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## Effect of Service Quality towards Customers' Satisfaction at Telecommunication Company in Indonesia

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### **Abstract:**

*Tight competition in the business world at this time requires every company always to give more attention to the marketing aspect. This attention can be seen from the number of the provider who involves meeting the consumers' needs. The telecommunications industry is a fast-growing business. In Indonesia, some telecommunication operators are also experiencing intense competition with both local and global companies. The ability to meet customer needs is essential. This study aims to see how the influence of quality service hopes customer satisfaction in a telecommunication company in Indonesia. The dimension of quality used includes five dimensions that are tangibles, reliability, responsiveness, assurance, and empathy. Measurement variable use questionnaire with the Likert scale from 1 (strongly disagree) to 5 (strongly agree). Statistical analysis used is the simple linear regression. The sampling technique was purposive random sampling (104 respondents). The result of data processing shows that there is the influence of quality service to customer satisfaction. The dimension of empathy receives the lowest response. On the contrary, assurance dimension has the highest answer.*

**Keywords:** Global competition, satisfaction, service quality, telecommunication industry

### **1. Introduction**

Tight competition in the business world at this time requires every company always to give more attention to the marketing aspect. This effort can be seen from the number of producers who involve themselves in every effort to meet the consumers' needs. The era of globalization demands keen business competition in both the domestic and international/ global markets (Adeloka & Sergi, 2016; Peng, 2016).

Quality of service is a unique phenomenon because the dimensions and indicators can be different from the people involved in the company (Hill & Brierley, 2017). Quality of service refers to the level of service excellence in meeting the needs and demands of every consumer. Thus, what is meant by the service quality is a process of service from producers to consumers that deemed qualified; it can meet the needs and provide a sense of satisfaction to consumers. Therefore, the understanding of the customer behavior is critical to increasing the excellent service of the business (Savva et al., 2017; Kuo et al., 2009).

The purpose of a company's business is to create and retain consumers to become customers. Customers must be satisfied. If they are not happy they will leave the company and the consumer will become the customers of the competitor, this can indeed lead to decrease in sales and ultimately can reduce the company's profit that can cause losses (Kuo et al., 2009; Johnson & Sirikit, 2002). Today, the need for information becomes very important in developed countries and developing countries such as Indonesia.

Competition among telecommunication companies is very tight (Arasa & Githinji, 2014). Every telecommunication company is always trying to develop a strategy to get a positive and best response from customers as what to be desired. The success of the telecommunication business in its service is not solely determined by the service factors in which they have many employees, but more emphasis on good cooperation relationship between the company and its service to customers (Kim et al., 2004). In fact, many complaints addressed to the company service either complaint caused by service error or customers dissatisfaction with the product they used.

This study was conducted at the telecommunication company in Indonesia especially at Yogyakarta branch. In January 2017, it obtained the most complaints from customers, which were 24,117 complaints. There was a considerable decrease in the number of complaints in April and August which are 22,104 and 8,555 complaints. At the end of December, the number of complaints increased to 23,850 complaints. It gives an idea that there are still many consumers who are not satisfied towards the service and product of this company. Every customer must have the desire to get the best service. This requirement

becomes an essential task for marketing management to examine the characteristics of products and services being required by their customers.

## 2. Research Method

The research was conducted in Yogyakarta branch of the certain telecommunication business operated around Indonesia. The research design was quantitative research. Independent variable in this research was service quality. The dependent variable in this research was consumers' satisfaction. The research population was the customers as much as 100 people. The sampling technique is nonprobability sampling, which is each member does not have the same opportunity to be selected as the sample.

The questionnaire was used to measure the service quality (Likert scale consists of 21 questions) and customer satisfaction (Likert scale consists of 18 items). Likert scale is the scale used to measure attitude, opinions, and perceptions of a person or group of people about social phenomena. In the questionnaire, the factors of tangible, reliability, responsiveness, assurance and empathy. Each question was provided five alternative answers, which were strongly disagreed (SD), disagreed (D), neutral (N), agreed (A) and strongly agreed (SA).

