



The effect of hotel facilities and guest satisfaction on customer loyalty at the Sibayak Hotel Berastagi

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ARTICLE INFO

Article history:

Received Jan 5, 2026

Revised Jan 13, 2026

Accepted Feb 7, 2026

Keywords:

Customer Loyalty;
Guest Satisfaction;
Hotel Facilities.

ABSTRACT

This study aims to determine: (1) the influence of hotel facilities on customer loyalty at the Sibayak Berastagi Hotel in Karo Regency. (2) the influence of guest satisfaction on customer loyalty at the Sibayak Berastagi Hotel in Karo Regency. (3) the influence of hotel facilities and guest satisfaction on customer loyalty at the Sibayak Berastagi Hotel in Karo Regency. This research approach is quantitative research using a questionnaire. The population in this study were 300 customers at the Sibayak Berastagi Hotel in July to September 2025. From a population of 300 customers using the Slovin formula and a significance level of 10%. Based on the calculation, a sample of 75 customers was obtained. Direct hypothesis testing was used with the F test and partially with the t test. Based on the results of the study are as follows: (1) Partially the first hypothesis states that there is an influence of hotel facilities on customer loyalty at the Sibayak Berastagi Hotel. (2) Partially the second hypothesis states that there is an influence of guest satisfaction on customer loyalty at the Sibayak Berastagi Hotel. (3) Simultaneously, hotel facilities and guest satisfaction together have a significant influence on customer loyalty at the Sibayak Berastagi Hotel. (4) The effective contribution generated is 0.651, meaning that 65.1% of the independent variables contribute an effective influence on the dependent variable, while the remaining 34.9% is influenced by other factors.

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1. INTRODUCTION

The hospitality industry is a crucial sector in supporting regional economic and tourism growth. In Indonesia, this sector has experienced rapid growth along with the increasing interest of domestic and international tourists in visiting various tourist destinations. The growth of the national tourism sector has contributed significantly to state revenue, created jobs, and supported economic sustainability in many regions, including Karo Regency, North Sumatra. One area with significant tourism potential is Berastagi, a sub-district in Karo Regency, North Sumatra. Berastagi is the second largest city in the Karo highlands after Kabanjahe City. Berastagi is one of the popular tourist cities in North Sumatra.

Berastagi, as the tourism center of Karo Regency, has good accessibility and is strategically located on the main road connecting Medan City with Simalungun Regency (Parapat). This makes it a gateway to other tourist destinations in North Sumatra. Berastagi also boasts

adequate accommodations and restaurants, along with excellent public facilities such as a bus terminal, communications facilities, healthcare facilities, banking, and money changers. Based on data from Head of the Karo Regency Tourism and Culture Office, foreign tourist visits in 2017. Data shows that there were 437 foreign tourist visits in December 2016 and 5,887 visits in December 2017. This figure increased by more than 100 percent, (Analisadaily, 2018).

The tourism sector is a key driver of regional economies, and within it, the hotel sector plays a vital role in providing accommodation, services, and comfort for tourists. According to the World Tourism Organization (Organization, 2022), the success of a tourist destination is determined not only by its natural or cultural attractions but also by the availability and quality of supporting facilities, particularly accommodation (hotels, guesthouses, and resorts). Adequate accommodation is a determining factor in tourist satisfaction, length of stay, and expenditure levels at the destination, (Khasanah et al., 2021).

In the context of regional tourism, such as in Karo Regency, the hotel sector is a strategic element because most tourists, both domestic and international, require temporary accommodations while traveling in and around Berastagi. The presence of hotels not only provides comfort and a sense of security but also serves as an indicator of a destination's readiness to receive tourists (Pietersz et al., 2024). Hotels with high service standards can increase a destination's competitiveness, as tourists tend to choose locations with high-quality and easily accessible accommodations, (Elshaer & Marzouk, 2024).

