The Effect of Service Quality on Customer Satisfaction at PT. PLN (Persero) in Makassar City

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ABSTRACT

This study aims to determine the service quality of PT. PLN (Persero) in Makassar City. This type of research is quantitative. Data collection techniques were carried out through library research and field research in the form of observations, questionnaires, agency data and documentation. The total population of the study was 24,332 with a sample of 100 people selected at random. The analytical method used is the Simple Linear Regression method. The results showed that the indicators of Service Quality at PT. PLN (Persero) in Makassar City is good because the percentage of Service Quality has high values or a high percentage, especially on the Empathy indicator. Customer Satisfaction in Makassar City is very good because Customer Satisfaction is higher than Service Quality, which means that customers in Makassar City are very satisfied with the service or performance of service providers. Service Quality has an effect on Customer Satisfaction, from the regression model obtained significant results and the percentage value is 66 percent.

Keywords : Service Quality; Performance; Customer satisfaction.

INTRODUCTION

In this era of globalization (Jessop, 2017; Kramsch, 2014; Kymlicka, 2010; Spivak, 2013), companies or organizations are required to improve service quality because the current service sector has experienced a dramatic and significant increase compared to the previous decade (Batchimeg, 2017; Maassen, 2018; Owolabi et al., 2011). The dynamics that occur in the service sector can be seen from the development of various service industries such as banking, insurance, aviation, telecommunications, tourism and other professional service companies such as accounting firms, consultants, lawyers and others (Johnston & Huggins, 2018; Katz, 2012; Mulder et al., 2014). Along with the increase in people's welfare, the consumption of goods other than basic needs is also increasing. Likewise with the need to consume service products that arise from people's needs to increase comfort and satisfaction.

Research conducted by Bandu with the title "Service quality on customer satisfaction at PT. PLN (Persero) Rayon Makassar Barat stated that State-Owned Enterprises (BUMN) in Indonesia are very influential in the development of the business world and society in running their business, because most of the government-owned companies have monopolized several business fields that regulate life and necessities of life. many people.

In Indonesia PT. PLN is one of the SOEs that provides services to the community, both the lower class and the upper class. PT. PLN (Persero) in Indonesia has long existed and developed to meet the needs of the community. PT. PLN (Persero) in Indonesia has two programs, namely postpaid electricity and prepaid electricity. Both programs have been enjoyed by people

throughout Indonesia, including in Makassar City (Damarta et al., 2021; Nabunome & Prihatminingtyas, 2016; Novianti, 2019; Sulaiman et al., 2019).

PT. PLN (Persero) provides many services to the community including new electricity installation services, additional electrical power, street lighting providers and electrical disturbance services both in offices, homes, companies, hospitals, schools, parks and others. PT. PLN (Persero) must be able to provide the best service or even provide excellent service to the community because it will create satisfaction for customers (Absori & Ramdani, 2020; Susilawati, 2016; Susilo, 2014).

Electricity is a source of life for people who have an important function as lighting and energy in all daily activities because this modern era is an era of all-electricity. Human dependence on electricity needs is caused because electrical energy can be converted in other forms such as electrical energy into heat energy (Ali et al., 2019; Montoya et al., 2017; Samani & Samani, 2012). Electricity is used to drive industrial equipment, banking, households, companies, hospitals to education.

Customer satisfaction is a requirement for companies to survive and is very important because by maintaining customer satisfaction it will create a good image for the company itself, as well as a good relationship between the company and customers. Customer satisfaction is the key to the success of a company. The higher the level of customer satisfaction, the higher the image or success of the company in the eyes of customers or even the company can get good trust in the eyes of the government.

According to a brief observation that has been made since two years ago, precisely in Makassar City, there are several problems in the form of service delays, uncertainty of service time and cost, illegal electricity to certain people who take advantage of the situation to take advantage of themselves by collecting a percent in every house. when carrying electricity payment receipts, which is certainly detrimental to customers and PLN itself. This phenomenon will cause negative thoughts from customers.

Customer service is an important element in efforts to increase customer satisfaction, therefore a company must provide excellent service to customers. In meeting customer needs which is an important goal for PT. PLN (Persero) in Makassar City in meeting the needs, desires and customer satisfaction depends on the quality of services provided by PT. PLN (Persero) to consumers (Khartabiel & Saydam, 2014; Ramanathan et al., 2017; Shamsudin et al., 2010). Therefore PT. PLN (Persero) in Makassar City must be able to provide the best service to customers.

