Effect of Service Quality and Satisfaction Level on Consumer Loyalty of MRT Trains
(Case Study in Ciputat Area)

Djoko Hananto*, Sampor Ali
Faculty of Economics and Business
Universitas Muhammadiyah Jakarta
Jakarta, Indonesia
*joko1967@yahoo.co.id, sampor_ali@yahoo.com

Abstract—Research aiming for knowing influence quality service and level satisfaction in a manner partial or simulant to loyalty consumer, sample in research this is all consumer who use service the train MRT in Ciputat, sample taken with use purposive sampling technique are required. Criteria sample is consumer who use services the train MRT, and data collection is done with spread questionnaire to 96 respondents. Met hod the analysis in research this is with use analysis multiple and processed data with SPSS version22. Result this to show that quality service and satisfaction level take effect positive and significant to Loyalty Consumers. While the result others to show Quality service and Satisfaction Level in manner simulant and influence Loyalty Consumers.

Keywords: quality service, level of satisfaction, loyalty consumer

I. INTRODUCTION

Human activity is currently increasing in line with the increasingly high needs, the increasing number of vehicle conditions that make traffic jams increase and demands for productivity are increasing.

Vehicles that currently as a means of transport in humans to places have become an indispensable necessity at this time. Of course the need for vehicles needs to be followed by facilities from vehicles and road facilities to be passed into human consideration in choosing the vehicle to be used.

Seeing the increasingly congested road conditions, then humans in deciding the use of transportation modes will consider in terms of time, in terms of availability, in terms of cost, in terms of safety and comfort. This situation ultimately led to increasingly intense competition between the modes of transportation used.

Vehicles that are made are used as private vehicles and some are made as public vehicles. Public vehicles can certainly be chosen by consumers by taking into account several conditions, namely travel time, costs, services provided in addition to the level of safety and comfort that will be enjoyed by consumers as users of these modes of transportation.

Large cities in Indonesia, especially Jakarta and its surroundings, the choice of land transportation modes that are used as public transportation modes are very high priority for consumers. The government also realizes that using public transportation will reduce the burden of the road being passed and reduce fuel consumption. With these considerations, the government together with the private sector pay attention in the procurement and services for the use of land transportation facilities such as buses, travel, public transport cars, taxis or trains.

Transportation modes that run on rails such as trains that have been around for a long time become a mode of transportation that still occupies the top level in terms of the amount that can be transported, the costs incurred. In Jakarta and several regions, the government has now developed a mode of transportation that runs on the rail by naming other than trains, also called KRL (Electric Train), MRT (Mass Rapid Transit) and LRT (Light Rail Transit). The difference in the types of carriages on the number of carriages carried, passenger capacity, target number of passengers targeted and crossings traversed.

The train that has its own track and the cost is not too expensive to increase public interest in using this mode of transportation. MRT (Mass Rapid Transit / Mode Raya Integrated) Jakarta is a new MRT in Jakarta as a new mode of transportation of trains serving destinations from the Lebak Bulus area to the Indonesian hotel back and forth where the area traversed is a dense area when using other land transportation modes such as buses, taxis, and other land modes. MRT in Jakarta is managed by PT. Jakarta MRT as a Regional Business Entity in this case is the Greater Jakarta Area. This makes PT MRT Jakarta must improve service quality and satisfaction levels to maintain public loyalty towards the use of MRT.

But when there is a mismatch in facilities and services people are reluctant to use the MRT, because people do not feel the satisfaction and expectations they expect. Although the use of this MRT service is a necessity for them, if the MRT service does not provide satisfaction and services that are not appropriate, the community will look for other alternatives in order to get comfort and suitability of facilities and services.
The main variable that determines customer satisfaction, namely expectations (what is expected) and perceived performance (services received), if the perceived performance is greater than expectations, the customer will be satisfied, on the contrary if the expectations are greater than the perceived performance, the customer is not satisfied.

Service is said to be quality or satisfying if the service can meet the needs and expectations of the community. If the community is not satisfied with a service provided, then the service can be ascertained to be of no quality or inefficient. Therefore service quality is very important and always focus on customer satisfaction.

