

# Satisfaction as Mediator in the Relationship between Service Quality and Image to Loyalty in the Retail Business

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**Abstract**—The purpose of this paper is to examine the relationship between the development of service quality, image, satisfaction, and loyalty to retail business customers in Yogyakarta. The survey was used to look at the relationships by collecting data through questionnaires. The sample was taken from 138 retail business customers in Yogyakarta for 6 months. Furthermore, the data were analyzed using multiple linear regression and hierarchical regression. This study found that service quality and image influence customer satisfaction. Customer satisfaction only mediates the relationship between image and loyalty. This research has implications for marketers that service quality is a variable that cannot be ignored in the retail business to make loyal consumers. But the image is another important consideration for marketers to make consumers loyal to retail.

**Keywords**—service quality; image; customer satisfaction; loyalty; retail

## I. INTRODUCTION

The retail industry in Indonesia faces competitive competition. This is due to the development of retailing and the emergence of transition of consumer shopping patterns. The industry grows to 31,4% per year as a result of significant boost in consumption growth [1]. The development of retail industry in Yogyakarta also has increased significantly, ranging from small to large scale retail. These retail growth patterns use many franchise formats. The intense competition is caused by the fact that these retails no longer compete in the same retail format (like supermarket no longer competes with supermarket, but supermarket also competes with hypermarket, superstore, department store and even with minimarket). Competition can be won and customer loyalty can be maintained if each retailer can satisfy its customers.

A survey shows that there is anomaly in the retail business in Indonesia [2]. This is because retail faces significant pressure even though the macroeconomic condition of Indonesia is considered quite good. This can be seen from the data of Indonesia's Gross Domestic Product which has a growth of above 5% while the inflation rate is relatively low. Some observers argue that the decline in retail business in Indonesia is due to the weak purchasing power and the emergence of online business systems. However this opinion is

refuted because the real growth of public consumption is considered quite strong, which is about 5%. Even in 2017, the economic growth until the third quarter is still considered quite good that is 5.01% [3].

The offer of pick-up services is also indicated as the cause of fewer consumers to shop at the mall. Nevertheless, there are other consumers who still go to the mall just to not only shop but also to relax while hanging out, whether in a cafe or restaurant while chatting with colleagues. The malls that carry the concept of lifestyle and provide a lot of food and beverage are indicated to remain crowded with consumers. Therefore, besides the products, a good quality of service and image is considered by the consumers in choosing retail. Service quality that matches customers' expectations is indicated to have an effect on customer satisfaction. When customers get service below expectations, negative opinions and judgments will be created so that customers become dissatisfied. The consequences of this dissatisfaction will affect the desire of customers to reuse the products and services in the future.

In the study of the theory, it shows that there are five factors that need to get special attention to satisfy customers, they are: quality products, quality services, emotional, price, and cost [4]. The quality of services perceived by consumers will have a direct effect on consumer satisfaction or dissatisfaction [5]. A service quality reflects customer's perceptions of service dimensions which include reliability, responsiveness, assurance, empathy and tangible. Whereas according to Zeithaml et al., unpleasant experience will affect the subjective judgment of consumers so that consumers feel dissatisfied even though the service they receive is satisfying [6]. On the other hand, a pleasant experience will make consumers have a high tolerance for the company so that consumers feel satisfied even though the service provided is considered unsatisfactory. This is supported by studies which state that service quality has a positive and significant effect on customer satisfaction in the retail context [7,8].

Loyal customers are those customers who repurchase from the same service provider, as well as customers who recommend or maintain positive attitudes towards service providers [9]. There is a significant relationship between service quality and consumer loyalty [10]. In contrast, study

Chao et al., shows that service quality is not related to customer loyalty [11].

Every retailer also seeks to influence the customer's mind by displaying a good image. This is because the image has an impact on the customer's buying behavior. Customer experience is considered an important factor that also influences the customer's mind. Image is an important variable that positively and negatively affects marketing activities [6].

Consumers can develop perceptions of the company from the products and services offered and from interactions with company employees. Corporate image is considered important because consumers will use the image as a condition in their purchasing decisions. However, consumers can assess the company's image and move the image into a specific product. Positive corporate image will create positive expectations and negative corporate image will create customer uncertainty and risk [12].