METHOD

This study uses a quantitative approach to process the data obtained from the research location which is data in the form of numbers (Quick & Hall, 2015). The method used is a survey method by examining a relatively large population by determining the number of samples from the population studied. This method is carried out by distributing questionnaires/questionnaires and documentation. The design of this relationship research is quite simple because it only collects scores of two variables, namely the service quality of PT. PLN (Persero) and customer satisfaction

then calculate the correlation coefficient. The subject of this research is the electric customer of PT. PLN (Persero) in Makassar City with a tariff of 900 VA for household customers. While the object of this research is the service of PT. PLN (Persero) in Makassar City.

RESULTS AND DISCUSSION

Research result

Characteristics Respondent

Based on results collection data which is obtained through questionnaire given to customers of PT. PLN (Persero) District of Makassar City , then you can know the characteristics of each customer. Characteristics/identity respondent this based on type sex, profession, education, amount occupant house, usage electricity, and places of payment.

Table 1. Type Sex Respondent

Type Sex	Frequency (f)	Percentage (%)
Man	52	52
Woman	48	48
Total	**100**	**100**

Source: data processed from questionnaire study

Based on gender, respondents were dominated by customers which male gender as many as 52 people with a percentage of 52 percentand the rest is the respondent as many women 48 person or 48 percent. Amount respondent the man who more compared to female respondents.

Table 2. Education Respondent

Education	Frequency (f)	Percentage(%)
Primary school	6	6
Junior high school	10	10
Senior high school	39	39
Diploma	13	13
Bachelor	32	32
Total	**100**	**100**

Source: data processed from questionnaire study

Based on education final which owned respondent, could seen that most of the respondents, 39 or 39 percent of them graduated from high school, 32 people or 32 percent

bachelor, Diploma 13 people or 13 percent, 10 people or 10 percent among them graduated from middle school and 6 people graduated from elementary school or 6 percent.

Table 3. Type Profession/Job Respondent

Work	Frequency (f)	Percentage (%)
Student/Student	19	19
Employee/Employee	36	36
Entrepreneur/Entrepreneur	23	23
Etc	22	22
Total	**100**	**100**

Source: data processed from questionnaire study

From data table on is known characteristics respondent which most dominant that is employee/employee as many as 36 people or 36 percent, followed Entrepreneurs/Entrepreneurs as many as 23 people or 23 percent, then others as many as 22 people or 22 percent and lastly 19 students or 19 percent.

Table 4. Amount Resident House

Amount householder	Frequency(f)	Percentage(%)
1-2 person	8	8
3-5 person	62	62
6-9 person	26	26
>10 person	4	4
Total	**100**	**100**

Source: data processed from questionnaire study

From data table on is known characteristics respondent which most dominant that is 3-5 person as much 62 person or 62 percent, followed 6-9 people, as many as 26 people or 26 percent, then 1-2 people as many as 8 people or 8 percent and finally above 10 residents of the house as many as 4 people or 4 percent. The number of occupants of the house owned somebody show para customer of course most of they which inhabited 3-5 people.

Table 5. Usage Electricity Respondent

Usage Monthly Electricity	Frequency(f)	Percentage(%)
Rp 0 – IDR 50,000	19	19
IDR 51,000 – IDR 100.000	49	49
Rp 101,000 – RP 200,000	21	21
Rp 201,000 – RP 300,000	11	11
Rp 301,000 – RP 400,000	0	0
>Rp 500,000	0	0
Total	**100**	**100**

Source: data processed from questionnaire study

From data Table in on could is known characteristics respondent based on frequency usage electricity per month, Rp 51,000 – Rp 100,000 as much 49 person or 49 percent, Rp. 101,000 - Rp 200,000 as much 21 person or 21 percent , Rp 0 – IDR 50,000 as much 19 people or 19 percent , Rp 201,000 - Rp 300,000 as much 11 person or 11 percent, Rp 301,000 – Rp 400,000as many as 0 people or 0 percent and > Rp.500,000 as many as 0 people or 0 percent.

Table 6. The place Payment Electricity

The place electricity payment	Frequency(f)	Percentage(%)
Counter payment PLN	35	35
Bank	6	6
ATM	10	10
Office Post	20	20
Etc	29	29
Total	**100**	**100**

Source: data processed from questionnaire study

Based on the place of payment for electricity, most respondents choose pay at the PLN payment counter (payment agent) as many as 35 people or 35 percent, 29 people or 29 percent chose the other. as much as 20 person or 20 percent choose pay in Office Post, as much 10 person or10 percent chose ATM and as many as 6 people or 6 percent chose Bank. Amount respondents who pay at the PLN payment counter are more than on which other.

