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Analysis of Facility Quality at "Kemit Forest Education" Tourism on Visitor Satisfaction

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Abstract. *Kemit Forest Education" Tourism Object in Cilacap Regency is famous for its selfie locations and recreational rides in the highlands, and has an educational element. In 2019, this destination entered the top 10 in Cilacap. However, many visitors complain about the facilities provided. This study aims to measure visitor satisfaction with existing facilities and provide suggestions for improvement. By using 7 Sapta Pesona and 4A variables, and using 100 respondents based on the calculation of the Sample Linear Time Function. This study uses the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) methods whose results are processed using IBM SPSS Statistic 22 software, the results show a satisfaction level (CSI) of 68% (satisfied category). The results of the IPA method show that the Cartesian quadrant analysis identifies 5 attributes in quadrant I (top priority) and 4 attributes in quadrant III (low priority) that need to be improved and maintained. This can be interpreted that visitors to "Kemit Forest Education" tours are satisfied with the facilities that have been provided but have not maximized the performance provided by "Kemit Forest Education" tours.*

Keywords: *7 Sapta Pesona, 4A, CSI, IPA*

I. INTRODUCTION

The development of the tourism sector is an important role in the economic growth of various countries. The tourism sector, if well developed, can contribute to an increase in national income as well as the potential to increase regional income. (Conterius et al., 2021). As in the tourism sector in Indonesia, this is one of the mainstay sectors which has an important role in regional economic development, so that currently many regions in Indonesia are competing to show and demonstrate their tourism potential in attracting tourists to visit (Juansya et al., 2022). With the development of tourism in an area, it will stimulate the emergence of various other businesses for the surrounding community such as souvenir businesses, lodging, restaurants and so on, this will certainly contribute to the economic growth of the area (Alcalá-Ordóñez & Segarra, 2023).

In addition, a tourist attraction is considered a service product presented by a service company, with the expectation that consumers will come and enjoy the offerings. To ensure visitor satisfaction, managers need to ensure that the facilities provided reach the best standards. (Yanto et al., 2022). In general, the service sector has different characteristics from the manufacturing industry, because in the service sector, the products produced are intangible. Therefore, the quality of facilities must start with customer needs and end with customer satisfaction and a good opinion about the quality of the facilities provided (Beddu & Nurbakti, 2019).

Providing the best quality facilities is a strategy to attract new customers, retain existing customers, reduce customer confusion and gain a competitive advantage in terms of price (Alshamsi et al., 2021). If the facilities provided are as expected, then the quality of the facilities provided is good and satisfying. In addition, facility quality is an important concept that allows businesses to survive in a fierce competitive

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environment (Zeithaml et al., 1996). A focus on facility quality is critical in business operations. When a business is unable to provide quality facilities, its growth is stunted because its own management fails to create a positive experience for visitors (Irfan, 2019).

Cilacap Regency, located in Central Java Province, features a very attractive tourism attraction and has great potential to be developed. Efforts in tourism development aim to introduce natural beauty, cultural heritage, and diverse traditions to the wider community. Cilacap Regency has the potential to become an attractive tourist destination, as evidenced by its abundant tourism wealth and cultural diversity that is no less interesting than other regions in Central Java. One of the prominent tourist attractions in Cilacap Regency is "Kemit Forest Education" (Sutrisno* & Sarjanti, 2023).

"Kemit Forest Education" Tourism Object is a tourism destination that is famous for its various selfie locations and various recreational rides, which are placed in the highlands. As the name implies, the main advantage of "Kemit Forest Education" is its status as the only natural destination that has an educational element in Cilacap Regency. In 2019, this tourist attraction was ranked in the top 10 in tourism destinations in Cilacap Regency. Other advantages include the presence of many towering pine trees around the area, fresh air, and green scenery that is perfect for enjoying with your family. What's more, there are plenty of locations to take pictures with the latest styles, and the number of rides at this attraction increases almost every month (Marni et al., 2020). However, from the many advantages of the "Kemit Forest Education" tour, there are also many complaints from visitors who have visited the tour. The following is a table of complaints from visitors related to the facilities on the "Kemit Forest Education" tour.

In Table 1 is data on complaints from visitors with a total of 23 respondents who complained that the facilities and rides provided by "Kemit Forest Education" tours still have many shortcomings, among others, such as the lack of gazebos, rides needing repairs, the need for additional rides, dirty and damaged toilets, the absence of canteens or stalls inside the tour, and the safety of rides that need attention as well. In addition to data on visitor complaints, there is also data from the number of visits to "Kemit Forest Education" tourist destinations for 6 years obtained by interviewing the LMDH (Lembaga Masyarakat Desa Hutan) or the tour manager.

Table 1. "Kemit Forest Education" Complaints Data

Complaints	Frequency
Lack of gazebo	6
Rides need repair	8
Addition of rides	11
Dirty and damaged toilets	4
There is no canteen in the tour	2
Safety of rides	3

Table 2. Visitor Data of "Kemit Forest Education"

Year	Number of Visitors	Descriptiom
2017	87.370	Before the Pandemic
2018	173.901	Before the Pandemic
2019	102.962	Before the Pandemic
2020	79.300	Pandemic
2021	53.319	Pandemic
2022	29.649	After Pandemic
2023	18.156	After Pandemic

Based on the data obtained by LMDH "Kemit Forest Education" in Table 2, it reflects the ups and downs in the number of visitors at "Kemit Forest Education" Tourism from 2017 to 2022. In 2017, the number of visitors reached 87,370 people. In 2018, there was a significant increase of 86,531 visitors, so that the total number reached 173,901 people in 2018. However, in the period 2019 to 2023, there was a decrease in the number of visitors by 70,939; 23,662; 25,981; 23,670; and 11,493 people per year, with the total number of visitors in these years being 102,962; 79,300; 53,319; 29,649; and 18,156 people respectively. This fluctuation shows the variation in the number of visitors each year. Apart from visitor data, researchers have conducted interviews with 10 visitors who complain that the facilities and rides provided by "Kemit Forest Education" tours still need to be added and repairs to abandoned rides or lack of maintenance from the manager.