Some studies indicate a relationship between image and customer satisfaction. The study Malik et al., shows that brand image has a positive and significant effect on customer satisfaction in the telecommunications sector in Pakistan [13]. Likewise, the study Yu et al., states that corporate brand image has an effect on customer satisfaction at Starbuck Coffee in Taiwan [14]. Furthermore, the study also show that image has an effect on customer loyalty [14,15]. However, the study Bowen and Chen states that customer satisfaction does not have a linear relationship with customer loyalty [16]. From previous studies wich show that there are still inconsistencies in the relationship between service quality and loyalty [10,11]. Furthermore, the image variable is partially related both to satisfaction [13] and loyalty [15]. Thus the current research is conducted to integrate the relationship between service quality and image with satisfaction and loyalty. This is because the relationship of these variables is relatively little studied, especially in the retail context.

## II. RESEARCH METHODOLOGY

### A. Research Variables and the Measurement

The variables of this study include service quality and image as independent variables, as well as customer loyalty as the dependent variable, with customer satisfaction as a mediating variable. Customer loyalty is measured using indicators adopted from Kandampully and Suhartanto, namely repurchase and recommendation [9]. Service quality is measured using five dimensions adopted from Parasuraman et al., that are reliability, responsiveness, assurance, empathy and tangible [5]. Image is measured using indicators adopted from Kandampully and Suhartanto, namely the attribute and holistic dimensions [9]. Then, customer satisfaction is measured by using indicators adopted from Ene and Ozkaya, namely happy, right and logical choices, no regrets, expectations, and requirements [8].

### B. Measurement Scale

The scale used in this study is a five-point Likert scale. This scale allows respondents to express the intensity of their feelings. Questions are closed and answers are made tiered

starting from the lowest to the highest intensity. The choice of answers starts from strongly disagree (point 1), disagree (point 2), agree (point 3), agree (point 4) and strongly agree (point 5).

### C. Research Model

This study is inspired by studies [6,7,9,16-18]. This study emphasizes the empirical analysis of the relationship of service quality, image, customer satisfaction and customer loyalty in the retail industry in Yogyakarta. This research model can be described as follows:

Model 1:

$$SAT = \beta_0 + \beta_1 SERVQUAL + \beta_2 I$$

Model 2:

$$LOYAL = \beta_0 + \beta_1 SERVQUAL + \beta_2 I + \beta_3 SAT$$

Where:

*SERVQUAL* = Service Quality

*I* = Image

*SAT* = Customer Satisfactory

*LOYAL* = Customer Loyalty

### D. Population and Sampling Technique

The population of this study is all Yogyakarta people who are currently using or have used retail services in Yogyakarta. The sample of this study is half of Yogyakarta people who are currently using or have used retail services in Yogyakarta that are chosen by convenience sampling technique. The sample is 138 people.

### E. Instruments Test

The survey method with a questionnaire was used in this study to see the relationship between service quality, image with satisfaction and loyalty. Loyalty is measured by using instruments adopted from Kandampully and Suhartanto [9], service quality instruments adopted from Zeithaml and Bitner [6], image instruments adopted from Kandampully and Suhartanto [9] and satisfaction instruments. Furthermore, the questionnaire items were tested for their validity by Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO MSA). The results of the validity test show that the KMO value for each variable is above 0.50 between 0.700 to 0.867, except empathy which is equal to 0.500. However, the significance value using Bartlett's test of sphericity in each variable is below 0.05. This means that all questions are declared as valid. Furthermore, the reliability test shows that all variables in this study have cronbach alpha value above 0.70 between 0.761 and 0.906. This means that all of the research variables are stated to be reliable.

Furthermore, from the data it also shows that there is no assumption deviation in the regression model, both in terms of normality, multicollinearity and heteroscedasticity. Kolmogorov-Smirnov (K-S) is used for testing normality. The test results show that the KS value is 0.660 and the significance

of 0.777 is greater than the significance of 0.05, which means that the data distribution is normal. While the results of the multicollinearity test with tolerance value and VIF show no multicollinearity between independent variables because the tolerance value is not less than 0.10, ranging from 0.325 to 0.553, and the value of the variance inflation factor (VIF) is no more than 10, ranging from 1.809 to 2.610.

