

The Impact of Marketing Strategies and Service Quality on Customer Satisfaction: A Case Study of Massage Chair Service Users

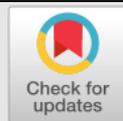
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ABSTRACT

This research investigates the influence of marketing strategy and service quality on customer satisfaction among massage chair service users at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City. The study employed a nonprobability sampling method using the incidental sampling approach, and the data analysis involved validity and reliability tests, classic assumption tests, multiple linear regression analysis, t-test, F-test, and R-squared test with SPSS version 24. The results of the descriptive analysis revealed moderate mean values for marketing strategy (3.37), service quality (3.35), and consumer satisfaction (3.34). The research found that marketing strategy (X1) and service quality (X2) positively and significantly affected customer satisfaction. Moreover, the F-test demonstrated that marketing strategy and service quality jointly and significantly influenced customer satisfaction ($p < 0.05$, $p = 0.000$). These findings highlight the importance of effective marketing strategies and high service quality to enhance customer satisfaction. The research contributes valuable insights for service industry practitioners and managers to improve customer experiences and loyalty.

Keywords: Customer Satisfaction; Incidental Sampling; Marketing Strategy; Multiple Linear Regression; Service Quality

1. Introduction

Health is one of today's primary concerns, and health technology encompasses medicines, medical devices, surgical and medical procedures, support systems, and organizational systems. Integrating technology in the health sector can enhance health services and positively influence health behaviors (Yani, 2018). Reflexology is one of the approaches utilized to promote health maintenance.

According to Do & Vu (2020), "Customer Satisfaction" is a business term used to assess how well products and services meet or exceed customer expectations. Since 2019, the massage chair business in Pangkalpinang has experienced rapid growth and diversified into different segments. However, many massage chair businesses in Pangkalpinang have encountered challenges in establishing a positive public image. Below is a list of massage chairs in Pangkalpinang.

Table 1. List of Massage Chairs in Pangkalpinang in 2021

No.	The name of the massage chair in Pangkalpinang	Address
1	PT Nusantara Sehat-Perfect Relax	Depati Amir Airport, Pangkalpinang City
2	Time Zone 2000 massage chair	Ramayana Pangkalpinang

Source: Data Processed (2021)

Based on **Table 1**, the subject of this research is PT Nusantara Sehat-Perfect Relax. PT Nusantara Sehat-Perfect Relax is among the massage chair businesses that operate in transportation areas, including several airports in major cities across Indonesia. One of these locations is Depati Amir Airport in Pangkalpinang City (Source: an interview with the massage chair supervisor). Below is an image of a massage chair at Perfect Relax, Depati Amir Airport, Pangkalpinang City:



Figure 1. Image of a massage chair of Perfect Relax at Depati Amir Airport, Pangkalpinang City, 2021

Figure 1 shows that Perfect Relax is one of the largest massage chair businesses in Pangkalpinang, particularly at Depati Amir Airport. The image above depicts that Perfect Relax operates efficiently and holds considerable appeal for consumers while they wait for their departures. Today's changing business environment requires entrepreneurs to be mindful of

internal and external factors to survive and thrive amidst the existing competition (Reniasi et al., 2022).

Perfect Relax has garnered a substantial consumer base that actively utilizes its services along its journey. This success can be attributed to the active participation of consumers who support Perfect Relax. The following data presents the number of consumers who used Perfect Relax’s massage chair services in 2021.

Table 2. Number of Massage Chair Consumers of Perfect Relax in 2021

Day	Achievements	Address
Monday, Friday	Maximum 10 consumers/day	More than 15 consumers/day
Saturday, Sunday	Maximum 15 consumers/day	More than 25 consumers/day

Source: Interview with massage chair operational staff of Perfect Relax in 2021

Based on Table 2, it is evident that the data indicates the number of consumers using Perfect Relax massage chairs on weekdays (Monday to Friday) can reach a maximum of 10 consumers per day. In contrast, on weekends (Saturday and Sunday), the number of consumers can reach a maximum of 15 per day. If we calculate the total, the average monthly number of massage chair consumers at Perfect Relax is 320 consumers. Despite this, the achievements of Perfect Relax massage chairs have not yet reached the desired target. The following are the rates for using a Perfect Relax massage chair:

Table 3. Rates for the Use of Massage Chairs of Perfect Relax in 2021

No	Usage Price Tariff	Usage Time
1	IDR10,000	5 minutes
2	IDR20,000	10 minutes
3	IDR50,000	25 Minutes

Source: Interview with massage chair operational staff of Perfect Relax in 2021

Based on Table 3, the rates for using Perfect Relax massage chairs at Depati Amir Airport, Pangkalpinang City, are available in three different pricing options. Users’ most frequently chosen option is IDR10,000 for 5 minutes of usage. The second option is priced at Rp. 20,000 for 10 minutes of use, and the third option is priced at IDR50,000 for 25 minutes.