So from this problem, research was conducted at "Kemit Forest Education" tour, where the purpose of this study was to measure how satisfied visitors were with the facilities provided by "Kemit Forest Education" tour.

II. Research Method

This research will use a quantitative approach to analyze cases found on "Kemit Forest Education" tours. The stages that will be carried out to start this research are by making direct observations on the "Kemit Forest Education" tour, after which it is continued by making a literature study to find several references to the problems to be studied. Next identify existing problems and formulate these problems. In this research process, the determination of indicators or variables will be carried out, if the variables are known, the next step is to make a questionnaire consisting of several statements related to the identity of the respondents and questions to measure the level of visitor satisfaction by distributing questionnaires directly at "Kemit Forest Education" tours.

After obtaining the results of the questionnaire, the next step is to conduct a validity test and reliability test. If the data that has been obtained is valid and reliable, the next step can be taken, but if the data is not valid and reliable, a new questionnaire will be made and the questionnaire will be distributed again. The next step is to process data from each case felt by visitors based on the CSI (Customer Satisfaction Index) and IPA (Importance Performance Analysis) methodologies, which is considered appropriate for measuring the level of customer satisfaction and determining corrective steps to increase customer satisfaction (Harmaja et al., 2022; I. W. Pratiwi & Hendrawan, 2018). Next, the results that have been obtained will be analyzed and discussed, after that determining the conclusions and suggestions of all the problems that have been studied. Below is a research flow chart, can be seen in Figure 3.

The data analyzed in this study consisted of two types of data, namely data obtained directly (primary data) and data obtained from other sources (secondary data). Primary data was collected through the interview process and direct observation at "Kemit Forest Education", collected through questionnaires given to visitors who were directly at "Kemit Forest Education". As for secondary data obtained from several references and reading journals about the theory of service quality on customer satisfaction as well as the methods and variables used. To enter quality data, statistical analysis can be carried out

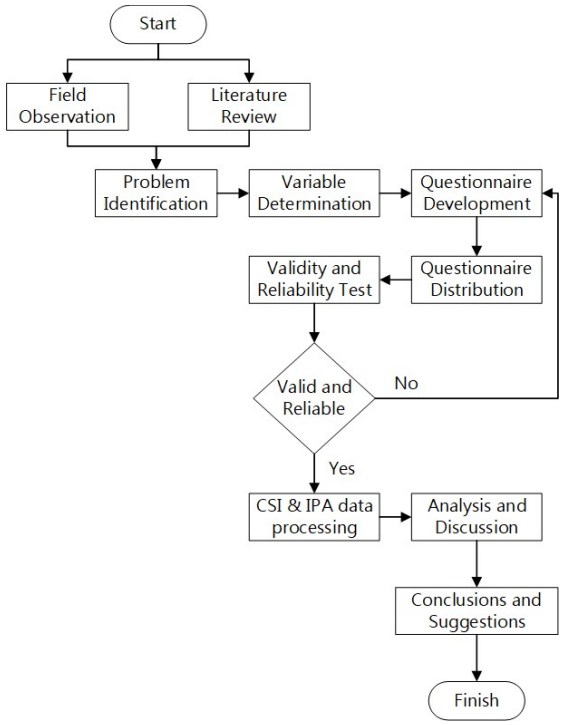

Figure 3. Research Flowchart

Table 3. Likert Scale on Expectations

Score	Expectations
1	Very Unimportant
2	Less Important
3	Quite Important
4	Important
5	Very Important

Table 4. Likert Scale on Performance

Score	Performance
1	Very Dissatisfied
2	Less Satisfied
3	Moderately Satisfied
4	Satisfied
5	Very Satisfied

using a Likert scale with 2 categories, namely expectations and performance can be seen in Table 3 and Table 4.

Determination of the number of samples using random sampling techniques (probability sampling) will be applied to determine the sample. Sample selection tends to be unstable and can change on a daily basis. In addition, the area sampling technique is considered a suitable alternative due to the uncertainty regarding the geographical population. To determine the sample size, the Sample Linear Time Function method will be used, a useful formula to project the sample size based on time constraints. (Hariputra et al., 2022). Here is the Sample Linear Time Function formula:

$$n = \frac{T - to}{t1} \quad \text{..... (1)}$$

Description:

n = Number of samples selected

T = Time available for research implementation (30 days x 4 hours = 120 hours/month)

t_0 = Fixed time survey duration (3 hours/day x 30 days = 90 hours/month)