The Glejser test is used to see if in the regression model, variance inequalities occur from residuals of one observation to another observation [19]. This test is to detect the presence or absence of heteroscedasticity in the regression model. The Glejser test results show that there is no service quality, image and satisfaction variable that significantly affects the absolute value of loyalty variable. This is also seen from the probability value that is above 5% significance value, so there is no problem with heteroscedasticity in the regression model. The Glejser test results are shown The Glacier Test shows that all variables have a significance value above 5% (significance of *Servqual* .480; image .332; and satisfaction .593).

#### F. Data Analysis

The research data are analyzed by multiple linear regression and supported by the F test and t test, and also the coefficient of determination ( $R^2$ ). This analysis is used to determine whether there is an effect of service quality, image, and satisfaction on loyalty variable. Furthermore, to determine whether there is or there is not an effect of mediating the customer satisfaction on the relationship among service quality, image and loyalty, hierarchical regression analysis is used.

### III. RESULTS

#### A. Data Description

The results of the data description on 138 respondents of the research based on gender show that there are 73 men (52.9%) and 65 women (47.1%). Furthermore, based on the occupation of the respondents, it indicates that there are 3 students (2.2%), 45 students (32.6%), 7 civil servants (5.1%), 63 private employees (45.7%), and other 20 people work in outside alternatives available (14.5%). Based on the age of the respondents, the sample shows that there are 62 respondents (44.9%) aged between 17 and 35 and 76 people (55.1%) are aged over 35 years. Furthermore from the frequency of visits done by respondents to retail shows that 80 people visit retail 1 to 2 times a week (58%), 29 people visit retail 3 to 4 times a week (21%), 5 people visit retail 5 to 7 times a week (3.6 %), and there are respondents who visit retail besides the specified answer (17.4%).

#### B. The Results of Multiple Linear Regression

Multiple linear regression analysis is used to determine the effect of service quality variable and image variable on the customer satisfaction variable. Calculation of model 1 multiple linear regression can be seen in the following equation:

$$SAT = 3.442 + .061 SERVQUAL + .444 I$$

From model 1, the counted F value is 39.250 with a significance of 0.000. This means that service quality variable

and image variable are really parameters for measuring customer satisfaction variable. Furthermore, from the t test, it shows that the service quality variable does not significantly influence customer satisfaction at retail in Yogyakarta so that hypothesis 1 is not supported statistically. This can be seen from the significance value of t which is 0.177, above 0.05. However, the image variable has a positive and significant effect on customer satisfaction in the retail industry in Yogyakarta so that hypothesis 2 is supported statistically. This is indicated by the significance value of t which is 0.000, below 0.05. The coefficient of determination ( $R^2$ ) is 0.447 and adjusted R square is 0.436, which means that from model 1 only 43.6% of customer satisfaction variable are explained by service quality and image variable, while 56.34% is influenced by variables outside of the two variables.

Furthermore, the results of multiple linear regression for model 2 are used to determine the effect of service quality variable, image variable, and customer satisfaction on customer loyalty. The results of model 2 regression analysis were shown in the following equation:

$$LOYAL = .217 + .075 SERVQUAL - .015I + .708SAT$$

Furthermore, from each variable shows that service quality ( $\beta = .075$ ;  $p = .023$ ) and satisfaction ( $\beta = .708$ ;  $p = .000$ ) are significant. They have positive effects on customer loyalty. Furthermore, image ( $\beta = -.015$ ;  $p = .854$ ) has negative effect on customer loyalty but it is insignificant.

From model 2, the counted F value is 77.941 with a significance of 0.000. This means that service quality variable, image variable and customer satisfaction variable really are parameters for measuring customer loyalty variable. From the t test, it shows that only image variable does not have a significant effect on customer loyalty in retail in Yogyakarta. Furthermore, service quality has a positive and significant effect on customer loyalty in the retail industry in Yogyakarta so that hypothesis 3 is supported statistically. This can be seen from the significance value of t which is 0.023, below 0.05. However, the image variable does not affect customer loyalty in the retail industry in Yogyakarta. This can be seen in the significance value of t which is 0.854, above 0.05. Customer satisfaction also has a positive and significant effect on customer loyalty so that hypothesis 5 is supported statistically. This can be seen in the significance value of t which is 0.000, below 0.05. The coefficient of determination ( $R^2$ ) shows the result of 0.709 and adjusted R square of 0.700. Thus from model 2 shows that 70% of customer loyalty variable are explained by service quality variable, image variable and customer satisfaction, while 30% are influenced by variables outside of the three variables.

