores of -0.98, and -0.81. There is still a gap between the level of expectation and the level of performance.

3.3 Assurance

- Tourists are not satisfied with the services provided in the dimensions of Assurance numbers 7, 8, and 9, namely providing updated information about events that will take place, standardization of lodging facilities, and the availability of accident insurance in tourist destinations. With servqual gap value -1.23, -1.11, -1.03 which means that the service is not satisfactory, there is a gap between the level of tourist expectations with the level of performance. Servqual score shows a sense of dissatisfaction of tourists because after asking several tourists who frequently visited there was no updated information about the event, then tourists who do not know of any accident insurance at tourist destinations and standardization of lodging facilities.

3.4 Emphaty

- Tourists are not satisfied with the services provided on the Emphaty dimension number 10, namely attractions that are enjoyed can satisfy tourists with a gap

value of -0.8,1 which meant less satisfactory service, there was a gap between the level of tourist expectations and the level of performance

- Tourists are dissatisfied with the services provided on the dimensions of Emphaty numbers 11 and 12, namely warning signs if there is a danger on the beach and integrated information service centre on children and lost items with servqual gap values of -1.11 and -1.36, which means the service is not satisfying, there is a large gap between the level of tourist expectations and the level of performance. Therefore the manager must make improvements to satisfy tourists visiting Pangandaran Beach.

3.5 Reliability

- Tourists are not satisfied with the services provided in the dimensions of Reliability numbers 13 and 15, namely the consistency of service in attractions and easy ticket service with a gap value of -0.79 and -0.94, which means the service is less satisfactory, there is a gap between the level of tourist expectations and the level of score performance servqual shows a feeling of unsatisfactory tourists
- Tourists are dissatisfied with the services provided in the Reliability dimension number 14, namely sound notification of danger in the beach area. After doing servqual calculations it turns out the results obtained are -1.05, which means the service is not satisfactory, there is a gap between the level of expectations of tourists with the level of performance. Servqual scores indicate a feeling of dissatisfaction of tourists because after asking several tourists who frequently visit, the sound of notification of danger is still not heard by tourists because there are only a few speakers and must be reproduced more to be heard by tourists.

3.6 Responsive

- Tourists are not satisfied with the services provided in the Responsive dimension numbers 16,17, and 18, namely the snorkelling tour training program, directions for evacuation during emergencies, and the availability of integrated service posts near the coast with servqual gap values -1.47, -1.52, -1.92 which means that the service is

unsatisfactory, there is a large gap between the level of tourist expectations and the level of performance. Servqual scores indicate tourists' dissatisfaction.

Quadrant A shows attributes that have a high level of tourist expectations but low performance so that it does not satisfy tourists. Therefore, every attribute in quadrant A needs to be immediate improvements in quality. Servqual matrix analysis on this attribute has a gap score between -1.235, -1.525 and -1.92, where the 3 attributes in quadrant A indicate that the performance performed is not satisfactory in attribute 7 about providing updated information, it is not satisfactory in attribute 17 about directions evacuation and unsatisfactory on attribute 18 regarding the availability of integrated service posts near the coast. For this reason, Pangandaran beach management needs to immediately make implementing to these attributes. This can happen because the average servqual matrix calculation for each attribute is at a number that shows that the attribute is not satisfying for tourists, so the Pangandaran beach management needs to change immediately with special attention.

Quadrant B has 9 attributes included in it. Quadrant B shows attributes that are considered unsatisfactory and unsatisfying tourists. Therefore, every attribute in quadrant B needs to be improvements. Servqual matrix analysis on its attributes has a gap score between -0.94 to -1.14 where the 6 attributes in quadrant B indicate that the performance is not satisfactory and 3 attributes are considered unsatisfactory. Because the 9 attributes are considered not able to meet tourist satisfaction. If seen from the measurement based on the emphasis on the gap problem, the service provided is unsatisfactory and less satisfactory, so the manager needs to improve the attributes included in quadrant B.

Quadrant C has 3 attributes; this quadrant shows attributes that are considered unsatisfactory, indicating the quality of service users on this variable is at a low level. Servqual matrix analysis on the attribute has a gap score between -1.12, -1.36 and -1.47. So that the management needs immediate improvement.

Quadrant D has 3 attributes, this quadrant shows attributes that are considered unsatisfactory. The performance of the manager is at a high level but

the expectation of tourists for the performance of these variables is low, so the manager needs to consider the performance carried out. Service is a very important element of tourist satisfaction, but the expectations of tourists are very small for this attribute so that the attribute is included in the D quadrant.

