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Evaluating the Impact of Customer Service Quality on Customer Satisfaction at XYZ Company

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Abstract

This study examines the impact of service quality on customer satisfaction at XYZ Company, with a specific focus on the role of customer service. Using quantitative methods, the study sampled 100 respondents. The research involved testing the validity and reliability of questionnaire instruments, and data analysis included multiple linear regression, t-tests, and F-tests. The findings reveal that, overall, service quality significantly affects customer satisfaction. Specifically, reliability, responsiveness, assurance, and tangibles have a significant impact, while empathy does not. This research contributes valuable insights for developing marketing and service management strategies to enhance customer satisfaction and offers data-driven guidance for gaining a competitive edge.

INTRODUCTION

In the current era of globalization, businesses confront unpredictable and multifaceted challenges. Internally, they deal with complex issues such as productivity, quality, cost, time, service, safety, environmental impact, and employee behavior. Externally, they face constant pressure from customers, suppliers, competitors, NGOs, governments, and unforeseen changes.

Intense competition in the business world is escalating due to advances in science and technology. As individuals seek to establish businesses aligned with their interests, they encounter increasingly complex challenges in implementation, maintenance, and growth. This high level of competition drives entrepreneurs to innovate and adapt continuously. Additionally, companies often experience fluctuations in tandem with changes in the external environment.

To enhance its potential, the role of service quality becomes crucial for an organization, ensuring that its offerings remain competitive or at least aligned with industry standards. Essentially, service is a fundamental need for individuals and is integral to everyday life.

To enhance service quality, optimizing human resources, particularly in customer service, is crucial. According to (Ayu & Srihandoko, 2021), customer service involves activities aimed at satisfying consumers by addressing their problems and meeting their needs through personal interactions. The core concept of customer service is to ensure customer satisfaction by responding effectively to their needs and concerns.

Beyond addressing consumer needs, customer service also plays a vital role in resolving customer complaints and providing solutions.

By examining the factors that impact service quality within the service sector to achieve customer satisfaction, five key indicators can be identified: reliability, responsiveness, assurance, empathy, and tangibles.

The aforementioned indicators of service quality reliability, responsiveness, assurance, empathy, and tangibles significantly influence consumer behavior towards an industry. When a business effectively optimizes these dimensions, it can greatly impact customer consumption patterns. In conclusion, delivering exceptional service and focusing on each of these dimensions enables a business to attract customers, enhance loyalty, and achieve sustainable profitability.

XYZ Company exemplifies how prioritizing service quality and customer satisfaction is essential for business sustainability. The role of customer service at XYZ Company is critically important, as delivering exceptional service is vital for the company's continued success. High-quality service ensures that both existing and new customers receive an optimal experience, reinforcing their satisfaction. To build and sustain customer trust, the company must consistently uphold its image, with customer service quality being a key factor in maintaining and enhancing this trust.

RESEARCH METHOD

The research method described in this journal article involves several stages, detailed as follows: First, variable operations are implemented to streamline data collection, address potential discrepancies, and narrow the scope of observed variables. The study examines independent variables related to service quality, which include reliability, responsiveness, assurance, empathy, and tangibles. The dependent variable, with a focus on customer satisfaction (Y) (Zulian, 2001), is analyzed to assess its relationship with these service quality dimensions.