Service quality is one part of the marketing management strategy. Service quality has become a dominant factor in the success of an organization. The quality development is very much driven by the conditions of competition between companies, technological advancements, and the economic and social stages of the community. Quality of service is a necessity that must be done by the company in order to be able to survive and still get the trust of customers.

To meet customer satisfaction in the service industry, service quality is very important for companies to be managed properly. Quality of service is a level of excellence to meet the desires of consumers. Good service quality starts from consumer perception, not from the company. Providing high quality services is a must to achieve customer satisfaction.

Customer loyalty is the result of an initial trial of a product that is strengthened through satisfaction so that it will lead to repeat purchases. Repurchase by consumers will certainly increase sales volume, which means it will increase company profits. This loyalty will be one of the goals that must be achieved by a company in retaining its customers from the invasion of similar competing companies.

Formulation of research problems:

- Is there quality of service to the loyalty of MRT train customers in the Ciputat area?
- Is there a level of satisfaction with the loyalty of MRT train customers in the Ciputat area?
- Is there a quality of service and level of satisfaction together with the loyalty of MRT train customers in the Ciputat area?

II. LITERATURE REVIEW

A. Marketing Management

Marketing management is the analysis, planning, implementation, and control of programs designed to create, build and maintain profitable exchanges with a view to achieving 3.

Marketing management is the process of analysing, managing and managing programs that include conceptualization, pricing, promotion and distribution of products, services and ideas designed to create and maintain profitable exchanges with target markets to achieve company goals according to Suparyanto [1].

B. Services

The service industry is currently a very large economic sector and growth is very rapid. The growth is caused not only by the emergence of new types of services, as a result of the demands and developments of the times. In terms of the context of globalization, the rapid growth of service businesses between countries is marked by the increasing intensity of cross-border marketing and the occurrence of alliances in various services in the world.

According to Payne, quoted by Hurriyati [2] that service marketing is a process of perceiving, understanding, stimulating and meeting the needs of specifically selected target markets by channelling the sources of an organization to meet those needs.

As such, marketing service management is the process of aligning an organization's resources with market needs. Marketing pays attention to the dynamic interrelationships between the company's products and services, the wants and needs of customers and the activities of competitors.

There are five service characteristics that distinguish them from Tipton [3],

- Intangibility. Services are different from goods, if the goods are objects, tools or objects, then services are actions, actions, experiences, processes, performance or effort. This causes the services cannot be seen, felt, smelled, heard and touched before being purchased and consumed.
- Inseparability. Goods are usually produced, then sold, and then consumed. Whereas services are generally sold first, then produced and consumed at the same time and place.
- Variability. Services are highly variable because they are non-standardized output, meaning that there are many variations in shape, quality, and type, depending on who, when, and where the service is produced.
- Perishability. Services are not durable and cannot be stored. Empty airplane seats, unoccupied hotel rooms, or unused telephone line capacity will pass or simply disappear because they are not stored.
- Lack of ownership. Is a basic difference between services and goods? In purchasing goods, consumers have full rights to the use and benefits of the product they bought. On the other hand, in purchasing services, consumers may only have personal access to a service for a limited period of time (e.g. hotel rooms, theatres, aviation services and education).

Dimensions of service quality according to Kotler [4] mentions five dimensions of service quality that must be met, namely:

- Tangibles. Namely the physical appearance of company services, such as the appearance of physical
facilities, equipment, personnel, cleanliness, tidiness and communication media.

- **Reliability.** Is the ability to provide the promised service immediately and satisfactorily?
- **Responsiveness.** Responsiveness of employees in providing the services needed and can finish quickly.
- **Assurance.** Includes knowledge, abilities, courtesy and trustworthiness that employees have, free from danger, risk and doubt.
- **Empathy.** Ease of relationships, good communication and understanding of consumer needs.

C. **Consumer Satisfaction**

Consumer satisfaction is the level of one’s feelings after comparing (the performance or results) that are felt compared to his expectations. Consumers can experience one of three general levels of satisfaction, namely if performance is below expectations, consumers will feel disappointed but if performance is in line with expectations consumers will feel satisfied and if performance can exceed expectations, consumers will feel very satisfied, happy and happy [5].

