

The Effect of Service Quality on Visitors' Satisfaction at Medan Zoo, North Sumatra, Indonesia

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| Received: 13.05.2019 | Accepted: 20.05.2019 | Published: 30.05.2019

DOI: [10.36348/sjbms.2019.v04i05.003](https://doi.org/10.36348/sjbms.2019.v04i05.003)

Abstract

Medan Zoo is located in Simalingkar Village B, Medan Tuntungan, about ten kilometres from the city centre towards Berastagi. Based on data obtained Medan Zoo has not been able to realize the amount of revenue that has been targeted. The present study aims to analyze the effect of service quality consisting of tangible, reliability, competence, courtesy, credibility, security, responsiveness, accessibility, communication, and understanding the customer to Medan Zoo visitors partially and simultaneously. The type of research is quantitative descriptive research. The questionnaires were distributed to a hundred visitors to Medan Zoo. Simultaneously, it has been found that there is a significant influence of service quality consisting of tangible, reliability, competence, courtesy, credibility, security, responsiveness, accessibility, communication, the customer's understanding on visitors' satisfaction at Medan Zoo.

Keywords: Service Quality, Customer Satisfaction.

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INTRODUCTION

Indonesia is one of the countries with a wealth of flora and fauna. The diversity of flora and fauna in Indonesia is facilitated by the zoo as a conservation area and also as a tourist attraction for the community. The natural resources of animals and their ecosystems are one of the most important parts of natural resources that have the function and benefits as the elements of the environment, whose presence cannot be replaced.

Based on Decree of the Minister of Forestry No.479 / ktps-II / 1998 mentioned that the main purpose of the zoo is to be a place of conservation or breeding of wildlife beyond their habitat in order to prevent the wildlife from extinction. According to Minister of Forestry Regulation No. P.53 / Menhut-II / 2006 on conservation agencies, the zoo is a place that has the main function as a conservation agency that undertakes the treatment and breeding of various species based on the ethics and methods of animal welfare in order to form and developing new habitat, as a kind of protection and conservation advice through nature rescue, rehabilitation and reintroduction activities and utilized as a means of education, research, science and technology development and a healthy recreation facility.

Along with the development and enhancement of the lifestyle of the community results in a shift in community needs from the fulfilment of primary needs

to the fulfilment of secondary and tertiary needs. Nowadays, people as consumers need products that can meet their needs for entertainment and pleasure. In attracting visitors, tourism objects should always look at quality to increase the revenue from tourist visits to these attractions. Competitive service quality and price can increase visitor satisfaction. Due to high satisfaction, the number of visitors will tend to increase because there is interest in revisiting.

Looking at the needs of urban communities in this modernization era, Medan City Government has opened up business opportunities to support the development of Medan City. The City Government of Medan has three regional companies. One of them is Medan City Development Company which is engaged in various business services. One of the managed businesses is Medan Zoo.

Medan Zoo is located in Simalingkar Village B, Medan Tuntungan, about 10 kilometres from downtown Berastagi direction. Medan Zoo was inaugurated on April 14, 2005, by the Mayor of Medan, Mr Abdillah, previously Medan Zoo was located on the street of Brigjen Katamso, "Kampung Baru" Village. The Zoo field faces a dynamic and complex business environment that must maintain and enhance visitor satisfaction in order to maintain the existence of Medan Zoo. Medan Zoo's development is not merely an issue

of operational or facility improvement but also includes service improvement.

Based on a preliminary survey conducted on twenty-two visitors in the Medan Zoo, in this case, visitors expressed their dissatisfaction with the service provided by the Medan Zoo. Some of the complaints are as follows as the number of broken roads; dirty animal stables; many unsustainable animals; seating is inadequate; lack of wildlife; dirty toilet; minimal parking security and location is not strategic. This indicates that Medan Zoo still needs improvement. Concerning the above issues, several research questions highlighted are:

- RQ1: How does the tangible effect on visitor satisfaction in Medan Zoo?
- RQ2: How does reliability effect of reliability on visitor satisfaction in Medan Zoo?
- RQ3: How does competence affect visitor satisfaction in Medan Zoo?
- RQ4: How does courtesy effect on visitor satisfaction in Medan Zoo?
- RQ5: How does credibility effect on visitor satisfaction in Medan Zoo?
- RQ6: How does security effect on visitor satisfaction in Medan Zoo?
- RQ7: How does responsiveness effect on visitor satisfaction in Medan Zoo?
- RQ8: How does accessibility effect on visitor satisfaction in Medan Zoo?
- RQ9: How does communication effect on visitor satisfaction in Medan Zoo?
- RQ10: How does the customer's understanding effect on visitor satisfaction in Medan Zoo?
- RQ11: How does tangible, reliability, competence, courtesy, credibility, security, responsiveness, accessibility, communication, the customer's understanding influence simultaneously on visitor satisfaction in Medan Zoo?