The questionnaires of customer service quality and customer satisfaction refer to five dimensions of service quality (Zeithaml et al., 1990), i.e., tangibles, reliability, responsiveness, assurance, and empathy. Tangible is the appearance of physical facilities, equipment, personnel, and communication materials. Reliability is the ability to perform the promised service dependably and accurately. Responsiveness is the willingness to help customers and provide prompt service. Assurance is the knowledge and the courtesy of employees and their ability to convey trust and confidence. Empathy is the caring, individualized attention the firm provides its customers. The questionnaire of customer service quality consists of 21 items, i.e., tangibles (4 items), reliability (4 items), responsiveness (4 items), assurance (4 items) and empathy (5 items). The questionnaire of customer service satisfaction consists of 18 items.

Data analysis in this research was data quality test consisting of validity test and reliability test. Data analysis technique was the simple linear regression. Simple linear regression analysis is used when comprised of one independent variable and one dependent variable. Calculation of regression analysis in this research was by SPSS for Windows.

## 3. Results and Discussion

The validity test is by-product moment correlation method, which is by correlating the score of answers obtained on each item. Validity test can be known by comparing between calculated correlation ( $r$  calculated) and table correlation ( $r$  table= 0.361) of product moment. If  $r$  calculated is more significant than  $r$  table and positive value then the item or question or indicator was valid. From the data calculation, the value of  $r$  for all items was higher than 0.361. Therefore all items can be used as the questionnaire.

The reliability test is used to indicate the stability and consistency of the concept of instrument measurement or measuring instrument so that the measured values do not change in a particular value. Reliable data in research instruments means that data can be trusted. The reliability test in this study is by Cronbach's Alpha value with provision if alpha value more than 0.60 then the instrument is reliable. Reliability test results found that the values were 0.949 (service quality) and 0.929 (customer's satisfaction). Based on the results of reliability tests, it can be seen that the value of coefficient Cronbach's Alpha on each variable is higher than 0.60, then all the questions in the research variable are reliable.

The research data was collected by distributing 104 questionnaires to the research respondents. The description of the respondents' condition explainabouts the respondents regarding the analysis of research variable. The respondent characteristic data observed in this research is based on respondents' gender, duration of becoming customer, and job. The frequency distribution of respondents can be seen in the following table.

| Characteristics of Respondents     | F   | %    |
|------------------------------------|-----|------|
| Sex:                               |     |      |
| Male                               | 56  | 53.8 |
| Female                             | 48  | 46.2 |
| Duration of becoming the customer: |     |      |
| One year                           | 10  | 9.6  |
| 1-5 years                          | 87  | 83.7 |
| > 5 years                          | 7   | 6.7  |
| Job:                               |     |      |
| Student                            | 15  | 14.4 |
| Housewife                          | 2   | 1.9  |
| Merchant                           | 2   | 1.9  |
| Private Employee                   | 28  | 26.9 |
| Entrepreneur                       | 8   | 7.7  |
| Civil servants                     | 10  | 9.6  |
| Others                             | 39  | 37.5 |
| Total                              | 104 | 100  |

Table 1: Frequency Distribution of Respondent Characteristics

Based on Table 1 above, it shows that from 104 respondents, as many as 56 respondents (53.8%) were male. A total of 87 respondents (83.7%) had been customers for 1-5 years, and as many as 39 respondents (37.5%) had other variety of jobs.

Description of research variables can be used to determine the description of each research variable presented with descriptive statistics. Based on the primary data that has been collected, the source of information obtained is described concerning maximum value, minimum value, mean, and standard deviation. The calculation of descriptive statistics of each research variable can be seen in the following Table 2.

| Variable                    | N   | Minimum | Maximum | Mean  | Std. Dev |
|-----------------------------|-----|---------|---------|-------|----------|
| Service Quality (X)         | 104 | 41.0    | 102.0   | 74.41 | 12.41    |
| Customers' Satisfaction (Y) | 104 | 19.0    | 87.0    | 62.23 | 9.51     |

Table 2: Descriptive Statistics of Research Variables

Table 2 is the result of statistical test description of research data. From the descriptive statistics, the table can be described.

