
| RESEARCH ARTICLE

The Effects of Service Quality on Customer Satisfaction and Its Implication on Company's Performance: A Case study of *Perumdam Tirta Alam Tarakan*

Arkas Viddy¹ ✉ Rukisah², Ana Srielaningsih³, Hanadelansa⁴ and Andi Asrifan⁵

¹*Business Administration Study Program Politeknik Negeri Nunukan, Indonesia*

²*Fishery Faculty of Borneo University Tarakan, Indonesia*

³*Management Department, Sekolah Tinggi Ilmu Ekonomi (STIE) Bulungan Tarakan, Indonesia*

⁴*Management Study Program, Sekolah Tinggi Ilmu Ekonomi Wira Bhakti Makassar, Indonesia*

⁵*Faculty of Teachers Training and Education, Universitas Muhammadiyah Sidenreng Rappang, Indonesia*

Corresponding Author: Arkas Viddy, **E-mail:** viddy.arkas@yahoo.com

| ABSTRACT

This study aims to identify and analyze the effects of service quality on customer satisfaction and its implication for *PDAM Tirta Alam Tarakan*. This quantitative research uses 3 variables: service quality, customer satisfaction, and performance. The population of this research is all customers of *PDAM Tirta Alam Tarakan*. By taking a sample of 96 samples using the purposive sampling technique, data collection was carried out by questionnaires distributed directly to respondents. The analytical method used is path analysis using SmartPLS 3.20 version to generate the model. The research results show the significant effect of service quality on customer satisfaction and *PDAM Tirta Alam Tarakan* performance. At the same time, it is found that customer satisfaction has no significant impact on the *PDAM Tirta Alam Kota Tarakan* Performance.

| KEYWORDS

Service Quality, Customer Satisfaction, and Performance

| ARTICLE INFORMATION

ACCEPTED: 01 January 2023

PUBLISHED: 06 January 2023

DOI: 10.32996/jbms.2023.5.1.3

1. Introduction

The government is obligated to serve every citizen to fulfill their basic rights and needs following the mandate of the 1945 Constitution of the Republic of Indonesia. In providing services to the community, the government must meet the community's expectations and always make improvements in terms of service to match society's expectations. Suppose the public services the government provides to its people are close to or equal to what is expected by the community; in that case, it can be said that public services will enable the government to carry out development in all government affairs.

The success of regional development can be assessed in terms of how the government can meet the needs of its people, both primary, secondary, and tertiary needs. One of these primary needs is the need for clean water as drinking water for the community, especially in Tarakan City. The need for drinking water is a need that concerns the needs of many people, which of course, must be carried out by the government through regional companies, specifically dealing with meeting the drinking water needs of the people of Tarakan City. So far, the Regional Drinking Water Company has been entrusted to Perumda Tirta Alam, Tarakan City, as a regional company that specifically provides public services to the people of Tarakan city.

Public services by government officials are still found, so they have not been able to meet the quality of service expected by the community's weaknesses. This is indicated by various public complaints that can lead to an unfavorable image of government officials. Considering that the government's main function is to serve the community, the government continues to strive to

improve service quality. One of the efforts to improve the quality of public services, as mandated in Law No. 25 of 2009 concerning Public Services Article 38 paragraph 1, where organizers are obliged to periodically evaluate the performance of public service delivery at least once a year, needs to compile a Community Satisfaction Survey as a benchmark for assessing the level of service quality.

One sign that the paradigm of public services has changed is the courage to self-evaluate the satisfaction of those it serves, including by conducting research or research on the performance of public services, which is uncommonly done by regional governments so that the measure for knowing how far the effectiveness of various public services, especially in terms of the satisfaction of the user community, has changed

The Community Satisfaction Survey (SKM) is data and information about the level of community satisfaction obtained from quantitative and qualitative measurement results of community opinion in obtaining services from public service delivery apparatus by comparing expectations and needs. The Community Satisfaction Survey (SKM) aims to regularly determine service units' performance levels as material for establishing policies to improve the quality of public services in the future.