Table 5. 7 Sapta Pesona and 4A Statements

Attributes	Statements
	Safe, Cool, Accessibility, and Orderly Variables
P1	There is a safety post ready to monitor the routine at "Kemit Forest Education" tour.
P2	I feel that the rides at "Kemit Forest Education" provide adequate protection against the risk of accidents.
P3	"Kemit Forest Education" provides enough shady areas or gazebos to rest and protect visitors from the heat of the sun.
P4	The facilities and areas around the rides give a cool and refreshing impression to visitors.
P5	There is a signpost to the "Kemit Forest Education" tour.
P6	The availability of a canteen inside the tour to facilitate visitors on the "Kemit Forest Education" tour.
P7	The direction and information boards at "Kemit Forest Education" help me navigate and find the rides or areas I am looking for.
P8	The parking area for "Kemit Forest Education" tours is neatly arranged according to the type of visitor vehicle.
	Memories, Beauty, Attractions, and Cool Variables
P9	The rides at "Kemit Forest Education" provide plenty of places to take memorable photos or videos.
P10	The rides at "Kemit Forest Education" have an attractive and aesthetic design.
P11	The rides at "Kemit Forest Education" offer interesting and entertaining attractions for visitors.
P12	The beautiful arrangement of plants and rides gives a cool and refreshing impression to visitors.
	Hygiene Variable
P13	The prayer room facilities at "Kemit Forest Education" are always clean and well-maintained.
P14	Restrooms at "Kemit Forest Education" are always clean and comfortable.
P15	The gazebo at "Kemit Forest Education" is always clean and well-maintained.
	Amenity and Ancillary Variables
P16	I feel at ease because of the availability of health and first aid facilities around the ride area, providing safety assurance while I enjoy the activities at "Kemit Forest Education".
P17	There is a public information center about "Kemit Forest Education".
P18	Public facilities such as toilets, rest areas, and dining areas at "Kemit Forest Education" meet the expected standards of comfort and cleanliness.
P19	There are additional luggage storage facilities or equipment rental places that make it easier for visitors to maintain cleanliness and comfort during visits at "Kemit Forest Education".
P20	There are Automated Teller Machines around the "Kemit Forest Education" tour.
P21	There are additional facilities such as cellphone charging.

T_1 = Survey time used for each sampling unit (0.3 hours/questionnaire or 18 minutes/questionnaire)

$$n = \frac{120-90}{0,3} = 100 \text{ sample} \quad \ldots\ldots (2)$$

The entire sample will provide an assessment of their expectations and performance using a Likert scale on 21 attributes grouped into several variables in accordance with 7 Sapta Pesona and 4A (Attraction, Amenity, Accessibility, and Ancillary), where the 7 Sapta Pesona and 4A are good benchmarks for the performance of a tourist spot (Mulyana & Er Meytha Gayatri, 2022; Safitra & Karina, 2023). All of these attributes are described in Table 5.

III. Result and Discussion

3.1 Validity Test

This validity test is carried out to measure the data to be measured, the validity test at this time uses a questionnaire which is carried out to determine the level of validity of a variable or attribute used in this study. In addition, the validity test is to determine the extent to which the measuring instrument is able to measure what you want to measure. If calculated r > tabled r then the statement is said to be valid, but if the value of calculated r > tabled r then the statement is invalid.

Testing the validity of this research using IBM SPSS Statistic 22 software. Testing was carried out with a total of 100 respondents and using a significant level of 5% (α = 0.05) the statements in the questionnaire can be said to be valid if the corrected item correlation value > tebled r (0.196). The test results on performance and expectations can be seen in Table 6.

From the results of the hope data validity test above, it shows that all indicators used to measure the variables used in this study have calculated r greater than tabled r which is 0.196. so it can be concluded that all of the data is valid and can be continued to the reliability testing stage.

Table 6. Expectation & Performance Validity Test

Attributes	Calculated R		Tabled R	Description
	Expectation	Performance		
P1	0.543	0.419	0.196	Valid
P2	0.555	0.314	0.196	Valid
P3	0.468	0.420	0.196	Valid
P4	0.219	0.251	0.196	Valid
P5	0.466	0.459	0.196	Valid
P6	0.501	0.273	0.196	Valid
P7	0.453	0.337	0.196	Valid
P8	0.458	0.478	0.196	Valid
P9	0.537	0.435	0.196	Valid
P10	0.429	0.312	0.196	Valid
P11	0.522	0.365	0.196	Valid
P12	0.531	0.342	0.196	Valid
P13	0.585	0.361	0.196	Valid
P14	0.514	0.375	0.196	Valid
P15	0.584	0.352	0.196	Valid
P16	0.563	0.523	0.196	Valid
P17	0.379	0.285	0.196	Valid
P18	0.525	0.405	0.196	Valid
P19	0.608	0.461	0.196	Valid
P20	0.491	0.509	0.196	Valid
P21	0.397	0.450	0.196	Valid

3.2. Reliability Test

The reliability test can be declared reliable or unreliable by looking at the value of the Crombach's Alpha coefficient ≥ 0.6, so it is declared reliable, but if Crombach's Alpha ≤ 0.6 it will be declared unreliable. For the results of the reliability test for the level of expectations and performance can be seen in table 4.3. The results of the reliability test on the expectation variable obtained a value of 0.843 while the results of the performance variable obtained a value of 0.702. so it can be concluded that the data is reliable this is because the results obtained are more than 0.6, this reliability test uses IBM SPSS Statistic 22 software.

Table 7. Reliability Test of Expectation & Performance

Variable	*Cronbach's Alpha*	R Coefficient	Description
Expectation Level	0.843	0.6	Reliable
Performance Level	0.702	0.6	Reliable

3.3. Customer Satisfaction Index (CSI) Results

The next stage is to process data from the level of expectations and the level of performance on "Kemit Forest Education" tours, then you should measure the level of visitor satisfaction based on the Customer Satisfaction Index (CSI). This CSI method is used to determine the overall level of satisfaction of the visitors.