Results of data processing can be seen from the above table stated that the quality of service being studied has an average of 74.41 with a minimum value of 41.0 and a maximum value of 102.0. Results of the distribution frequency distribution can be seen in table 3 below:

| Category    | Interval Score       | Frequency | Percent |
|-------------|----------------------|-----------|---------|
| Very Low    | $X \leq 42.0$        | 1         | 1.0     |
| Low         | $42.0 \leq X < 56.0$ | 5         | 4.8     |
| Pretty Good | $56.0 \leq X < 70.0$ | 34        | 32.7    |
| Good        | $70.0 \leq X < 84.0$ | 42        | 40.4    |
| Very Good   | $X \geq 84.0$        | 22        | 21.2    |
| Total       |                      | 104       | 100     |

Table 3: Frequency Distribution of Service Quality

Based on Table 3, it showed that most of the service quality is in proper category as much as 42 (40.4%), while 1 (1.0%) is in the owdeficient category. The results of data processing can be seen from Table 4 stated that the customers' satisfaction being studied has an average of 62.23 with a minimum value of 19.0 and a maximum value of 87.0. The results of the frequency distribution can be seen in Table 4 below.

| Category    | Interval Score       | Frequency | Percent |
|-------------|----------------------|-----------|---------|
| Very Low    | $X \leq 36.0$        | 1         | 1.0     |
| Low         | $36.0 \leq X < 48.0$ | 4         | 3.8     |
| Pretty Good | $48.0 \leq X < 60.0$ | 35        | 33.7    |
| Good        | $60.0 \leq X < 72.0$ | 50        | 48.1    |
| Very Good   | $X \geq 72.0$        | 14        | 13.5    |
| Total       |                      | 104       | 100     |

Table 4: Frequency Distribution of Customer Satisfaction

Based on Table 4, most customers' satisfaction is in a good category as much as 50 (48.1%) while as much as 1 (1.0%) in the deficient category. Based on the criteria on Table 3 and Table 4, the result of the customer response for service quality and service satisfaction is shown in Table 5.

| Dimensions            | The Frequency of The Customer's Responses |     |             |      |           |
|-----------------------|-------------------------------------------|-----|-------------|------|-----------|
|                       | Very low                                  | Low | Pretty good | Good | Very good |
| Service quality:      |                                           |     |             |      |           |
| Tangibles             | 1                                         | 3   | 19          | 41   | 40        |
| Reliability           | 3                                         | 15  | 29          | 25   | 32        |
| Responsiveness        | 1                                         | 7   | 25          | 26   | 45        |
| Assurance             | 2                                         | 8   | 23          | 24   | 47        |
| Empathy               | 2                                         | 25  | 29          | 27   | 21        |
| Total                 | 10                                        | 53  | 164         | 316  | 87        |
| Percentage            | 2%                                        | 8%  | 26%         | 50%  | 14%       |
| Service satisfaction: |                                           |     |             |      |           |
| Total                 | 1                                         | 4   | 35          | 50   | 14        |
| Percentage            | 2%                                        | 9%  | 27%         | 53%  | 10%       |

Table 5: Customer Service Quality Data

Figure 1 shows the comparison responses between customer service quality and customer service satisfaction based on Table 5.