LITERATURE REVIEW

Service Marketing

Business development in the era of globalization demands the perfect performance of every operates process by the company. Marketing is no longer seen as a separate part of an organization that only serves as a product sales process. The development of the marketing concept itself is independent of the functions of the organization and ultimately has the purpose of satisfying customers. Ineffective marketing tends to have an impact on the business as it results in dissatisfied consumers. Effective marketing is just the opposite of creating value or utility. Creating value and customer satisfaction is at the core of modern marketing thinking. The purpose of marketing activities is to attract new customers by promising the value they can and retaining today's customers by meeting their expectations to create a level of satisfaction. The role of

marketing is an important role in service companies and goods. Marketing not only works to drive sales but strives to create a good corporate image in the community. According to Kotler [1], marketing is a social and managerial process by which a person or group acquires what they need and wants through creation and product conversion and value. Marketing does not necessarily mean selling. In a modern sense, marketing is defined as satisfying or fulfilling customer needs.

According to Kotler & Keller [1], services are every act offered by one party to another party that is essentially intangible (non-physical) and it does not yield ownership. Services are an indefinable activity, with a non-dirty nature and are planned to meet customer satisfaction. According to Umar [2], service marketing is intangible and immaterial marketing that is made when consumers are dealing with producers. Marketing has the goal of knowing and understanding consumers well so the services offered should be in line with the needs and wants of consumers. Characteristics of services according to Tjiptono [3] are as follows: 1) Intangible, 2) Inseparability, 3) Variability, 4) Perishability.

SERVQUAL

Sunyoto [4] mentions that the quality in the service industry is a presentation of the product or service according to the size applicable in the place where the product is held, and the delivery is at least similar to the consumer wants and expectations. Quality is also one of the keys to winning the market competition. Goeth and Davis referred by Tjiptono [5], quality is a dynamic condition associated with products, services, humans, processes, and environments that meet or exceed expectations. Tjiptono also cites that quality depends on the person who judges and the most satisfying product the preference of a person is classified as the highest quality product. Sunyoto [4] believes that quality is a measure of valuation that an item or service has usable value as intended or in other words, an item or service is deemed to have quality if it works or has the intended value as intended. The conclusion is that quality is the focal point of service in order to fulfil the wishes and satisfaction of consumers in meeting their needs.

Tjiptono [6] states service is a process consisting of a series of intangible activities that are usually necessarily occurring in the interaction between the consumer and the service personnel, the physical resources, the goods, or the provisioning services provided as the top solution consumer problems. From this definition, it can be stated that service is an activity that is given to consumers and it is basically unrealized, provided as a solution or consumer problem. Service Quality by Parasuraman [7] as far as the difference between the reality and the expectations of customers for services they receive. Meanwhile Lovelock [8]

service quality as the expected level of excellence, and control over such levels of excellence to meet customer's expected. From the Parasuraman research [9] there are ten general dimensions that represent the criteria of assessment used by the service users for service quality: 1) tangible, 2) reliability, 3) responsiveness, 4) competence, 5) courtesy, 6) credibility, 7) security, 8) access, 9) communication, 10) understanding the customer,

There are many that can be used to analyze the service quality of one of the model gaps developed by Parasuraman *et al.*, [9]. This model is known as SERVQUAL. Parasuraman's research identified five gaps that led to the failure of service delivery, namely: 1) The gap between consumer expectations and management perceptions. 2) The gap between management perceptions towards consumer expectations and service quality specifications. 3) The gap between service quality specifications and service delivery. 4) The gap between service delivery and external communication. 5) The gap between perceived services and services expected by consumers.