Beyond serving as a place to rest, the hotel sector also plays a role in creating a holistic tourism experience. According to (Pietersz et al., 2024) in *Tourism: Principles and Practice*, hotels are "an integral part of the tourist experience," as the interaction between guests, staff, and local culture, reflected in the service, adds value. In natural tourism areas like Karo, the presence of hotels with a local feel, or eco-hotels, contributes to the promotion of Karo culture and supports sustainable tourism.

In the context of the tourism industry, hotels serve not only as a place to stay but also as a vital part of the tourist experience, (Elshaer & Marzouk, 2024). According to (Pietersz et al., 2024), tourists' decisions to return to or recommend a destination are heavily influenced by the quality of hotel services and facilities they experience. Adequate hotel facilities, such as clean and comfortable rooms, restaurants, Wi-Fi, parking, swimming pools, and friendly receptionists, are key factors in guest satisfaction, (Hasibuan, 2021).

Guest satisfaction is a traveler's emotional reaction to the match between expectations and reality during their stay, (McLean & Barhorst, 2022). If a hotel's facilities and services meet or exceed guest expectations, satisfaction will increase and directly influence customer loyalty, (Singalen, 2024). Research by (Tjiptono & Chandra, 2017) confirms that customer loyalty is reflected in consumer behavior, such as repeat visits and word of mouth recommendations.

In Karo Regency, many hotels are competing to improve their facilities and services to retain customers. Hotels like Sibayak International, Sinabung Hills, and Grand Mutiara Berastagi are prominent examples of accommodations that prioritize comfort and complete facilities for tourists. However, observations by the (Karo, 2022) indicate that some hotels and inns still do not fully prioritize the quality of facilities and service standards, resulting in decreased satisfaction levels and potential customer loss.

Research by (Hasibuan, 2021) in the *Indonesian Tourism Scientific Journal* shows that in the Berastagi area, customer loyalty levels increase significantly when satisfaction with hotel facilities and services increases. Good facilities create a positive perception of the hotel's image, while satisfaction builds trust and emotional closeness between guests and service providers. Therefore, hotel facilities and guest satisfaction are closely linked in shaping long-term customer loyalty, (Kotler et al., 2017).

From a tourism economic perspective, customer loyalty also impacts hotel revenue stability and contributes to Regional Original Income (PAD) through hotel taxes. Loyal tourists tend to stay longer, spend more, and recommend destinations to other potential travelers. This will create a positive cycle for the overall growth of the Karo Regency hotel and tourism sector.

2. RESEARCH METHOD

This research approach uses a quantitative research method. According to (Sugiyono, 2017), quantitative research can be defined as a research method based on the philosophy of positivism, used to research a specific population or sample, with sampling techniques generally random, data collection using research instruments, and quantitative/statistical data analysis, with the aim of testing a predetermined hypothesis.

This study used a questionnaire. Through the questionnaire, researchers collected data to test hypotheses or answer research questions, (Ghanad, 2023). After collecting the data and measuring the results, researchers analyzed the data using quantitative data analysis techniques in the form of numbers to determine whether hotel facilities and guest satisfaction influence customer loyalty at the Sibayak Hotel in Berastagi. The population in this study was 300 customers at the Sibayak Hotel in Berastagi from July to September 2025. From a population of 300 customers, using the Slovin formula and a significance level of 10%, a sample of 75 customers was obtained.

The data collection technique chosen in this study is a scale used to collect data on three variables, namely hotel facilities, guest satisfaction, and customer loyalty. The scale sheet in this study was prepared using a modified rating scale. The scale was modified to measure the variables of hotel facilities, guest satisfaction, and customer loyalty with a score for each item being graded, a score of 5 meaning always, a score of 4 meaning often, a score of 3 meaning rarely, a score of 2 meaning sometimes, and a score of 1 meaning never, (Sugiyono, 2017).

