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VISITOR SATISFACTION AT PAS TJ GRAPE PLANTATION AGROTOURISM IN SINGKAWANG

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ABSTRACT

Background: PAS TJ Grape Plantation Agrotourism analyses visitor satisfaction to improve services and attract more visitors.
Purpose: This research analyses visitor satisfaction levels at PAS TJ Grape Plantation Agrotourism in Singkawang. By utilising the 7A+1S framework (attraction, amenities, Ancillary services, activity, accessibility, available package, accommodation, and sustainability), this research evaluates the factors influencing visitor experiences. The findings are expected to provide recommendations for managers to enhance service quality and the attractiveness of agrotourism, thereby supporting sustainable agrotourism.
Design/methodology/approach: This research employs a nonprobability sampling method with a purposive sampling technique on 40 respondents. Data were collected through structured questionnaires and analysed using descriptive statistical methods. Validity and reliability tests were conducted, along with the Customer Satisfaction Index (CSI) and Importance-Performance Analysis (IPA), to assess visitor satisfaction and service performance.
Findings/result: Based on the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA), visitor satisfaction at PAS TJ Grape Plantation reached 81.22%, categorised as "very satisfied." While visitors generally have a positive experience, some aspects need improvement. The IPA results highlight the availability of a canteen, road conditions, and supporting infrastructure as key concerns, as they are essential but underperforming. Meanwhile, other attributes meet or exceed expectations. Addressing these gaps, particularly those in Quadrant I (high importance, low performance), is crucial for enhancing visitor satisfaction.
Conclusion: Overall, the attributes of PAS TJ Grape Plantation agrotourism in Singkawang are very satisfying for visitors. However, improvements in facilities and infrastructure are needed to enhance visitor satisfaction and attract more visitors in the future.
Originality/value (State of the art): This research contributes to developing a visitor satisfaction analysis methodology by applying the 7A+1S approach, which has not been widely used in agritourism. Focusing on PAS TJ Grape Plantation Agrotourism, this research is expected to serve as a reference for developing sustainable agritourism in other regions.

Keywords: Visitor satisfaction, Agrotourism, Customer satisfaction index (CSI), and Importance performance analysis (IPA)

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INTRODUCTION

Tourism in Indonesia is continuously evolving, with agritourism emerging as a sector of significant interest. (Nabila et al., 2022). Agritourism is a creatively designed approach to farm management aimed at attracting tourists. Activities within this sector encompass cultivation, processing, marketing of agricultural products, and providing agriculture-based recreational amenities. (Kementerian Pertanian, 2012). Beyond its function as a tourist destination, agritourism plays a role in increasing farmer income, preserving land resource sustainability, and conserving local wisdom through appropriate technologies. (Muzha, 2013).

The rapid development of agritourism encourages regions to optimise their local potential to enhance competitiveness. The success of a destination heavily relies on sound planning and management practices, which can boost the number of tourists and attract visitors from outside the region. (Visa Sandy et al., 2021). Singkawang, West Kalimantan, features several appealing agritourism locations, one of which is Agrowisata PAS TJ in Sedau Village, South Singkawang. PAS TJ spans approximately 1 hectare and boasts a variety of superior commodities, including Indian apples, Singkawang wax avocados, rapoza mangoes, crystal guavas, crystal longans, matoa, and oranges, with its primary attraction being a vineyard.
Visitor numbers to PAS TJ show a positive trend, averaging 20 visitors per day on weekdays and increasing to as many as 100 visitors per day on weekends or holidays. Therefore, the management aims to understand visitor satisfaction levels with the agritourism site to inform service quality improvements and enhance the overall tourist experience, thereby increasing the site's appeal.

Research on agritourism visitor satisfaction has been extensively conducted. For instance, Clarisia (2022) on Citrus Fruit Agrotourism in North Sumatra, while Nabila (2022). Analysed visitor satisfaction at Agrowisata Taman Edelweis in Bali. The main difference between this research and previous research is the indicators used. Prior studies generally applied the 4A approach (Attraction, Amenities, Ancillary, and Accessibility), whereas this research adopts the 7A+1S approach, encompassing Attraction, Amenities, Ancillary, Activity, Accessibility, Available Package, Accommodation, and Sustainability. Further distinctions include the location, research subject, timing, and sampling techniques.

The methodology employed in this research still refers to the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA), which have been widely applied in previous studies to measure visitor satisfaction levels. The 7A+1S approach provides an additional, more comprehensive dimension than earlier studies.

This research employs a quantitative method with a descriptive approach to analyse visitor satisfaction at Agrowisata PAS TJ. Satisfaction is measured using the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) methods, with the Likert scale as the primary measurement tool. CSI is used to determine overall satisfaction levels, while IPA is used to analyse aspects that require improvement based on the importance and performance perceived by visitors. Data is collected through the distribution of questionnaires to PAS TJ visitors using a sampling technique tailored to the target population. This research aims to determine visitor satisfaction at PAS TJ Grape Plantation Agrotourism in Singkawang.