In addition to effectively supervising the drinking water treatment process, Perumda Tirta Alam has also improved various other services in terms of Tangibility, Reliability, Assurance, Responsiveness, and Empathy for all Drinking Water customers in Tarakan City. One of the service facilities provided is by launching a service application called the *TirtaalamKU* Application, in which 2,505 application users have been recorded as users. With this application, it can easily detect the number of complaints, and the number of new registrants and, at the same time, monitor and control the number of bills that can be carried out.

Based on the background, it can be mentioned the aims of this research are as follows:

1. To identify the effects of service quality on customer satisfaction in *Perumdam Tirta Alam Tarakan*.
2. To identify the effects of service quality on *Perumdam Tirta Alam* performance.
3. To identify the effects of customer satisfaction on *Perumdam Tirta Alam* performance.

2. Literature Review

2.1 Marketing

According to (Alma, 2004), *pemaran* is a business or activity to distribute goods and services from producers to consumers (Aulia, 2005). According to (Saladin, 2007), marketing is a total system of business activities designed to plan, determine prices, promote, and distribute goods that can satisfy wants and achieve target markets and company goals. (Zulfikar, Aprianti, & Rachmawati, 2022). Philip Kotler (Kotler, Kotler, & Kotler, 2008) expresses the definition of marketing: "Marketing is identifying and meeting human and social needs. Meeting needs profitably" (Putra et al., 2018)

2.2 Public Service

Public service is any activity carried out by the government for several people who have every activity and offer satisfaction even though the results are not physically tied to a product (Pasolong, 2020). Meanwhile, according to Sinambela (Sinambela, 2011), service is any profitable activity in a group or unit that offers satisfaction even though the result is not physically tied to a product.

Following that, public service is defined as all service activities carried out by public service providers to meet the needs of recipients of services and enforce statutory provisions, as per the Minister of Administrative Reform's Decree Number: KEP/25/M.PAN/2/2004 concerning General Guidelines for Compiling the Public Satisfaction Index for Government Agency Service Units. Furthermore, according to Law Number 25 of 2009 concerning Public Services, public service is a single activity or a set of related activities that are undertaken to deliver goods, services, or administrative services to all citizens and residents in line with statutory requirements.

The conclusion regarding the definition of public services, namely: all activities carried out by the government to meet the community's needs for goods, services, and administrative services by statutory regulations -invitation and endeavor to provide satisfaction to the community, can be made based on the definitions of public services from experts and the laws and regulations above.

2.3 Service Quality

Service quality can manifest in meeting consumer needs and expectations and the accuracy of delivery to match consumer expectations. (Wibowo & Phil, 2007) Service quality is a long-term cognitive evaluation of consumers on service delivery by companies. (Lovelock & Wirtz, 2007) States, "service quality, the customer's perception of the service component of a product, is also a critical determinant of customer satisfaction." this is an important determinant in obtaining consumer satisfaction. Based on

these various definitions, it can be understood that service quality is by comparing consumers' perceptions of the services they actually get or receive with the services they want for the company's service attributes.

2.4 Customer Satisfaction

Lovelock and Wirtz (2007) explained that there are at least five dimensions that serve as measurements of service quality by consumers, namely:

a. Tangible;

Physical evidence is related to the attractiveness of the employee's appearance and the material used by the company. In this context, the company needs to consider facilities and infrastructure related to customer service. Buildings with refrigeration facilities (AC), sophisticated telecommunications equipment or quality office furniture, and others are consumer considerations in determining a service.

b. Reliability;

Reliability is the company's ability to provide the right service from the first time without making mistakes and delivering services by the specified time. In this case, a marketer is required to provide reliable products/services. Products/services should not be damaged. The employees of a company must also be honest in solving problems so that consumers do not feel,

c. Assurance;

Guarantees are employee behaviors that can generate consumer confidence in the company and create a sense of security for its customers. Assurance also means that employees are always courteous and possess the knowledge and skills needed to solve or answer any customer questions and problems;

d. Responsiveness;

Responsiveness relates to the ability of employees to help consumers and respond to their requests, as well as convey when services are distributed and then provide services quickly. Another element that is also important in the Responsiveness element is that the company's employees are always ready to help consumers. Whatever one's position in the company should always pay attention to customers who contact the company;

e. Empathy

Empathy is the company's attitude in understanding the problems of its customers and behaving in the interests of consumers, as well as paying personal attention to customers and having comfortable operating hours.