3.6 PGCV (Potential Gain Customer Value)

PGCV (Potential Gain Customer Value) analysis was performed to determine the PGCV index value on each attribute and service quality dimension. Where attributes with PGCV index values below the median value must be maintained their performance and attributes with PGCV index values above the median value be a priority for improvement.

The following details the proposed priority improvement plan:

1. **The availability of integrated service post near the beach:** Previously on the east coast, there was a separate lifeguard and information service centre for missing goods/children. Improvements that can be made from Fig. 1 there is information about the length of the east coast area of Pangandaran is 1.87 km (2 km), the management should prepare an integrated service post that includes information on goods or missing children, which is integrated with the existing lodging service facilities in the coastal area Pangandaran and 6 units of integrated service posts should be made that are obtained from the calculation of every 300 m there are 1 post and where 300 m is still covered by binoculars.
2. **Snorkel tourism training program:** Previously in Pangandaran beach, there was no snorkelling training program, improvements could be made to make the snorkelling tourism training program created to attract tourists who are in Pangandaran beach and prevent accidents when snorkelling. By integrating an adequate information system to promote the program through social media and print accounts and create Pangandaran beach tour packages which also include snorkelling tourism training programs in one tour package.
3. **Attractions displayed:** Previously the attractions on Pangandaran beach were

only kite festivals which were still not well scheduled. Attractions that should be displayed on Pangandaran beach are scheduled once a month, events can be made such as kite festivals, Pangandaran cultural arts performances, fireworks

performances at night, and lantern festivals. By integrating adequate information systems to promote the program through both social media and print media and also create related tour packages according to each attraction to be displayed.

Table 2. Comparison of servqual matrices and cartesian diagrams

No	Service attributes	Servqual score	Servqual matrix	Cartesian diagram quadrant	Information
1	Surfing water tour	-1,12	Not satisfactory	Quadrant C	Needs Improvement
2	Attractions displayed	-1,36	Not satisfactory	Quadrant C	Needs Immediate Improvement
3	Easy access to tourist destinations	-1,09	Not satisfactory	Quadrant B	Needs Improvement
4	Boat as a supporting facility	-0,98	Less satisfactory	Quadrant B	Needs Improvement
5	Directions to get to Pangandaran beach tourist destination	-0,98	Less satisfactory	Quadrant B	Needs Improvement
6	Swimwear sales facilities	-0,81	Less satisfactory	Quadrant D	Needs Improvement
7	Provides updated information about upcoming events	-1,23	Not satisfactory	Quadrant A	Needs Immediate Improvement
8	Standardization of lodging facilities	-1,11	Not satisfactory	Quadrant B	Needs Improvement
9	Accident insurance available at tourist destinations	-1,03	Not satisfactory	Quadrant B	Needs Improvement
10	Attractions enjoyed can satisfy tourists	-0,81	Less satisfactory	Quadrant D	Needs Improvement
11	Warning signs when there is a danger on the beach	-1,11	Not satisfactory	Quadrant B	Needs Improvement
12	Integrated information service centre on missing children and property	-1,14	Not satisfactory	Quadrant B	Needs Improvement
13	Service consistency in attractions	-0,79	Less satisfactory	Kuadrant D	Needs Improvement
14	Sound notification of danger in the coast	-1,05	Not satisfactory	Quadrant B	Needs Improvement
15	Easy and fast ticketing service	-0,94	Less satisfactory	Quadrant B	Needs Improvement
16	Snorkel tourism training program	-1,47	Not satisfactory	Quadrant C	Needs Immediate Improvement
17	Directions for evacuation during emergencies	-1,52	Not satisfactory	Quadrant A	Needs Immediate Improvement
18	The availability of integrated service post near the beach	-1,92	Not satisfactory	Quadrant A	Needs Immediate Improvement

Information :

- A = High level of expectation but low level of performance
- B = High level of expectation and high performance
- C = Low expectations and low performance
- D = Low expectation but high performance

Table 3. Score median PGCV

N	Valid	18
	Missing	0
Median		6.27

4. Directions for evacuation in case of emergency:

Previously the evacuation directions on Pangandaran beach were still lacking and not visible. Improvements can be made by making evacuation directions placed in a position that is easily seen and understood by laypeople and given additional lighting facilities in the evacuation directions and the size of the evacuation direction is adjusted to the location of placement.