METHODS

This research uses primary and secondary data as the main sources of information. Primary data were obtained through interviews, observations, and questionnaires distributed to PAS TJ Grape Plantation Agrotourism visitors. The data collected included visitor characteristics and aspects of the 7A+1S variables: Attraction, Amenities, Ancillary Services, Activity, Accessibility, Available Packages, Accommodation, and Sustainability. Meanwhile, secondary data were collected from journals, books, previous research, and institutions such as the Central Bureau of Statistics and the Ministry of Agriculture.

Data was collected at PAS TJ Grape Plantation Agrotourism in Sedau Village, South Singkawang. The location was purposively selected as it is the only grape Plantation agrotourism site in Singkawang, where visitors can directly experience grape picking. Data collection was carried out from April to May 2024. The research population consists of visitors who have visited the agritourism site, with a sample size of 40 respondents determined using Malholtra (2016) Method. Respondents were selected through non-probability sampling techniques, specifically purposive and accidental sampling, with the criteria that they must

be at least 17 years old and have visited the site at least once in the past year.

This research applies descriptive analysis, validity and reliability tests, Customer Satisfaction Index (CSI), and Importance-Performance Analysis (IPA). The validity test was conducted by comparing the calculated r-value with the r-table, where a question is considered valid if r-count > r-table. Reliability was tested using Cronbach's Alpha method, with a threshold of > 0.6 for the questionnaire to be considered reliable.

Customer Satisfaction Index (CSI) measures visitor satisfaction with the service, considering the importance of various product or service attributes. According to Pratama (2011) There are four steps in calculating CSI:

1. Mean Importance Score (MIS) and Mean Satisfaction Score (MSS) are the average values of the importance and performance given by visitors.

   $MIS = \sum^{n}_{i=1} yi / n$ and $MSS = \sum^{n}_{X1} / i=1$

   Explanation: n (Number of respondents); Xi (The performance value of the ith attribute); Yi (Importance value of the ith attribute)

2. Weight Factor (WF) is the percentage of the MIS value for each attribute that affects visitor satisfaction.

   $$WF = (MIS / \sum^{n}_{i=1} MIS) \times 100\%$$

   Explanation: P (The number of attributes with importance p); I (The i-th attribute).

3. The weight score (WS) is obtained from the product of WF and MSS, which is calculated using the following formula:

   $$WSi = WF \times MSS$$

4. Determining the Customer Satisfaction Index (CSI): CSI is calculated by sukardi dividing the Weighted Score (WS) value by the highest scale used. The CSI calculation formula is as follows:

   $$CSI = (\sum^{n}_{i=1} WSi/5) \times 100\%$$

If the CSI percentage exceeds 50%, agrotourism visitors are considered satisfied. Conversely, agrotourism visitors are unsatisfied if the CSI percentage is below 50%. In this study, the CSI value is divided into five categories, from dissatisfied to very satisfied, as listed in Table 1

Table 1. Satisfaction index values

Index Value (100%)	CSI Criteria
0%-34.99%	Dissatisfied
35%-50.99%	Less satisfied
51%-65.99%	Moderately satisfied
66%-80.99%	Satisfied
81%-100%	Very satisfied

Source: Pratama (2011)

The Importance Performance Analysis (IPA) method evaluates attributes or variables based on the organiser's performance level in realising the visitor's expectations. (Simamora, 2000). Importance Performance Analysis (IPA) in measuring visitor satisfaction is beneficial for developing marketing strategies. This method can identify attributes that must be maintained, improved, or excessive to ensure visitor satisfaction. The results of this analysis can be easily interpreted in the form of a cartesian quadrant diagram. (Karimah et al., 2021). The analysis of Importance-Performance Analysis (IPA) is conducted as follows:

Comparing the importance and performance scores aims to evaluate the extent to which the performance of the studied attributes aligns with their level of importance. The formula used to calculate the level of conformity is as follows:

$$TKi = (Xi / Yi) \times 100\%$$

Explanation: Tki (Level of conformity); Xi (Performance score); Yi (Importance score)

To establish the boundaries of the Cartesian diagram, the following formula is used to calculate the average of all attributes of importance and performance:

$$\bar{X} = \sum Xi/k \quad \bar{Y} = \sum Yi/k$$

Explanation: $\bar{X}$ (Average performance score of attribute i); $\bar{Y}$ (Average importance score of attribute i); k (Number of attributes that can affect visitor satisfaction)

Here is an explanation of the four quadrants in the Cartesian diagram (Figure 1).