Based on the Table 8, calculations have been carried out using the Customer Statsifaction Index method so that it can be seen that the indels of visitor satisfaction with "Kemit Forest Education" tours are 68%. It can be said that the level of satisfaction of visitors to "Kemit Forest Education" tours is in the satisfied category and therefore the level of satisfaction of "Kemit Forest Education" tours must be maintained and can even be improved for the better.

Table 8. Customer Statisfaction Index (CSI).

No	MIS	MSS	WF	WS
1	3,9	3,33	4,95	16,49
2	4,08	3,48	5,18	18,03
3	3,8	3,44	4,82	16,60
4	3,73	3,56	4,74	16,86
5	3,83	3,46	4,86	16,83
6	3,78	3,3	4,80	15,84
7	3,58	3,5	4,55	15,91
8	3,76	3,44	4,77	16,42
9	3,8	3,59	4,82	17,32
10	3,63	3,64	4,61	16,78
11	3,68	3,38	4,67	15,79
12	3,76	3,46	4,77	16,52
13	3,53	3,23	4,48	14,48
14	3,93	3,6	4,99	17,96
15	3,61	3,25	4,58	14,90
16	3,85	3,23	4,89	15,79
17	3,77	3,55	4,79	16,99
18	3,6	3,61	4,57	16,50
19	3,92	3,48	4,98	17,32
20	3,56	3,6	4,52	16,27
21	3,66	3,11	4,65	14,45
CSI Total = 68,8%				

3.4. Importance Performance Analysis (IPA) Result

The next stage is data processing with the IPA (Importance Performance Analysis) method, with the aim of measuring the level of visitor satisfaction with the performance of the company. A person's satisfaction is measured by comparing a level of expectation with the performance that has been provided by the company. If the level of expectation is higher than the level of performance of the company, then the consumer is dissatisfied and vice versa.

Based on the Table 9, the results of the calculation of data measuring performance variables and expectations at the level of conformity above can be analyzed as follows:

1. Performance Level Score (Xi)

This score reflects how far the measured attribute or factor has been achieved, with the information that the higher the performance score, the better the performance on that attribute.

2. Expectation Level Score (Yi)

This expectation level score reflects the desired expectation for that attribute, with the information that the higher the expectation score, the higher the expectation to be achieved.

Table 9. Suitability Level

No	Attributes	Performance Level Score (Xi)	Expectation Level Score (Yi)	Suitability Level
1	P1	333	390	85,38%
2	P2	348	408	85,29%
3	P3	344	380	90,53%
4	P4	356	373	95,44%
5	P5	346	383	90,34%
6	P6	330	378	87,30%
7	P7	350	358	97,77%
8	P8	344	376	91,49%
9	P9	359	380	94,47%
10	P10	364	363	100,28%
11	P11	338	368	91,85%
12	P12	346	376	92,02%
13	P13	323	353	91,50%
14	P14	360	393	91,60%
15	P15	325	361	90,03%
16	P16	323	385	83,90%
17	P17	355	377	94,16%
18	P18	361	360	100,28%
19	P19	348	392	88,78%
20	P20	360	356	101,12%
21	P21	311	366	84,97%
Average		**7224**	**7876**	**91,83%**

3. Level of suitability

At this level of conformity describes the extent to which performance on the attribute has reached the desired expectations or targets. The percentage of the level of conformity is calculated by comparing the performance score with the expectation score which will then be multiplied by 100%. With the information that the higher the percentage, the closer the performance will be to the desired expectations.

Based on Table 9, the average of the overall level of conformity is 91.83% which is obtained from the summation of all attributes which then the results will be divided by 21 attributes. So it can be said that the performance of each attribute of performance or service can meet the expectations of visitors.

With this analysis, "Kemit Forest Education" tour managers can identify what attributes need to be improved or improved in order to meet the expectations of visitors. In addition, attributes that have exceeded expectations can also be plus points that can be used as promotions in the marketing strategy of tourist attractions.

After knowing the value of the average of each attribute of the performance level and the level of expectations in the table above, a quadrant analysis of the cartesian diagram will be carried out. Based on the Table 10, there is an average performance calculation of 3.44, while the average expectation is 3.75. The purpose of the cartesian diagram is to determine the position

Table 10. Average Expectation & Performance Level

No	Total Score	
	Performance (Xi)	Expectation (Yi)
1	3,33	3,9
2	3,48	4,08
3	3,44	3,8
4	3,56	3,73
5	3,46	3,83
6	3,3	3,78
7	3,5	3,58
8	3,44	3,76
9	3,59	3,8
10	3,64	3,63
11	3,38	3,68
12	3,46	3,76
13	3,23	3,53
14	3,6	3,93
15	3,25	3,61
16	3,23	3,85
17	3,55	3,77
18	3,61	3,6
19	3,48	3,92
20	3,6	3,56
21	3,11	3,66
Total	3,44	3,75

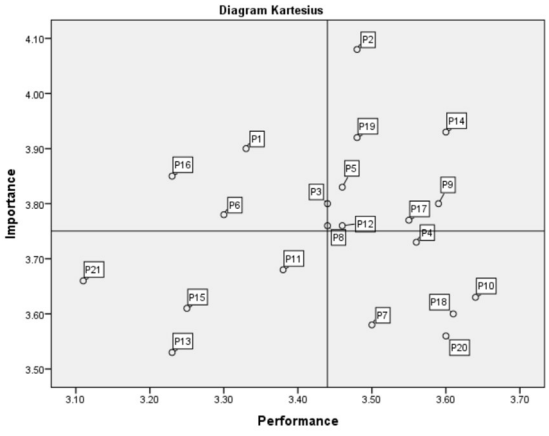

Figure 2. Cartesian Diagram

of each of the various attributes and dimensions which will be divided into four quadrants, namely quadrant I, Quadrant II, quadrant III, and quadrant IV. These four quadrants describe a variety of different positions, so the following is the positioning of the statement of the results of the Cartesian diagram which can be seen in the Figure 2.