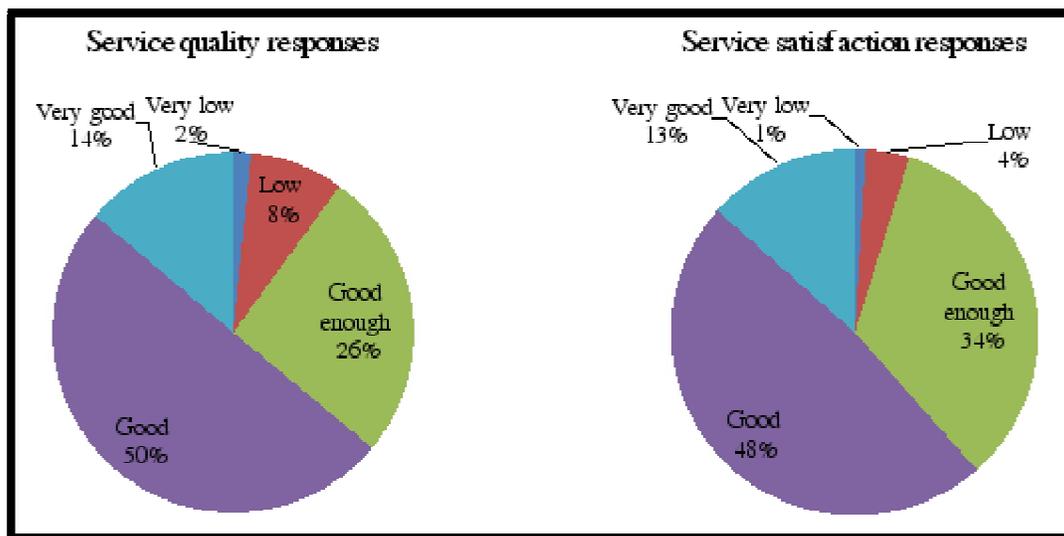


Figure 1: The Result of the Customer Service Quality and Customer Service Satisfaction

This research aims to determine the effect of service quality on customers' satisfaction. To answer the research hypothesis, a simple linear regression statistic test was performed. The hypothesis formulation being tested in this research is the service quality has a positive effect on customers' satisfaction. A criterion of the accepted hypothesis is that  $H_0$  rejected if the value of  $t$  calculated  $t$  higher than one of  $t$  table at significance value equal 0.05.

The result of the analysis was obtained regression coefficient value for positive service quality variable that indicating the service quality has a positive effect on customers' satisfaction. The coefficient value of 0.526, it means the increase in service quality of one unit will raise customers' satisfaction of 0.526. Value of  $t$  calculated was 9.552 ( $p = 0.000 < 0.05$ ). It can be said that service quality influence to customers' satisfaction, thus the hypothesis accepted.

The coefficient of determination showed the percentage of variation of independent variables that can be explained by dependent variables. The result of the research shows that the coefficient of determination is (adj.R<sup>2</sup>) = 0.467 indicates that 46.7% of customers' satisfaction can be explained by service quality and the rest 53.3% influenced by other factors. Thus the hypothesis is supported. The result of the calculation using simple linear regression analysis is as Table 6.

| Variable        | Coefficient | Constants | R     | r <sup>2</sup> | t <sub>test</sub> | Sig.t |
|-----------------|-------------|-----------|-------|----------------|-------------------|-------|
| Service Quality | 0.526       | 23.068    | 0.687 | 0.467          | 9.552             | 0.000 |

Table 6: Simple Linear Regression Test Result

The result of the analysis is the service quality coefficient to customer satisfaction equal to 0.526, and the constant number equal to 23.068. Based on these results can be composed simple linear regression line equation as follows,

$$\text{Customers' Satisfaction} = 23.068 + 0.526 \text{ Service Quality}$$

The meaning of the equation is that if service quality rises 1%, then customer satisfaction is predicted to rise by 0.526%.

The research results showed that as many as 42 (40.4%) of respondents feel the service quality is good. These results indicate that most of the service quality provided by the company was in the good category. Quality of service is how far the difference between the customers' expectations and the reality of the services they received. Service Quality can be identified by comparing customers' perceptions of the services they received with the service they expected.

Good service quality means that respondents have felt the service is following what they expect and want. Respondents think that technicians who in charged and served customers look neat, while the customer service has also given serious attention to customers who have difficulty in operating.

The research results showed that as many as 1 (1.0%) is in the category of very less. It means there are respondents who feel that the service quality is very less. One of the reasons respondents think that the service quality was very low due to the modem facility and network provided not following the prerequisites that need to exist on an internet connection. Also, respondents also feel that the company cannot provide clear and detailed information about other additional services.

Competition among telecommunication companies is very tight. Every telecommunication company is always trying to develop a strategy to get a positive and best response from customers as desired, one of them is to improve the quality of service. The company engaged in communication technology can improve the service quality by enhancing the competence of human resources or by improving product quality.

