

The Influence of Tourist Facilities and Attractions on Visitor Satisfaction at Toba Caldera Resort Pardamean Sibisa

Tryadevy Pasaribu¹, Jamardua Haro²

¹ Politeknik Negeri Medan, Indonesia; pasaribudevi0803@gmail.com

² Politeknik Negeri Medan, Indonesia; jamarduaharo@polmed.ac.id

ARTICLE INFO

Keywords:

facilities;
tourist Attractions;
visitor satisfaction

Article history:

Received 2025-08-13

Revised 2025-09-15

Accepted 2025-11-02

ABSTRACT

The development of tourist destinations in Indonesia, particularly the Lake Toba area, is a major focus in supporting the tourism sector and the MICE (Meeting, Incentive, Convention, Exhibition) industry. Toba Caldera Resort, managed by the Lake Toba Authority, plays a crucial role as a leading destination in attracting tourists. This research is motivated by the importance of understanding the factors that influence visitor satisfaction as an indicator of successful destination management. The purpose of this research is to determine the extent to which tourist facilities and attractions influence visitor satisfaction at Toba Caldera Resort. This research uses a quantitative method with an associative approach. A sample of 100 respondents was selected using an accidental sampling technique. Data were collected through a questionnaire using a Likert scale and analyzed using multiple linear regression. The results show that both facilities and tourist attractions have a positive and significant effect on visitor satisfaction, both partially and simultaneously. The conclusion of this research is that facilities and tourist attractions are the main factors determining the level of visitor satisfaction at Toba Caldera Resort. The better the quality of the facilities and the more attractive the attractions offered, the higher the level of perceived satisfaction. Therefore, the management and development of these two aspects must be prioritized in strategies to increase the attractiveness and sustainability of tourist destinations.

This is an open access article under the [CC BY](https://creativecommons.org/licenses/by/4.0/) license.



Corresponding Author:

Tryadevy Pasaribu

Politeknik Negeri Medan, Indonesia; pasaribudevi0803@gmail.com

1. INTRODUCTION

MICE is a form of tourism that focuses on organizing Meeting, Incentive, Convention, and Exhibition activities. This segment not only involves ordinary tourist trips, but also prioritizes the provision of complete facilities and an environment that supports the organization of various forms of meetings and events. The success of tourist destinations in attracting MICE activities is highly dependent on the quality

of the facilities and attractions available, because both are important factors that determine comfort, satisfaction, and positive impressions for visitors. In this context, Toba Caldera Resort as one of the national priority tourism destinations, is expected to be able to meet these standards by providing adequate supporting facilities and attractive tourist attractions, in order to increase visitor satisfaction and strengthen its position as a potential location for tourism and MICE activities.

Tourism is one of the leading sectors in national economic development that is able to make a significant contribution to increasing the country's foreign exchange, job creation, as well as infrastructure development and cultural preservation. With the growing global trend in the tourism industry, every country is competing to create tourist destinations that are not only attractive, but also provide a satisfying experience for visitors. Indonesia, as an archipelagic country rich in natural beauty and cultural diversity, has great potential in the tourism sector that can be optimally utilized to encourage sustainable economic growth.

One of the strategic steps taken by the Indonesian government in an effort to develop the tourism sector is to designate certain areas as Super Priority Tourism Destinations (DPSP). One of the five super priority destinations is the Lake Toba area, which is located in North Sumatra Province. This area is not only known as the largest volcanic lake in Southeast Asia, but also holds natural beauty, Batak cultural richness, and high historical values. To support the acceleration of the development of the Lake Toba area as a leading destination, the government established a special institution called the Lake Toba Authority Implementing Agency which has the authority to manage and develop the area in an integrated and sustainable manner.

One of the core areas managed by the Lake Toba Authority Implementing Agency is Toba Caldera Resort, which is designed as an integrated tourism area with international standards. Toba Caldera Resort is expected to become a new icon of tourism in North Sumatra and become a main magnet for domestic and foreign tourists. To achieve this goal, Toba Caldera Resort must be able to provide a variety of adequate facilities and offer interesting tourist attractions with educational and entertainment value. The concept of developing modern tourist destinations does not only focus on natural beauty, but also emphasizes the importance of providing supporting facilities and organizing relevant and sustainable tourist attractions as part of efforts to increase visitor satisfaction and loyalty. Here is a picture of the Toba Caldera Resort area:

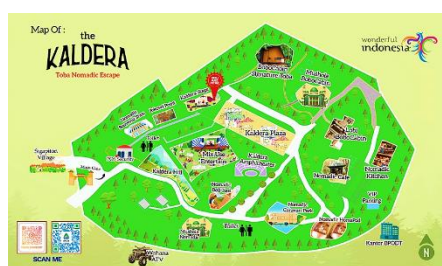


Figure 1. Kawasan Toba Caldera Resort
Source: <https://bpodt.kemenpar.go.id>

In the context of tourist destination management, there is a general hope that every tourist area, especially super priority destinations such as Toba Caldera Resort, can provide a quality tourism experience through the provision of proper infrastructure and attractive attractions. The infrastructure not only includes good accessibility, but is also supported by a variety of adequate supporting facilities. According to Pratomo et al. (2023), facilities are a means to achieve goals and meet needs, while Purnomo et al. (2020) emphasize their role in making it easier for consumers and attracting purchase interest. Suwena and Widyatmaja (2017) divide tourism facilities into several types of accommodation such as hotels, homestays, and villas. Raharjo (2020) said that facility indicators include completeness, quality, accessibility, security, and service, which affect the comfort and satisfaction of visitors. These facilities include comfortable road conditions, spacious parking areas, clean public toilets, representative rest

rooms, information centers for tourists, clear signage, and accommodation and culinary facilities that meet the standards. In addition, the main attraction of the destination is also determined by the tourist attractions presented. These attractions can be in the form of cultural arts performances, music festivals, exhibitions of local handicraft products, educational tours, and various other recreational activities that are tailored to local potential and characteristics. According to Kurniawan and Pratiwi (2021), attractions are the main tourist attraction that can be in the form of natural, cultural, or artificial objects. Attractions function to attract tourists to visit (Susanti & Dewi, 2022). Lestari and Ramadhan (2019) divide them into natural, cultural, and artificial attractions, while Haris and Utami (2020) assess attractions based on uniqueness, visual appeal, variety of activities, affordability, and sustainable management.