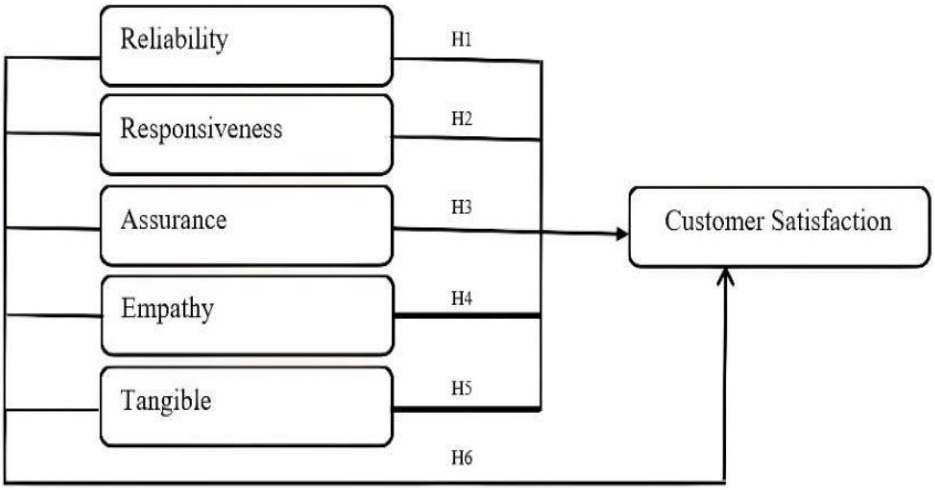

Figure 1. Research model.

Based on the research model depicted in Figure 1, the hypothesis tested in this study is that service quality encompassing reliability, responsiveness, assurance, empathy, and tangibles has a significant effect on customer satisfaction, both simultaneously and individually.

Research data can be categorized into two types: primary data and secondary data. Primary data is collected directly from the original source, whereas secondary data is obtained from a second party who has access to or knowledge of the data (Abdillah & Hartono, 2015).

The research utilizes a questionnaire as the primary instrument, which will be distributed to customers of XYZ Company. The Likert scale is employed to measure the opinions, attitudes, and perceptions of individuals or groups regarding the social phenomena under investigation (Siregar, 2017).

To determine the sample size, the formula developed by Joseph F. Hair was applied, which suggests a sample size of 15 to 20 times the number of independent variables. Given that this study includes 5 independent variables, the required sample size was 100 participants (Prihandoyo, 2019). The sampling technique employed is accidental sampling, where individuals who are conveniently available and involved in the service process are considered suitable sources of relevant data (Sugiyono, 2013).

In this research method, several stages of data processing are required. The first stage is the validity test, which assesses the accuracy of the instruments used in the study. High validity indicates that the instruments effectively measure the variables and align closely with the intended concepts (Ahmad, 2009). The next stage is the reliability test, which evaluates the consistency and dependability of the measurement results. A measurement is deemed reliable if it yields consistent results across multiple tests on the same subject, assuming that the measured attribute remains unchanged. Cronbach's Alpha coefficient is one method used to test the reliability of the questionnaire (Yeti, 2003).

Subsequently, a series of classic assumption tests are conducted, including three key evaluations:

1. Multicollinearity Test: This test assesses the correlation between independent variables in the regression model. A variance inflation factor (VIF) value of less than 10 for all independent variables indicates the absence of multicollinearity issues.
2. Heteroscedasticity Test: This test examines whether there is unequal variance of residuals across different levels of the independent variables. The Glejser test is employed, where a p-value greater than 0.05 between the independent variable and the residual suggests no significant heteroscedasticity.
3. Autocorrelation Test: This test evaluates the correlation between residuals at period t and residuals from the previous period ($t-1$) in the regression model. This helps identify any patterns of instability over time (Ghozali, 2013).

The next step is multiple linear regression analysis, a statistical method used to describe the relationship between one dependent variable (Y) and two or more independent variables (X1, X2, ..., Xn). This analysis aims to predict the value of the dependent variable (Y) based on the known values of the independent variables (X1, X2, ..., Xn) (Yuliara, 2016).

Finally, hypothesis testing involves three key tests:

1. T-Test (Partial): This test examines the effect of each independent variable individually on the dependent variable.
2. F-Test (Simultaneous): This test assesses whether there are significant differences between the means of several groups, evaluating the overall significance of the regression model.

3. Coefficient of Determination (R^2) Test: This test measures the effectiveness of the multiple regression equation in explaining the variance in the dependent variable due to changes in the independent variables.

These steps are crucial for developing a robust and reliable research methodology (Simamora, 2005).

RESULTS AND DISCUSSION

Descriptive Analysis

Data for this study will be collected by distributing online questionnaires via a Google Form link. The research targets customers or users of the XYZ Company website, with a sample size of 100 respondents. Table 1 shows the respondent characteristics.

Table 1. Respondent characteristics.