Customers' Satisfaction

Consumer satisfaction is the level of the consumer's feeling after comparing what he or she receives and expected. A customer if satisfied with the value provided by the product or service, it is highly likely to be a customer for a long time. Satisfy the consumers need is the goal of every company. Satisfied consumers of products and services tend to repurchase products and reuse services at the same time re-emerging needs. This case means satisfaction is a key factor for consumers in repurchasing which is the largest portion of the company's sales volume.

According to Lovelock and Wirtz [10], satisfaction can be defined as an attitude that is decided based on the experience gained. The research is more needed to prove whether or not previous expectations were the most important part of the satisfaction. According to Westbrook & Reily quoted by Tjiptono [3], customer satisfaction is an emotional response to experiences related to a particular product or service purchased, retail outlets, or even behavioural patterns, as well as the market overall. Purwani and Dharmmesta [12] loyalty is the attitude towards tangible products expressed by consumers in the likes of dislike or dislikes and decides whether to buy the product or not. High loyalty if the consumer has firmness in the product he or she chooses, while low loyalty if the consumer is vulnerable to switching to another product. Specific objects, actions or conditions with individual values.

According to Kotler [1], customer satisfaction indicators can be seen from 1) Re-purchase, 2) Creating Word-Of-Mouth, 3) Creating Brand Image, 4) Creating Purchase Decision on the same company. According to

Kotler and Keller [1], there are several methods that can be used to measure customer satisfaction, among others: 1) Grievance system and advice, 2) Ghost shopping, 3) Lost customer analysis, 4) Customer satisfaction survey. According to Tjiptono [6] there are six core concepts that have similarity among the various ways of measuring customer satisfaction: 1) Overall customer satisfaction, 2) Customer satisfaction dimension, 3) Expectancy Confirmation 4) Repurchase intention, 5) Customer dissatisfaction, the customer satisfaction will have a positive impact on the company. With such satisfaction, the consumer will repurchase and will affect the company's revenue.

Hypotheses Development

The hypotheses of this study are as follows:

- H1: There is a significant effect of tangible variables on customer satisfaction at Medan Zoo.
- H2: There is a significant effect of reliability variables on customer satisfaction at Medan Zoo.
- H3: There is a significant effect of responsiveness variables on customer satisfaction at Medan Zoo.
- H4: There is a significant effect of competence variables on customer satisfaction at Medan Zoo.
- H5: There is a significant effect of courtesy variables on customer satisfaction at Medan Zoo.
- H6: There is a significant effect of the credibility variables on customer satisfaction at Medan Zoo.
- H7: There is a significant effect of the security variables on customer satisfaction at Medan Zoo.
- H8: There is a significant effect of accessibility variables on customer satisfaction at Medan Zoo.
- H9: There is a significant effect of the communication variables on customer satisfaction at Medan Zoo.
- H10: There is a significant effect of customer's understanding variables on customer satisfaction at Medan Zoo.
- H11: There is a significant effect of the independent variables simultaneously on customer satisfaction at Medan Zoo.

RESEARCH METHODS

This research is quantitative descriptive research. The research data source is divided into two primary and secondary. The research populations are visitors to the Medan Zoo which come from January 2016 until December 2016 with a total of 347.446 people. Sampling method with simple random sampling, which is randomly implemented without strata. In other words, there is no discrimination in

sampling, anyone can be chosen to be a sample of research [13]. Methods for collecting data used are questionnaires and documentation. The variable of this research consists of the independent variable (X) and dependent variable (Y). In this study, there are ten independent variables which consist of Tangible (X1), Reliability (X2), Responsiveness (X3), Competence (X4), Courtesy (X5), Credibility (X6), Security (X7), Accessibility (X8), Communication (X9), and Understanding the Customer (X10). The dependent variable is visitor satisfaction at Medan Zoo (Y). Scale technique used in this research is Likert scale.

RESULTS & DISCUSSION

RESULTS

Coefficient of Determination

The coefficient of determination purpose to find out how much independent variables affect dependent variables. In table 1, we can see the magnitude of multiple correlation coefficient (R), determination coefficient (R^2) and adjusted coefficient of adjustment (adjusted R^2).

Table-1: Coefficient of determination

Model	R	R Square	Adjusted R Square	Std. An error of the Estimate	Durbin-Watson
1	0,883 ^a	0,779	0,755	0,866	1,994

Multiple correlation coefficient (R) is 0,883. It shows that independent variables have a strong relationship with dependent variables. The coefficient of determination (R^2) is 0.779 which means that 77.9% variability of customer satisfaction variable can be explained by independent variables. Adjusted coefficient (adjusted R^2), at 0.775 means that 75.5% of customer satisfaction is influenced by service quality, while 24.5% is influenced by other variables that are excluded in this study.