Test Validity Data

Test the validity using the formula and the help of SPSS obtained results test validity questionnaire as attached. From table test validity (Appendix) it can be seen whether the question items are valid or invalid. From table the could is known that everything valid for variable *Tangible, Reliability, Responsiveness, Assurance, Empathy, Desire Service* and *Adequate Service* because score r count more big from score r table= 0.195. Items that have the highest validity

are instrument item number 16 with a correlation coefficient of 0.735 and the lowest is instrument item number 23 with a correlation coefficient of 0.432.

The highest indicators of the average number of correlation coefficients on the service quality variable are Tangibel with a correlation coefficient of 0.68675 , then responsiveness (0.68475), Empathy (0.67375), Assurance (0.641) and the last is reliability (0.626).). Meanwhile, the highest customer satisfaction variable is Adequate Service with a correlation coefficient of 0.6975 and Desire Service with a correlation coefficient of 0.6225.

In the Service Quality indicator, the highest Tangible instrument number is number 2 (0.722), the highest reliability is item number 3 (0.683), the highest responsiveness is item number 3 (0.720), the highest assurance is item number 4 (0.735) and the highest empathy is item number 2 (0.717). While on the customer satisfaction indicator, the highest Desire Service is item number 1 (0.676) and the highest Adequate Service is item number 2 (0.732).

Data Reliability Test

Reliability analysis is the level of confidence in the results of a measurement. Measurements that have high reliability are measurements that are able to provide reliable (reliable) measurement results. Although theoretically the magnitude of the reliability coefficient is around 0.00 to 1.00 , in reality the coefficient of 1.00 is never achieved in the measurement.

The reliability test using the Cronbach Alpha formula with the help of SPSS obtained the results of the questionnaire reliability test as attached. The recapitulation of the questionnaire items from the reliability test results is shown in the following table:

Table 7. Recapitulation Results Test Reliability

Category	Score	Information
Quality Service	0.852	Reliable
Satisfaction Customer	0.725	Reliable

Source : data processed through SPSS with enter items score questionnaire.

The questionnaire instrument test in Table 1.7 is declared reliable because the value obtained exceeds the standard value of 0.64 and below 0.90. This reliability test provides an indication that the reliability of the questionnaire used is highly correlated and accepted. To support customer satisfaction, one of the efforts made by every company, especially companies engaged in services, really needs to provide the implementation of service quality, because with an increase in service quality, it will be able to affect customer satisfaction.

In improving the quality of customer service at PT. PLN (Persero), it is necessary to analyze the quality of service. It aims to be able to see most of the influence of the quality of services provided by PT. PLN (Persero). The dimensions of service quality include: Tangible, Reability, Responsiveness, Assurance, and Empathy

1. Proof physique (tangible)

show ability location company where evaluate aboutCondition of building equipment and physical equipment is a form of evidence real of possibility the high quality of service provided PLN (Persero) to customers. This research uses 4 items questionnaire on*Tangible* indicator . for measure perception consumers regarding physical evidence . Results response to tangible could explained on The following table this :

Table 8. Indicator Percentage *Tangible*

No	Indicator	Score					Quantity	%
		SS	S	RG	TS	STS		
1	Appearance officer which neat	53	40	4	3		443	25.25
2	Means and infrastructure complete	31	56	13			418	23.83
3	Condition building environment which clean and comfortable	54	38	8			446	25.42
4	Area land parking available	53	41	6			447	25,48
	Total						**1754**	**100**
	Average							**4.38**

Source: Data processed from questionnaire indicator *Tangible*

Frequency distribution in table above 1.8 indicates that some Most of the respondents have *Tangible* . The indication is shown that 38 (38 percent) who stated strongly agree and an average of 4.38 . Number of items the most is item number 4, namely the parking area at the PLN office available.

2. Reliability (reliability)

Reality show ability company for give prompt, accurate, and satisfactory service. This study uses 4 itemsreliability questionnaire to measure customer perceptions of reliability. Results response to reliability could explained on The following table this:

Table 9. Percentage of Realibility Indicator

N o	Indicator	Score					Quantity	%
		SS	S	RG	TS	STS		
1	Timely registration	50	44	6			444	25,40
2	Complaint servicereliable	40	56	3	1		434	24.82
3	Billing info according to payment	41	54	3	2		434	24.82
4	Recording error as soon as possible will checked repeat	43	50	7			436	24.94
	Total						**1748**	**100**
	Average							**4.37**

Source : data processed from questionnaire *Reality* indicator

Scatter frequency on table on 1.9 show that part Most of the respondents have demonstrated reliability that 37 (37 percent) who agree and an average of 4,37 . _ The most number of items many is number 1 or service registration in the office PLN on time .