Respondent's Age			**Length of Product & Service Usage**		
Criteria	Amount	%	Criteria	Amount	%
< 20 years old	7	7%	< 1 year	55	55%
20 – 30 years old	51	51%	1 – 2 years	25	25%
> 30 years old	42	42%	> 2 years	20	20%

Source: Data processed by the author, (2023)

The results indicate that the majority of XYZ Company customers are aged 20-30 years, comprising 51% (51 respondents), followed by those over 30 years of age, accounting for 42% (42 respondents). This suggests that the primary customer base of XYZ Company consists of individuals in the 20-30 age range, who are likely to be working or have established families.

Additionally, the results presented in the table reveal that the majority of XYZ Company customers have used the product for less than 1 year, comprising 55% (55 respondents). This is followed by 25% (25 respondents) who have used the product for 1-2 years. Consequently, it can be concluded that most respondents have been using the XYZ Company website for less than 2 years.

Validity Test

Table 2 shows that all statement items related to the variables in the questionnaire are valid.

Table 2. Validity test results.

Variable	**Number of Statement Items**	**Valid**	**Invalid**
Reliability	10	10	0
Responsiveness	10	10	0
Assurance	10	10	0
Empathy	10	10	0
Tangible	10	10	0
Customer Satisfaction	5	5	0

Source: Data Processing with IBM SPSS Statistic 29.0

This conclusion is drawn from the fact that the significance level for all items is below 0.05, indicating statistical significance. Additionally, the correlation

coefficients (R-count) for all items surpass the R-table value of 0.195, further supporting their validity. As a result, none of the statement items need revision or removal since they meet the required validity criteria. These findings confirm that the questionnaire items are appropriate for use in further analysis.

Reliability Test

Table 3 shows the results of the reliability test, indicating that all statement items related to the variables in the questionnaire are reliable.

Table 3. Reliability test results.

Variable	Cronbach's Alpha	Cross of Value	Information
Reliability	0,688	0,60	Reliable
Responsiveness	0,669	0,60	Reliable
Assurance	0,618	0,60	Reliable
Empathy	0,681	0,60	Reliable
Tangible	0,828	0,60	Reliable
Customer Satisfaction	0,656	0,60	Reliable

Source: Data Processing with IBM SPSS Statistic 29.0

Based on the data in Table 3, each variable shows a Cronbach's Alpha value greater than 0.6. This suggests that all variables possess good internal consistency, meaning the items within each variable are measuring the same concept reliably. A Cronbach's Alpha value above 0.6 confirms that the questionnaire used is dependable for accurate data collection. This level of reliability ensures that the responses are consistent and repeatable across different scenarios. Thus, the questionnaire is a trustworthy instrument for gathering reliable information in the study.

Multiple Linear Regression Analysis

Table 4 presents the results of the Multiple Linear Regression Analysis, which was conducted to examine the relationship between several independent variables and the dependent variable. This analysis helps determine the extent to which each independent variable influences the dependent variable, providing insights into the overall model's predictive power.

Table 4. Multiple Linear Regression Analysis results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.186	1.508		-1.449	.151
	X1	.263	.050	.369	5.299	<,001
	X2	.173	.048	.246	3.585	<,001
	X3	-.101	.048	-.121	-2.090	.039
	X4	-.006	.039	-.009	-.162	.872
	X5	.259	.035	.486	7.332	<,001

Source: Data Processing with IBM SPSS Statistic 29.0

After conducting statistical analysis using IBM SPSS Statistics 29.0, the regression results reveal a relationship between the service quality variables (reliability, responsiveness, assurance, empathy, and tangibles) and customer satisfaction (Y) for users of the XYZ Company website. The constant value of -2.186 suggests that if all service quality variables were zero, the customer satisfaction (Y) would decrease by -2.186.

Furthermore, the positive coefficient values for the reliability (X1) and responsiveness (X2) variables are 0.263 and 0.173, respectively. This indicates a significant relationship between these variables and customer satisfaction (Y). Specifically, for each one-unit increase in the reliability variable (X1), customer satisfaction (Y) is expected to increase by 0.263, or approximately 26.3%, assuming other independent variables remain constant. Similarly, a one-unit increase in the responsiveness variable (X2) is associated with a 0.173 increase, or about 17.3%, in customer satisfaction (Y).

