THE IMPACT OF PRODUCT QUALITY, SERVICE QUALITY, AND CUSTOMER LOYALTY PROGRAM PERCEPTION ON RETAIL CUSTOMER ATTITUDE

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ABSTRACT

This journal examines the relationship between perception of product quality, perception of service quality, perception of Customer Loyalty Program on retail customer behavior, and sales volumes of cement products. This study examines three different cement brands, namely cement XYZ with the largest market share, cement PQR which is the main competitor, as well as cement ABC, a newcomer cement brand which is strong enough to enter the Indonesian cement market. The research is focused on the building material retailers with 100 respondents. The data collection will be done by survey through direct interview by using questionnaires. The analysis of this research uses descriptive analysis, analysis by ANOVA and also inferential analysis by using Structural Equation Model (SEM). The results of this study indicate that from the factors that influence the attitudes of retail customers of the three variables tested, only one dominant factor which influences the attitude of retail customers, which is the perception of the product quality. The results of this research also show that the perception of product quality also affects sale volume significantly, the greater the perception of the quality of cement
products, the greater the volume of sales generated by the retail customer.

**Keywords:** Product Quality, Service Quality, Customer Loyalty Program, ANOVA, SEM

1. INTRODUCTION

In 2012-2013, there was an explosion of cement demand which was characterized by property business which was very dominating during those years. At the beginning of 2013, the ratio between cement demand and installed capacity of cement producers in Indonesia reached 95 percent, meaning that almost all of the cement produced and sold in Indonesia could be absorbed by the market. The large number of cement demands invited producers of cement from outside Indonesia to be interested to participate in the Indonesian market.

Research of DBS Bank (2015) states that the installed capacity of cement by the cement plant spread in some areas of Indonesia will generate a significant difference for the level of utility comparison between demand and installed capacity of cement, which reached 74 percent. 2016 will be the new battleground for sixteen companies to compete in the cement market in Indonesia. PT. XYZ, which is the market leader for cement company in Indonesia, experienced a decline in sales and lower the market share in Indonesia, from 2012 which reached 32 percent of market share, up to 2014 which declined to 30 percent and is projected to continue to decline if there is no strategy in facing the future condition. The change of market share is the characteristic of customers who change their selection from one product to another.

The online media The Globe (2013) which discusses blackberry case, stated that the decrease in market share predominantly due to the customer migration from one product to the other products. Cement production companies should take the appropriate strategy to sustain the company. From the background mentioned previously, thus the research questions are:

a) How is the influence of the perception of product quality on the customer attitude?

b) How is the influence of the perception of service quality on the customer attitude?
c) How is the influence of the perception of Customer Loyalty Program on the customer attitude?

d) How is the influence of the perception of customer attitude on the sale of cement products?

2. FRAMEWORK AND LITERATURE REVIEW

2.1. Research Framework

This study examines the impact of the perception of the product quality, the perception of service quality, and the perception of Customer Loyalty Program toward the customer attitude, and also reviews the effect of customer attitudes on the sale of cement products. The research model can be seen in Figure 1.

![Research Model Diagram]

Figure 1: The research model

2.2. Literature Review

2.2.1. Perception of Product Quality and the Relationship with Customer Attitude and Sale Volume

Boisvert and Ashill (2011) conducted a study on the perception of product quality to customer attitude, and the result is that there is positive influence of the perception of quality on the customer attitude. Research by Santoso and Kunto (2014).

Horvat and Dosen (2013), and Ing Wu and Lie Lo (2007) obtained the same results in researching the influence of the perception of product quality on the customer attitude. Aynadis (2014) from the research concluded that the quality of product is the dominant factor influencing the customer's attitude toward a product.
In the research of Mennecke et al. (2006), Chen and Cheng (2011), Asshidin et al. (2015), Jaafar et al. (2012), Christiansen (2010), and Sirfaz et al. (2014) proved that there is a significant influence on the quality of product on the customer attitude. In addition to the research of product quality perception on the customer attitude, there is another study that examined the direct relationship between the perception of product quality and the sale volume.

Iranita (2010) in her research obtained the result that there is direct relationship between the quality of products and sale volume, either simultaneously or partially. Empirically there are many studies that discuss the quality of the product against both values. The study has proved that there is positive influence of the product quality to customer attitude and sale volume, so the hypotheses proposed are as follows:

- **H1**: Perception of product quality significantly affects the customer attitude
- **H2**: Perception of product quality significantly affects the sale volume

### 2.2.2. Perception of Service Quality and the Relationship Between Customer Attitude and Sale Volume

Kumari (2013) in his study examines the relationship between customers’ perception regarding the quality of service and the customer's attitude obtained the result that the customer's attitude is influenced by the perception of service quality by customers.