T-Test

Using Microsoft Excel 2007 can be found t-table value at $\alpha = 5\%: 2 = 2.5\%$ (double-sided test) with degrees of freedom (df) = nk-1 or df = 100-10-1 = 89 (n is the number of samples and k is the number of independent variables), through the TINV function (0.05,89) got t-table result = 1,987.

Table-2: T-Tests

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-3,767	1,353		-2,784	0,007
Tangible	-0,020	0,026	-0,049	-0,738	0,462
Reliability	0,373	0,100	0,354	3,726	0,000
Responsiveness	0,015	0,083	0,014	0,175	0,861
Competence	0,056	0,099	0,037	0,562	0,576
Courtesy	0,042	0,081	0,041	0,522	0,603
Credibility	0,533	0,153	0,379	3,488	0,001
Security	0,133	0,046	0,198	2,924	0,004
Accessibility	-0,158	0,132	-0,075	-1,199	0,234
Communication	-0,699	0,112	-0,403	-6,212	0,000
Understanding the Customer	1,043	0,122	0,699	8,556	0,000

Dependent Variable: Customer Satisfaction

The t-test results show that each variable of reliability, credibility, security, communication, and understanding of the customer partially has a significant effect on customer satisfaction, while the partial variables of tangible, responsiveness, competence, courtesy, and accessibility have an insignificant effect on customers' satisfaction.

F-Tests

By using Microsoft Excel 2007, the value of F-table degree of confidence is 95%, $\alpha = 5\%$, df1 = 10, df2 = 89, through FINV function (0.05,10,89) is known as F-table = 2.32.

Table-3: F-Tests

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	235.763	10	23.576	31.437	.000 ^b
Residual	66.747	89	.750		
Total	302.510	99			

In Table-3, it is known that F-value is 31,437. Because F-count is higher than F-table (2.32), H0 is accepted which means there is a significant effect of service quality that consists of Tangible, Reliability, Responsiveness, Competence, Courtesy, Credibility, Security, Accessibility, Communication, and

Understanding the Customer simultaneously on customer satisfaction.

Multiple Linear Regression Analysis

In order to know the effect of variable X to Y, multiple regression analysis is used.

Table-4: The result of research coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-3,767	1,353		-2,784	0,007
Tangible	-0,020	0,026	-0,049	-0,738	0,462
Reliability	0,373	0,100	0,354	3,726	0,000
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Understanding the Customer	1,043	0,122	0,699	8,556	0,000

Dependent Variable: Customer Satisfaction

By looking at the regression coefficient it can be seen that the variable that has the most dominant effect is Understanding the Customer with 1,043, followed by Communication variable with the number 0.699, Credibility variable with 0,533, Reliability variable with 0,373, and Security variable with 0,133.

DISCUSSION

The effect of tangible on visitors satisfaction at Medan Zoo

From the result of research, it is found that tangible variables have an insignificant effect on visitors' satisfaction at Zoo Medan. It proved that the indicators of tangible variables have fulfilled the elements of visitor satisfaction.

The effect of reliability on visitors satisfaction at Medan Zoo

From the result of research, it is found that reliability variable has a significant influence on visitors satisfaction at Medan Zoo. This is supported by a study conducted by Tricilia Dewi Mars Angraeni [14] that reliability has a significant influence on PT. Godongjijo Asri.

The effect of responsiveness on visitors satisfaction at Medan Zoo

From the result of research, it is found that responsiveness does not have a significant effect on visitors satisfaction. This is supported by research conducted by Tricilia Dewi Mars Angraeni where responsiveness variable has an insignificant influence on PT. Godongjijo Asri.

The effect of competence on visitors satisfaction at Medan Zoo

From the result of research, it is found that the variable of competence does not have a significant effect on visitors satisfaction. This shows that visitors are quite satisfied with the services of the Medan Zoo from the competence aspect. From the result of multiple regression analysis can be seen that the coefficient of competence variable is positive, where if the competence value is increased, then the visitors' satisfaction also increases.