Satisfied consumers are likelier to exhibit loyalty to the product provider and continue using products from the same brand. Customer satisfaction plays a crucial role in determining a business’s success. Here is the income data for Perfect Relax massage chairs from 2019 to 2021:

Table 4. Total Massage Chair Revenue of Perfect Relax in 2019-2021

Year	Revenue per Year
2019	IDR86,870,000
2020	IDR48,570,000
2021	IDR46,980,000
Total	IDR182,420,000

Source: Interview with massage chair operational staff of Perfect Relax in 2021

Based on **Table 4**, Perfect Relax massage chairs' income at Depati Amir Airport fluctuated from 2019 to 2021. The highest revenue was recorded in 2019, amounting to IDR86,870,000, while the lowest was in 2021, totaling IDR46,980,000. The most significant decline in revenue was observed in 2020, where it decreased from IDR86,870,000 to IDR48,570,000, with a difference of IDR38,300,000. This decrease was attributed to the impact of the COVID-19 pandemic, which significantly affected flight operations and subsequently had an adverse effect on massage chair revenue.

According to **Juniardi et al. (2018)**, the marketing mix refers to the controllable set of tactical marketing tools a company utilizes to elicit desired responses from its target market. The marketing mix for services and products/goods may differ. For product marketing, the 4Ps are considered: product, price, place, and promotion. On the other hand, service marketing includes three additional indicators: people, process, and physical evidence (**Juniardi et al., 2018**).

The following are the results of an initial survey conducted on 30 users of the Perfect Relax massage chair service from January 10, 2022, to February 8, 2022, regarding the marketing strategies that employ the marketing mix (product, price, location, promotion, physical evidence, people, and process) for the Perfect Relax massage chair at Depati Amir Airport in Pangkalpinang City.

Table 5. Pre-survey results of Marketing Strategy on Massage Chairs of Perfect Relax in 2021

Dimension Question	STS	TS	N	S	SS
Product	8.3%	15%	18.3%	41.7%	16.7%
Price	5.6%	14.4%	28.9%	37.8%	13.3%
Location	10%	21.7%	23.4%	35%	10%
Promotion	12.2%	37.8%	21.1%	15.6%	2.2%
Physical Facilities	12.7%	20.7%	22.7%	33.3%	10.7%
Person	10%	22.5%	29.2%	25%	13.3%
Process	5.6%	23.3%	20%	35.6%	15.6%

Source: Data Processed (2021)

Based on **Table 5**, it is evident that consumers perceive certain deficiencies in the marketing strategy of Perfect Relax massage chairs across various aspects. Only 15.6% of respondents agreed on consumer promotion, while 37.8% disagreed. For questions about the people aspect, only 25% of respondents agreed, and 29.2% remained neutral or undecided.

Service quality can be assessed by comparing customers' perceptions of the service they receive with their actual expectations (**Kamaludin, 2019**). Five dimensions measure service quality: reliability, responsiveness, assurance, empathy, and tangibility.

Below are the results of a pre-survey conducted by researchers concerning service quality, as shown in **Table 6**:

Table 6. Results of the Pre-survey of Service Quality on Massage Chairs of Perfect Relax in 2021

Dimension Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Tangibles	5.6%	2.2%	26.7%	44.4%	21.1%
Reliability	15%	21.7%	18.3%	26.7%	18.3%
Responsiveness	11.7%	26.7%	23.3%	25%	13.3%
Assurance	8.3%	20%	30%	21.7%	16.7%
Empathy	8.3%	15%	30%	23.3%	20%

Source: Data Processed (2022)

Based on **Table 6**, it is evident that consumers perceive certain deficiencies in the service quality of Perfect Relax massage chairs across various aspects. Regarding the responsiveness of the massage chair Perfect Relax, only 25% of respondents agreed, while 26.7% disagreed. Regarding the assurance question, 21.7% of respondents agreed, while 30% remained neutral or undecided. Similarly, for the question about empathy, 23.3% of respondents agreed, while 30% remained neutral or undecided. These results indicate areas where improvements may be needed to enhance the service quality and meet customer expectations.