1. Quadrant 1 (Concentrate Here): This includes agrotourism characteristics considered necessary by visitors but still performs below expectations. Attributes in this quadrant need to be improved to meet visitor expectations and enhance overall satisfaction.
2. Quadrant 2 (Keep Up the Good Work): Consists of attributes that are considered essential and have already demonstrated exemplary performance. These attributes should be maintained to ensure high service quality.
3. Quadrant 3 (Low Priority): Represents attributes that visitors perceive as less critical and have unsatisfactory performance. Given their low impact on visitor satisfaction, improving these attributes should be reconsidered.
4. Quadrant 4 (Possible Overkill): Contains attributes that visitors deem unimportant and excessive. Enhancing the performance of characteristics in this quadrant would only result in a waste of resources.

This research framework analyses visitor satisfaction by incorporating the 7A+1S model and measuring performance using CSI and IPA. The framework considers visitor satisfaction factors, evaluates service performance, and provides strategic recommendations. The research framework is illustrated in Figure 2.

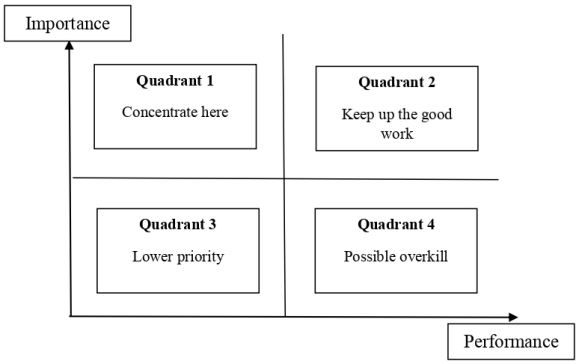

Figure 1. Quadrant Importance Performance Analysis (Supranto, 2011) (Y (The level of visitor expectations); X (The level of service performance provided); $\bar{Y}$ (The average score of all factors related to the level of visitor importance); $\bar{X}$ (The average score of all factors related to the level of service performance)

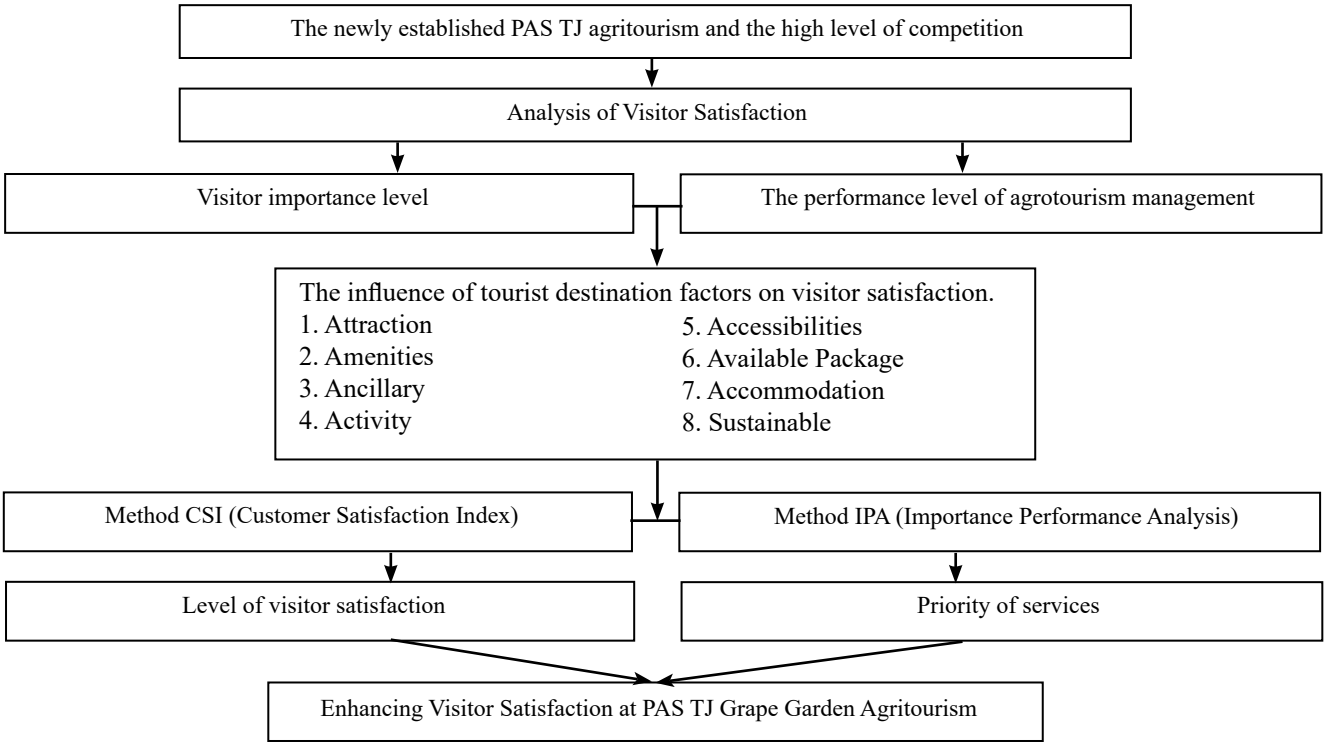

Figure 2. Research framework for visitor satisfaction analysis at PAS TJ Grape Plantation Agrotourism

PAS TJ Grape Plantation Agritourism is a relatively new agritourism destination that is facing high competition. Therefore, a visitor satisfaction analysis is necessary to understand the factors influencing their experience. This analysis focuses on two main aspects: the level of visitor importance regarding facilities and the performance of tourism management.