However, the negative coefficient values for the assurance (X3) and empathy (X4) variables are -0.101 and -0.006, respectively, indicating that their relationship with customer satisfaction (Y) is not significant. A one-unit increase in these variables does not have a substantial effect on customer satisfaction. Specifically, a 1% increase in the assurance variable (X3) is associated with a decrease of approximately 10.1% in customer satisfaction (Y), while a 1% increase in the empathy variable (X4) results in a decrease of about 0.6%, assuming other independent variables remain constant.

Lastly, the positive coefficient value for the tangible variable (X5) is 0.259, indicating a significant relationship between tangibles and customer satisfaction (Y). This means that each one-unit increase in the tangible variable (X5) results in an increase of 0.259, or approximately 25.9%, in customer satisfaction (Y), while holding other independent variables constant.

Hypothesis Testing

T Test

Table 5. T Test results.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.186	1.508		-1.449	.151
	X1	.263	.050	.369	5.299	<,001
	X2	.173	.048	.246	3.585	<,001
	X3	-.101	.048	-.121	-2.090	.039
	X4	-.006	.039	-.009	-.162	.872
	X5	.259	.035	.486	7.332	<,001

Source: Data Processing with IBM SPSS Statistic 29.0

Based on the calculations performed using IBM SPSS Statistics 29.0, the partial test results show that specific service quality variables significantly influence customer satisfaction on the XYZ Company website. The variables reliability (X1), responsiveness (X2), assurance (X3), and tangibles (X5) all have a notable impact, as indicated by their t-count values exceeding the t-table value. This implies that these factors are crucial in shaping customer satisfaction (Y). However, the empathy

variable (X4) does not significantly affect customer satisfaction, as its t-count value is below the t-table threshold. Therefore, while most service quality aspects are impactful, empathy does not contribute as strongly to customer satisfaction in this context.

F Test

Table 6. F Test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	307.915	5	61.583	**71.391**	<,001[b]
	Residual	81.085	94	.863		
	Total	389.000	99			

Source: Data Processing with IBM SPSS Statistic 29.0

Based on the data in the table, it can be concluded that the variables of reliability, responsiveness, assurance, empathy, and tangibles collectively have a significant influence on customer satisfaction, as the F-count value for these variables exceeds the F-table value.

After analyzing the data, the results indicate a significant influence between the service quality variables and customer satisfaction. Specifically, reliability has a notable impact on customer satisfaction, with a t-count value of 5.299, which exceeds the t-table value of 1.985. Therefore, the first hypothesis stating that there is a significant impact of reliability on customer satisfaction can be accepted.

The results of this study support the findings of previous research conducted by (Prihandoyo, 2019). Specifically, the study aligns with earlier work, demonstrating that the reliability variable in service quality has a positive and significant effect on customer satisfaction.

Furthermore, responsiveness significantly affects customer satisfaction, with a t-count value of 3.585, which exceeds the t-table value of 1.985. Therefore, the second hypothesis stating that there is a significant impact of responsiveness on customer satisfaction can also be accepted.

The results of this study corroborate previous research conducted by (Prihandoyo, 2019), demonstrating that the responsiveness variable in service quality has a positive and significant effect on customer satisfaction.

This study also reveals that assurance has a significant effect on customer satisfaction, with a t-count value of 2.090, which exceeds the t-table value of 1.985. Consequently, the third hypothesis stating that there is a significant influence of assurance on customer satisfaction can be accepted.

The results of this study support previous research conducted by (Prihandoyo, 2019), confirming that the service quality variable of assurance has a positive and significant effect on customer satisfaction.

However, empathy does not have a significant impact on customer satisfaction, as its t-count value of 0.162 is lower than the t-table value of 1.985. Therefore, the fourth hypothesis stating that there is a significant influence of empathy on customer satisfaction cannot be accepted.

The results of this study align with previous research conducted by (Prihandoyo, 2019), demonstrating that the service quality variable of empathy has a negative and insignificant effect on customer satisfaction.