From the picture above, it can be seen that the quadrant placement of Performance and Expectation attributes shows four different areas. This Cartesian diagram is made to understand the location of each attribute and dimension that has been divided into four quadrants. The following is an analysis of the Cartesian diagram above:

1. Quadrant I (Top Priority). In quadrant I is a description of factors or attributes that are considered important and highly expected by consumers, but the performance of the "Kemit Forest Education" tourism manager has not provided satisfaction with what visitors expect. For this reason, these dimensions or attributes need to be prioritized for improvement. These attributes are statement 1 (P1), statement 3 (P3), statement 6 (P6), statement 8 (P8), and statement 16 (P16). This shows that the "Kemit Forest Education" tour must improve the performance of the attributes in this quadrant I.
2. Quadrant II (Maintain Achievement). In this quadrant is the quadrant most expected by visitors, because these attributes are in accordance with what is felt by visitors besides that as a factor that is considered important and is expected as a factor supporting visitor satisfaction so that the tour is obliged to maintain these performance achievements. The attributes in quadrant II are statement 2 (P2), statement 3 (P3), statement 5 (P5), statement 8 (P8), statement 9 (P9), statement 12 (P12), statement 14 (P14), statement 17 (P17), and statement 19 (P19).
3. Quadrant III (Low Priority). In quadrant III, there are attributes that are considered to have a low priority level or are considered less important by respondents and the performance received in their implementation is also normal. The attributes in quadrant III are statement 11 (P11), statement 13 (P13), statement 15 (P15), and statement 21 (P21).
4. Quadrant IV (Excessive). In quadrant IV, it shows attributes that are considered less important to visitors, but the perceived performance is actually too much. The attributes that are different in quadrant IV are statement 4 (P4), statement 7 (P7), statement 10 (P10), statement 18 (P18), and statement 20 (P20).

3.2 Proposed Improvements (IPA)

Based on the Cartesian diagram above which serves as a priority for facility improvement with the aim of knowing what attributes must be improved first, so as to increase visitor satisfaction and improve performance. In this Cartesian diagram, it can also map each quadrant which can make it easier for "Kemit Forest Education" tourism to make attribute improvements, attributes that require improvement can be seen in quadrant I, quadrant II, and quadrant IV.

Quadrant I is a quadrant with top priority or attributes that are considered important to visitors and must get more attention or must get improvements. In quadrant I there are 5 indicators that must get more attention. Here are some attributes that are included in quadrant I, namely as follows:

a. Statement 1 (P1) Safety posts at "Kemit Forest Education" are essential for maintaining visitor safety and comfort. It enhances the visitor experience and ensures quick and proper emergency response. To function optimally, some improvements and upgrades are required. The proposed improvements include conducting disaster response training for employees and improving the facilities located at the safety post, for example adding CCTV at strategic points connected to the safety post to improve monitoring and quick response (Prastowo, 2022).
b. Statement 3 (P3) "Kemit Forest Education" provides enough shady areas or gazebos to rest and protect visitors from the sun. With proposed improvements to increase the number of shelters or gazebos at several easily

accessible points, in addition to adding enough tables and chairs to provide a sense of comfort to visitors, and providing enough trash bins near the gazebo (Mendrofa & Weni Puji Hastuti, 2023).

c. Statement 6 (P6) The availability of a canteen inside the tour to facilitate visitors on the "Kemit Forest Education" tour. Entering quadrant I with the proposed improvement of this indicator, namely the need to build a canteen or stall in the tourist area will provide convenience for visitors by providing a variety of food and beverage choices. With the existence of a canteen, visitors do not need to leave the tourist site to find food. (Putra & Sukarni, 2022). The proposed improvements are also expected to increase the level of comfort and satisfaction of visitors while in the destination.
d. Statement 8 (P8) The "Kemit Forest Education" tourist parking area is neatly organized according to the type of visitor vehicle. With the proposed improvements to organize parking regularly based on the type of vehicle in the tourist area, it will increase the level of comfort and safety for visitors. With an orderly arrangement, visitors will find it easier to find a parking space that suits their vehicle type. In addition, it is important to provide parking areas equipped with shade, such as tents or canopies, to protect vehicles from sun exposure and rain (T. I. Pratiwi et al., 2019). This will also create a good impression for visitors and improve the image of "Kemit Forest Education" tourism as a visitor-friendly destination or tour.
e. Statement 16 (P16) I feel calm because of the availability of health and first aid facilities around the ride area, providing a guarantee of safety while I enjoy activities on the "Kemit Forest Education" tour. The existence of health and first aid facilities around "Kemit Forest Education" rides is very important to provide a sense of security to visitors. It is necessary to make improvements and improvements to these facilities so that visitors can feel calm and protected while enjoying activities at the tourist attractions. Improvement efforts can be made by providing complete health facilities, training staff with proper first aid skills, and installing information boards on the importance of safety and health in the tourist area (Rusvitasari & Solikhin, 2014).