2. Basis of Theory and Hypothesis

According to [Indrasari \(2019\)](#), marketing management involves analysis, planning, implementation, monitoring, and controlling marketing activities to effectively and efficiently achieve company targets. On the other hand, [Kotler and Armstrong \(2012\)](#), as cited in [Sakinah & Suhardi \(2018\)](#), define marketing management as a planned, implemented, and controlled stage in business activities that involve allocating products/services to customers, facilitating the smooth achievement of company targets.

2.1. Marketing Strategy

According to [Assauri \(2013\)](#), as cited in [Naninsih & Hardiyono \(2019\)](#), a marketing strategy is a collection of goals, objectives, policies, and rules that provide direction to a company's marketing efforts over time, encompassing different levels, references, and locations. It is crucial in guiding companies to respond effectively to the constantly evolving competitive environment and changing circumstances.

2.2. Service Quality

According to [Tjiptono \(2008\)](#), as cited in [Purnama \(2019\)](#), service quality is determined by the alignment between consumer expectations during the pre-purchase phase and the quality of goods or services received. On the other hand, according to [Kotler and Keller \(2012\)](#), as cited in [Chaerudin & Syafarudin \(2021\)](#), service quality refers to the overall features and characteristics of a product or service contingent upon its capacity to meet both stated and implied needs.

2.3. Satisfaction

According to [Keller \(2013\)](#), as cited in [Syafarudin \(2021\)](#), consumer satisfaction results from feelings of pleasure or disappointment that arise when comparing the perceived product outcomes with the expected product outcomes. It is an individual's subjective evaluation based on comparing the actual product or service received and what was anticipated.

Additionally, Assauri (2010), as cited in [Triannah & Pranitasari \(2017\)](#), defines consumer satisfaction as an assessment of how positively customers respond to a company's business in the future. It serves as an indicator of a company's business success.

Both definitions highlight the significance of consumer satisfaction in gauging a company's performance and ability to meet customer expectations.

2.4. Hypothesis

- H1: Marketing strategy positively and significantly affects consumer satisfaction using massage chair services at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City.
- H2: Service Quality positively and significantly affects consumer satisfaction using massage chair services at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City.
- H3: Marketing Strategy and Service Quality positively and significantly affect consumer satisfaction using massage chair services at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City.

3. Research Method

The research approach conducted by researchers involves descriptive analysis and quantitative methods. The research object was PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City, aiming to examine the influence of marketing strategies and service quality on consumer satisfaction regarding massage chair services at the exact location. Both secondary data and primary data were utilized in this study.

The secondary data in this study consisted of the company vision and mission, company profile, and company revenue. These data were obtained from various sources such as books, journals, and other relevant materials. Meanwhile, the primary data was collected through questionnaires distributed to consumers who used massage chair services at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City. The data collection techniques employed in this study included questionnaires, observations, and interviews.

The collected data were subjected to descriptive statistical analysis, followed by tests for validity, reliability, normality, multicollinearity, heteroscedasticity, multiple linear regression analysis, t-test, F-test, and coefficient of determination (R²). The data analysis was performed using the Statistical Package for the Social Sciences (SPSS) Version 25.

4. Results

4.1. Validity Test

This validity test assesses the questionnaire items' validity as research instruments. The calculation for the degrees of freedom (df) used to determine the critical r-table value in this study is $178 - 2 = 176$, resulting in an r-table value of 0.1237. The results of the validity test in this study are as follows:

Table 7. Validity Test Results

Variable	Items	r-count	r-table	Information
Marketing Strategy	X1.1	0.637	0.1237	Valid
	X1.2	0.712	0.1237	Valid
	X1.3	0.648	0.1237	Valid
	X1.4	0.645	0.1237	Valid
	X1.5	0.631	0.1237	Valid
	X1.6	0.730	0.1237	Valid
	X1.7	0.791	0.1237	Valid
	X1.8	0.792	0.1237	Valid
	X1.9	0.796	0.1237	Valid
	X1.10	0.747	0.1237	Valid
	X1.11	0.636	0.1237	Valid
	X1.12	0.650	0.1237	Valid
	X1.13	0.638	0.1237	Valid
	X1.14	0.568	0.1237	Valid
Service Quality	X2.1	0.704	0.1237	Valid
	X2.2	0.682	0.1237	Valid
	X2.3	0.798	0.1237	Valid
	X2.4	0.838	0.1237	Valid
	X2.5	0.853	0.1237	Valid
	X2.6	0.838	0.1237	Valid
	X2.7	0.825	0.1237	Valid
	X2.8	0.835	0.1237	Valid
	X2.9	0.751	0.1237	Valid
	X2.10	0.740	0.1237	Valid
Consumer Satisfaction	Y.1	0.871	0.1237	Valid
	Y.2	0.905	0.1237	Valid
	Y.3	0.848	0.1237	Valid
	Y.4	0.903	0.1237	Valid

Source: Data Processed (2022)

The provided data represents the results of a validity test for three variables: Marketing Strategy, Service Quality, and Consumer Satisfaction. Each variable consists of several questionnaire items (X1.1 to X1.14 for Marketing Strategy, X2.1 to X2.10 for Service Quality, and Y.1 to Y.4 for Consumer Satisfaction).