The analysed factors include attraction, amenities, ancillary services, activity, accessibility, available packages, accommodation, and sustainability. These factors are evaluated based on their level of importance and the extent to which the management meets visitor expectations.

This study employs the Customer Satisfaction Index (CSI) to measure overall satisfaction and the Importance Performance Analysis (IPA) to identify attributes that must be prioritised or improved. The findings of this analysis are expected to assist management in enhancing service quality and the competitiveness of agritourism, ultimately increasing visitor satisfaction.

RESULTS

Variable validity tests

A validity test is a method used to determine and test the accuracy of measuring instruments so that they can be used as a measuring tool for something that must be measured. (Sugiyono, 2013). In this research, with a sample size 40 and degrees of freedom (df) = 38, the r table value is 0.312 at $\alpha = 0.05$. Questions in the questionnaire are considered valid if the calculated r value exceeds 0.312; conversely, they are deemed invalid if it is less than this value.

Table 2 shows that the calculated value (r_{value}) is greater than the critical value (r_{table}) according to the significance test at the 0.05 level. This indicates that the variables related to importance and performance have been demonstrated to be valid, and therefore, a reliability test will be conducted subsequently.

Table 2. Variable validity tests of PAS TJ Grape Plantation Agrotourism

Variable	Question	Importance Level	Performance Level	r table	Conclusion
Attraction	A1	0.694	0.495	0.312	Valid
	A2	0.619	0.672	0.312	Valid
	A3	0.332	0.623	0.312	Valid
	A4	0.487	0.458	0.312	Valid
Amenities	B1	0.729	0.586	0.312	Valid
	B2	0.452	0.421	0.312	Valid
	B3	0.723	0.734	0.312	Valid
	B4	0.704	0.813	0.312	Valid
	B5	0.691	0.620	0.312	Valid
Ancillary Service	C1	0.528	0.344	0.312	Valid
	C2	0.530	0.405	0.312	Valid
	C3	0.673	0.614	0.312	Valid
	C4	0.562	0.578	0.312	Valid
Activity	D1	0.434	0.487	0.312	Valid
	D2	0.318	0.626	0.312	Valid
Accessibility	E1	0.787	0.392	0.312	Valid
	E2	0.789	0.460	0.312	Valid
	E3	0.595	0.674	0.312	Valid
	E4	0.444	0.467	0.312	Valid
Available Package	F1	0.364	0.330	0.312	Valid
Accommodation	G1	0.454	0.627	0.312	Valid
	G2	0.727	0.651	0.312	Valid
Sustainable	H1	0.558	0.583	0.312	Valid
	H2	0.600	0.329	0.312	Valid
	H3	0.763	0.542	0.312	Valid
	H4	0.326	0.656	0.312	Valid
	H5	0.744	0.329	0.312	Valid

Variable reliability tests

The reliability test on research instruments aims to assess the reliability of the questionnaire in collecting data. If the reliability test results using Cronbach's alpha show a value of more than 0.60, the variable can be considered reliable or consistent in its measurement (Rosita et al., 2021). Based on Table 3, the analysis results show that Cronbach's alpha for the questionnaire regarding the level of importance is 0.909, while for the questionnaire regarding the level of performance is 0.906. Thus, the indicators used to measure these variables are highly or significantly reliable.

Table 3. Variable reliability test

Reliability test	Cronbach's Alpha	Description
Importance	0.909	Reliable
Performance	0.906	Reliable

Customer Satisfaction Index (CSI) Analysis results

The calculation of visitor satisfaction is used to measure overall visitor satisfaction by considering the importance of each attribute of the product or service provided (Handriati et al., 2015). Based on Table 4, visitor satisfaction at PAS TJ Grape Plantation Agritourism was measured using the Customer Satisfaction Index (CSI) by comparing the Weight Total (WT) and Highest Score (HS) on a five-point scale. The analysis results indicate that the visitor satisfaction level reached 81.22%, which falls into the very satisfied category, according to Pohandry et al.(2013), the highest possible CSI score is 100%, while a score of 50% or less satisfied inadequate service performance. In contrast, a CSI score of 80% satisfied a high level of visitor satisfaction.

However, these results also highlight a satisfaction gap of 18.78%, which needs to be addressed to reach the maximum index score. Based on research by Karimah et al. (2021), several attributes with low satisfaction levels, such as the availability of tour packages, ATMs, and food stalls, require particular attention. Factors such as direct agricultural observation experiences and accommodation options should also be improved to enhance visitor comfort. (Clarisia, 2022; Nabila et al., 2022).