However, the reality on the ground shows that there are still various obstacles and shortcomings felt by visitors when traveling to Toba Caldera Resort. Based on the results of initial observations and informal interviews with several tourists, it is known that most visitors are not completely satisfied with the facilities available and the attractions offered. Some of the complaints that are often submitted include the lack of supporting facilities such as unmaintained toilets, limited seating or shelters, limited transportation facilities in the area, and lack of easily accessible tourist information. In addition, the tourist attractions presented in this area are still seasonal, not well scheduled, and lack promotion, so tourists feel that they do not get a memorable experience.

The symptom of the problem that arises from this condition is the low level of visitor satisfaction with Toba Caldera Resort as a tourist destination. Visitor satisfaction is an important element in the success of a tourist destination because satisfaction is the main indicator in determining the intention of revisiting, the dissemination of positive information from word of mouth, and loyalty to the destination. If visitors are dissatisfied with the existing facilities and tourist attractions, then it is likely that they will not recommend the destination to others, and are even reluctant to visit again. This will certainly have an impact on decreasing the number of tourist visits and hindering long-term destination development efforts.

If explored further, the cause of these symptoms is closely related to the lack of optimal management of facilities and the absence of minimum service standards that are consistently applied in the Toba Caldera Resort area. Some facilities look poorly maintained due to a lack of regular maintenance and periodic evaluations. In addition, the tourist attractions offered have not been integrated into a structured calendar of activities and tend to be held only irregularly or at any time, depending on certain moments such as celebrations of holidays or visits of important guests. This causes tourist activities at Toba Caldera Resort to not take place consistently, making it difficult for tourists to plan their visit to enjoy the available attractions. This uncertainty has an impact on the lack of interesting and memorable tourist experiences for visitors. According to Kurniawan and Pratiwi (2021), attractions are the main tourist attraction that can be in the form of natural, cultural, or artificial objects. Attractions function to attract tourists to visit (Susanti & Dewi, 2022). Lestari and Ramadhan (2019) divide them into natural, cultural, and artificial attractions, while Haris and Utami (2020) assess attractions based on uniqueness, visual appeal, variety of activities, affordability, and sustainable management. The urgency of this research is very important considering the strategic position of Toba Caldera Resort as a national leading tourism development area. As a super priority destination, this region is required to be able to compete with other destinations, both domestically and abroad. If the quality of facilities and tourist attractions is not immediately improved, it will be difficult for Toba Caldera Resort to maintain and increase its attractiveness in the midst of increasingly fierce global competition. Therefore, an academic study is needed that can provide an objective and in-depth picture of the extent to which existing tourist facilities and attractions are able to

affect the level of visitor satisfaction, as well as provide practical recommendations for the management in developing a destination development strategy oriented towards tourist satisfaction.

The number of visitors to Toba Caldera Resort in 2022 and 2023 is as follows:

Table 1. Number of visitors to Toba Caldera Resort in 2022.

Jumlah Pengunjung tahun 2022					
Bulan	Umum	Pelajar	Balita	Mancanegara	TOTAL
Januari	14871	6059	835	1	21766
Februari	8972	2722	372	0	12066
Maret	10405	3227	380	0	14012
April	7080	2667	250	0	9997
Mei	37764	10763	1460	0	49987
Juni	15758	4107	743	0	20608
Juli	16299	3558	850	0	20707
Agustus	33127	1763	461	0	35351
September	8455	931	290	2	9678
Oktober	10780	1253	625	36	12694
November	8273	963	257	27	9520
Desember	15997	3192	1052	28	20269
TOTAL					236655

Source: BPS Data, Data processed (2025)

Table 2. Number of Visitors to Toba Caldera Resort in 2023

2023 VISITOR DATA						
NO	MOON	ADULT	STUDENTS	TODDLER	FOREIGN	SUM
1	JANUARY	35551	7966	2102	47	45666
2	FEBRUARY	14676	2481	611	39	17807
3	MARCH	12582	1670	401	89	14742
4	APRIL	35428	6430	1773	43	43674
5	MAY	20769	6797	1047	90	28703
6	JUNE	20582	5112	1184	75	26953
7	JULY	23310	4656	1250	108	29324
8	AUGUST	12058	1269	355	156	13838
9	SEPTEMBER	11349	979	362	73	12763
10	OCTOBER	11303	1011	433	41	12788
11	NOVEMBER	11544	1640	356	67	13607
12	DECEMBER	23071	5245	5245	100	33661
		232223	45256	15119	928	293526

Source: BPS Data, Data processed (2025)

The number of visitors to Toba Caldera Resort in 2022 and 2023 shows a fairly significant upward trend. In 2022, the total number of visitors was recorded at 236,655 people, and increased to 293,526 people in 2023. This increase is a signal that Toba Caldera Resort has a strong attraction in the eyes of tourists, both domestic and foreign. Although the data on visits in 2024 is not officially available, with the continuation of various promotional agendas and tourism events, Toba Caldera Resort is predicted to continue to record growth in the number of visitors in the current year.