Customer satisfaction strategies according to 5 include:

- **Relationship Marketing.** Companies make a list of names that need long-term relationships that contain the frequency and amount of purchases.
- ** Superior Customer Service.** The company offers services that are superior to its competitors, through superior service the company concerned can differentiate higher prices on the product service. Superior companies achieve profits and a higher growth rate than competitors who provide interior services.
- **Unconditional Guarantees.** To increase customer satisfaction, companies can also develop Augmented Services for core services, for example by designing certain guarantees by providing good after-journal services.
- **Effective complaint handling.** Good handling of complaints provides an opportunity to turn someone, a dissatisfied customer into a satisfied customer, even a loyal customer.
- **Improved Company Performance.** The company seeks to monitor and measure customer satisfaction on an ongoing basis, provide education and training in communication, salesmanship, and public relations to consumer’s management and employees, incorporate an element of ability to satisfy into employee performance systems, and provide greater empowerment to employees in implementing his assignment.

D. **Consumer Loyalty**

A commitment that is firmly held to buy back a choice product or service in the future [4].

Customer loyalty as a customer commitment to a brand, shop, and supplier based on a very positive attitude is reflected in consistent repurchases [6].

III. **METHODS**

A. **Nature of Research**

This research uses associative research, namely Service Quality (X₁) and Satisfaction Level (X₂) variables on Consumer Loyalty (Y) of MRT trains in Ciputat area

B. **Data Sources**

1) **Primary data:** Primary data is a data source that directly provides data to data collection. Primary data collection in this study through the distribution of questionnaires and conducting interviews directly with parties related to research conducted by Sugiyono [7].

2) **Secondary data:** Secondary data is taken from data obtained from the second source or secondary source from the data needed to reveal the data needed, related to the title of the research that will be used as a basis in solving the problems faced.

C. **Data Analysis Technique**

The analysis technique used to analyse the data obtained at the same time to test the hypothesis that has been proposed in this study is to use a Likert scale. To obtain data on the effect of packaging and prices on the purchasing decision of Chowtime drinks. By giving a questionnaire or questionnaire consisting of questions or statements for variables X and Y and variables and given to 96 consumers (respondents).

D. **Data Analysis Method**

1) **Data Quality Test**
   - Validity test
   - Reliability Test

2) **Classic assumption test**
   - Multicollinearity Test
   - Normality test
   - Heteroscedasticity Test
   - Analysis Method

3) **Multiple linear regression analysis:** Multiple linear regression analysis is used to determine whether there is an influence of product diversity and product quality on purchasing decisions. The regression equation is as follows:

   \[ Y = a + b_1X_1 + b_2X_2 + e \]  

Information:

- \( Y = \) Buying decision
- \( A = \) Constant
- \( b_1 = \) Packaging regression coefficient
- \( b_2 = \) Price regression coefficient
- \( e = \) Error
4) Analysis of the determination coefficient (R2):

Hypothesis testing,

- T test (Partial)
- Test F (Simultaneous Test)

According to Ghozali [8], the F test basically shows whether all the independent variables included in the model have a joint influence on the dependent variable. Decision making is done based on a comparison of the calculated F value by looking at the level of significance, then comparing with the predetermined significance level (5% or 0.05). If the significance of F count is smaller than 0.05, then Ho is rejected, which means that the independent variables simultaneously influence the dependent variable.

IV. RESULTS AND DISCUSSION

A. Test Data Quality Instruments

1) Test validity: It is known from the data above because it is considered valid because the value of r count > 0.3610. Because all the data is verified as valid, then the instrument is tested using the data reliability test.

2) Test reliability:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Croan’ch Alpha</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service quality (X₁)</td>
<td>0.911</td>
<td>Reliable</td>
</tr>
<tr>
<td>Satisfaction Level (X₂)</td>
<td>0.942</td>
<td>Reliable</td>
</tr>
<tr>
<td>Consumer Loyalty (Y)</td>
<td>0.892</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

It is known from the data above that the instrument can be said to be reliable because the value of alpha croan’ch is more than 0.70 [8]. Then the data can be continued for further submissions.

B. Test of Classical Assumptions

1) Normality test:

Based on the normality test seen from Figure 1 on the Normal P-Plot graph the data distribution follows the diagonal line, and follows the direction of the diagonal line. This shows that the regression model is normally distributed.