Khare (2011) conducted a study which obtained the result that the foreign banks that provide a good perception of service quality will get positive customer response and attitude from bank customers. The results of the research conducted by Khan (2012) also demonstrate the close relationship between service quality and customer attitude towards the products offered.

Yulianto et al. (2014), Mpinganjira (2015), Vinayagamoorthy and Magdaline (2015), and Al-Nasser et al. (2016) have shown a close relationship between service quality and customer attitude. In addition to the research on the perception of service quality to the customer attitude, there are other studies that examined the direct relationship between the perception of service quality and sale volume.
Jahri et al. (2015) and Pitaloka (2015) concluded that there is a positive relationship between service quality and sale volume.

Empirically, there has been a lot of studies with different object of research that have proven that there is influence of perception of service quality on the customer attitude and sale volume, so that in the present study the hypotheses proposed are:

- **H3**: Perception of service quality significantly affects customer attitude
- **H4**: Perception of service quality significantly affects sales volume

### 2.2.3. Perception of Customer Loyalty Program and Its Relationship with Customer Attitude

Frequency program is designed to provide value or appreciation to the customers who often make a purchase of a product being offered. While club program is a program for those who have purchased a specific product and would like to become a member of the club. To become a member of the club, customers are required to pay dues, it is done to close the door to people who are not interested in the long term of this product.

Arbore and Estes (2013) conducted a study on the perception of CLP on the customer attitudes. It obtained the result that there is a positive relationship between the perception of CLP with the attitude of customers of grocery store. Boeck et al. (2011), McCall and Voorhees (2010), as well as Magateh and Tomalieh (2015) also conducted research and proved the existence of significant influence between CLP and customer attitude.

In addition to the research on the perception of CLP on the customer attitude, there are other studies that examined the direct relationship between the perception of CLP with sales volume.

Manalu (2008) conducted research on a loyalty program by promotions obtained the result that the perception of CLP directly affects the volume of product sales. Empirically, there has been a lot of research with the different object of research that have proven that there is influence of the perception of Customer Loyalty Program on customer attitude and sale volume directly, the proposed hypotheses are as follows:
2.2.4. Customer Attitude and Its Relationship with Sale Volume

Kamins and Frank (2004) conducted a study on the company making the claim as a market leader and the results proved that the relationship of the customer's attitude towards the product is positive and beneficial to the company, so it can be concluded from these study that there is a positive relationship between market share, and in this term is as market leader on the positive attitude of consumers.

Other research that addresses the customer's attitude is Christine (2008), which concluded that there is a positive relationship between the customer's attitude and the level of sale volume. Rink (1998) also did a research on the relationship between the customer's attitude and sale volume, and proved that there is a positive relationship between the customer's attitude and sales.

Huang (2004) proved in his study that the customer's attitude is closely linked to volume. Empirically, there has been a lot of research with the different object of research that have proven that there is an influence of customer attitude toward sales or market share directly, the proposed hypothesis is as follows:

- **H7 : The attitude of the customers has real impact on sale volume**

3. RESEARCH METHODOLOGY

This research is an explanatory research that explains the relationship between the variables studied, as well as tests the hypothesis that has been formulated previously (SINGARIMBUN, 1999).

To obtain the data required in this thesis, the author conducted research to agent stores of building materials that sell cement in the marketing area of JABODETABEK. The data collection of this research will be carried out for about two months, from August 2016 to October 2016. The technique used in the sampling and determination of the respondent was non-probability sampling, which was done intentionally (purposive).
The selected respondents were 100 samples who represent each agent or building stores that sell cement products. Respondents were selected based on the capability and the responsibility for making decisions in choosing a product or have got a recommendation from the head of the company.

To measure the response of the respondents to the variables of study, the researcher used Likert scale, because of the number of statements as a tool for collecting data or information from respondents. Measurement of the answers is symbolized from scale: 5 (strongly agree); 4 (agree); 3 (neutral); 2 (disagree); up to 1 (strongly disagree). Table 1 shows the definition of each variable used.

4. RESULTS AND DISCUSSION

4.1. Research Instrument Testing

There are three criteria in the use of data analysis techniques by SmartPLS to assess outer model which are by using Discriminant Validity and Composite Reliability. Discriminant validity is the measurement of indicator and the latent variables. The measurement of discriminant validity is performed by seeing the AVE value (Average Variance Extracted) of each variable. Table 1 shows the value of discriminant validity for cement XYZ, cement PQR and cement ABC.