Prayudi et al. (2019) State that public transportation accessibility and fuel availability are crucial in enhancing the tourist experience. Therefore, Importance-Performance Analysis (IPA) can identify attributes with high importance but low performance, allowing improvements to focus on aspects that impact visitor satisfaction most.

Results of Calculation of Visitor Importance Level and Performance Conformity

The Importance Performance Analysis (IPA) method is important because it evaluates attributes or variables based on the organiser's performance level in realising the visitor's expectations (Simamora, 2000) (Table 5). IPA method offers benefits in developing marketing strategies and has the advantage of identifying attributes that need to be maintained, improved, or reduced to sustain visitor satisfaction levels. Moreover, the results of the analysis can be easily interpreted in the form of a Cartesian quadrant diagram.

The attribute suitability level achieved an average of 89.66%, falling into the "very suitable" category (Table 6). This indicates that, in general, the alignment between importance and performance at PAS TJ Grape Plantation Agritourism is excellent. According to Sukardi & Chandrawatisma (2008), it can be satisfactory if the suitability level approaches 100% and exceeds the average.

Based on the calculations, the attribute with the highest suitability level is polite and friendly service, achieving 100%. This suggests that visitor satisfaction is strongly influenced by the hospitality of the staff, creating a comfortable atmosphere that encourages repeat visits. (Rumayar, 2022).

On the other hand, the lowest suitability level is found in the availability of a canteen, with a score of 71.58%. The absence of a canteen at PAS TJ Grape Garden Agritourism makes it difficult for visitors to access food and beverages, leading to reduced satisfaction, according to Nasution et al. (2024), supporting facilities such as prayer rooms, restrooms, and food stalls significantly contribute to visitor satisfaction. Therefore, improving these facilities, mainly by providing a canteen, is essential to meet visitor expectations better and enhance their overall experience.

Table 4. Variable Customer Satisfaction Indeks test of PAS TJ Grape Plantation Agrotourism

Variable	MIS	MSS	WF	WS
Pick the fruit directly	4.28	4.63	3.80	16.24
Neat and organised garden arrangement	4.33	4.80	3.94	17.05
Photo spot	4.18	4.40	3.61	15.09
Purchase of fruit seeds	4.33	4.40	3.61	15.63
Public toilet facilities	4.45	4.75	3.90	17.36
Parking area	4.50	4.88	4.00	18.02
Canteen availability	3.28	4.58	3.76	12.31
Trash can	4.00	4.78	3.92	15.69
Seating	4.55	4.75	3.90	17.76
Polite & friendly service	4.88	4.88	4.00	19.52
The existence of directions in agrotourism	4.33	4.63	3.80	16.43
Availability of ATMs around agrotourism	3.28	3.75	3.08	10.09
Availability of fuel around agrotourism	3.78	4.33	3.55	13.41
Enjoy and explore agrotourism	4.40	4.55	3.74	16.45
Observe agricultural activities firsthand	3.70	4.23	3.47	12.84
Suitability of the entrance ticket price with the facilities offered	4.63	4.75	3.90	18.05
Road conditions	3.70	4.70	3.86	14.29
Availability of road signs/guides to agrotourism	4.15	4.58	3.76	15.60
Easy access to public transportation	3.85	4.23	3.47	13.36
Availability of tour packages	3.10	3.90	3.20	9.93
Lodging options available around the agrotourism	3.73	4.20	3.45	12.85
Distance between lodging and agrotourism	3.75	4.18	3.43	12.86
Cultivated products that are continuously available and protected from pest attacks	3.75	4.70	3.86	14.48
The existence of information about PAS TJ Grape Plantation promotions that is easy to access	4.03	4.58	3.76	15.13
Facilities and Infrastructure Support	4.43	4.60	3.78	16.72
Visitors are given agricultural knowledge	4.20	4.23	3.47	14.93
Government support (Tourism Agency/Agriculture Agency)	3.55	4.80	3.94	14.00
TOTAL	121.73			406.11
Weight Total (WT) = 406.11				
CSI (405.76/5) x 100% = 81.22%				

Note: Mean Importance Score (MIS); Weight Factor (WF); weight score (WS); Mean Satisfaction Score (MSS)

Based on Figure 3, it can be observed that the attributes of the PAS TJ Grape Plantation agrotourism are divided into four quadrants: Quadrant 1 (Concentrate These) with six attributes, Quadrant 2 (Keep Up The Good Work) with 11 attributes, Quadrant 3 (Low Priority) with seven attributes, and Quadrant 4 (Possible Overkill) with three attributes. The explanation for each of these quadrants is as follows:

Quadrant 1 (Concentrate These)

Quadrant 1 illustrates attributes considered highly important by visitors to the PAS TJ Grape Plantation agrotourism site but whose current performance levels fall short of visitor expectations, leading to dissatisfaction. According to the research findings, management must prioritise six attributes in this quadrant for improvement.