The estimated correlation coefficient for each item (r-count) is compared with the crucial r-table value (r-table = 0.1237) to assess whether the items are valid research instruments. A questionnaire's ability to accurately capture the construct it is meant to measure is determined by the correlation coefficient, which calculates the strength and direction of the association between two variables.

Based on the findings, all questionnaire items related to marketing strategy, service quality, and consumer satisfaction show a significant and valid link with the corresponding constructs. Each item's correlation coefficients (r -count) are consistently higher than the threshold value of the r -table (0.1237), proving the validity of the items as measurements of the variables they are meant to represent.

Overall, the validity test finds that the survey questions used to evaluate Marketing Strategy, Service Quality, and Consumer Satisfaction are reliable and appropriate for further investigation in the research project.

4.2. Reliability Test

Table 8. Reliability Test Results

Variable	Item	Cronbach Alpha	Information
Marketing Strategy	X1	0.913	Reliable
Service Quality	X2	0.931	Reliable
Consumer Satisfaction	Y	0.905	Reliable

Source: Data Processed (2022)

Based on **Table 8**, the reliability test results indicate that all three variables, namely Marketing Strategy (X1), Service Quality (X2), and Consumer Satisfaction (Y), exhibit high levels of internal consistency. The Cronbach's Alpha values for Marketing Strategy (0.913), Service Quality (0.931), and Consumer Satisfaction (0.905) are all above the recommended threshold of 0.60. This suggests that the questionnaire instruments used to measure each research variable are reliable and consistent in capturing the intended constructs.

The high Cronbach's Alpha values reflect the degree to which the items within each variable are interrelated and reliable in measuring their respective constructs. Therefore, the data obtained from the primary data can be confidently relied upon to analyze and draw valid conclusions in the research study.

Overall, the results demonstrate the robustness of the questionnaire instruments and assure that they are suitable tools for assessing Marketing Strategy, Service Quality, and Consumer Satisfaction in the study.

4.3. Classic Assumption Test

4.3.1. Normality Test

The normality test determines whether the regression model's confounding or residual variables follow a normal distribution. Observing the histogram and normal probability plots helps ascertain whether the research data exhibits normality, which may not be apparent (Ghozali, 2013).

Table 9. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		178
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.85607251
Most Extreme Differences	Absolute	.050
	Positive	.050
	Negative	-.040
Test Statistic		.050
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Source: Data Processed (2022)

Table 9 presents the normality test results conducted on the unstandardized residuals of 178 respondents. The normality test aims to assess whether the data in the regression model follows a normal distribution. In this test, the test statistic for the Kolmogorov-Smirnov test is calculated as 0.050, and the associated two-tailed significance value is 0.200.

Based on the obtained results, the significance value (0.200) is greater than the significance level of 0.05 (commonly used for hypothesis testing). As a result, it can be concluded that the data in the regression model is normally distributed. This means that the unstandardized residuals of the respondents' data follow a distribution pattern close to a normal curve.

Having normally distributed residuals is an essential assumption in linear regression analysis, as it ensures the validity and reliability of the regression model's results. The confirmation of normality in this test supports the appropriateness of the regression model for the research analysis, enhancing the trustworthiness of the findings.

4.3.2. Multicollinearity Test

Table 10. Multicollinearity Test Results

Variable	Tolerance	VIF	Description
Marketing Strategy	0.566	1.766	No Multicollinearity
Service Quality	0.566	1.766	No Multicollinearity

Source: Data Processed (2022)

Table 10 presents the normality test results conducted on the unstandardized residuals of 178 respondents. The normality test aims to assess whether the data in the regression model follows a normal distribution. In this test, the test statistic for the Kolmogorov-Smirnov test is calculated as 0.050, and the associated two-tailed significance value is 0.200.

Based on the obtained results, the significance value (0.200) is greater than the significance level of 0.05 (commonly used for hypothesis testing). As a result, it can be concluded that the data in the regression model is normally distributed. This means that the unstandardized residuals of the respondents' data follow a distribution pattern close to a normal curve.