2.5 Performance

Performance or work performance comes from the notion of performance. Performance is about doing the work and the results achieved from work. Performance is about what is done and how to do it. Performance is the result of work that has a strong relationship with the organization's strategic goals, customer satisfaction and making an economic contribution. (Armstrong & Baron, 2005) The definition of performance, according to Anwar Prabu Mangkunegara (Mangkunegara & Puspitasari, 2015), is the result of the quality and quantity of work achieved by an employee in carrying out his duties by the responsibilities given to him. Then according to (Sulistiyani, Aisyah, Mamat, & Sontang, 2016), "a person's performance is a combination of ability, effort and opportunity that can be assessed from the results of his work".

With the above understanding of performance, it can be concluded that performance is the formulation of goals, there is cooperation, it is sustainability, there is two-way communication, and there is feedback. Polter and Lawer formulate performance as the result of multiplying effort (effort), ability, and role perception (understanding of roles). (Wibowo & Phil, 2007)

2.6 Relationship Service Quality and Customer Satisfaction

Afthnorhan (Afthnorhan, Awang, Rashid, Foziah, & Ghazali, 2019) suggest that quality of service significantly impacts customer satisfaction. It was also found by Chou et al. that service quality had a positive effect on customer satisfaction and customer loyalty. (Chou, Lu, & Chang, 2014), while Khan and Fasih stated that service quality and all its dimensions have a significant and positive association with customer satisfaction and loyalty. (Khan & Fasih, 2014)

2.7 Relationship Service Quality and Performance

There are significant implications for bank managers in Jordan concerning the mediating role of service quality implementation on the levels of service quality and, therefore, bank performance. (Akroush, 2008), it is also found that service quality has positive effects on the key indicators of service used by the organization (Haynes & Fryer, 2000)

2.8 Relationship Customer Satisfaction and Performance

All factors affecting customer satisfaction also affect business performance. (Suchánek & Králová, 2015), While Henning et al. explained the satisfaction–retention relationship and the development of a more comprehensive view of the customer's quality perception. (Hennig-Thurau & Klee, 1997), Contrastingly, Bamberger found that the adverse effect of customer satisfaction persists, leading to a nonsignificant total effect on long-term profitability (Bamberger, Homburg, & Wielgos, 2021)

2.9 Hypothesis

Hypothesis 1: There are significant effects of service quality on customer satisfaction

Hypothesis 2: There are significant effects on service quality on *PDAM Tirta Alam* performance

Hypothesis 3: There are significant effects on customer satisfaction on *PDAM Tirta Alam* performance.

3. Methodology

3.1 Population and Sample

This research is quantitative. The population of this research is all customers of banking in Samarinda, both from conventional banks and Islamic banks, by taking a sample of 100 people consisting of 50 conventional bank customers and 50 Islamic bank customers to be the respondent or samples of this study. The sampling technic used the probability sampling method with convenience sampling.

Data collection was carried out by questionnaires distributed directly to respondents. This is done because the population studied is spread over a fairly wide area. So customers who are easy to find and feel able to be used as samples are entitled to become research respondents. This is done to diagnose the situation quickly and easily.

3.2 Collecting Data

The data collection technique used is Field Research. This is research conducted directly on bank customers. The data collection methods used are distributing the questionnaire and interviewing the respondents.

3.3 Method Analysis

To determine how much influence the marketing strategy has, the author uses quantitative analysis tools, namely completing, classifying, and systematically compiling the collected data to facilitate further analysis. The reliability and validity test must be done to get the result precisely.

The validity of a test is concerned with whether the test measures what it is intended to measure. Suryabrata (2000: 41) states that the validity of the test refers to the degree of the measuring function of a test or the degree of accuracy of the measurement of a test. The point is that how far a test can reveal exactly the characteristics or the actual state of the object being measured will depend on the level of validity of the test in question (Matondang, 2009).

Meanwhile, Gozali explained (Sari, Ghozali, & Achmad, 2017) that the Reliability test aims to measure the consistency of the constructs or indicators (variables) of the study. A questionnaire is said to be reliable or reliable if a person's answer to the statement is consistent or stable from time to time (Kodu, 2013).