3. *Responsiveness*

Responsiveness is gift service to customer withfast and responsive. This study uses a 4-item responsiveness questionnaire for measure perception customers can be seen as follows:

Table 1.10 Percentage Indicator *Responsivenss*

N o	Indicator	Score					Quantity	%
		SS	S	RG	TS	STS		
1	Readiness of serving officers customer	56	42	2			454	24.63
2	Officer fast respondcustomer	44	50	5	1		437	24.67
3	Clear information and easy to understand	51	40	6	2	1	438	24.73
4	Willingness to helpcustomer	45	52	3			442	24.04
	Total						**1771**	**100**
	Average						**4.42**	

Source : Data processed from questionnaire *Responsivenes* indicator

Scatter frequency on on 1.10 show that part bigrespondents have *Responsiveness* . The indication is shown that 42 (42 percent) who agree and an average of 4.42 which means that part biggest from respondent (employee) by average have *Responsiveness* . Most respondents chose Strongly Agree on the questionnaire question.

4. *Assurance (* guarantee)

Assurance shows knowledge, courtesy and trustworthiness owned by service providers. This study uses 4 items *assurance* questionnaire to measure customer perceptions of *assurance* . Results response to *assurance* could explained on table following this :

Table 11 Percentage *Assurance* Indicator

N o	Indicator	Score					Qua ntity	%
		SS	S	R G	TS	STS		
1	Giving trustto customer	49	46	5			444	25,15
2	Able to answer any customer inquiries	46	48	6			440	24.92
3	Customer feel safe in to o do transaction	42	54	3			437	24.75
4	The queue that regular	52	42	4	2		444	25,15
	Total						**1765**	**100**
	Average							**4.41**

Source : Data processed from questionnaire *Assurance* indicator

Scatter frequency on table on 1.11 shows that part Most of the respondents have *assurance* . The indication is shown that 41 (41 percent) who stated strongly agree and an average of 4.41 which means that part biggest from respondents by average have *Assurance* .

5. Empathy

Question in indicator Empathy about concern and attention to customers. This study uses a 4-item empathy questionnaire to measuring consumer perceptions of the attention given PLN (Persero) to the Customer. The results of responses to *empathy* can be explained in the table the following :

Table 12. Indicator Percentage *Empathy*

N o	Indicator	Score					Quantity	%
		SS	S	RG	TS	STS		
1	Understand needs Specific customer	49	47	3	1		444	25.04
2	Treat customer full attention	46	49	5			441	24.87
3	Easy contacted customer	57	38	5			452	25.49
4	Not differentiate status social customer.	41	55	3	1		436	24.59
	Total						**1773**	**100**
	Average							**4.43**

Source: Data processed from questionnaire *Empathy* indicator

The frequency distribution in the table above 1.12 shows that some of the big respondents have *Empathy*. The indication is shown that 43 (43 percent) who stated strongly agree and an average of 4.43 which means that most of the respondents have on average *Empathy* . Items questionnaire which has the most number is easy to contact by customer with how to call to PLN with *call center* 123. Analysis satisfaction customer PT. PLN (Persero) to gift service which given could is known through indicator *Desire Service* and *Adequate Service* , for for further details there is on table following:

Quality Service

From data percentage Quality Service could is known that which choosing the most answers on the *Tangible indicator* is a question item number 4 as much 447 or 25,48 percent. On indicator *Reality* the most is on item number 4 as much as 436 or 24.94 percent. On indicator *Responsiveness* is on item number 1 as much as 254 or 25.63 percent. On indicator *Assurance* which most many is on items question number 1 and4 as much 444 or 25,15 percent. And on indicator the *empathy* mostmany is an item question number 3 as much as 452 or 25.49 percent.

Quality service on PT. PLN (Persero) in Makassar city goodbecause percentage from quality service have values which tall orpercentage which tall. From results the could is known that indicator the highest quality of service is Empathy of 4.43 or 43 percent, which means that care and attention is needed by customers in performing the required services.

Customer satisfaction

From the data, it can be seen that those who chose the most answers on the Desire Service indicator were item numbers 1 and 3, amounting to 447 or 25.42 and on the Adequate Service indicator, item number 1 was 459 or 25.33 percent. From these results it can be seen that the indicator on customer satisfaction which has the highest average percentage is Adequate Service of 4.53 or 53 percent. Customer Satisfaction at PT. PLN (Persero) in Makassar City is good because Adequate Service (customer expectations after being given service) is greater in value than Desire Service (customer expectations before being given service) and the value of Customer Satisfaction is higher than Service Quality, which means that customers in Makassar City are very satisfied with the service. or the performance of service providers (PT. PLN) compared to customer expectations.