Having normally distributed residuals is an essential assumption in linear regression analysis, as it ensures the validity and reliability of the regression model's results. The confirmation of normality in this test supports the appropriateness of the regression model for the research analysis, enhancing the trustworthiness of the findings.

4.3.3. Heterocadasticity Test

A good regression model has homoscedasticity or does not have heteroscedasticity (Ghozali, 2013).

Table 11. Heteroscedasticity Test Results

Coefficients ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.622	.492		5.327	.000
1 Strategy Marketing	-.022	.013	-.163	-1.646	.102
1 Quality Service	-.005	.016	-.031	-.316	.753

Source: Data Processed (2022)

Table 11 presents a regression analysis with unstandardized and standardized coefficients for the variables "Marketing Strategy" and "Service Quality." The analysis includes each coefficient's t-statistic and corresponding significance (p-value).

The regression model includes a constant term; the "Marketing Strategy" and "Service Quality" coefficients are presented. The unstandardized coefficients (B) represent the change in the dependent variable associated with a one-unit change in the respective independent variable. The standardized coefficients (Beta) indicate the strength and direction of the relationship between the independent and dependent variables, considering each variable's scale.

The results show that the constant term is 2.622, and the "Marketing Strategy" coefficient is -0.022 with a p-value of 0.102. Similarly, the "Service Quality" coefficient is -0.005 with a p-value of 0.753. The p-values are greater than 0.05 for both variables, indicating that neither "Marketing Strategy" nor "Service Quality" affect the dependent variable in this regression model statistically significantly.

The outcomes of the heteroscedasticity test using Spearman's rank correlation coefficient (rho) are also shown in **Table 11**. This regression model has no significant heteroscedasticity because the significance values for both variables are more than 0.05. As a result, the regression analysis is more reliable and accurate because the assumption that residual variance will remain constant across all levels of the independent variables is true.

The regression model indicates that this study's "Marketing Strategy" and "Service Quality" have no statistically significant effects on the dependent variable. The dependability of the regression analysis in assessing the correlations between the variables under examination is further supported by the absence of heteroscedasticity.

4.3.4. Multiple Linear Regression Analysis

Multiple regression is used in the study to test the research hypothesis. The impact of two or more independent variables on the dependent variable is investigated using multiple linear regression analysis (Diah et al., 2013). This analysis's main goal is to test the hypothesis and evaluate the impact of each variable, specifically the marketing strategy (X1) and service quality (X2), on the dependent variable (Y), in this case, customer happiness.

Table 12. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.734	.785		.934	.352
Strategy Marketing	.130	.021	.382	6.161	.000
Service Quality	.193	.025	.481	7.764	.000

Source: Data Processed (2022)

A multiple linear regression analysis was performed on this model to look at the link between the dependent variable (Y), customer happiness, and the two independent variables, "Marketing Strategy" and "Service Quality."

Unstandardized coefficients (B), which show the change in the dependent variable corresponding to a one-unit change in each independent variable, were generated by the analysis for each independent variable. Additionally, standardized coefficients (Beta), which account for each variable's scale, were calculated. These coefficients show the direction and intensity of the association between the independent and dependent variables.

With a p-value of 0.352 (higher than 0.05), the results show that the constant term's value of 0.734 is not statistically significant. This implies that the constant term has little effect on client satisfaction.

However, "Marketing Strategy" and "Service Quality" demonstrate statistically significant effects on customer satisfaction. For "Marketing Strategy," the unstandardized coefficient is 0.130, with a standardized coefficient of 0.382 and a highly significant p-value of 0.000. This indicates that a one-unit increase in the "Marketing Strategy" variable results in a 0.130 unit increase in customer satisfaction, and the relationship is positive and meaningful.

Similarly, for "Service Quality," the unstandardized coefficient is 0.193, with a standardized coefficient of 0.481 and a highly significant p-value of 0.000. This means that a one-unit increase in "Service Quality" leads to a 0.193 unit increase in customer satisfaction, and the relationship is positive and meaningful.

This multiple linear regression analysis supports the research hypothesis, demonstrating that "Marketing Strategy" and "Service Quality" significantly influence customer satisfaction. The model suggests that enhancing marketing strategies and service quality can lead to increased customer satisfaction, essential for the success and growth of the company or organization under study.