Quadrant III (Low Priority) is a category that is considered less important to visitors and the performance of unsatisfactory tourism. In quadrant III there are 4 statement indicators that are considered less important in performance and less damaging to visitors. The following indicators are included in quadrant III as follows:

a. Statement 11 (P11) The rides at "Kemit Forest Education" offer interesting and entertaining attractions for visitors, falling into low priority. Improvements and innovations need to be made so that the rides at "Kemit Forest Education" continue to provide an interesting and enjoyable experience for visitors. Proposed improvements include the addition of new unique rides to provide a variety of visitor experiences, as well as organizing special events such as theme parties, festivals, or local art performances such as kuda lumping to add excitement and entertainment for visitors. (Sukmaratri & Damayanti, 2016).
b. Statement 13 (P13) The prayer room facilities at "Kemit Forest Education" are always clean and well maintained. Improvements need to be made so that the prayer room facilities at "Kemit Forest Education" are kept clean and provide comfort to visitors who need it. Proposed improvements include setting a routine schedule for cleaning and maintenance every day, paying attention to the availability of worship equipment such as prayer mats and mukena, adding supporting facilities such as clean sinks and ablutions, and providing trash bins to prevent accumulation of garbage around the prayer room area (Yulianto & Wijayanti, 2020).
c. Statement 15 (P15) The gazebo at "Kemit Forest Education" is always clean and well-maintained. Improvements need to be made to keep the gazebo in good condition. Proposed improvements include establishing a regular maintenance schedule, including cleaning and maintaining the building

structure and surrounding equipment, repairing or replacing damaged parts such as roofs, walls, and floors, and installing signs or banners to remind visitors of the importance of maintaining cleanliness and caring for the environment (Fujiyama & Wipranata, 2020).

d. Statement 21 (P21) There are additional facilities such as cellphone charging. The existence of additional facilities such as cell phone charging at "Kemit Forest Education" is a significant added value for visitors. However, to ensure a better visitor experience, some corrective actions are needed. First, it is necessary to place charging points in strategic locations and easily accessible to visitors so that the use of these facilities becomes more practical. Furthermore, providing a charging time limit aims to avoid the accumulation of visitors waiting for their turn. In addition, it is also important to provide information to visitors about the proper and safe use of the cellphone charging facility. Finally, it is necessary to periodically check the condition of the cables and connectors to prevent damage and failure during charging. By taking these corrective actions, it is hoped that the cellphone charging facility can function optimally and better meet the needs of visitors (Khaerurrusli, 2022).

Quadrant IV shows attributes that are considered less important to visitors, but the perceived performance is actually too much. The attributes that are in quadrant IV are as follows:

a. Statement 4 (P4) The facilities and areas around the rides provide a cool and refreshing impression for visitors. With proposed improvements to reduce the over-performance of attribute P4, namely optimizing vegetation, for example planting shady trees and green plants for natural and aesthetic cooling effects, such as banyan or trembesi trees. Furthermore, water facilities and shady areas, for example adding ponds, fountains, and shady areas with gazebos or canopies to give a cool impression (Suwarno, 2009). These proposed improvements are expected to make the facilities and areas around the rides give a cooler and more refreshing impression without burdening the manager, taking into account sustainability and visitor comfort.

b. Statement 7 (P7) The signage and information at "Kemit Forest Education" helped me navigate and find the rides or areas I was looking for. The following suggested improvements to reduce the over-performance of this attribute are a clearer and more informative information board design, for example redesigning the signage with larger fonts, better color contrast, and more complete information. Boards should also be placed in strategic locations such as major intersections and near important facilities. In addition, universal symbols and icons can be used, for example, using universally understandable symbols and icons to indicate directions and important information. This makes it easier for visitors from different backgrounds to understand the instructions provided (Kusumawardhani, 2022).

c. Statement 10 (P10) The rides at "Kemit Forest Education" have an attractive and aesthetic design. With proposed improvements to reduce the over-performance of attributes (P10), namely creating interactive rides that not only entertain but also educate visitors about flora, fauna, and forest ecosystems. This can increase the attractiveness and educational value of the vehicle. In addition, it can add supporting facilities such as seating, rest areas, and photo spots that are designed with high aesthetics to enrich the visitor experience and beautify the overall area (Taning et al., 2022).

d. Statement 18 (P18) Public facilities such as toilets, rest areas, and dining areas at "Kemit Forest Education" meet the expected standards of comfort and cleanliness. With proposed improvements to reduce over-performance on this attribute, namely conducting routine maintenance and periodic cleaning to maintain the cleanliness of public facilities such as toilets, rest areas, and dining areas. The use of environmentally friendly cleaning products also needs to be considered. In addition, reviewing the comfort

standards of public facilities based on research on visitor preferences and needs, such as the addition of toilet paper, toiletries, ergonomic chairs, and air conditioning or heating facilities in the rest area (Yulianto & Wijayanti, 2020).

e. Statement 21 (P21) There are ATM machines or Automated Teller Machines around "Kemit Forest Education" tours. e. With proposed improvements to reduce the excessive performance of attribute (P21), namely the Application of Digital Payment Technology, for example, encouraging the use of digital payment technology in the "Kemit Forest Education" area, such as payments with banking applications or digital wallets. This can reduce dependence on ATM machines and speed up the visitor transaction process, thereby reducing queues and excessive performance at ATM machines (Era Purike et al., 2022).