The phenomenon of increasing the number of visits shows that the development of tourist destinations is not enough to rely only on the natural charm it has. The success of a tourist destination depends heavily on how the manager integrates attractive attractions, adequate facilities, and quality services to create memorable experiences for tourists. Without improvements and innovations in the aspects of facilities and attractions, the charm of nature will be difficult to compete with other destinations that offer a more complete and modern tourist experience. Therefore, the approach to facility-based

destination development, strengthening local attractions, and sustainable management is important to encourage visitor satisfaction and increase tourist loyalty to Toba Caldera Resort tourist destinations.

The results of research conducted by Siburian and Nasution (2023) reinforce these findings, where the accessibility and facilities available at The Caldera Toba Nomadic Escape are proven to have a significant influence on visitor satisfaction levels, with facilities being the most dominant factor. In addition, Maudina and Simanjuntak (2024) also found that improving the quality of accessibility and facilities also encouraged tourist loyalty and their tendency to revisit the destination. Annisa & Kurniawan (2024) found that facilities and attractions at Marcopolo Water Adventure Bogor had a simultaneous effect on satisfaction with a contribution of 53.3%, where facilities were the dominant factor. Salsabila & Nathalia (2023) show that attractions and facilities in post-revitalization TMII explain 43% variation in visitor satisfaction. Meanwhile, Ginting et al. (2022) emphasized that attractiveness and service quality have a positive effect on the decision to revisit, and Priambudi et al. (2021) stated that the combination of educational attractions and comfortable facilities increases tourist satisfaction and loyalty. Overall, good management of facilities and attractions has proven to be a key factor in increasing tourist satisfaction and repeat visits.

According to Kotler and Keller (2019), the quality of physical facilities is the main factor in shaping tourist satisfaction. Research by Yulianti and Priyanto (2021) and Wulandari et al. (2023) shows that complete, comfortable, and well-managed facilities—such as toilets, parking, road access, and cleaning facilities—have a significant effect on the satisfaction and desire of tourists to visit again. The Ministry of Tourism and Creative Economy (2020) also emphasized that adequate facilities increase the perception of destination value. In addition, according to Hasanah and Wardani (2022), attractions designed according to the character of the destination can foster emotional satisfaction, while Sari and Pramudito (2022) found that synergy between facilities and attractions simultaneously increases the satisfaction, loyalty, and interest of tourists revisiting.

Although official data for 2024 has not been released, the various promotional and attraction development efforts that continue to be carried out by the Lake Toba Authority Implementing Agency give a positive signal that the trend of increasing visits will still continue. Through destination management that focuses on improving service quality, preserving local culture, and utilizing tourism potential in a sustainable manner, Toba Caldera Resort is believed to have a great opportunity to develop into a tourism destination that is not only crowded, but also able to provide a memorable experience and increase visitor loyalty in the long term. Based on this explanation, the researcher is interested in conducting a research entitled "The Influence of Tourist Facilities and Attractions on Visitor Satisfaction at Toba Caldera Resort Pardamean Sibisa". Thus, this research is not only important in an academic context, but also relevant in supporting the sustainable development of tourism in the Lake Toba region. Through improving the quality of facilities and organizing planned tourist attractions, it is hoped that Toba Caldera Resort can meet visitor expectations, increase tourist satisfaction, and ultimately contribute to the achievement of overall national tourism development goals.

2. METHODS

This research was conducted at Toba Caldera Resort, Pardamean Sibisa Village, Ajibata District, Toba Regency. This location was chosen because it is a leading destination managed by the Lake Toba Authority Implementing Agency and is relevant to research the influence of tourist facilities and attractions on visitor satisfaction. The research will be carried out starting in May 2025, including the

preparation and dissemination of questionnaires, data collection, and analysis. This type of research uses a quantitative approach with primary and secondary data as the primary sources.

Population is the entire object of research consisting of living beings, objects, symptoms, or events that have certain characteristics (Abdullah et al., 2022:80). The population in this study is visitors to Toba Caldera Resort Tourist Destinations. Samples are part of a population that has similar characteristics, taken due to time, funding, and energy constraints. This study uses non-probability sampling with an incidental sampling approach, which is sampling based on who is coincidentally encountered and meets the criteria. The sample size was determined using the Lemeshow formula, as the population size is not known for sure and to obtain a certain degree of precision in large populations.

$$n = \frac{Z^2 \cdot p \cdot (1-p)}{d^2}$$

Information:

n = Minimum Sample Count

Z = 1.96 (95% confidence level)

p = 0.5 (because the actual proportion is unknown)

d = 0,10 (margin of error 10%)

So it is written as follows:

$$n = \frac{1,96^2 \cdot 0,5 \cdot (1-0,5)}{0,10^2}$$

$$n = \frac{3,8416 \cdot 0,25}{0,01}$$

$$n = \frac{0,9604}{0,01}$$

$$n = 96.04$$

In this study, the minimum sample number was 96 respondents, but the researcher took 100 respondents. The sampling technique used is non-probability sampling with a combination of purposive and accidental sampling. This technique was chosen because the number of visitors to Toba Caldera Resort is not known for sure and is not listed in the official database. Through this approach, researchers can easily collect data from visitors who meet the criteria and obtain representative results to analyze the influence of facilities and tourist attractions on visitor satisfaction.