Table 12 presents the results of the multiple linear regression analysis with the following equation:

$$Y = 0.734 + 0.130X_1 + 0.193X_2 + e \dots\dots\dots (1)$$

Information:

Y : Consumer Satisfaction

X₁ : Marketing Strategy

X₂ : Service Quality

e : Error Term

The regression equation above can be interpreted as follows:

- 1) The constant term of 0.734 indicates that when both the marketing strategy (X₁) and service quality (X₂) are equal to 0, the predicted value of consumer satisfaction (Y) is 0.734.
- 2) The regression coefficient of the marketing strategy variable (X₁) is 0.130. It implies that for every one-unit increase in the marketing strategy variable (X₁), the predicted consumer satisfaction (Y) value will increase by 0.130, assuming all other independent variables are constant.
- 3) The regression coefficient of the service quality variable (X₂) is 0.193. It indicates that for every one-unit increase in the service quality variable (X₂), the predicted customer satisfaction (Y) value will increase by 0.193, assuming all other independent variables are constant.
- 4) The error term (e) represents the variability in consumer satisfaction (Y) that the regression model does not explain. It captures the differences between the predicted values of Y from the regression equation and the actual observed values.

The presented description accurately explains the components of the regression equation and their interpretation in the study context. Based on the estimated regression coefficients, it provides valuable insights into how the independent variables (marketing strategy and service quality) influence the dependent variable (consumer satisfaction).

4.3.5. Partial Test (T-Test)

The partial test or t-test determines how much an independent variable contributes to explaining the dependent variable. In this test, the t-count (calculated t-value) is compared with the t-table (critical t-value) at a given significance level (usually set at <0.05).

If the calculated t-value (t-count) is greater than the critical t-value (t-table) at the chosen significance level, typically 0.05, then the alternative hypothesis (H₁) is accepted. Accepting the alternative hypothesis means a statistically significant partial relationship exists between the independent and dependent variables, indicating that the independent variable contributes to explaining the variation in the dependent variable.

The provided data processing results in the table should include the t-count values for each independent variable tested against the t-table values corresponding to the chosen significance level (e.g., <0.05). This information enables researchers to decide the statistical significance of the relationships between the independent and dependent variables based on the t-test results.

Table 13. T-Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.734	.785		.934	.352
	Marketing Strategy	.130	.021	.382	6.161	.000
	Service Quality	.193	.025	.481	7.764	.000

Source: Data Processed (2022)

Table 13 presents the results of the t-test for the model, including the unstandardized coefficients (B) and the standardized coefficients (Beta) for each variable. The t-values and their corresponding significance levels (p-values) are also reported.

The constant term in the model has a coefficient of 0.734 but is not statistically significant ($p = 0.352$, more than 0.05). Hence it is not included. This implies that the constant term does not considerably impact the dependent variable.

The t-test results for the independent variables show that the impacts of “Marketing Strategy” and “Service Quality” on the dependent variable are statistically significant. The coefficient (B) is 0.130 for “Marketing Strategy,” while the standardized coefficient (Beta) is 0.382. The p-value is 0.000 (less than 0.05), and the t-value is 6.161. This demonstrates that “Marketing Strategy” positively and significantly affects the dependent variable.

The coefficient (B) is 0.193, and the standardized coefficient (Beta) is 0.481 for “Service Quality,” respectively. The p-value is 0.000 (less than 0.05), and the t-value is 7.764. This shows that “Service Quality” influences the dependent variable statistically and favorably.

The t-test results reveal that “Marketing Strategy” and “Service Quality” are important predictors of the dependent variable in this model. These results are consistent with the research hypothesis and show that changes in marketing strategy and service quality are related to higher levels of the dependent variable, in this case, most likely consumer pleasure.

The study tested two hypotheses: H1 examined the effect of the marketing strategy on consumer satisfaction. At the same time, H2 looked into the effect of massage chairs at Depati Amir Airport in Pangkalpinang City on the relationship between service quality and client satisfaction.

For H1, the researchers obtained a t-value of 6.161, greater than the critical t-value of 1.973 (at a significance level of 0.05). The significance level (p-value) for H1 was 0.000, less than 0.05. Based on these results, H1 was accepted, and H0 (null hypothesis) was rejected. This

suggests that the marketing strategy variable influences consumer satisfaction with massage chairs at the given location in a positive and statistically significant way.

Like H1, H2 had a calculated t-value of 7.764, more than the crucial t-value of 1.973, and a significance level of 0.000, or less than 0.05. As a result, H2 was approved, while H0 was disapproved. This suggests that the service quality variable positively and statistically significantly impacts customer satisfaction with massage chairs at the selected site.