Table 1: Discriminant validity cement XYZ, cement PQR and cement ABC

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kode</th>
<th>XYZ Brand AVE</th>
<th>PQR Brand AVE</th>
<th>ABC Brand AVE</th>
<th>Total Brand AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Service Quality</td>
<td>KN</td>
<td>0.55</td>
<td>0.37</td>
<td>0.005</td>
<td>0.49</td>
</tr>
<tr>
<td>Perception of Product Quality</td>
<td>KP</td>
<td>0.5</td>
<td>0.41</td>
<td>0.81</td>
<td>0.497</td>
</tr>
<tr>
<td>Perception of Customer Loyalty Program</td>
<td>CLP</td>
<td>0.42</td>
<td>0.29</td>
<td>0.79</td>
<td>0.965</td>
</tr>
<tr>
<td>Customer Attitude</td>
<td>SP</td>
<td>0.39</td>
<td>0.41</td>
<td>0.86</td>
<td>0.599</td>
</tr>
</tbody>
</table>

Variable is said to have reliability if the composite reliability value is above 0.60. In Table, the composite reliability value of latent variable of the experiment results will be presented. Table 2 shows composite reliability values of cement XYZ, cement PQR and cement ABC.
Table 2: composite reliability values of cement XYZ, cement PQR and cement ABC

<table>
<thead>
<tr>
<th>Variabel Laten</th>
<th>Kode</th>
<th>XYZ Brand</th>
<th>PQR Brand</th>
<th>ABC Brand</th>
<th>Total Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Service Quality</td>
<td>KN</td>
<td>0.88</td>
<td>0.68</td>
<td>0.005</td>
<td>0.791</td>
</tr>
<tr>
<td>Perception of Product Quality</td>
<td>KP</td>
<td>0.8</td>
<td>0.79</td>
<td>0.81</td>
<td>0.871</td>
</tr>
<tr>
<td>Perception of Customer Loyalty Program</td>
<td>CLP</td>
<td>0.98</td>
<td>0.7</td>
<td>0.79</td>
<td>0.838</td>
</tr>
<tr>
<td>Customer Attitude</td>
<td>SP</td>
<td>0.83</td>
<td>0.86</td>
<td>0.86</td>
<td>0.982</td>
</tr>
</tbody>
</table>

The results of the overall evaluation, both discriminant validity and composite reliability which have been described above, it can be concluded that the majority of indicator as the measure of latent variable is a valid and reliable measure. Some of the variables and indicators that are not valid will not be removed from the model for all components of this variable remains contribute to shape good SmartPLS model in this study.

4.2. Difference Test Analysis of Cement Products

Analysis of difference test in this study used ANOVA analysis. ANOVA analysis is used to determine whether there are significant differences in average values among the cement brands about something, in this study is about the perception of service quality, perception of product quality, perception of customer loyalty programs and the customer attitude.

ANOVA analysis used SPSS23 to determine the outcome. Table 3 shows the results of ANOVA for the three cement brands. It resulted that there are indeed many differences in the assessment of service quality perception, the perception of customer loyalty programs and customer attitude.

Table 3: shows the results of ANOVA for the three cement brands

<table>
<thead>
<tr>
<th>No</th>
<th>Variabel Laten</th>
<th>Mean XYZ</th>
<th>Mean PQR</th>
<th>Mean ABC</th>
<th>Anova</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perception of Service Quality</td>
<td>0.839</td>
<td>0.792</td>
<td>0.646</td>
<td>0.0001</td>
<td>Different</td>
</tr>
<tr>
<td>2</td>
<td>Perception of Product Quality</td>
<td>0.741</td>
<td>0.733</td>
<td>0.735</td>
<td>0.942</td>
<td>No Different</td>
</tr>
<tr>
<td>3</td>
<td>Perception of Customer Loyalty Program</td>
<td>0.824</td>
<td>0.832</td>
<td>0.900</td>
<td>0.002</td>
<td>Different</td>
</tr>
<tr>
<td>4</td>
<td>Customer Attitude</td>
<td>0.873</td>
<td>0.803</td>
<td>0.658</td>
<td>0.0001</td>
<td>Different</td>
</tr>
</tbody>
</table>
4.3. The Relationship Between Variable and Managerial Implication

From the conclusions of the research results obtained, we can conclude for the test of the hypothesis that can be seen in Table 4. The results of this study showed that from seven hypotheses which were made, there are two hypotheses that can be accepted, which are the perception of product quality significantly affects the attitude of retail customers, and the perception of product quality significantly affects sale volumes of cement. Other hypotheses are rejected because their t-test values are less than 1.96.