5. Surfing water tour:

Saran yang dapat dilakukan dengan lebih mempertimbangkan apakah lokasi wisata tersebut benar-benar dapat digunakan untuk kegiatan wisata tersebut, apabila bisa maka perlu diperhatikan keandalan peralatan yang digunakan seperti papan *surfing*, membuat jadwal waktu kegiatan surfing yang sesuai dengan cuaca dan pelatih surfing yang mampu berbahasa asing. Melakukan promosi dengan cara mengintegrasikan antara atraksi yang ditampilkan dengan wisata air *surfing*, membuat event wisata air

surfing dalam suatu paket wisata melalui sosial media maupun media cetak.

6. Provides updated information about upcoming events:

Previously, Pangandaran beach had not provided updated information regarding upcoming events. Improvements can be made by creating an integrated information system between residents and the Pangandaran district government, by creating several social media accounts to be able to promote more about what activities will and are ongoing at the tourist site. Involving artists or public figures in promoting Pangandaran beach and conducting promotional activities by creating a calendar of events that will last for one year, which is integrated with adequate information systems through both social media and print media.

7. Standardization of lodging facilities:

Previously, in Pangandaran beach there were no facilities such as 1,2,3,4 and 5 stars. Improvements can be made by standardizing lodging facilities by integrating all lodging service providers for Pangandaran beach tourists, with the existence of consumer services that provide reprimands against lodging facilities providers, which are not appropriate and provide compensation to tourists in the form of price discounts.



Fig. 1. length of the East Pangandaran coastline

Source: Google maps

Table 4. Index potential gain customer value (PGCV)

Improvement priority	PGCV Index	Attribute number	Service attribute
1	10,6	18	The availability of integrated service post near the beach
2	8,67	16	Snorkel tourism training program
3	8,44	2	Attractions displayed
4	8,27	17	Directions for evacuation in case of emergency
5	7,51	1	Surfing water tour
6	7,23	7	Provides updated information about upcoming events
7	6,62	8	Standardization of lodging facilities
8	6,36	12	Integrated information service centre about lost children and property
9	6,29	3	Easy access to attractions



Fig. 2. snorkelling tours
Source: www.instagram.com



Fig. 3. wisata surfing
Source : www.instagram.com

8. Integrated information service centre about lost children and property:

Already included in point number 1 above .

9. Easy access to attractions:

- Improvements that can be done by opening access via air and land that is, through access via air from Halim Perdana Kusuma - Nusawiru takes 1 hour drive at a cost of Rp.800,000 thousand rupiah, and must be

integrated with modes of transportation via land to get to the beach tourist destinations Pangandaran, with a shorter travel time than the normal land route, is for certain circles and is expected to be enjoyed in the future by all groups

- If via land access it will take quite a long time, which is 10 hours of travel with a round trip fuel cost of Rp. 600,000 thousand rupiah,

and a toll of Rp. 150,000 thousand rupiah for the round trip, and also improve road infrastructure such as the construction of an alternative route that can be taken faster to go to Pangandaran beach tour.

4. CONCLUSION

Based on data analysis, it can be concluded as follows :

- 1) Based on the servqual score the level of service perception is not satisfied for Pangandaran beach tourists with 5 dimensions, namely:
 - a) Tangible (Physical Evidence): Attractions displayed (-1.36)
 - b) Assurance: Availability of accident insurance in tourist destinations (-1.03)
 - c) Emphaty: Integrated information service centre on missing children and property (-1,14)
 - d) Reliability: Sound notification of danger in the coastal area (-1.05)
 - e) Responsive: Availability of integrated service posts near the coast (-1.92)
- 2) Supporting components that are expected to be realized by Pangandaran beach tourists with the concept of tourism A3 (Attractions, Accessibility and Amity), namely:
 - a) Attractions: Snorkel tourism training program
 - b) Accessibility: Directions to get to Pangandaran beach destinations
 - c) Amenity: Availability of integrated service post near the beach
- 3) Priority improvement of Pangandaran beach tourist satisfaction improvement can be seen in order from the priority to the end, namely:

1)The availability of integrated service post near the beach, 2) Snorkeling tourism training program, 3) Attractions displayed, 4) Directions for evacuation during emergencies, 5) Surfing water tourism, 6) Provide updated information about the event that will take place, 7) Standardization of lodging facilities, 8) Integrated information service center on children and lost property, 9) Easy access to tourist destinations.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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