Table 5. Variable Importance Performance Analysis test of PAS TJ Grape Plantation Agrotourism

Variable	∑Xi	∑Yi	Tki (%)	$\bar{X}$	$\bar{Y}$
Pick the fruit directly	171	185	92.43	4.28	4.63
Neat and organised garden arrangement	173	192	90.10	4.33	4.80
Photo spot	167	176	94.89	4.18	4.40
Purchase of fruit seeds	173	176	98.30	4.33	4.40
Public toilet facilities	178	190	93.68	4.45	4.75
Parking area	180	195	92.31	4.50	4.88
Canteen availability	131	183	71.58	3.28	4.58
Trash can	160	191	83.77	4.00	4.78
Seating	182	190	95.79	4.55	4.75
Polite & friendly service	195	195	100.00	4.88	4.88
The existence of directions in agrotourism	173	185	93.51	4.33	4.63
Availability of ATMs around agrotourism	131	150	87.33	3.28	3.75
Availability of fuel around agrotourism	151	173	87.28	3.78	4.33
Enjoy and explore agrotourism	176	182	96.70	4.40	4.55
Observe agricultural activities firsthand	148	169	87.57	3.70	4.23
Suitability of the entrance ticket price with the facilities offered	185	190	97.37	4.63	4.75
Road conditions	148	188	78.72	3.70	4.70
Availability of road signs/guides to agrotourism	166	183	90.71	4.15	4.58
Easy access to public transportation	154	169	91.12	3.85	4.23
Availability of tour packages	124	156	79.49	3.10	3.90
Lodging options available around the agro-tourism	149	168	88.69	3.73	4.20
Distance between lodging and agrotourism	150	167	89.82	3.75	4.18
Cultivated products that are continuously available and protected from pest attacks	150	188	79.79	3.75	4.70
The existence of information about PAS TJ Grape Plantation promotions that is easy to access	161	183	87.98	4.03	4.58
Facilities and Infrastructure Support	177	184	96.20	4.43	4.60
Visitors are given agricultural knowledge	168	169	99.41	4.20	4.23
Government support (Tourism Agency/Agriculture Agency)	142	192	73.96	3.55	4.80
Average	162	180	89.66	4.04	4.51

Table 6. Category Level of Interest Conformity to Performance

Level of Suitability	Range of Suitability (%)
Very suitable	80-100
Suitable	70-79
Moderately suitable	60-69
Less suitable	50-59
Not suitable	40-49

These attributes include the availability of a canteen, which is expected to meet visitors' needs for food and drink but is currently insufficient; seating availability, which needs to be increased and improved to ensure visitors can rest comfortably; and the condition of the access roads to the agrotourism site, which require repair to ensure visitor comfort and convenience. Additionally, easily accessible information about PAS TJ Grape Plantation promotions is also crucial, as the current dissemination of information is suboptimal. Support facilities such as toilets, trash bins, and parking areas must also enhance quality and availability. Lastly, the agricultural knowledge provided to visitors is considered a significant added value, but its delivery needs to be improved.

These factors are a primary focus for the management because they carry high expectations from visitors but currently exhibit low performance, resulting in dissatisfaction. Therefore, optimal management of these six attributes is necessary to deliver more satisfying services to visitors utilising the existing facilities.

Quadrant 2 (Keep Up The Good Work)

The second quadrant maintains performance, indicating that the performance of PAS TJ Grape Plantation managers has met visitors' expectations. Therefore, agrotourism managers must sustain and preserve their performance in this quadrant. There are 11 attributes included in this quadrant: direct fruit picking, neat and orderly garden arrangements, public toilet facilities, parking area, seating, polite and friendly service, presence of directional signs within the agrotourism site, enjoyment and exploration of the agrotourism site, appropriateness of the ticket price about the facilities offered, availability of road signs leading to the agrotourism site, and support from infrastructure and facilities.

Visitors are satisfied with the service provided and the condition of the available facilities. Thus, agrotourism managers must maintain and preserve this quality to ensure continued visitor satisfaction. This indicates that these attributes have achieved a high level of performance by visitors' expectations and thus should be maintained to continue providing a positive experience for visitors in the future.

Quadrant 3 (Low Priority)

The third quadrant includes factors considered to be of low importance to visitors. There are seven attributes in this quadrant: the availability of ATM around the agritourism site, the availability of fuel around the agritourism site, the opportunity to observe agricultural activities directly, easy access to public transportation, the availability of tour packages, lodging options available around the agritourism site, and the distance between lodging and the agritourism site. Although these factors are less critical to visitors, they should still be addressed and improved by managing the PAS TJ Grape Plantation agritourism site to enhance visitor satisfaction. The agritourism site can attract visitors and generate positive impacts by implementing continuous improvements. Over time, if these factors, currently considered less critical, are successfully improved, they will gain increased significance for visitors.