#### C. The Effects of Mediating Customer Satisfaction

Furthermore, the mediation effect in this research model used Hierarchical regression analysis. The results are shown in table 1.

TABLE I. HIERARCHICAL REGRESSION ANALYSIS RESULT

Model	B	Beta	T	Sig.
1 Constant	2.653		1.342	.183

	Service Quality	.119	.324	2.624	.010
	Image	.299	.365	2.960	.004
2	Constant	.217		.151	.880
	Service Quality	.075	.206	2.314	.023
	Image	-.015	-.018	-.184	.854
	Satisfaction	.708	.719	9.709	.000

Table 1 of model 1 shows that the variables of service quality and image each have a positive and significant effect on the variable customer satisfaction with a significance value of  $t$  below 0.05. Next, from model 2 shows that only service quality and satisfaction have an effect on customer loyalty with a significance value below 0.05. But the image variable does not have a significant effect on customer loyalty because the significance value is above 0.05. Thus the variable customer satisfaction mediates the relationship of image variable to customer loyalty, and the customer satisfaction variable does not mediate the relationship of service quality variable to customer loyalty. This means that customer satisfaction partially mediates the relationship between image and customer loyalty.

#### IV. DISCUSSION

The results of the current study indicate that service quality has no effect on customer satisfaction variables but service quality has a positive and significant effect on customer loyalty in the retail industry in Yogyakarta. This result does not support the study which state that service quality variable affect customer satisfaction [13,20]. Service quality is an important antecedent of customer satisfaction at commercial banks in Jordan [20]. While the study Malik et al., states that there is a positive influence between service quality and customer satisfaction in the telecommunications sector in Pakistan [13].

Furthermore, the results of this study also show that image variable has a positive and significant effect on customer satisfaction and customer satisfaction has a positive and significant effect on customer loyalty variable. These results support the study which states that brand image has an effect on customer satisfaction [20]. Furthermore, customer satisfaction also affects loyalty in the telecommunications sector in Pakistan. This study is also supported by study which states that an increase in real shop satisfaction has a greater influence on store loyalty than the same increase in satisfaction of latent stores [21]. The relationship of satisfaction with loyalty is asymmetrical and not linear [16]. This is because it is not enough if the customers feel satisfied but the company must have customers to be extremely satisfied. However a small increase in customer satisfaction drives customer loyalty dramatically.

The results of the current study show that service quality has no effect on customer satisfaction. This is contrary to the study which states that service quality is an antecedent of customer satisfaction [22]. However, customer satisfaction has a stronger influence on customer purchase intention than service quality. In the current study, it also states that service quality has a stronger influence on customer loyalty than service quality. All dimensions of service quality significantly predict customer satisfaction [23]. This study Culiberg and Rojšek contrasts with the current study shown in model 1 that service quality does not significantly influence customer

satisfaction [23]. Furthermore, the study Polyorat and Sophonsiri states that satisfaction mediates the influence between dimensions of service quality and customer loyalty in the context of restaurant chains [24]. The results of this study are not supported by the current study which shows that customer satisfaction does not mediate the relationship of service quality with customer loyalty [24].

#### V. CONCLUSION AND SUGGESTION

The results of the study show that the image has an effect on satisfaction and loyalty. Even though service quality does not affect satisfaction, service quality affects loyalty. Customer satisfaction also affects customer loyalty. Thus, hypothesis one and four are not supported while hypothesis two, three and five are supported statistically. Customer satisfaction is stated to mediate partially the relationship between image and customer loyalty but does not mediate the relationship of service quality with loyalty.

The results of the study suggest that although service quality variable has no significant effect on customer satisfaction, the variable still shows parameters that affect retail customer loyalty. While, image has an effect on customer satisfaction and loyalty. Currently, consumers shop at retail not only feeling satisfied with retail services, but the retail image greatly influences customer satisfaction and loyalty. Future research can be developed with sequential analysis to see the simultaneous influence of the variables studied.

#### ACKNOWLEDGMENTS

This research was supported in part by funds provided by Janabadra University. Furthermore, we thank reviewers for their suggestion of this article.

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