Additionally, tangibles have a significant impact on customer satisfaction, with a t-count value of 7.332, which far exceeds the t-table value of 1.985. Therefore, the fifth hypothesis stating that there is a significant influence of tangibles on customer satisfaction can be accepted.

The results of this study support previous research conducted by (Yuliarto, 2021), demonstrating that the service quality variable of tangibles has a positive and significant effect on customer satisfaction.

The F-test results indicate that, collectively, reliability, responsiveness, assurance, empathy, and tangibles have a positive and significant effect on customer satisfaction. The F-count value of 71.391 exceeds the F-table value of 2.31, thus confirming that the sixth hypothesis can be accepted.

The results of this study support previous research conducted by (Prihandoyo, 2019), confirming that service quality variables, when considered together, have a positive and significant effect on customer satisfaction.

CONCLUSION

Based on the data analysis, several important conclusions can be drawn. First, all service quality variables are shown to have a significant and strong influence on customer satisfaction at XYZ Company. The results of the simultaneous test (F-test) demonstrate that these variables collectively contribute to increasing customer satisfaction. Additionally, the partial test results (t-test) confirm that the dimensions of service quality—namely reliability, responsiveness, assurance, and tangible aspects—significantly affect customer satisfaction levels. However, the empathy variable was found to have no significant impact on customer satisfaction.

This research makes a significant contribution to the development of more effective marketing and service management strategies aimed at achieving optimal customer satisfaction. By highlighting the importance of service quality in influencing customer satisfaction, companies can design targeted strategies to enhance market share and foster a positive customer image. The findings offer valuable insights for data-driven decision-making, helping companies to gain a competitive edge in an increasingly competitive industry.

Several recommendations can be made based on the findings of this study. First, for the company, it is suggested that greater emphasis be placed on improving the empathy variable, which did not show a significant effect. Enhancing customer service to provide more attentive and personalized interactions could potentially address this gap. Second, future researchers are encouraged to broaden the sample range to capture a more comprehensive view of the relationship between service quality and customer satisfaction across diverse backgrounds and preferences. Additionally, further analysis of the service quality indicators used in this study could be beneficial. Incorporating other dimensions of service quality, such as service personalization, data security, or platform usability, may provide a more nuanced understanding of their impact on customer satisfaction. By addressing these suggestions, companies can refine their service strategies and identify more effective approaches to enhance customer satisfaction in the future.

REFERENCES

Abdillah, W., & Hartono, J. (2015). Partial Least Square (PLS): alternatif structural equation modeling (SEM) dalam penelitian bisnis. Yogyakarta: Penerbit Andi, 22, 103-150.

Ahmad Tanzeh. 2009. Pengantar Metode Penelitian. Yogyakarta: Teras

Ayu, F. R. P., & Srihandoko, W. (2021). Peranan Customer Servis Dalam Meningkatkan Mutu Pelayanan Pada Sekolah Islam Ibnu Hajar. Jurnal Aplikasi Bisnis Kesatuan, 1(1), 31-40.

Ghozali, I. (2013). Aplikasi Analisis Multivariate Lanjutan dengan Program IBM SPSS 21. Semarang: Badan Penerbit Universitas Dipenogoro.

Prihandoyo, C. (2019). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan JNE Cabang Balikpapan. Jurnal GeoEkonomi, 10(1), 116-129.

Simamora, B. (2005). Analisis multivariat pemasaran. Gramedia Pustaka Utama.

Siregar, S. (2017). Statistik Parametrik Untuk Penelitian Kuantitatif. Rev. ed.

Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.

Yeti Azwar, S. (2003). Sikap Manusia, Teori dan Pengukurannya. Pustaka Pelajar. Yogyakarta.

Yuliara, I. M. (2016). Regresi linier berganda. Denpasar: Universitas Udayana.

Yuliarto, R. T. (2021). Analysis of the Influence of Service Quality on Customer Satisfaction (Doctoral dissertation, Udayana University).

Zulian, Y. (2001). Manajemen kualitas produk dan jasa. Ekonomi dan Bisnis.