Previous research showed that human resources, adequate application, and public trust are factors that influence in improving the quality of internet service. Therefore, the need for additional employees in the field of technicians that have experience and competency, marketing officers must be as determined, and the price must be more adjust again.

The research results showed that customer satisfaction as many as 50 (48.1%) are in a good category. It showed that most customers have a high level of satisfaction in every aspect. Hill & Alexander (2017) defined customer' satisfaction as the feeling of pleasure or disappointment of someone that emerges after comparing the performance (outcome) of the thought product to the expected return (or issue). It means that most customers feel the performance and the results corresponding to what they expected.

Customers with good satisfaction or high satisfaction by the service staff, where the team is ready when they are needed, the way treats them following the expectation and work by their expectation. The skills and competence the staff may arise because of the trust and confidence in the products quality provided to customers.

The trust of customers will increase customers' satisfaction with the products and performances. The customers' trust is one of the factors that significantly affect the customers' satisfaction toward telecommunication in other branches. The low satisfaction can be because respondents do not feel the results of the performance maximally, and not following what they expected (Hill & Alexander, 2017).

One of the efforts that can be done by the provider is by improving products quality to increase trust and satisfaction of its customers. Research conducted showed that product quality variables have the significant and positive effect on customers' satisfaction, whereas the better the quality of the product, the customer satisfaction is also increasing (Kuo et al., 2009; Kim et al., 2004; Savv as et al., 2017).

Quality of service affects customers' satisfaction. These results indicate that the assessment to predict customers' satisfaction can be done through the assessment of service quality factors. Each increase in service quality of 1% predicted to increase customers' satisfaction by 0.526%. Based on these results, it indicates that the service quality variable becomes the support force to improve customers' satisfaction. The service quality and products quality are related to the requirements of the customers (Hill & Alexander, 2017; Hill & Brierley, 2017). Thus, a product is said to be qualified for someone if the product can meet his/ her needs. Customers who were fulfilled of their needs than can be supposed that the customers are satisfied.

The coefficient of determination shows the percentage of variation of the independent variables that can be explained by the dependent variables. The result of the research shows that the coefficient of determination (adj.R<sup>2</sup>) = 0.467 indicates that 46.7% of customers' satisfaction can be explained by service quality and the rest 53.3% influenced by other factors. It is known that the quality of service determines how much satisfaction is perceived by the customers (Hill & Alexander, 2017).

This is in line with the opinion of Akbar & Parves (2009) that consumers' satisfaction can be influenced by several factors such as product quality, service quality, emotional, price, and cost.

Based on the results of the research and previous researches (Akingbade, 2014; Kim et al., 2004; Arasa & Githinji, 2014), as well as theories provide a depiction on the correlation between service quality and customer satisfaction, thus when all employees are work by paying attention to service quality and also good product quality then it can increase customers' satisfaction.

#### 4. Conclusion and recommendations

Based on various testing and data analysis from this research can be obtained some conclusions. The quality of service affected positively and significantly to customers' satisfaction proved by positive value at t calculated (9.552) and significance value (0.000). The coefficient value of the regression equation was 0.526; it means the increase in service quality of one unit will raise customer satisfaction of 0.526. The service quality had the average value equal to 74.41. The majority of service quality is in the good category of 42 (40.4%) while 1 (1.0%) is in the very low category. The customer satisfaction had the average value equal to 62.23. Majority customers' satisfaction is in the good category of 50 (48.1%).

Based on the results of research and conclusion above, it can be suggested to the company related to service quality; they need to improve all aspect of service quality which is the important factor influencing to consumers' satisfaction. Service quality provided by employees to customers is considered good enough, and this should be maintained and improved, by the employees should be more sensitive to the needs and desires of consumers, as well as develop the ability to communicate well between employees with consumers.

These efforts are intended to make consumers feel comfortable and satisfied using the mobile product, and willing to continue to use the product and service in fulfilling the communication technology and information they need. The results of this research can be used as a reference source for further research to develop topics related to the influence of service quality to customers' satisfaction level.

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