The next step is to test all hypotheses using Sample Paired T-Test. This test is used to determine the difference in the results of the initial measurements before being given treatment and after being given treatment. (Anindya Septa Hudana, 2022).

3.4 Consumer Behaviour

Consumer behavior is the things that underlie consumers to make purchasing decisions. Consumer behavior is the process and activity when a person is associated with searching, selecting, purchasing, using, and evaluating products and services to meet needs and wants. For low-priced goods (low involvement), the decision-making process is carried out easily, while for high-priced goods (high involvement), the decision-making process is carried out carefully.

According to (Suminar & Meiyuntari, 2015), consumer behavior is an act that is directly involved in obtaining, consuming, and spending on products and services, including decisions preceding and following these actions. Consumer behavior is all activities, actions, and psychological processes that drive these actions when before buying, when buying used, and spending on products and services after doing the above or evaluating activities. Consumer behavior is a decision-making process and individual physical activity involved in evaluating, obtaining, using, or being able to use goods and services. There are two important elements of the meaning of consumer behavior, namely:

1. The decision-making process.

2. Physical activities that involve individuals in assessing, obtaining and using economic goods and services. According to (Kotler et al., 2008), several factors influence consumer behavior, including psychological factors. The kinds of psychological factors include, namely:
 - a. Motivation is a need that is sufficiently stimulated to make a person seek satisfaction from that need.
 - b. Perception is how a person selects, organizes, and interprets information to form a meaningful picture of the world.
 - c. Learning is a change in individual behavior that arises from experience.
 - d. Beliefs are a person's descriptive thoughts about something, and attitudes describe a person's relatively consistent judgments, feelings, and tendencies toward an object or idea.

The method section describes actions to investigate a research problem and the rationale for applying specific procedures or techniques used to identify, select, process, and analyze information.

3.5 Data Collection

The data was collected using Sample Morgan dan Krejcie Technic by distributing questionnaires to 96 respondents, which were generated by variables such as Service Quality, Customer Satisfaction, and Performance. The data will be collected using fieldwork research methods where the surveyors will attend to all of the respondents' addresses in all of Tarakan District, while Tarakan District Consists of 4 Sub Districts; West Tarakan, Centre Tarakan, East Tarakan, and North Tarakan Sub Districts

Transactional leadership styles are measured by contingent compensation, active exception management, and exception passive management; transformational leadership styles by idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration; and lecturer working satisfaction by financial, physical, social, and psychological satisfaction.

For analyzing the data Path Analysis instrument is used by using SmartPLS 3.20 version with the steps such as designing the structural model (inner and outer model), constructing a path diagram, converting a path diagram to regressions, hypothesis parameters, and examining the hypothesis. The next step is testing the validity and reliability of the instrument by using the SPSS 21 version to ensure that all of the items of the questionnaires are appropriate. The reasons for using SmartPLS 3.20 version are this research uses a small sample of only 30 respondents, this research is path analysis research, using SmartPLS is quite easy because the data is not necessarily normal and linear; moreover, not the only significance of direct effect but also the significance of indirect effect can result.

3.6 Model Design

Using SmartPLS 3.20, the model can be designed as follows:

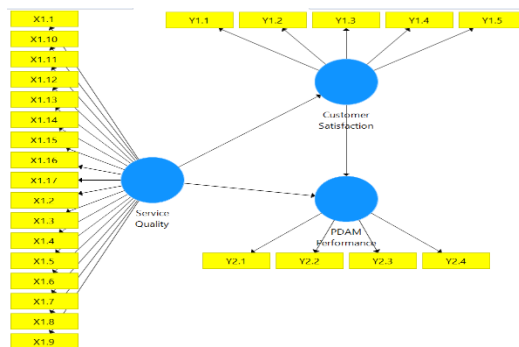


Figure 1. Model Design

Whereas X = Service Quality, Y1 = Customer Satisfaction, and Y2 = PDAM Tirta Alam Performance, it can be explained that α_1 = direct influence X1 to Y1, β_1 = direct influence X1 to Y2, β_2 = direct influence Y1 to Y2.