Table 1. Operational definition of variables

Variables	Dimensions	Scale
Guest Facilities (X1) (Munawir, 2018)	1. Spatial considerations/planning	Likert
	2. Space planning	
	3. Equipment/furniture	
	4. Lighting and color design	
	5. Messages conveyed graphically	
	6. Supporting elements	
Guest Satisfaction (X2) (Komalig et al., 2017)	1. Fulfillment of consumer expectations	Likert
	2. Attitude or desire to use the product	
	3. Recommend to others	
	4. Quality of service	
	5. Loyal	
	6. Good reputation	
	7. Location	
Customer Loyalty (Y) (Griffin, 2010)	1. Make repeat purchases regularly	Likert
	2. Recommend to others	
	3. Immune to competing products	

Source: Data processed by the author, 2025

The technique used in data analysis is correlation analysis. As (Sinambela, 2014) argues, for quantitative research, this data analysis technique involves calculations to answer the problem formulation and test the proposed hypothesis, which will determine which statistical technique is used. Direct hypothesis testing is performed using the F-test and partial testing is performed using the t-test.

3. RESULTS AND DISCUSSIONS

Result

Respondent Characteristics

The presentation of descriptive research data aims to examine the profile of the study and the relationships between the variables. Descriptive respondent data describes the respondent's circumstances and conditions as further information for understanding the research results. The characteristics of the respondents in this study include:

Table 2. Respondent characteristics results

No	Characteristics	Category	Frequency (f)	Percentage (%)
1	Gender	Man	33	44.0
		Woman	42	56.0
2	Age	<20 years	6	8.0

No	Characteristics	Category	Frequency (f)	Percentage (%)
3	Last education	21-30 years	28	37.3
		31-40 years	22	29.3
		41-50 years	12	16.0
		>50 years	7	9.3
		Elementary School	3	4.0
4	Work	JUNIOR HIGH SCHOOL	6	8.0
		High School/Vocational School	27	36.0
		Diploma	11	14.7
		S1	24	32.0
5	Frequency of Staying at Hotel Sibayak	S2	4	5.3
		Students	19	25.3
		Government employees	11	14.7
		Private	24	32.0
		Businessman	14	18.7
6	Purpose of Stay	Other	7	9.3
		First time	18	24.0
		2-3 times	31	41.3
		4-5 times	16	21.3
		>5 times	10	13.3
Total		Tour	48	64.0
		Business	20	26.7
		Other	7	9.3
Total			75	100

Source: Processed Primary Data, 2025

Hypothesis Testing

- a. Multiple Regression Test, the results of data processing with SPSS version 25.0 regarding the influence of hotel facilities variables (X1) and guest satisfaction (X2) on customer loyalty (Y) can be seen in the following table:

Table 3. Multiple linear regression test

Model	Coefficients ^a		Standardized Coefficients Beta	t	Sig.
	Unstandardized Coefficients B	Std. Error			
1 (Constant)	0.057	2,075		0.028	0.978
Hotel Facilities	0.253	0.041	0.513	6,188	0,000
Guest Satisfaction	0.209	0.043	0.406	4,904	0,000

a. Dependent Variable: Customer Loyalty

Source: data processed by SPSS version 25.0, 2025

From the table above, we can obtain a multiple linear regression equation model which can be expressed as follows:

$$Y = 0.057 + 0.253X_1 + 0.209X_2 + e$$

The constant value of 4.590 means that if the independent variables, namely hotel facilities (X1) and guest satisfaction (X2) are constant or do not change, then customer loyalty (Y) is 0.057. Based on the multiple linear regression model obtained from the test results, it can be concluded that the influence of the independent variables on the dependent variables is as follows: a) The regression coefficient of hotel facilities (X1) in the test conducted was 0.253, meaning that if the other independent variables remain constant and the hotel facilities variable (X1) increases by 1%, customer loyalty (Y) increases by 0.253. A positive coefficient means that there is a positive relationship between hotel facilities and customer loyalty, the more hotel facilities increase, the more customer loyalty will increase b) The guest satisfaction regression coefficient (X2) in the test conducted was 0.209, meaning that if the other independent variables remain the same and the guest satisfaction variable (X2) increases by 1%, customer loyalty (Y) increases by 0.209. A positive coefficient means that there is a positive relationship between guest satisfaction and customer loyalty, the more guest satisfaction increases, the more customer loyalty will increase.