According to Sugiyono (2024:213), data collection can be done through interviews, questionnaires, and observations. In this study, the techniques used were observation and questionnaire. Based on Sahir (2022:30), observation is a data collection technique by directly observing the research object to obtain relevant information. The researcher made observations on visitors to Toba Caldera Resort to record the data needed. In addition, data collection was also carried out through questionnaires, which were given a set of written questions to respondents. This instrument uses the Likert scale to measure respondents' level of approval of statements related to facilities, tourist attractions, and visitor satisfaction.

Table 3. Questionnaire Rating Scale Using the Likert Scale

No.	Score	Information
1	5	Strongly Agree (SS)
2	4	Agree (S)
3	3	Hesitation (RR)
4	2	Disagree (TS)
5	1	Strongly Disagree (STS)

Source: Sugiyono (2024:154)

3. FINDINGS AND DISCUSSION

3.1. Results

1) Data Quality Test

a. Validity Test

Table 4. Validity Test Results

Variabel	Statement	Calculation	rtabel	Information
Facilities (X ₁)	X1.1	0,45	0,361	Valid
	X1.2	0,593	0,361	Valid
	X1.3	0,629	0,361	Valid
	X1.4	0,51	0,361	Valid
	X1.5	0,445	0,361	Valid
	X1.6	0,55	0,361	Valid
	X1.7	0,469	0,361	Valid
	X1.8	0,426	0,361	Valid
	X1.9	0,416	0,361	Valid
	X1.10	0,446	0,361	Valid
	X1.11	0,542	0,361	Valid
	X1.12	0,469	0,361	Valid
	X1.13	0,518	0,361	Valid
	X1.14	0,573	0,361	Valid
	X1.15	0,412	0,361	Valid
Tourist Attractions (X ₂)	X2.1	0,544	0,361	Valid
	X2.2	0,537	0,361	Valid
	X2.3	0,44	0,361	Valid
	X2.4	0,562	0,361	Valid
	X2.5	0,544	0,361	Valid
	X2.6	0,467	0,361	Valid
	X2.7	0,462	0,361	Valid
	X2.8	0,435	0,361	Valid
	X2.9	0,459	0,361	Valid
	X2.10	0,426	0,361	Valid
	X2.11	0,51	0,361	Valid
	X2.12	0,426	0,361	Valid
	X2.13	0,536	0,361	Valid
	X2.14	0,529	0,361	Valid
	X2.15	0,519	0,361	Valid
Visitor Satisfaction (Y)	Y1	0,562	0,361	Valid
	Y2	0,559	0,361	Valid
	Y3	0,614	0,361	Valid
	Y4	0,505	0,361	Valid
	Y5	0,535	0,361	Valid
	Y6	0,546	0,361	Valid
	Y7	0,686	0,361	Valid

Y8	0,517	0,361	Valid
Y9	0,51	0,361	Valid
Y10	0,539	0,361	Valid
Y11	0,527	0,361	Valid
Y12	0,517	0,361	Valid

Source: SPSS processed data (2025)

Based on the table above, it is stated that all statement items on Facilities, Tourist Attractions and Visitor Satisfaction can be declared valid because all statement items have a calculation of > rtable of 0.361. From these results, it can be concluded that all statement items are proven valid and can be used in research questionnaires.

b. Reliability Test

Table 5. Reliability Test Results

Variabel	Nilai Cronbach's Alpha	Syarat Cronbach's Alpha	Information
Facilities (X1)	0,817	>0,60	Reliabel
Tourist Attractions (X2)	0,875	>0,60	Reliabel
Visitor Satisfaction (Y)	0,801	>0,60	Reliabel

Source: SPSS processed data (2025)

Based on the table above, it is stated that the results of the reliability test of the variables of Facilities, Tourist Attractions and Visitor Satisfaction have a fairly large Cronbach's Alpha coefficient, which is above 0.60 so that it can be said that each variable of this research questionnaire is reliable, meaning that this research questionnaire is a reliable and reliable questionnaire.

2) Classical Assumption Test

a. Normality Test

- Kolmogorov-Smirnov Test

Table 6. Results of the Kolmogorov Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Hours of deviation	3.85013841
Most Extreme Differences	Absolute	.072
	Positive	.072
	Negative	-.056
Test Statistic		.072
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: SPSS processed data (2025)

Based on the table above, it is known that the value of Asymp. Sig. (2-tailed) is 0.200, which is greater than the significance level of 0.05. Referring to the decision-making criteria in the Kolmogorov-Smirnov normality test, if the significance value is greater than 0.05 then the data is

declared to be normally distributed. Thus, it can be concluded that the residual data in this study is normally distributed, thus meeting the normality assumptions for regression analysis.

- Graph Histogram

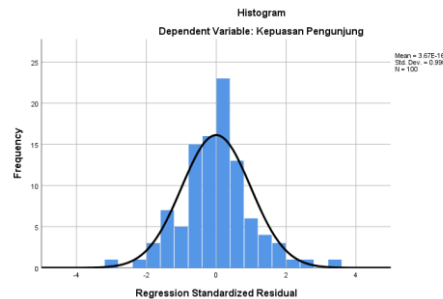


Figure 2. Graph histogram
Source: SPSS processed data (2025)

Based on the Figure above, it can be seen that the residual histogram forms a bell-shaped curve distribution pattern that is relatively symmetrical to the vertical axis. The curve peaks are around zero values and the bars of the histogram spread evenly to the left and right. This shows that the residues of the regression model are normally distributed, so the normality assumption has been fulfilled in this regression analysis.