IV. CONCLUSION

Based on the results of the research that has been carried out, it can be concluded as follows:

1. Based on the results obtained by calculating using the CSI method of 68%. It can be said that the level of satisfaction of visitors to "Kemit Forest Education" tours is in the satisfied category and therefore the level of satisfaction of "Kemit Forest Education" tours must be maintained and can even be improved for the better.
2. Based on the results obtained by calculating using the IPA method, the average performance result is 3.44, while the average expectation is 3.75. In addition, based on the analysis of the Cartesian diagram quadrant, there are several indicators that need to be improved and maintained, namely attributes that fall into quadrant I (Main Priority) and quadrant III (Low Priority). With the attributes that are the top priority, there are 5 attributes in quadrant I of the IPA Cartesian diagram and there are 4 attributes that are in quadrant III with lower priority.
3. Suggested improvements to attributes that fall into Quadrant I (Top Priority), for example in statement 1 (P1) Safety posts at "Kemit Forest Education" are very important to maintain visitor safety and comfort. Its presence enhances the visitor experience and ensures quick and proper emergency handling. To function optimally, some improvements and upgrades are required. With the proposed improvements, namely by carrying out disaster response training for employees and improving the facilities located at the safety post, for example adding CCTV at strategic points connected to the safety post to improve monitoring and quick response. Proposed improvements to attributes that fall into quadrant III (Low Priority), for example in statement 15 (P15) The gazebo at "Kemit Forest Education" is always clean and well maintained. Improvements need to be made so that the gazebo remains in good condition. Proposed improvements include establishing a routine maintenance schedule, including cleaning and maintaining building structures and surrounding equipment, repairing or replacing damaged parts such as roofs, walls, and floors, and installing signs or banners to remind visitors about the importance of maintaining cleanliness and caring for the environment.

REFERENCES

Alcalá-Ordóñez, A., & Segarra, V. (2023). Tourism and economic development: A literature review to highlight main empirical findings. *Tourism Economics, 0* (0), 1–28. https://doi.org/10.1177/13548166231219638

Alshamsi, A., Alshurideh, M., Kurdi, B. Al, & Salloum, S. A. (2021). *The Influence of Service Quality on Customer Retention: A Systematic Review in the Higher Education*. In Advances in Intelligent Systems and Computing: Vol. 1261 AISC. Springer International Publishing. https://doi.org/10.1007/978-3-030-58669-0_37

Beddu, M., & Nurbakti, R. (2019). Pengaruh Metode Servis Quality (Serqual) Terhadap Strategi Pemasaran Objek Wisata Alam (Studi Kasus Objek Wisata Pantai Wakka Kabupaten Pinrang). SEIKO : *Journal of Management & Business, 3* (1), 101. https://doi.org/10.37531/sejaman.v3i1.513

Conterius, A. L. F., Bire, R. B., & Nasar, A. (2021). *Tourist Motivation and Perception of Three Favorite Tourist Attractions in Kupang Regency.* Proceedings of the International Conference on Applied Science and Technology on Social Science (ICAST-SS 2020), 544, 76–81. https://doi.org/10.2991/assehr.k.210424.016

Era Purike, Imas Wiwin Kurniasih, Fransiska Wuri Wulandari, & Ayulia Nirwani. (2022). TRANSAKSI DIGITAL DAN PERKEMBANGAN e-TOURISM DI INDONESIA. NAWASENA : J*urnal Ilmiah Pariwisata, 1*(2), 12–19. https://doi.org/10.56910/nawasena.v1i2.157

Fujiyama, R. A. W., & Wipranata, I. (2020). Evaluasi Strategi Pengelolaan Wisata Alam Kawasan Curug Luhur, Kabupaten Bogor. *Jurnal Sains, Teknologi, Urban, Perancangan, Arsitektur (Stupa), 2* (1), 1167. https://doi.org/10.24912/stupa.v2i1.7274

Hariputra, R. P., Defit, S., & Sumijan. (2022). Analisis Sistem Antrian dalam Meningkatkan Efektivitas Pelayanan Menggunakan Metode Accidental Sampling. *Jurnal Sistim Informasi Dan Teknologi, 4*, 70–75. https://doi.org/10.37034/jsisfotek.v4i2.127

Harmaja, O. J., Purba, W., Siregar, M. P., Manurung, H. T., & Sirait, F. A. (2022). Analisis Tingkat Kepuasan Pelanggan Pada Rudang Hotel Berastagi Menggunakan Metode Customer Satisfaction Index (Csi). *Jurnal Teknik Informasi Dan Komputer (Tekinkom), 5* (1), 147. https://doi.org/10.37600/tekinkom.v5i1.511

Irfan, A. M. (2019). Pengaruh Kualitas Pelayanan, Harga Dan Fasilitas Yang Diberikan Kenari Waterpark Bontang Terhadap Tingkat Kepuasan Pelanggan. Al-Infaq: *Jurnal Ekonomi Islam, 9* (2), 82. https://doi.org/10.32507/ajei.v9i2.451

Juansya, J., Rahayu, S., & Tobari, T. (2022). Pengaruh Kualitas Layanan, Harga dan Aksesibilitas Terhadap Loyalitas Melalui Kepuasan Wisatawan Sebagai Variabel Intervening Pada Objek Wisata Air Kabupaten Penukal Abab Lematang Ilir (Pali). *Jurnal Bisnis, Manajemen, dan Ekonomi, 3* (4), 196–207. https://doi.org/10.47747/jbme.v3i4.843

Khaerurrusli, C. (2022). Strategi pemasaran Destinasi Wisata Aranka Tempasan Desa Pringgasela Kabupaten Lombok Timur.