Partial Test (t-Test)

The correlation coefficient (r) will be tested for significance using a t-test. Partial testing can be performed using a t-test. If the probability value is <0.05, Ho is rejected and Ha is accepted.

This means there is a significant influence between the independent and dependent variables. The results of the partial test can be seen in the following table:

Table 4. t-test results

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.057	2,075		0.028	0.978
	Hotel Facilities	0.253	0.041	0.513	6,188	0,000
	Guest Satisfaction	0.209	0.043	0.406	4,904	0,000

a. Dependent Variable: Customer Loyalty

Source: data processed by SPSS version 25.0, 2025

- The Influence of Hotel Facilities (X1) on Customer Loyalty (Y). The partial test results show that for the hotel facilities variable (X1) $t_{count} = 6.188$ is obtained with $\alpha = 0.05$ and $n = 75 - 2 = 73$, then $t_{table} = 2.000$ is obtained. Based on the t_{count} and t_{table} values, 6.188 is obtained which is greater than 2.000 and the significant value is $0.000 < 0.05$, so H_0 is rejected and H_a is accepted. This means that partially the first hypothesis which states that there is an influence of hotel facilities on customer loyalty at the Sibayak Berastagi Hotel is accepted.
- The Influence of Guest Satisfaction (X2) on Customer Loyalty (Y). The partial test results show that for the guest satisfaction variable (X2) $t_{count} = 4.904$ is obtained with $\alpha = 0.05$ and $n = 75 - 2 = 73$, then $t_{table} = 2.000$ is obtained. Based on the t_{count} and t_{table} values, 4.904 is obtained which is greater than 2.000 and the significant value is $0.000 < 0.05$, so H_0 is rejected and H_a is accepted. This means that partially the second hypothesis which states that there is an influence of guest satisfaction on customer loyalty at the Sibayak Berastagi Hotel is accepted.

Simultaneous Test (F Test)

Simultaneous testing using the F-statistic was conducted to determine whether the independent variables (hotel facilities and guest satisfaction) simultaneously have a significant effect on the dependent variable (customer loyalty). The rule is that if the probability value is $sig > 0.005$, then H_0 is accepted and H_a is rejected.

Table 5. Results f test

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	301,752	2	150,876	70,123	<.001b
	Residual	154,915	72	2,152		
	Total	456,667	74			

a. Dependent Variable: Customer Loyalty

b. Predictors: (Constant), Guest Satisfaction, Hotel Facilities

Source: data processed by SPSS version 25.0, 2025

Based on the data in the table above, namely the F test with the above criteria, the F value is obtained. The calculated value is 70.123, while the F_{table} value ($nk-1 = 75-2-1 = 72$) is 3.12 or with a significant value of $F_{count} < .001b < 0.05$ so that it can be understood that this value indicates a significant influence between the independent variable (X) on the dependent variable (Y).

Hypothesis assessment criteria: a) $F_{count} > F_{table} = H_0$ is rejected, significance level is 0.05 (sig.2-tailed ≤ 0.05); b) $F_{count} < F_{table} = H_a$ is accepted, significance level is 0.05 (sig.2-tailed ≤ 0.05).

From the results above, it can be seen that the F valuecount of 70,123 with a significance level of $<.001b$. While the F valuetable is known to be 3.12 based on these results it can be seen that $f_{count} > f_{table}$ ($70.123 > 3.12$) meaning H_0 is rejected. So it can be concluded that the variables of hotel facilities and guest satisfaction together have a significant effect on customer loyalty at Hotel Sibayak Berastagi.

Test of the Coefficient of Determination (R²)

The coefficient of determination is used to see how variations in the value of the dependent variable are affected by variations in the value of the independent variable. The following table shows the coefficient of determination:

Table 6. Results of the coefficient of determination (r²) test

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.813a	0.661	0.651	1,467
a. Predictors: (Constant), Guest Satisfaction, Hotel Facilities				
b. Dependent Variable: Customer Loyalty				

Source: data processed by SPSS version 25.0, 2025

Based on the table above, the R value is the correlation between all independent variables and the dependent variable. The resulting correlation is 0.813, which falls into the very high correlation category.