The findings show that customer satisfaction with massage chair services at Depati Amir Airport, Pangkalpinang City, is highly influenced by marketing strategy and service quality characteristics. These findings highlight the significance of successful marketing strategies and high-quality service delivery in improving customer experiences and provide insightful information about the elements influencing consumer happiness.

4.3.6. Simultaneous Test (F-test)

Table 14. F-test Results

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	992.257	2	496.128	142.387	.000 ^b
	Residual	609.766	175	3.484		
	Total	1602.022	177			

Source: Data Processed (2022)

The F-test result is 142.387, greater than the critical F-value of 3.047 at a significance level of 0.05. The F-test's significance level (p-value) is 0.000, less than 0.05. These findings lead to the acceptance of H3 (alternative hypothesis) and the rejection of H0 (null hypothesis).

The conclusion drawn from these results is that both the marketing strategy (X1) and service quality (X2) variables, when considered together (simultaneously), significantly impact the customer satisfaction variable (Y). In other words, the joint effect of marketing strategy and service quality on customer satisfaction is positive and statistically significant.

This finding adds valuable insights to the study, highlighting the importance of combining marketing strategy and service quality to enhance customer satisfaction with massage chair services at Depati Amir Airport, Pangkalpinang City. The simultaneous influence of these factors indicates that a comprehensive approach that addresses both aspects can improve customer satisfaction levels, ultimately contributing to the success and competitiveness of the company or organization under study.

4.4. Analysis of the Coefficient of Determination (R2)

The coefficient of determination (R2) measures the proportion of variance in the dependent variable explained by the independent variables in the regression model. It ranges from 0 to 1, where a value close to 1 indicates that the independent variables can account for a large portion of the variation in the dependent variable. On the other hand, an R2 value closer to 0 suggests that the independent variables cannot explain the variations in the dependent variable.

Nearly all of the pertinent information required to forecast the variation in the dependent variable can be captured by the independent variables when R2 is close to 1. On the other hand,

an R2 value closer to zero means that other factors may have a role in the outcome and that the independent variables are ineffectual at explaining the variance in the dependent variable.

R2 is an important metric in multiple linear regression because it sheds light on the model's capacity to fit the data and the extent to which the independent variables are responsible for the dependent variable's variability. A higher R2 value suggests that the independent variables are more successful in predicting and explaining the variance in the dependent variable, indicating a better fit of the model to the data.

Table 15. Test Results for the Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.787 ^a	.619	.615	1.86665

Source: Data Processed (2022)

The amount of variance in the dependent variable (employee performance) that can be accounted for by the independent variables (marketing plan and service quality) in a regression model is measured by the coefficient of determination (R2). The R2 score in this instance is 0.615, or 61.5%. This indicates that the combined effects of the model's marketing strategy and service quality variables account for about 61.5% of the variability in employee performance.

The adjusted R-squared value is a modified R2 considering the sample size and the number of independent variables in the model. It aids in addressing potential model overfitting problems. In this analysis, the adjusted R-squared value is not provided in the given information but is typically reported alongside the R2 value.

The interpretation correctly states that 61.5% of the variation in employee performance can be explained by the marketing strategy and service quality variables used in the regression model. However, the remaining 38.5% of the variation is not accounted for by these two variables and may be influenced by other factors not included in the research variables. This highlights the presence of other important variables or factors that impact employee performance but were not considered in the current analysis. It also underscores the complexity of the relationship between employee performance and various influencing factors beyond marketing strategy and service quality.

5. Discussion

5.1. Overview of Marketing Strategy and Service Quality on Consumer Satisfaction

The research findings indicate that marketing strategy and service quality positively affect consumer satisfaction with massage chairs at the airport. The research variables, marketing strategy, and service quality were rated in the high category within the interval 3.41-4.20, suggesting that better marketing strategies and service quality provided by the massage chair service at Depati Amir Airport lead to increased customer satisfaction.

Based on the responses of the respondents, the average score for the marketing strategy variable (X1) was 3.37, the service quality variable (X2) was 3.35, and consumer satisfaction (Y) was 3.34. These findings demonstrate that the respondents were pleased with the marketing strategy and standard of customer service used by the massage chair service at the Depati Amir Airport in Pangkalpinang City.

The research results highlight the importance of effective marketing strategies and top-notch customer service in increasing massage chair customers' contentment. The results also imply that the current level of satisfaction reflects a favorable response to the massage chair service's offerings at the selected location. The business or organization may use these insights to maintain and increase customer happiness by strengthening and optimizing its marketing strategy and service quality.