2) Multicollinearity test: The multicollinearity test results can be seen the value of VIF (Variance Inflation Factor) of the two variables, namely Service Quality and Satisfaction Level is 4.760. The VIF value of both variables shows a number smaller than 10 or 4.760 <10. So it can be concluded that between the independent variables (independent) there is no multicollinearity problem in the regression model.

3) Heterokedacity test:

From the scatterplot it can be seen clearly the random points and scattered both above and below the number 0 on the Y axis. It can be concluded that there is no heteroscedasticity in the regression model, so that the regression model is feasible to be used in testing.

C. Multiple Linear Regression

The regression equation can be obtained from the standardized coefficient, this is because the measurement uses the same rating scale that is Likert, and so the equation is as follows:

\[
Y = 2.347 + 0.532X₁ + 0.540X₂
\]  

(2)

Information:

Y = Service Quality  
X₁ = Level of Satisfaction  
X₂ = Consumer Loyalty

Based on table I, the regression equation is obtained as follows:

- Constants of 2.347; meaning that if X₁ and X₂ value is 0 then Y value is 2.347.
- The regression coefficient for variable X₁ is 0.532, meaning that if the other independent variable X₂ has a fixed value and X₁ has increased by 1%, then Y will experience an increase of 2.347. A positive coefficient means that the effect of X₁ on Y. In fact, a good X₁ can directly affect consumers on Y.
The regression coefficient for variable X2 is 0.540; meaning that if the other independent variable (X1) has a fixed value and X2 has increased by 1% then Y will have an increase of 0.540. The coefficient is positive meaning X2 affects Y, in fact X2 will directly affect consumers against Y.

D. Determination Coefficient (R2)

Based on the output using the SPSS version 22 program the determination coefficient test results above indicate an Adjusted R2 value of 0.810, these results indicate that the variable service quality and level of satisfaction with the variable Consumer Loyalty of 0.814.

E. Statistical Test T

Based on the results, conclusions can be drawn:

1) Effect of service quality on consumer loyalty: Based on the results of the t test obtained t value of 3.601 is much greater than the value of t table 1.985 and the probability value (sig) of 0.001. This means that service quality has a positive and significant influence on Consumer Loyalty by $\alpha$ 5% (0.00 <0.05).

2) Effect of satisfaction level on consumer loyalty: Based on the t test results, the calculated t value of 5.901 is much greater than the t table value of 1.985 and the probability value (sig) of 0.000. This means that the level of satisfaction there is a positive and significant effect on Consumer Loyalty with $\alpha$ 5% (0.00 <0.05).

F. Statistical Test F

Based on the results of the simultaneous F test obtained the calculated F value of 3.09 or 203.666> 3.09. With a probability value (sig) of 0.000. This means that there is a positive and significant influence on Service Quality and Satisfaction Level on Consumer Loyalty simultaneously (together) with $\alpha$ 5% (0.00 <0.05).

V. CONCLUSION AND SUGGESTION

A. Conclusion

This study aims to determine the effect of service quality and level of satisfaction on the loyalty of MRT train customers in the Ciputat area. The respondents of this study were 96 customers. Based on the data that has been collected and tests that have been carried out on the problem using multiple linear regression, the following conclusions can be drawn:

- Based on the results of the t test obtained t value of 3.601 is much greater than the value of t table 1.985 and the probability value (sig) of 0.001. This means that service quality has a positive and significant influence on Consumer Loyalty by $\alpha$ 5% (0.00 <0.05).
- Based on the results of the t test, the calculated t value of 5.901 is much greater than the value of t table 1.985 and the probability value (sig) of 0.000. This means that the level of satisfaction there is a positive and significant effect on Consumer Loyalty with $\alpha$ 5% (0.00 <0.05).
- Based on the results of the simultaneous F test obtained the calculated F value of 3.09 or 203.666> 3.09. With a probability value (sig) of 0.000. This means that there is a positive and significant influence on Service Quality and Satisfaction Level on Consumer Loyalty simultaneously (together) with $\alpha$ 5% (0.00 <0.05).

B. Suggestions

Based on this research, the achievements of the research that have been done in order to be useful for companies related to the influence of service quality and level of satisfaction on customer loyalty and as a reference for companies to determine customer loyalty of MRT train service users in Ciputat and surrounding areas that enter the South Tangerang area are based on research that has been done.

REFERENCES