Quadrant 4 (Possible Overkill)

Factors with low expectations but high satisfaction are located in the fourth quadrant. These include photo spots, which add value through aesthetic experiences and opportunities for visitors to capture moments, often leading to increased satisfaction. The purchase of fruit seedlings introduces an interactive and educational element, allowing visitors to apply the knowledge gained during their visit to agritourism, thereby enhancing the benefits of their visit. Additionally, providing visitors with agricultural knowledge improves their understanding of farming practices, increasing satisfaction through educational aspects and overall experience quality.

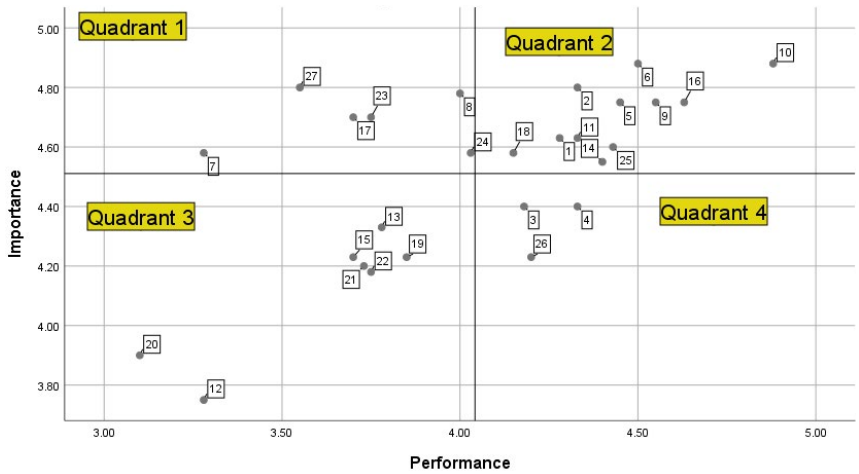

Figure 3. Cartesian diagram

The PAS TJ Grape Plantation Agritourism can maintain the performance or attributes in quadrant 4, although current research indicates that visitors perceive improvements in these attributes as excessive. Nevertheless, visitor behaviour is expected to change in future studies. Such changes may result from evolving visitor needs or expectations, potentially influencing their assessment of attributes in quadrant 4.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the Customer Satisfaction Index (CSI) of 81.22%, visitor satisfaction at PAS TJ Grape Plantation falls into the "very satisfied" category. The Importance Performance Analysis (IPA) identifies several aspects that need improvement, particularly the availability of a canteen, road conditions, and infrastructure, which, despite being critical to visitors, have not yet met the expected standards. In contrast, friendly service, well-organized garden arrangements, and public toilet facilities have met visitor expectations and should be maintained. Therefore, improvement efforts should focus on priority attributes that still require enhancement while preserving the quality of already satisfactory aspects to ensure a continuously improved tourism experience.

Recommendations

Based on the data obtained from the analysis of visitor satisfaction at PAS TJ Grape Plantation Agrotourism, several recommendations have been made to enhance visitor satisfaction: The management should focus on the attributes located in Quadrant 1, which include the provision of a canteen, seating areas, road conditions, promotional information about PAS TJ, infrastructure support, and the agricultural knowledge shared with visitors. The canteen needs to be improved so visitors can quickly obtain food and drinks. More comfortable seating should be provided strategically to allow visitors to rest well. Improving road conditions leading to the agrotourism site is crucial to ensure visitor comfort and easy access. Promotional information should be more accessible through various media, including information boards and social media. Facilities such as toilets, trash bins, and parking areas need improved quality and availability to provide better comfort. Finally, the delivery of agricultural knowledge to visitors should be enhanced through more interactive and engaging educational sessions or workshops.

The attributes in Quadrant 2, which already meet visitor expectations, need to be maintained and preserved in quality. These include polite and friendly service, well-maintained gardens, clean toilet facilities, sufficient parking areas, and clear signage within the agrotourism area. Management should continue to pay attention to these aspects to ensure high visitor satisfaction.

The attributes in Quadrant 3, although considered less critical, still need attention and improvement. This includes the availability of ATMs and fuel stations around the agrotourism site, ease of access to public transportation, and tour and accommodation packages. Continuous improvements to these attributes can increase added value and attract more visitors.

The attributes in Quadrant 4, which are considered to perform exceptionally well, such as photo spots, the sale of fruit seedlings, and the provision of agricultural knowledge, do not need further improvement since they already provide high satisfaction despite low expectations. However, management may consider maintaining the quality of these services to ensure continued visitor satisfaction.

By focusing on enhancing important attributes and maintaining the quality of those already performing well, PAS TJ Grape Plantation Agrotourism can continue to improve visitor satisfaction and become a more attractive and satisfying agrotourism destination.