- Grafik Normal *Probability Plot*

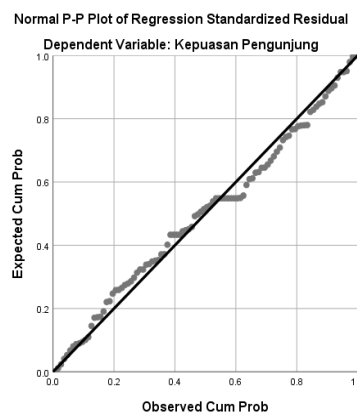


Figure 3. P-Plot Normality Test Results
Source: SPSS processed data (2025)

Based on the image above, it can be seen that the dots on the graph are spread out and follow a diagonal line (straight line) from the bottom left to the top right. The spread of points approaching and following the direction of this diagonal line indicates that the residual is normally distributed. Thus, it can be concluded that the data meet the assumption of normality, which is an important condition in linear regression analysis.

b. Multicollinearity Test

Table 7. Multicollinearity Test

Coefficientsa								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	Model	B	Std. Error	Beta	t	Itself.	Tolerance	BRIGHT
1	(Constant)	5.171	2.781		1.860	.066		
	Facilities	.309	.056	.434	5.524	.000	.442	2.264
	Tourist Attractions	.416	.067	.484	6.162	.000	.442	2.264
a. Dependent Variable: Visitor Satisfaction								

a. Dependent Variable: Visitor Satisfaction

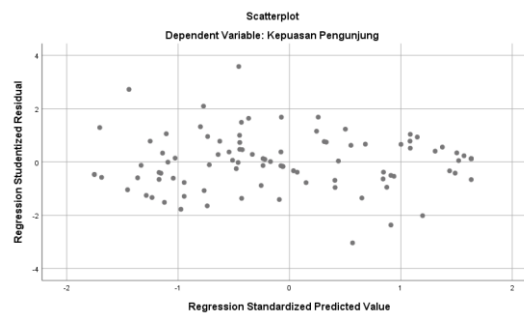
Source: SPSS processed data (2025)

Based on the table above, the following data can be obtained:

- In the Facility variable, a tolerance value of $0.442 > 0.1$ and a VIF value of $2.264 < 10$, it can be concluded that in the Facility variable is not multicollinearity occurs.
- In the Tourist Attraction variable, a tolerance value of $0.442 > 0.1$ was also obtained and VIF of $2.264 < 10$, so it can be concluded that in the Attraction variable Tourism also does not occur multicollinearity.

Based on the results of the Multicollinearity Test, it is known that the two independent variables, namely Facilities and Tourist Attractions, each have a tolerance value above 0.1 and a VIF value below 10. This shows that there is no high linear relationship between independent variables, so that multicollinearity does not occur in the regression model. Therefore, the regression model is considered feasible for use in further analysis.

c. Heteroscedasticity Test

**Figure 4.** Scatterplot results from heteroscedasity test

Source: SPSS processed data (2025)

Based on the Figure above, it can be seen that the spread of data points occurs randomly and does not form a specific pattern, either a conical or spread pattern. The points are evenly distributed above and below the zero axis on the Y axis.

3) Multiple Linear Regression Analysis Test

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + e$$

Information:

Y = Visitor Satisfaction

A = Coefazine Constanta

 β_1 = Regression Coefficient of X_1 (Facility)

β_2 = Regression Coefficient of X_2 (Tourist Attractions)

X_1 = Facilities

X_2 = Tourist Attractions

e = Standard Error

Table 8. Multiple Linear Regression Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.171	2.781		1.860	.066
Facilities	.309	.056	.434	5.524	.000
Tourist Attractions	.416	.067	.484	6.162	.000

a. Dependent Variable: Visitor Satisfaction

Source: SPSS processed data (2025)

Based on the results of the regression analysis above, the regression equation is obtained as follows.

$$Y = 5.171 + 0.309 X_1 + 0.416 X_2$$

From the linear regression equation above, it can be explained as follows:

1. A constant value (α) of 5.171 indicates that if the Facilities and Attractions variable is zero, then the Visitor Satisfaction value is estimated to be 5.171. This value represents the baseline value of visitor satisfaction when the two independent variables have no effect.
2. The regression coefficient of the Facility variable (X_1) is 0.309, with a positive value. This means that every one-point increase in the facility variable will increase visitor satisfaction by 0.309 points, assuming the tourist attraction variable remains the same. This positive sign shows that the facility has a positive and unidirectional effect on visitor satisfaction. The results of the t-test also showed that this effect was significant, with a significance value of 0.000 (< 0.05).
3. The regression coefficient of the Tourist Attraction variable (X_2) of 0.416 is also positive. This means that every one-point increase in the tourist attraction variable will increase visitor satisfaction by 0.416 points, assuming the other variables remain the same. This positive sign indicates that tourist attractions also have a positive and significant influence, as indicated by a significance value of 0.000 (< 0.05).

4) Hypothesis Test

a. Partial Significance Test (t-test)

Table 9. Partial Significance Test Results (t-Test)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Itself.
	B	Std. Error	Beta		
1 (Constant)	5.171	2.781		1.860	.066
Facilities	.309	.056	.434	5.524	.000
Tourist Attractions	.416	.067	.484	6.162	.000

a. Dependent Variable: Visitor Satisfaction

Source: SPSS processed data (2025)

In this study, a partial test was carried out by comparing the t_{cal} value with the t_{table} at a significance level of 5% ($\alpha = 0.05$) and the degree of freedom ($df = n - k = 100 - 2 = 98$), so that the t_{table} value of 1.984 was obtained. Based on the results of the regression calculation in the table above, it is concluded as follows:

- a. The Facility variable (X_1) has a calculated t -value of 5.524 with a significance level of 0.000. Because $t_{count} (5.524) > t_{table} (1.984)$ and $sig < 0.05$, it can be concluded that facilities have a positive and significant effect on visitor satisfaction. Thus, the hypothesis H_{01} is rejected and H_{a1} is accepted.
- b. The Tourist Attraction variable (X_2) has a calculated t -value of 6.162 with a significance level of 0.000. Because $t_{count} (6.162) > t_{table} (1.984)$ and $sig < 0.05$, it can be concluded that tourist attractions also have a positive and significant effect on visitor satisfaction. Thus, the hypothesis of H_{02} is rejected and H_{a2} is accepted.

b. *Simultaneous Significance Test (F test)*

Table 10. Results of Simultaneous Significance Test (F Test)

ANOVA						
	Model	Sum of Squares	df	Mean Square	F	Itself.
1	Regression	4088.307	2	2044.153	135.113	.000b
	Residual	1467.533	97	15.129		
	Total	5555.840	99			
a. Dependent Variable: Visitor Satisfaction						
b. Predictors: (Constant), Tourist Attractions, Facilities						

Source: SPSS processed data (2025)

Based on the results of the ANOVA test in the table above, an F value of 135.113 was obtained with a significance level of 0.000. Since the significance value is less than 0.05 ($sig < 0.05$), it can be concluded that the regression model used simultaneously is significant. This means that the variables of Facilities and Tourist Attractions together have a significant influence on Visitor Satisfaction. Thus, the null (H_0) hypothesis is rejected and the alternative hypothesis (H_a) is accepted.

c. *Determination Coefficient Test (R Square)*

Table 11. Determination Coefficient Test Results (R2)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.858a	.736	.730	3.890
a. Predictors: (Constant), Facilities, Tourist Attractions				
b. Dependent Variable: Visitor Satisfaction				

Source: SPSS processed data (2025)

Based on the table above, it can be seen that the Adjusted R Square value is 0.730 or 73.0%. This shows that the relationship between the variables of Tourist Attractions and Facilities to Visitor Satisfaction has a very strong relationship strength, which is 73.0%. This means that the independent variable, namely Tourist Attractions and Facilities, is able to explain the variation in Visitor Satisfaction of 73.0%.

Meanwhile, the remaining 27.0% was explained by other factors outside this regression model that were not examined in this study. These factors can include aspects of officer service,

price or entrance fee, weather conditions during the visit, environmental safety, promotion or destination information, to the personal preferences of visitors. These external factors still have the potential to affect visitor satisfaction levels, although they are not included in the focus of the study variables.

Thus, although Tourist Attractions and Facilities have proven to have a great influence, further research still needs to consider these other variables to obtain a more comprehensive picture of the factors that affect visitor satisfaction at Toba Caldera Resort.

3.2. Discussion

1) The Influence of Facilities on Visitor Satisfaction

Based on the results of the multiple linear regression test and the t-test, it is known that the Facility variable (X_1) has a positive and significant effect on visitor satisfaction at Toba Caldera Resort. These findings show that the better the facilities available, the higher the level of visitor satisfaction. In this study, facilities include aspects of infrastructure comfort, completeness of facilities and infrastructure, environmental cleanliness, ease of access, and other supporting services. Adequate and well-managed facilities are able to create a pleasant visit experience and have a direct impact on visitor satisfaction. Thus, improving the quality of facilities is a key factor in increasing satisfaction, and an optimal facility management strategy will make a significant contribution to the success and sustainability of Toba Caldera Resort's tourist destinations.

2) The Influence of Tourist Attractions on Visitor Satisfaction

Based on the results of the multiple linear regression test and the t-test, it is known that the Tourist Attraction variable (X_2) has a positive and significant effect on visitor satisfaction. This is indicated by a significance value of less than 0.05. These results show that the more attractive and quality the tourist attractions offered, the higher the level of visitor satisfaction. Tourist attractions in this study include natural beauty, local cultural uniqueness, art performances, entertainment rides, and recreational activities that provide experience value for visitors. The diversity and uniqueness of the attractions available are able to create a memorable experience and strengthen a positive perception of the destination. Thus, the development and management of good tourist attractions is an important factor in increasing visitor satisfaction and a crucial strategy to maintain the attractiveness and sustainability of Toba Caldera Resort's tourist destinations.

3) The Influence of Tourist Facilities and Attractions on Visitor Satisfaction

Based on the results of the simultaneous hypothesis test (F Test), it is known that the variables of Facilities and Tourist Attractions together have a significant effect on visitor satisfaction. This is indicated by a significance value of less than 0.05, which indicates a meaningful relationship between the two variables and visitor satisfaction. These findings show that the better the quality of facilities and the more attractive the available tourist attractions, the higher the level of visitor satisfaction.

Factors that affect satisfaction include the comfort of infrastructure, the completeness of facilities and infrastructure, environmental cleanliness, natural beauty, the uniqueness of local culture, art performances, and recreational activities that are able to create pleasant experiences. In addition, aspects of spatial planning, area management, and technology support in tourism services also contribute significantly to creating comfort and strengthening visitors' positive perceptions of destinations. Thus, improving the quality of facilities and managing tourist attractions is an important step in an effort to increase visitor satisfaction in a sustainable manner.

Based on the results of the study, it is known that 27.0% of the satisfaction rate of visitors at Toba Caldera Resort is influenced by other factors outside of the variables of facilities and tourist attractions studied in this model. These external factors may include third-party services, weather during the visit, local socio-cultural conditions, regional security, and visitors' personal preferences that may affect their perception of satisfaction. In addition, aspects such as spatial planning of tourist areas, efficient spatial

management, and information technology support in tourism services can also make a significant contribution in creating comfort during visits. Thus, the development and evaluation of factors outside the model is important to gain a more comprehensive understanding in an effort to improve visitor satisfaction on a sustainable basis.