3.7 Data Analysis

All the data have been examined by validity and reliability test; it could be analyzed using path analysis formulation such as:

$$Y1 = \alpha_1 X1 + e1$$

$$Y2 = \beta_1 X1 + \beta_2 Y1 + e2$$

Whereas;

X = Service Quality consists of 17 sub-indicators

Y1 = Customer Satisfaction consists of 5 indicators and

Y2 = PDAM Tirta Alam Performance consists of 4 indicators

3.8 Research Map

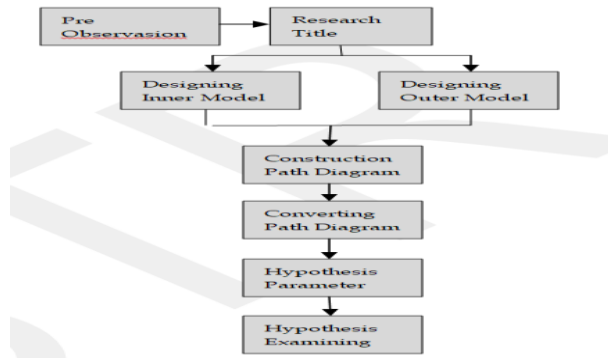


Figure 2: Research Road Map

This research roadmap can be done by analyzing the path or using the Smart Partial Least Square (PLS) software with the following steps: Some Common Mistakes followed by designing a measurement model (outer model), but it is not necessary because this is purely quantitative research. Construction of the path diagram or research model is the next step and then followed by converting the path diagram into a regression formulation. Based on the model, the hypothetical parameters need to be designed, and the hypotheses need to be checked.

4. Results and Discussion

4.1 Validity Test

Table 4.1 Discriminant Validity

Discriminant Validity			
	Customer Satisf...	PDAM Performance	Service Quality
Customer Satisfaction	0.632		
PDAM Performance	0.401	0.736	
Service Quality	0.625	0.558	0.464

By using SmartPLS 3.20 version, all of the Correlation results are greater than 0.3, so it can be concluded that all questioners are valid.

4.2 Reliability Test

Table 4.2 Construct Reliability

Construct Reliability and Validity				
Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extract...
	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted ...
Customer Satisfaction	0.610	0.620	0.761	0.399
PDAM Performance	0.700	0.691	0.821	0.542
Service Quality	0.770	0.777	0.817	0.215

Based on the data tested, it could be decided that all of the items are reliable because all of Cronbach's Alpha is greater than 0.6.

4.3 Path Analysis

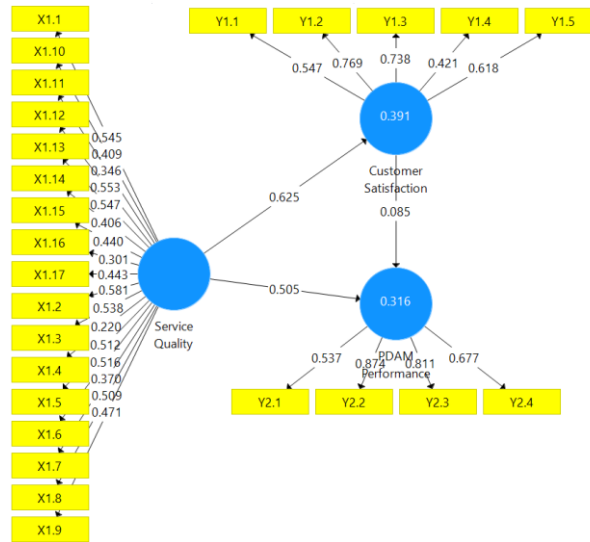


Figure 3 Calculating Result

The results can be simplified as follows:

Table 4.3 Path Coefficients

Path Coefficients			
	Customer Satisfaction	PDAM Performance	Service Quality
Customer Satisfaction		0.085	
PDAM Performance			
Service Quality	0.625		0.505

Based on the calculating result by using SmartPLS 3.20 as Figure 4.1, it could be mentioned inner loading and outer loading as follows:

$$Y1 = 0.625X1 + e1 \quad (1)$$

Based on equation 1 above formulation, it can be determined that service quality positively affects customer satisfaction.

$$Y2 = 0.505X1 + 0.085Y1 + e2 \quad (2)$$

Based on equation 2 above formulation, it can be determined that service quality and customer satisfaction positively affect PDAM performance.