The effect of courtesy on visitors satisfaction at Medan Zoo

From the result of research, it is found that courtesy variable does not have a significant effect on visitors satisfaction in Medan Zoo. This suggests that visitors value enough to be satisfied with the services of the Medan zoo officer in connection with the courtesy aspect. When viewed from the results of multiple regression analysis it can be seen that the coefficient of the courtesy variable is positive, which means that if there is an increase in the courtesy variable, then the visitors' satisfaction will also increase.

The effect of credibility on visitors satisfaction at Medan Zoo

The results show that credibility has a significant effect on visitor satisfaction. This is in line with the results of Dwi Prasetyo [15] where assurance has a significant influence on the visitors' satisfaction of the Recreational Park, Pantai Kartini Rembang.

The effect of security on visitors satisfaction at Medan Zoo

The results show that security has a significant influence on visitor satisfaction. This is in line with the results of Dwi Prasetyo [15] where assurance has a

significant influence on the visitor satisfaction of the recreational park, Pantai Kartini Rembang.

The effect of accessibility on visitors satisfaction at Medan Zoo

From the result of research, it is found that accessibility variable does not have a significant influence on visitors satisfaction at Medan Zoo. From the result of multiple regression analysis, it is found that the accessibility variable coefficient has a negative value which, if there is an increase in accessibility variable, it will give a reverse effect on visitors satisfaction.

The effect of communication on visitors satisfaction at Medan Zoo

The result of the research shows that the communication variable has a significant effect on customer satisfaction, this is supported by the research conducted by Tricilia Dewi Mars Angraeni [14] that empathy has a significant effect on the satisfaction of PT.Godongijo Asri.

The effect of understanding of the customer on visitors satisfaction at Medan Zoo

The results of the study found that the understanding of the customer had a significant effect on customer satisfaction. This finding supports the research conducted by Tricilia Dewi Mars Angraeni [14] that empathy has a significant effect on the satisfaction of PT. Godongijo Asri, and is the variable that has the most dominant influence.

CONCLUSIONS & SUGGESTIONS

CONCLUSION

Based on the results of the research and discussion, some of the conclusions that can be taken are as follows:

- Partially, tangible does not have a significant effect on visitors' satisfaction at Medan Zoo.
- Partially reliability has a significant effect on visitors' satisfaction at Medan Zoo.
- Partially responsiveness does not have a significant effect on visitors' satisfaction at Medan Zoo.
- Partially competence has an insignificant effect on visitors' satisfaction at Medan Zoo.
- Partially courtesy has an insignificant effect on visitors' satisfaction at Medan Zoo.
- Partially credibility significant effect on visitors' satisfaction at Medan Zoo.
- Partially security has a significant effect on visitors' satisfaction in Medan Zoo.
- Partially accessibility has an insignificant effect on visitors' satisfaction at Medan Zoo.
- Partially communication has a significant effect on visitors' satisfaction at Medan Zoo.

- Partially understanding the customer has a significant effect on visitors' satisfaction at Medan Zoo.
- Simultaneously, the independent variables have a significant effect on visitors' satisfaction at Medan Zoo

SUGGESTIONS

Based on the results of the research, some suggestions can be presented as follows:

In order to encourage every employee to carry out their duties and responsibilities, it is recommended that a Key Performance Indicator be applied to each employee. Appropriate reward and recognition for each employee will motivate each employee to perform their duties and responsibilities better. In order to provide a safety guarantee for visitors who come to the Zoo of Medan, it is recommended that each of the animals is kept in the safety of the cages. In order to minimize the costs incurred to repair the cages, various efforts can be made for such as building a fence that can minimize the visitor's proximity to the stables. Empower the parking lot to enhance the comfort and safety of every visitor. Officer scheduling to stay at specific points. In addition to animal shelters, facilities and infrastructure need periodic maintenance. The goal is for visitors to feel comfortable using the facilities and infrastructure. Create an evacuation lane marker in a zoo area where visitors can easily view and understand instructions. Suppose that when an emergency happens, the Medan Zoo can evacuate the visitors faster and easier. Provide training to every officer on how to communicate information and respond to complaints from each visitor, and conduct routine briefings to each officer. Its purpose is to straighten and reconstitute understanding of the vision and mission of the Zoo to be achieved. Print brochures with information that is consistent with the fact that visitors are satisfied with the services of the officers at the Medan Zoo.

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