The main difference between this study and previous studies lies in the characteristics and context of the tourist destinations studied. Previous studies such as by Annisa & Kurniawan (2024), Siburian & Nasution (2023), Salsabila & Nathalia (2023), Ginting et al. (2022), and Priambudi et al. (2021) have raised the issue of tourist facilities and attractions, but with different objects and settings. This research specifically focuses on Toba Caldera Resort (TCR) which is an open-nature-based tourist destination in the Lake Toba area, with a sustainable approach and distinctive local cultural potential.

In this study, it was found that the variables of Tourist Facilities and Attractions had a simultaneous and significant effect on Visitor Satisfaction. The results of the F test showed a significance value of 0.000, much smaller than the significance level of 0.05, and a Fcal value of 135.113 which far exceeded the value of Ftable (3.09). This indicates that the regression model has good explanatory power. Furthermore, the Adjusted R Square value of 0.730 reveals that 73.0% variation in Visitor Satisfaction can be explained by the Facilities and Attractions variables in this model. This value is very high and surpasses the achievements of several previous studies, such as Priambudi et al. (2021) which reported an R^2 value of 65.7%. This suggests that the model in this study has stronger predictive power, especially in the context of nature- and cultural-based tourist destinations. Therefore, this study refers to and refers to the research conducted by Siburian & Nasution (2023) because it has the highest relevance, both in terms of the location of the research which is both in the Toba Caldera Resort area, and in terms of the main variables used, namely facilities and accessibility to the satisfaction of domestic tourists. In a study by Siburian & Nasution (2023), it was reported that the facility variable contributed 68.5% to tourist satisfaction, with accessibility as a supporting factor that also influenced the comfort of visiting. Meanwhile, this study shows that facilities and tourist attractions together are able to explain 73.0% of the variation in visitor satisfaction, which means that there is an increase in the power of the model when the tourist attraction variable is included as an important aspect in the assessment of the tourist experience.

Siburian & Nasution's (2023) research provides an initial empirical picture of the role of facilities in tourist satisfaction in TCR, but has not accommodated the influence of tourist attractions as an element that shapes visitor experience. By adding the tourist attraction variable as an important aspect that has not been used as a focus in the study, this study is expected to be able to make a new contribution in understanding tourist satisfaction more comprehensively at Toba Caldera Resort.

Thus, it can be concluded that Tourist Facilities and Attractions have a strong and significant influence on Visitor Satisfaction at Toba Caldera Resort. Therefore, these two variables should be the main concern in the strategy of developing and improving the quality of nature-based tourist destinations, especially in an effort to maintain attractiveness and increase tourist satisfaction in a sustainable manner.

4. CONCLUSION

Based on the results of the research and discussions that have been carried out, the following conclusions can be drawn: 1) Facilities have a positive and significant effect on visitor satisfaction at Toba Caldera Resort. The results of the questionnaire showed that the aspects of comfort, cleanliness, ease of access, and availability of supporting facilities were considered the most satisfactory, although some supporting facilities still needed to be improved. This confirms that well-managed facilities contribute greatly to creating an enjoyable visit experience. 2) Tourist attractions have a positive and significant effect on visitor satisfaction. Respondents rated natural beauty, local cultural richness, and art and entertainment performances as the main factors that provide a memorable experience. These findings show that tourist attractions have a strong attraction in forming a positive perception of destinations. 3) Facilities and tourist attractions simultaneously have a significant effect on visitor

satisfaction. The results of the analysis show that these two variables are able to explain most of the variation in satisfaction, so that improving the quality of facilities and managing tourist attractions simultaneously becomes an important strategy in maintaining visitor satisfaction. 4) Based on the results of the comparison, it is known that tourist attractions have a greater influence on satisfaction than facilities. Therefore, in nature-based destinations such as Toba Caldera Resort, strengthening cultural, natural, and recreational attractions needs to be prioritized, while maintaining the quality of existing facilities. This research also makes a new contribution by adding the tourist attraction variable in the context of the research at Toba Caldera Resort, complementing the findings of Siburian & Nasution (2023) which previously emphasized more on facilities and accessibility. Therefore, destination managers are advised to continue to improve the quality of facilities and strengthen the attractiveness of tourist attractions in order to maintain visitor satisfaction and loyalty in a sustainable manner.