The outer loading can be displayed as follows:

- X1.1 = 0.545 X1.7 = 0.370 X1.3 = 0,547
- X1.2 = 0.581 X1.8 = 0.509 X1.4 = 0,406
- X1.3 = 0,538 X1.9 = 0.471 X1.5 = 0,440
- X1.4 = 0.220 X1.10 = 0.409 X1.6 = 0,301
- X1.5 = 0.512 X1.11= 0.348 X1.7 = 0,443
- X1.6 = 0.516 X1.12 = 0.553

The highest outer loading is X1.2 = 0,581, which means that service quality can be reflected by indicator X1.2.

- Y1.1 = 0.547 Y2.1 = 0.537
- Y1.2 = 0.760 Y2.2 = 0.854
- Y1.3 = 0.738 Y2.3 = 0.811

Y1.4 = 0.421 Y2.4 = 0.677 Y1.5 = 0.618

From all of the outer loadings above, it can be determined that indicator Y1.2 can reflect customer satisfaction because this coefficient is the highest coefficient rather than others. It also can be determined that *Perumdam Tirta Alam* performance can be reflected by indicator Y2.2 because this is the highest coefficient among all the coefficients.

This research using one intervening variable could create two types of effect: direct effect and indirect effect. The direct effect can be seen from the path coefficient, while the indirect effect can be seen as follow:

Table 4.4 Indirect Effects

Indirect Effects

Total Indirect Effects		Specific Indirect Effects	
	Customer Satisfaction	PDAM Performan...	Service Quality
Customer...			
PDAM Pe...			
Service Q...		0.053	

The indirect effect of service quality on customer service through *Perumdam Tirta Alam* performance is 0.053

4.4 R Square Adjusted Analysis

Identifying the contribution independence variable to the dependence variable in the path analysis equation can be explored by R Square Adjusted analysis as follow:

Table 4.5 R Square Adjusted

R Square

Matrix	R Square	R Square Adjusted
Customer Satisfaction	0.391	0.385
PDAM Performance	0.316	0.301

From Table 4.3, Y1 R Square Adjusted is 0,385, which means that service quality's contribution to customer satisfaction is 38,5 percent, while 61,5 percent could be attributed to other variables. It is also identified that Y2 R Square Adjusted is 0.301.

4.5 Hypothesis Examining

After the calculation, it is necessary to examine all the hypotheses. To examine the hypothesis, bootstrapping needs to be done. The results of bootstrapping can be seen as follow:

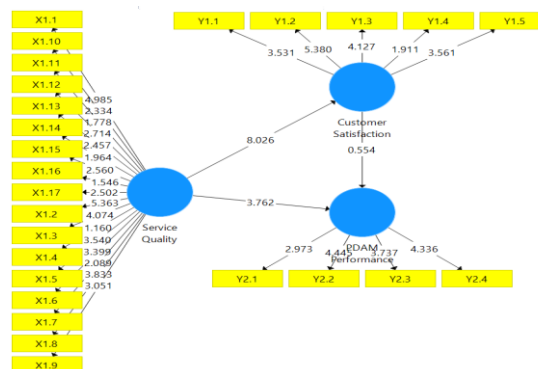


Figure 4.6 Bootstrapping Results

Hypothesis 1: There are significant effects of service quality on customer satisfaction.

The bootstrapping results show that T test1 for the service quality variable is 8.026 and is greater than 1,960, or it can be determined that hypothesis 1 is accepted.

Hypothesis 2: There are significant effects on service quality on *Perumdam Tirta Alam* performance

From the bootstrapping results, it can be seen that T test2 for the service quality variable is 3.762, and it is greater than 1,960, or it can be determined that hypothesis 2 is accepted

Hypothesis 3: There are no significant effects on customer satisfaction on *PDAM Tirta Alam* performance.

The bootstrapping results show that the T-test for the service quality variable is 0.554 and less than 1,960, or it can be determined that hypothesis 3 is rejected.