Kusumawardhani, Y. (2022). Role of Facilities on Visitor Satisfaction in Gunung Bunder Natural Tourism, Bogor Regency. *Jurnal Hospitality Dan Pariwisata, 8*(1), 65–75. https://doi.org/10.30813/jhp.v8i1.3211

Marni, Rianawati, F., & Nisa, K. (2020). Estimasi Daya Dukung Ekologis Dan Persepsi Wisatawan Di Kawasan Wisata Kemit Forest Education Cilacap Jawa Tengah. *Jurnal Sylva S cienteae, 03*(4), 675–686.

Mendrofa, N. I., & Weni Puji Hastuti. (2023). Strategi Dinas Pemuda Olahraga dan Pariwisata dalam Pengembangan Objek Wisata Candi Sipamutung di Kecamatan Barumun Tengah Kabupaten Padang Lawas Provinsi Sumatera Utara. *Jurnal Publik, 17* (01), 52–65. https://doi.org/10.52434/jp.v17i01.207

Mulyana, A., & Er Meytha Gayatri, I. ayu M. (2022). Pengaruh Komponen Destinasi Wisata Terhadap Kepuasan Wisatawan. EKOMBIS REVIEW: *Jurnal Ilmiah Ekonomi Dan Bisnis, 10* (1), 25–36. https://doi.org/10.37676/ekombis.v10i1.1753

Prastowo, I. (2022). Pelatihan Keamanan Dan Keselamatan Di Destinasi Wisata Sesuai Standar Nasional Maupun Internasional Bagi Pengelola Pariwisata Di Kabupaten Sukoharjo. *Jurnal Pengabdian Teknologi Tepat Guna, 3* (1), 37–46. https://doi.org/10.47942/jpttg.v3i1.829

Pratiwi, I. W., & Hendrawan, D. (2018). Implementasi Importance-Performance Analysis (IPA): Analisis Preferensi Konsumen Muda Mie Setan. *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi Dan Bisnis, 6* (2), 1–20.

Pratiwi, T. I., Muttaqin, T., & Chanan, M. (2019). Pengembangan Desa Wisata Edelweiss di Desa Wonokitri Kecamatan Tosari Kabupaten Pasuruan (Resort PTN Gunung Penanjakan Taman Nasional Bromo Tengger Semeru). *Journal of Forest Science Avicennia, 2* (1), 16–28. https://doi.org/10.22219/avicennia.v2i1.8369

Putra, E. S., & Sukarni, S. (2022). Strategi Pengembangan Pusat Laut (Pusentasi) Donggala Sebagai Objek Wisata Bahari. *Jurnal Pariwisata PaRAMA : Panorama, Recreation, Accomodation, Merchandise, Accessbility, 3* (1), 1–11. https://doi.org/10.36417/jpp.v3i1.275

Rusvitasari, E., & Solikhin, A. (2014). Strategi Pengembangan Wisata Alam Dalam Meningkatkan Kunjungan Wisatawan di Obyek Wisata Umbul Sidomukti Bandungan Semarang. *Pariwisata Indonesia, 10* (1), 1–24.

Safitra, L., & Karina, M. E. (2023). Strategi Dalam Mewujudkan Sapta Pesona Wisata Pantai Di Bengkulu. *Ilmu Sosial, Politik Dan Pemerintahan, 12* (2), 259–270.

Sukmaratri, M., & Damayanti, M. (2016). Diversifikasi Produk Wisata Sebagai Strategi Pengembangan Daya Saing Wisata Kota Batu. *Jurnal Pembangunan Wilayah & Kota, 12* (3), 325. https://doi.org/10.14710/pwk.v12i3.12907

Sutrisno*, S., & Sarjanti, E. (2023). Strategi Pengembangan Obyek Wisata Kemit Forest Education untuk Meningkatkan Daya Saing Pariwisata di Kabupaten Cilacap. *JIM: Jurnal Ilmiah*

Mahasiswa Pendidikan Sejarah, 8 (2), 447–452. https://doi.org/10.24815/jimps.v8i2.24673

Suwarno, N. (2009). Model Pengembangan Tata Ruang Kawasan Objek Wisata Air Studi Kasus: Objek Wisata Air Jolotundo, Klaten (Models of Land Use Development in Water Tourism Area Case Study: Jolotundo Water Recreation, Klaten). *Jurnal Manusia Dan Lingkungan, 16* (1), 1–11.

Taning, N. P., Masyhudi, L., Hulfa, I., Idrus, S., & Martayadi, U. (2022). Pengaruh Fasilitas Wisata Terhadap Kepuasan Wisatawan Pada Destinasi Wisata Alam Aik Nyet Desa Buwun Sejati. *Journal Of Responsible Tourism, 2* (2), 379–392. https://doi.org/10.47492/jrt.v2i2.2173

Yanto, A., Dahmiri, & Hasbullah, H. (2022). Pengaruh Promosi Visual Dan Daya Tarik Wisata Terhadap Minat Berkunjung Wisatawan (Studi Pada Pengunjung Danau Sipin Jambi). *Jurnal Dinamika Manajemen*, *10* (1), 1–11.

Yulianto, A., & Wijayanti, A. (2020). Strategi Pemeliharaan dan Pengembangan Fasilitas Wisata Bagi Kenyamanan Pengunjung Pula Payung Yogyakarta. *Pariwisata*, *7*(2), 144–154.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, *60* (2), 31–46. https://doi.org/10.1177/002224299606000203