REFERENCES

- Abdullah, Karimuddin; Misbahul Jannah, Ummul Aiman, Surya Hasda, Zahara Fadila, Masita, Ketutut Ngurah Ardiawan & Meilida Eka Sari. (2022). *Metodologi Penelitian Kuantitatif*. Aceh: Muhammad Zaini.
- Afrizal. (2024). *Manajemen Pelayanan Pariwisata dan Kepuasan Pengunjung*. Yogyakarta: Deepublish.
- Annisa, Visya Putri, & Taufiq, Kurniawan. (2024). Pengaruh Fasilitas dan Atraksi Wisata terhadap Kepuasan Pengunjung di Marcopolo Water Adventure Bogor. *Jurnal Pariwisata Indonesia*, 19(1), 45–56.
- Ginting, Fransisko, Isa Kristiana, Situmorang, & Jenny Sari, Tarigan. (2022). Pengaruh Daya Tarik dan Kualitas Layanan terhadap Putusan Berkunjung kembali Wisatawan Kaldera Toba. *Konferensi Nasional Sosial dan Engineering Politeknik Negeri Medan*, 3, 13–21.
- Haris, Andi dan Sari Utami. (2020). *Indikator Penilaian Atraksi Wisata: Kajian Teoritis dan Praktis*. Yogyakarta: Deepublish.
- Indrasari, Meithiana. (2019). *Manajemen Pemasaran* (hlm. 82, 90–91). Yogyakarta: Deepublish.
- Kementerian Pariwisata dan Ekonomi Kreatif. (2020). *Pedoman Pengelolaan Daya Dukung Destinasi Pariwisata*. Jakarta: Deputi Bidang Pengembangan Destinasi dan Infrastruktur.
- Kotler, Philip dan Kevin Lane Keller. (2019). *Manajemen Pemasaran* (Edisi ke-15). Jakarta: Erlangga.
- Kurniawan, Dedi dan Ayu Pratiwi. (2021). *Manajemen Destinasi Pariwisata Berkelanjutan*. Yogyakarta: Deepublish.
- Kusnadi, Rachmat dan Andi Senen. (2024). *Manajemen Pemasaran Pariwisata: Teori dan Aplikasi*. Jakarta: Prenadamedia Group.
- Lestari, Vera dan Budi Ramadhan. (2019). *Atraksi Wisata: Alam, Budaya, dan Buatan sebagai Daya Tarik Destinasi*. Yogyakarta: Deepublish.
- Muslimin, Dian; Moch. Nurcholis Majid, Nur Ika Effendi, Nicholas Simarmata, Rida Ristiyana, Wahyuni Langelo, Teti Anggita Safitri, Agung Anggoro Seto, Sunariyanto, Ade Putra Ode Amane, Retno Indriyati, Sulistiyani, Anna Triwijayati, Hadawiah, & Yeni Januarsari. (2023). *Metodologi Penelitian Kuantitatif dan Kualitatif*. GET Press Indonesia.
- Nurfitriani; Mene Paradilla., Andi Niartiningsih., Muhammad Takwa & Nurul Hidayah Nur. (2024). *Patient Experience*. Jawa Timur: Uwais Inspirasi Indonesia.
- Pratomo, Wahyu Ario, Wahyu Sugeng Imam Soeparno, & Arif Rahman. (2023). *Manajemen Sarana dan Prasarana dalam Pariwisata*. Jakarta: Pustaka Cendekia.
- Priambudi, Rio Rizky, Stella, Alvianna, Estikowati, & Syarif, Hidayatullah. (2021). Dampak Atraksi dan Fasilitas terhadap Kepuasan Wisatawan Domestik. *ResearchGate.net*, 1(1), 26–35.
- Purnomo, Hery; Rino Sardanto & Basthoumi Muslih. (2020). Signifikasi Prediktor Kepuasan Konsumen Jasa Hotel. : (hlm. 67–78) *Pramnon Ngajuk: Adjie Media Nusantara*.
- Putra, Dedi dan Agus Hidayat. (2020). *Pengantar Ilmu Pariwisata: Teori dan Aplikasi*. Yogyakarta: Deepublish.

- Raharjo, Budi. (2020). Analisis Fasilitas Wisata terhadap Kepuasan Pengunjung di Destinasi Pariwisata. Yogyakarta: Deepublish.
- Sahir, Syafrida Hafni. (2021). Metodologi Penelitian. Jogjakarta: Kbm Indonesia
- Salsabila, Sahda dan Theodosia C. Nathalia. (2023). Pengaruh Atraksi dan Fasilitas Wisata terhadap Kepuasan Pengunjung di Taman Mini Indonesia Indah (TMII) Pascarevitalisasi. *Jurnal Manajemen Pariwisata*, 8(1), 66–75.
- Siburian, Aprilia Yolanda dan Harris P. Nasution. (2023). Pengaruh Aksesibilitas dan Fasilitas terhadap Kepuasan Wisatawan Domestik di The Kaldera Toba Nomadic Escape. *Jurnal Kepariwisata dan Perhotelan Indonesia*, 5(2), 87–96.
- Sugiyono. (2024). Metode Penelitian Kuantitatif, Kualitatif, dan R&D (hlm. 57, 130–131, 197, 203, 213). Bandung: Alfabeta.
- Susanti, Christina Esti dan Ayu Dewi. (2022). Atraksi Wisata dan Daya Saing Destinasi Alam dan Budaya. Yogyakarta: Deepublish.
- Suwena, I Ketut dan I Gusti Ngurah Widyatmaja. (2017). Pengetahuan Dasar Ilmu Pariwisata. Denpasar: Pustaka Larasan.
- Tjiptono, Fandy dan Anastasia Diana. (2019). Kepuasan Pelanggan: Konsep, Pengukuran, dan Strategi (hlm. 107–109). Yogyakarta: Penerbit Andi.
- Wulandari, Riska., Budi Santosa, & Annisa Rahmawati. (2023). Pengaruh Fasilitas Dasar terhadap Kepuasan Pengunjung di Destinasi Wisata Alam dan Budaya. *Jurnal Destinasi Pariwisata*, 8(1), 45–57.
- Wulandari, Siska, Tuti Nurhayati, & Dedi Pratama. (2023). Pengaruh Atraksi Wisata terhadap Kepuasan Pengunjung pada Destinasi Wisata Alam dan Budaya. *Jurnal Kepariwisata Nusantara*, 8(1), 55–66.
- Yulianti, Rina dan Dwi Priyanto. (2021). Pengaruh Kualitas Fasilitas terhadap Kepuasan Pengunjung di Destinasi Wisata. *Jurnal Pariwisata dan Perhotelan Indonesia*, 6(2), 115–124.