Meanwhile, There are significant effects of service quality on customer satisfaction because most of the respondents have appropriated services from PDAM Tirta Alam, and this public service company has launched several specific programs especially offering free installation and building new water shelters. According to questionnaire results, most of the customers are happy with the service provided, which could directly affect customer satisfaction. It is indicated from the outer loading that the service quality can be reflected by indicator X1.2 or service quality regarded as watercolor (water transparency). Hence, it means that most customers are more concerned about watercolor. It is reasonable because, in a normal situation, the customers have an appropriate watercolor. In contrast, customers usually have inappropriate watercolor or a little yellow color in the dry or rainy season. This result was confirmed by (Afthanorhan et al., 2019), (Chou et al., 2014), and (Khan & Fasih, 2014), that service quality has a significant effect on customer satisfaction.

On one side, the water color is in the dry season because most of *Perumda Tirta Alam* water pipes are already old, and the color comes from pipes corrosion, while in the rainy season, the watercolor comes from the grey land. The rainy water flooded the grey land and then flowed into the shelters. On the other side, Perumdam water processing technology still has not yet supported how to reduce the rate of cloudy water.

Service quality significantly affects *Perumdam Tirta Alam* performance because, theoretically, since the customers have high-quality services, they will express it by asking for more services. In fact, in the last two years, there have been more new customers or more than 10,000 customers, affecting more returns for *Perumdam Tirta Alam Tarakan*. It is also reasonable because, from the result, it could be decided in general service quality of Perumdam Tirta Alam Tarakan at the Satisfaction Level and its obvious effects on *Perumdam Tirta Alam* income. This result is supported by several researchers, namely Akroush (2008) and Haynes & Fryer (2000) that service quality significantly affects performance.

There are no significant effects on customer satisfaction on *PDAM Tirta Alam* performance because this company is public service and on one side, this company has a main priority to fulfill customer satisfaction; it is expected that customer satisfaction could affect the *Perumdam Tirta Alam* performance; likewise, the theatrical approaching. Unfortunately, the *Perumdam Tirta Alam* improving their performance is not based on customer satisfaction. Still, it is based on other factors, such as the compensation system and leadership style. It could be indicated by the result of R Square Adjusted for 0.301, which means that 69,9 percent of *Perumdam Tirta Alam* performance contributed to other factors, excluding customer satisfaction. This result is supported by Bamberger, Homburg, & Wielgos (2021), that the adverse effect through customer satisfaction persists, leading to a nonsignificant total impact on long-term profitability.

5. Conclusion

This study aims to identify and analyze the effects of service quality on customer satisfaction and its implication for *PDAM Tirta Alam Tarakan*. The results of the study revealed that there are significant effects of service quality on customer satisfaction. Also, there are no significant effects on customer satisfaction on *PDAM Tirta Alam* performance. There is a significant difference in location strategy between *BRI* and *BRI Sariah*. *The study also showed that there are no significant effects on customer satisfaction on PDAM Tirta Alam performance.*

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Acknowledgement: This research is done by supporting several extraordinary relatives, such as PNN Team Managements and Lectures, for their knowledge contribution. For that kind of contribution, it needs to thanks to several parts as follows:

1. Vice Director I, Dr. Asniwati, SE, MSi, and Vice Director II, Dr. Rafiqoh, SE, MM, always support preparing literature reviews.
2. The Director of Perumdam Tirta Alam Tarakan, Mr. Iwan Setiawan, provided time in discussing *Perumdam Tirta Alam Tarakan* regarded to discuss the matters of water services.