The R² value represents the magnitude of the effective contribution between all independent variables on the dependent variable. The resulting R² value of 0.661 means that 66.1% of the independent variables contribute an effective influence on the dependent variable, while the remaining 33.9% is influenced by other factors.

The adjusted R² value represents the effective contribution effect adjusted for the standard deviation. This effect is typically used when there is more than one independent variable, as the adjusted R² value increases with the number of independent variables. The resulting adjusted R² value of 0.651 means that 65.1% of the independent variables contribute an effective influence on the dependent variable, while the remaining 34.9% is influenced by other factors.

Discussion

Based on the research results, this study met its stated objective: to determine the influence of hotel facilities and guest satisfaction on customer loyalty at the Sibayak Hotel in Berastagi. The following is a discussion:

- The influence of hotel facilities on customer loyalty at Hotel Sibayak Berastagi. Based on the partial test results (t-test), the t valueThe calculated and ttable obtained 6.188 is greater than 2.000 and the significant value is 0.000 < 0.05, so Ho is rejected and Ha is accepted. This means that partially the first hypothesis states that there is an influence of hotel facilities on customer loyalty at the Sibayak Berastagi Hotel. Hotel amenities are a crucial aspect of the hospitality industry, influencing guest satisfaction and ultimately increasing customer loyalty. These amenities encompass everything from bedrooms and restaurants to additional services like fitness centers and swimming pools. Comprehensive and high-quality amenities ensure guest comfort and enhance their loyalty to the hotel. This research aligns with research conducted by (Somantri et al., 2024) that found that hotel facilities and customer loyalty significantly influence customer satisfaction. These findings confirm that improving facility quality and customer loyalty strategies can significantly increase customer satisfaction, (Kazungu & Kubenea, 2023).
- The influence of guest satisfaction on customer loyalty at Hotel Sibayak Berastagi. Based on the partial test results (t-test), the t valueThe calculated and ttable obtained 4.904 is greater than 2.000 and the significant value is 0.000 < 0.05, so Ho is rejected and Ha is accepted. This means that partially the second hypothesis states that there is an influence of guest satisfaction on customer loyalty at the Sibayak Berastagi Hotel. Consumer satisfaction is the level at which consumers perceive the comparison between what they receive and what they expect, (Oh et al., 2022). According to (Umar, 2015), consumers who are satisfied with the value provided by a product or service are highly likely to remain long-term customers. This is in line with previous research by (Hutasoit, 2018), which found that guest satisfaction and customer loyalty at Sheraton Bandung Hotel & Towers were in the high category. The results showed that guest satisfaction had a strong influence on customer loyalty of 70.4%.

4. CONCLUSION

This study aims to determine the influence of hotel facilities and guest satisfaction on customer loyalty at the Sibayak Hotel in Berastagi. Based on the research questions and data analysis conducted using the results of the data analysis and discussion presented in the previous chapter, the following conclusions can be drawn: a) Partially, the first hypothesis states that there is an influence of hotel facilities on customer loyalty at the Sibayak Berastagi Hotel; b) Partially, the second hypothesis states that there is an influence of guest satisfaction on customer loyalty at the Sibayak Berastagi Hotel; c) Simultaneously hotel facilities and guest satisfaction together have a significant influence on customer loyalty at Hotel Sibayak Berastagi; d) The effective contribution generated is 0.651, meaning that 65.1% of the independent variables contribute an effective influence on the dependent variable, while the remaining 34.9% is influenced by other factors

ACKNOWLEDGEMENTS

The author would like to express sincere gratitude to the management of Sibayak Hotel Berastagi for granting permission and providing support that made this research possible. Appreciation is also extended to all hotel guests who willingly participated as respondents and contributed valuable data to this study. Furthermore, the author would like to thank the academic supervisors and all parties who provided guidance, constructive suggestions, and motivation throughout the completion of this article. It is hoped that the findings of this research will contribute positively to academic development and support improvements in service quality within the hospitality industry.

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