Recapitulation of Simple Regression Analysis Results

To find out how much influence the Service Quality of PT. PLN (Persero) on Customer Satisfaction in Makassar City can be known through the recapitulation of the results of simple regression analysis. Based on the research data collected, both the dependent variable (Y) and the independent variable (X) were processed using the SPSS 16 program (attached).

The value of the correlation/relationship (R) is 0.812 and is explained that big percentage influence variable Satisfaction Customer to Service Quality is called the coefficient of determination which is the result of squared R. of these results obtained R^2 of 0.660 which contains definition that influence quality service to satisfaction customer is 66 percent and the other 34 percent is influenced by factors other outside the variable Service quality.

Table 13. Analysis Regression Simple

<table>
<tr><td colspan="7" align="center">Coefficients ᵃ</td></tr>
<tr>
<td></td>
<td></td>
<td colspan="2" align="center">Unstandardized Coefficients</td>
<td colspan="1" align="center">Standardized Coefficients</td>
<td></td>
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<tr>
<td colspan="2" align="center">Mode 1</td>
<td align="center">B</td>
<td align="center">Std. Error</td>
<td align="center">Beta</td>
<td align="center">t</td>
<td align="center">Sig.</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3,472</td>
<td>2,343</td>
<td></td>
<td>1.482</td>
<td>.142</td>
</tr>
<tr>
<td></td>
<td>Service quality</td>
<td>.366</td>
<td>.027</td>
<td>.812</td>
<td>13,791</td>
<td>.000</td>
</tr>
</table>

a. Dependent Variables: Customer satisfaction

Based on data study good for variable free (Quality service) as well as the dependent variable (Customer Satisfaction) which is processed by use rock program SPSS 16 (Attached), so obtained results calculation simple linear regression as follows:

$Y = a + bX +$

$Y = 3,472 + 0.366X$

From equality it can explained that:

1. constant as big as 3,472 state that if no there is score QualityService so Customer Satisfaction value of 3,472.
2. The regression coefficient of Service Quality of 0.366 states that for every additional 1 value of Service Quality, the value of Customer Satisfaction increases by 0.366.
3. From these data, it can be seen that the t-count value is 13,791 with a significant value of 0.000 <0.05, then Ho is rejected and H1 is accepted, which means that there is a significant (significant) effect on the Service Quality variable on Customer Satisfaction.

Service Quality has a close relationship with Customer Satisfaction because every addition to the value of Service Quality, Customer Satisfaction also increases. If the service provided is not pleasant, then customer satisfaction will also be lacking. Customer service and satisfaction is the main goal in the company, without customers the company will not exist and the value of its assets is very small.

In the theory of Service Quality which consists of Tangibles in the form of the appearance of officers, facilities, equipment that meet standards or exceed customer expectations, Realibility or reliability of service officers at PLN is good, Responsiveness or the responsiveness of officers in serving customers is good, Assurance or guarantees provided have exceeded customer expectations, and Empathy or how to treat customers at the PLN office is good because it has the highest percentage. provided by the service provider.

CONCLUSION

The results of research on the effect of service quality PT.PLN (Persero) on customer satisfaction in Makassar City can be concluded as follows: (1) Service quality at PT. PLN (Persero) in Makassar City is very good because the percentage of service quality has high values or a high percentage. From these results, it can be seen that the indicator of the highest service quality is Empathy of 4.43 or 43 percent, which means that care and attention are needed by customers in providing services. (2) Customer Satisfaction at PT. PLN (Persero) in Makassar City is very good because Adequate Service (customer expectations after being given service) is greater in value than Desire Service (customer expectations before being given service) and the value of Customer Satisfaction is higher than Service Quality, which means that customers in Makassar City are very satisfied with service or service provider performance (PT. PLN) compared to customer expectations. (3) Service Quality has an effect on Customer Satisfaction because the value of t count is greater than t table (Terlampi) and the percentage is 66 percent, 34 percent is influenced by other factors outside the Service Quality variable. This research has shown that the influence of service quality of PT. PLN (Persero) on Customer Satisfaction in Makassar City. Thus the Service Quality indicator becomes the main component to increase customer satisfaction. Empathy is very influential on Customer Satisfaction

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