3. Some lectures of Politeknik Negeri Nunukan, such as Ismail Ramli, Herlina, and Siti Hajar, have contributed to editing and submitting the paper.
4. Other lecturers and staff, such as Don Daniel and Reni Wardana. Hopefully, this study contributes the public services knowledge, both theoretical and empirical real cases.
5. **Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management Science Letters*, 9(1), 13-24.
- [2] Akroush, M. N. (2008). Exploring the mediation effect of service quality implementation on the relationship between service quality and performance in the banking industry in Jordan. *Global Business and Economics Review*, 10(1), 98-122.
- [3] Alma, B. (2004). Manajemen pemasaran dan pemasaran jasa edisi Revisi. *Alfabeta*. Bandung.
- [4] Anindya S H, A. (2022). *efektivitas bakom massage terhadap pengurangan rasa nyeri punggung ibu hamil trimester III di pmb anik rohanjarwati, amd keb pakis kabupaten malang*. universitas kusuma husada surakarta,
- [5] Armstrong, M., & Baron, A. (2005). *Managing performance: performance management in action*: CIPD publishing.
- [6] Aulia, E. (2005). Hierarchical indexing for region-based image retrieval.
- [7] Bamberger, B., Homburg, C., & Wielgos, D. M. (2021). Wage inequality: Its impact on customer satisfaction and firm performance. *Journal of Marketing*, 85(6), 24-43.
- [8] Chou, P.-F., Lu, C.-S., & Chang, Y.-H. (2014). Effects of service quality and customer satisfaction on customer loyalty in high-speed rail services in Taiwan. *Transportmetrica A: Transport Science*, 10(10), 917-945.
- [9] Haynes, P., & Fryer, G. (2000). Human resources, service quality and performance: a case study. *International Journal of Contemporary Hospitality Management*.
- [10] Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology & Marketing*, 14(8), 737-764.
- [11] Khan, M. M., & Fasih, M. (2014). Impact of service quality on customer satisfaction and customer loyalty: Evidence from the banking sector. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 8(2), 331-354.
- [12] Kodu, S. (2013). Harga, kualitas produk dan kualitas pelayanan pengaruhnya terhadap keputusan pembelian mobil Toyota avanza. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(3).
- [13] Kotler, N. G., Kotler, P., & Kotler, W. I. (2008). *Museum marketing and strategy: designing missions, building audiences, generating revenue and resources*: John Wiley & Sons.
- [14] Lovelock, C., & Wirtz, J. (2007). *Marketing dei servizi. Risorse umane, tecnologie, strategie*: Pearson.
- [15] Mangkunegara, A. A. P., & Puspitasari, M. (2015). Kecerdasan emosi guru, stres kerja, dan kinerja guru SMA. *Jurnal Kependidikan: Penelitian Inovasi Pembelajaran*, 45(2).
- [16] Matondang, Z. (2009). Validitas dan reliabilitas suatu instrumen penelitian. *Jurnal tabularasa*, 6(1), 87-97.
- [17] Pasolong, H. (2020). Kepemimpinan birokrasi. In: Alfabeta Bandung.
- [18] Putra, D. A., Jasmi, K. A., Basiron, B., Huda, M., Maselena, A., Shankar, K., & Aminudin, N. (2018). Tactical steps for e-government development. *International Journal of pure and applied mathematics*, 119(15), 2251-2258.
- [19] Saladin, D. (2007). Marketing Essential and Marketing Elements, third printing. *Bandung: Linda Karya*.
- [20] Sari, N., Ghozali, I., & Achmad, T. (2017). The effect of internal audit and internal control system on public accountability: The empirical study in Indonesian state universities. *International Journal of Civil Engineering and Technology*, 8(9), 157-166.
- [21] Sinambela, L. P. (2011). Public Service Reform, Policy Theory and Implementation. In: Jakarta: PT Bumi Aksara.
- [22] Suchánek, P., & Králová, M. (2015). Effect of customer satisfaction on company performance. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 63(3), 1013-1021.
- [23] Sulistiyani, A. T., Aisyah, D., Mamat, I., & Sontang, M. (2016). Pemberdayaan Masyarakat Pemanfaatan Limbah Tulang Ikan untuk Produk Hidroksiapatit (Hydroxyapatite/HA) Kajian di Pabrik Pengolahan Kerupuk Lekor Kuala Terengganu-Malaysia. *Indonesian Journal of Community Engagement*, 2(01).
- [24] Suminar, E., & Meiyuntari, T. (2015). Konsep diri, konformitas dan perilaku konsumtif pada remaja. *Persona: Jurnal Psikologi Indonesia*, 4(02).
- [25] Wibowo, S., & Phil, M. (2007). Manajemen Kinerja edisi tiga. *Jakarta: PT. Raja grafindo persada*.
- [26] Zulfikar, T., Aprianti, I., & Rachmawati, E. (2022). Digital Marketing and Brand Image To Increase Consumer Purchase Interest. *Jurnal Manajemen Industri dan Logistik (JMIL)*, 6(1), 21-29.