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REFERENCES

Clarisia, R. F. (2022). Analisis kepuasan konsumen pada agrowisata buah jeruk di Desa Pematang Kuing Kecamatan Sei Suka Kabupaten Batubara Provinsi Sumatera Utara (p. 56). https://repository.uir.ac.id/15113/1/174210058.pdf

Handriati, A. A., Sunaryo, S., & Helia, V. N. (2015). Analisis kualitas pelayanan publik terhadap

kepuasan konsumen dengan menggunakan metode Servperf-Ipa-Csi. Teknoin, 21(4), 178–190. https://doi.org/10.20885/teknoin.vol21.iss4.art4

Hidayat, F. N. P. (2020). Analisis tingkat kepuasan nasabah terhadap kualitas pelayanan BRI Syari'ah dengan metode Importance Performance Analysis (IPA) dan Customer Satisfaction Index (CSI) (Studi kasus pada mahasiswa S.1 IAIN Purwokerto angkatan 2016-2019) [Skripsi, IAIN Purwokerto].

Karimah, M., Setiadi, A., & Mukson. (2021). Analisis kepuasan pengunjung terhadap kualitas pelayanan Agrowisata Omah Salak [Skripsi, Universitas Diponegoro]. Jurnal Socioeconomics of Agriculture (SOCA, 15)(1). http://eprints.undip.ac.id/80916/1/JURNAL_SOCA_(KEPUASAN_AGROWISATA_OMAH_SALAK)_PDF.pdf

Kementerian Pertanian. (2012). Inventarisasi potensi agrowisata. Repositorisasi Kementerian Pertanian, Ditjen Pengolahan dan Pemasaran Hasil Pertanian/PPHP.

Malhotra, N. K., & Dash, S. (2016). Marketing research: An applied approach (7th ed.). Pearson India Education Services.

Muzha, V. K. (2013). Pengembangan agrowisata dengan pendekatan community-based tourism (Studi pada Dinas Pariwisata Kota Batu dan Kusuma Agrowisata Batu). Jurnal Administrasi Publik Mahasiswa Universitas Brawijaya, 1(3), 135–141. https://doi.org/10.25008/parahita.v3i1.57

Nabila, I., Yudhari, I. D. A. S., & Dewi, I. A. L. (2022). Analisis tingkat kepuasan pengunjung terhadap Agrowisata Taman Edelweis di Kabupaten Karangasem Bali. Jurnal Agribisnis Dan Agrowisata (Journal of Agribusiness and Agritourism, 11(1), 200. https://doi.org/10.24843/jaa.2022.v11.i01.p19

Nasution, L., Aji, K., Rohana Sufia, & Tangge, N. A. (2024). Strategi pengembangan agrowisata berbasis lingkungan di Desa Loto Kecamatan Ternate Barat. Jurnal Spatial Wahana Komunikasi Dan Informasi Geografi, 24(1), 32–40. https://doi.org/10.21009/spatial.241.04

Pohandry, A., Yusuf, M., & Winarni. (2013). Metode customer satisfaction index dan importance, 1(1), 73–81.

Pratama, T., Rahman, T., & Rahman, N. (2011). Analisis kepuasan konsumen food bar Kabupaten Subang. Prosiding Seminar Nasional Penelitian dan PKM Sains, Teknologi dan Kesehatan, 313–314.

Prayudi, A. B. E. D., Dolorosa, E., & Kurniati, D. (2019). Kepuasan pengunjung terhadap agrowisata di Agribisnis Aloe Vera Center. Agric, 31(1), 15–16. https://doi.org/10.24246/agric.2019.v31.i1.p15-30

Rosita, E., Hidayat, W., & Yuliani, W. (2021). Uji validitas dan reliabilitas kuesioner perilaku prososial. Fokus, 4(4), 279–284. https://doi.org/10.22460/fokus.v4i4.7413

Rumayar, D. Y. N. (2022). Pentingnya kualitas pelayanan terhadap kepuasan konsumen pada PT. Hasjrat Abadi (pp. 1–16).

Simamora, B. (2000). Panduan riset perilaku konsumen (Cetakan ke-2). PT Gramedia Pustaka Utama.

Sugiyono. (2013). Metode penelitian kuantitatif kualitatif dan R&D. Penerbit Alfabeta.

Sukardi, & Chandrawatisma, C. (2008). Analisis tingkat kepuasan pelanggan terhadap produk Corned Pronas produksi PT CIP, Denpasar, Bali. Jurnal Teknologi Industri Pertanian, 18(2), 106–117.

Supranto, J. (2011). Pengukuran tingkat kepuasan pelanggan (Cetakan ke-). PT RINEKA CIPTA.

Visa Sandy, R. P., Hamid, H., & Fadhilah, H. A. (2021). Pengembangan kawasan agrowisata Kebun Belimbing di Kecamatan Tawangharjo, Kabupaten Grobogan, Provinsi Jawa Tengah. J-3P (Jurnal Pembangunan Pemberdayaan Pemerintahan, 6, 75–90. https://doi.org/10.33701/j-3p.v6i1.1567