Table 4: The influence of perception of product quality on customer attitude and sale volume

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Latent Variable</th>
<th>T Test</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Perception of Product Quality -&gt; Customer Attitude</td>
<td>12.98</td>
<td>Accept H1</td>
</tr>
<tr>
<td>H2</td>
<td>Perception of Product Quality -&gt; Sale Volume</td>
<td>3.38</td>
<td>Accept H2</td>
</tr>
<tr>
<td>H3</td>
<td>Perception of Service Quality -&gt; Customer Attitude</td>
<td>0.576</td>
<td>Reject H3</td>
</tr>
<tr>
<td>H4</td>
<td>Perception of Service Quality -&gt; Sale Volume</td>
<td>0.472</td>
<td>Reject H4</td>
</tr>
<tr>
<td>H5</td>
<td>Perception of Customer Loyalty Program -&gt; Customer Attitude</td>
<td>1.409</td>
<td>Reject H5</td>
</tr>
<tr>
<td>H6</td>
<td>Perception of Customer Loyalty Program -&gt; Sale Volume</td>
<td>0.567</td>
<td>Reject H6</td>
</tr>
<tr>
<td>H7</td>
<td>Customer Attitude -&gt; Sale Volume</td>
<td>1.66</td>
<td>Reject H7</td>
</tr>
</tbody>
</table>

This study apart from the results of the survey data, the analysis result of depth interview was also obtained from the retail customers regarding sales and cement products they sell. The retail customers have a role to provide advice to final customers in selecting cement products, but most of the final customers that they are facing have chosen their own demand for cement with a particular brand and the influence given by retail customers is less addressed.

Final customers are strict enough in choosing a cement brand. They also have their own perception on the cement brands they choose either from the perception of quality of the product until the price given by the store. This study also obtained an interesting fact that cement XYZ, the management of final customers are not faced directly by producers but by cement distributor.

This has resulted in policies regarding service quality, which the role is fully held by the distributors. The role of the distributors of cement XYZ to the final customers is more dominant than the producers themselves, so that the perception of service quality perceived by retail customers is generally performed by the distributors of cement, especially in cement XYZ.
4.4. Discussion and Managerial implication

Managerial implication derived from this research that should be done by the cement production companies in order to increase the positive attitude of retail customers, which is concluded from the results in Figure 7 are grouped based on the approach to the marketing mix that can be seen in Table 5.

<table>
<thead>
<tr>
<th>No</th>
<th>Description of Indicator &amp; Variable</th>
<th>The value of t / Outer Loading</th>
<th>Marketing mix</th>
<th>Managerial Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perception of production quality affects significantly on customer attitude (H1)</td>
<td>12.98 (Accept H1)</td>
<td>Product</td>
<td>Consistency in the quality of the cement which is produced</td>
</tr>
<tr>
<td>2</td>
<td>Perception of production quality affects significantly on the sale volume (H2)</td>
<td>3.38 (Accept H2)</td>
<td>Promotion</td>
<td>Marketing campaign about the perception of cement product quality should be consistent and improved</td>
</tr>
<tr>
<td>3</td>
<td>Characteristic of the main operation of core product contribute dominantly on the perception of product quality (KP1 &amp; KP2)</td>
<td>0.933 &amp; 0.883 (KP1 &amp; KP2 Dominant)</td>
<td>Product</td>
<td>Consistency for the colour of cement which is convincing the customers and also the superiority in terms of the texture of the cement product produced</td>
</tr>
<tr>
<td>4</td>
<td>The suitability with the specification contribute dominantly on the perception of product quality (KP3 &amp; KP4)</td>
<td>0.889 &amp; 0.890 (KP3 &amp; KP4 Dominant)</td>
<td>Product</td>
<td>Consistency in terms of the quality of cement is appropriate with Indonesia national standards (consistent in the certification achievement) as well as the superiority compared with other cement brands.</td>
</tr>
</tbody>
</table>

4.5. CONCLUSIONS AND SUGGESTIONS

The results of this study indicate that factors that influence the attitude of retail customers from the three variables tested; there is only one variable which dominantly influences the attitude of retail customers, which is the perception of the product quality. This study provides information that the higher the quality of the cement product received by retail customers, the more positive retail customers attitude towards the cement brand.

Indicator which is dominant in its contribution to the perception of product quality is the characteristic of core product and the suitability with the specifications.
These two indicators could be a suggestion to the cement producers to enhance the positive attitude of retail customers.

The results also show that the perception of product quality also affects sale volume significantly, the greater the perception of the quality of cement products, the greater the volume of sales generated by the retail customers. It could also be as a suggestion for cement producers in terms of consistency of maintaining and improving the quality of cement products and give the perception of the quality of cement product more intensively.

However, the further research can look for variables that affect the sale volume because in this research, variable that is influential is only the perception of the product quality. The attitude of the final customer is suggested to be studied because from this research, the retail customer attitude does not significantly affect the sale volume of cement.

REFERENCES