5.2. The Influence of Marketing Strategy on Consumer Satisfaction

According to the study's findings, the marketing strategy variable has a small but significant effect on consumer satisfaction. With a t-count value of 6.161 and a significance threshold of less than 0.05, the quantitative calculations demonstrate that this effect is bigger than the critical t-value of 1.973, indicating statistical significance.

With a marketing strategy coefficient of 0.130, the multiple linear regression analysis findings demonstrate a favorable link between the marketing strategy and consumer satisfaction with the massage chairs at Depati Amir Airport. The t-test demonstrates that the marketing strategy variable impacts consumer happiness, supporting H1 (the alternative hypothesis) while rejecting H0 (the null hypothesis).

According to the study, the marketing strategy variable greatly impacts customers' satisfaction with the massage chairs at the given location. This emphasizes the significance of implementing efficient marketing techniques to raise customer happiness and boost the effectiveness of the massage chair service at Depati Amir Airport in Pangkalpinang City. The findings offer insightful information that can be used to develop marketing strategies to meet customers' needs and expectations and boost customer satisfaction and loyalty.

5.3. The Effect of Service Quality on Consumer Satisfaction

The study's findings indicate that the service quality variable influences customer satisfaction in a way that is both positive and substantial. The quantitative calculations show that this effect is larger than the crucial t-value of 1.973, and the significance level is less than 0.05, showing statistical significance. The t-count value is 7.764, and this effect is more than the critical t-value.

The multiple linear regression analysis results show that customer satisfaction with the massage chairs at Depati Amir Airport positively correlates with service quality, with a service quality coefficient of 0.193. The t-test supports the relationship between the service quality variable and customer satisfaction, supporting H2 as an alternate hypothesis and rejecting H0 as the null hypothesis.

The study results imply that the service quality variable highly influences customer satisfaction with massage chairs at the targeted location. To increase client happiness and promote the overall effectiveness of the massage chair service at Depati Amir Airport, Pangkalpinang City, it is crucial to deliver high-quality service. The findings offer insightful information that can direct future enhancements in customer happiness and loyalty through better service quality and experience.

5.4. The Influence of Marketing Strategy and Service Quality on Consumer Satisfaction

The research findings indicate that marketing strategy and service quality positively and significantly affect customer satisfaction when considered together (simultaneously). The F-test result, with an F-value of 142.387, is greater than the critical F-value of 3.047 at a significance level of 0.05. The F-test's significance level (p-value) is 0.000, less than 0.05, indicating statistical significance.

The joint impact of marketing strategy and service quality on customer satisfaction is positive and significant. This implies that both variables play crucial roles in influencing customer satisfaction with massage chairs at Depati Amir Airport, Pangkalpinang City. The findings highlight the importance of implementing effective marketing strategies and maintaining high service quality to achieve and sustain customer satisfaction.

The results provide valuable insights for the company or organization operating the massage chair service, emphasizing the need for a comprehensive approach that considers marketing strategies and service quality to maximize customer satisfaction and improve overall business performance.

6. Conclusion

Based on the results and discussions presented in this research regarding the impact of marketing strategies and service quality on consumer satisfaction with massage chairs at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City, it can be concluded that both marketing strategies and service quality significantly influence consumer satisfaction. The descriptive analysis showed that marketing strategies, service quality, and consumer satisfaction were rated high. The study revealed that an effective marketing strategy positively affects customer satisfaction with PT Nusantara Sehat-Perfect Relax massage chairs. Similarly, good service quality also contributes to higher levels of consumer satisfaction. Moreover, it was found that a combined approach of implementing both marketing strategies and maintaining service quality further enhances customer satisfaction. Based on these conclusions, several suggestions can be made to serve as references for future research and improvements at PT Nusantara Sehat-Perfect Relax at Depati Amir Airport, Pangkalpinang City. The company is encouraged to re-evaluate its marketing strategies by conducting regular reviews and revisiting the plan to ensure continuous improvement. This approach will help the company enhance its marketing efforts and boost consumer satisfaction with its massage chair services. By consistently prioritizing service quality and aligning it with effective marketing strategies, PT Nusantara Sehat-Perfect Relax can strengthen its position in the market and foster long-term customer loyalty. Hopefully, these suggestions will contribute to the company's growth and success in providing exceptional massage chair services to its customers at Depati Amir Airport, Pangkalpinang City.

7. Conflicts of Interest and Ethical Standards

The authors certify that in this research, there are no conflicts of interest within their current organization, and no unethical practices, such as plagiarism, were followed during the research.

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