The Influence of Product Quality, Brand Image, and Quality of Service to Customer Trust and Implication on Customer Loyalty
(Survey on Customer Brand Sharp Electronics Product at the South Kalimantan Province)

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Abstract
This research aims to examine the influence of: 1) examine the influence of Product Quality, Brand Image, and Quality of Service on Customer Trust, 2) Quality of Product, Brand Image, and Quality of Service on Customer Loyalty, 3) Customer Trust on Customer Loyalty.

Causal Research design used to examine the influence between variables. Samples taken as many as 200 Sharp Electronics customer selected accidental sampling. Data collection using questionnaires. Hypothesis testing structural models is done with GeSCA (Generalized Structured Component Analysis).

The result indicate there are significant influence on Quality of Product, Brand Image and Quality of Service on Customer Trust, Quality of Product have a significant influence on Customer Loyalty, while Brand Image and Quality of service is not a significant influence on Customer Loyalty. Customer Trust have a significant influence on Customer Loyalty.

Keywords: Quality of Product, Brand Image, Quality of Service, Customer Trust, and Customer Loyalty.

1. Introductions
One of the key factor which must be attention in an effort to win the business competition is to strengthen customer loyalty on brand (brand loyalty). Griffin (2007 p.51) more emphasis on the creating customer loyalty as a result of interpersonals that happened between customer and the employees who providing service. Griffin (1995 p.8) suggests two key factors in building customer loyalty, the attention to the “value” of the products or service and the development of relationships with customers.

Presented Gremler (1999 p.271) Customer Loyalty is the most important and most challenging in many industries today. Jones and Saser (1995), Reichheld and Sasser, Reichheld (1990) and also Woodruff (1997) as quoted by McDougall and Levesque (2000 p.392) showed loyalty is the most important determinant of long-term financial performance.

Customer loyalty is influenced by many factors among Quality of Product backed by Jahanshahi et.al (2011), Bei and Chiao (2001), and Luarn and Lin (2003), Brand Image backed by Sondoh Jr. et.al. (2007), and Ogba and Tan (2009) and Quality of Service backed by Aydin and Ozer (2005), Bloemer, de Ruyter and Peeters (2008), as well as Customer Trust backed by Falvian and Guinaliu (2006), Dagger and O’Brien (2010), Ndubisi (2009).

2. Literature Review
2.1. Quality of Product
Quality of product is a collection of features and Sharp brand product characteristic which have contribution to the ability to fulfilling specified demand Garvin (2007). Dimensions of quality of product according to Garvin (1987 and 1988) in Tjiptono (2011, h.193), are as follows:

(1) Performance, is characteristic of operation fundamental from product nucleus (core product). These dimensions like in the form of product which is easy to operated, maintenance of product which easy to
conducted, product giving benefits for everyday life and product have consumption efficient energy.

(2) Features, is a special characteristics or additional idiosyncrasy in the form of complement characteristics, for example equipment of interior and exterior. Examples of dimensions features is products have different newest technological individuality with other brands, having additional function which is not owned by other brands, and have specification more compared of other brand.

(3) Reliability, is reliability of product. This reliability related product durability which not easy to damaged and can function better in long term.

(4) According to specification (Conformance to specification), device characteristic and operating fulfill of standard have been specified. These dimension related to standar which have been specified in regulation, like product which must fulfill SNI.

(5) Durability, with reference to duration of product can be used. This dimension closely related with reliability. This durability can be seen from product its components which are not easily damaged, although frequently is used, and can function better in long term.

(6) Ability to serve (Service ability), which includes speed, competence, comfort, and handling satisfactory problem. This dimension is closely related with company its product is a service, which uses human power.

(7) Esthetics, the attractiveness of product through the five senses. Aspects in this dimension like a product that has interesting design, has external appearance is innovative, location of arranged component elegantly, and product giving many choice model to customer.

(8) Perceived quality, the image and reputation of the product and also company responsibility to both the things. This dimension closely related with image a brand which is picture or impression have customer to a brand or product.

2.2. Brand Image

A perception which forming picture of the Sharp brand in the customer’s mind for the experience and information received during use of the product. Brand image includes the strength of brand association, brand associations advantage, and uniqueness of brand associations. (Keller, 2003).

(1) Strength of Brand Associations

Strength leads at various advantages had by pertinent brand which have the character of physical, which is not found in other product.

(2) Brand association advantage. Advantage leads to the easy or advantage a brand or product to be remembered by customer.

(3) Uniqueness of Brand Associations.

Brand should be unique and attractive so that can cause a strong association in the data sensory consumer.

2.3. Quality of Service

As assessment of customer to company consistency in fulfilling consumer expectations to requirements of product. Parasuraman, et.al. (1990) promoted to five (5) dimension of quality of service, namely:

(1) Evidence of physical is facility physical, equipment, officer, and communication tools provided by service giver.

(2) Ability of reliability to conduct service which have been promised in accurate figure.

(3) Durability is willingness to help customers and provide fast service.

(4) Assurance is the knowledge, courtesy of employees and their ability to deliver customer trust and confidentiality.

(5) Emphaty is the caring and individual attention given by the company to the customer.

2.4. Customer Trust

As a positive expectation of consumers to producer for his ability to produce product that satisfy customer. Its includes : integrity, competence, consistency, and transparency Robbins and Judge (2007), Mayer et al. (1995)
and Rindings et al. (2002) in Casalo, Flavian and Guinaliu (2007). Robbins and Jugde (2007 h.392) mentions four key dimensions of the concept of trust, namely:

(1) Integrity, refer at honesty and truth. Integrity can be seen in the form of trust on product excellence, trust in the company to produce quality product, trust in company commitment to give best, and trust in the greatness of product.

(2) Competencies, related to knowledge and skills of interpersonal and technical is owned by individual.

(3) Consistency, can be seen in the form of confident companies able to innovate on new product, trust the company can continue to produce advanced products, trust in the constancy determination companies adopting the latest technological development for each product and trust in brand to compete with similar products.

(4) Transparency, can be seen in the form of company to help consumer who experience difficulties associated with the products purchased, the company have solution of best financing for consumers which ability of economic is limited, believe in the company to organize social programs for the community, and believe in the ability of the company to create products of beneficial to the costumers.

2.5. Customer Loyalty
A positive of customers for pleasure of product with specific brand so that push to continue to using it, where there are a loyal customer characteristic Griffin (2007 p.31), namely :

(1) Doing purchasing regularly
(2) Buying outside the line of products/service
(3) Recommending other product
(4) Refusing product fascination from competitor

3. Research Methods
This research uses quantitative approach through approach of causality study (causality research). Samples were taken counted 200 customer Sharp Electronics products selected by Accidental sampling. Collecting of data using a structured questionnaire with Likert scale level of 1-5. Hypothesis testing structural models is done with GeSCA (Generalized Structured Component Analysis).

4. Result and Discussion
Outer model test obtained by result for the variable of the Quality of Product there is one item which is invalid, that is X12. Indicator of performance have most contribution is product easy to operated, for the indicator of features most determined by adopting technology friendly of environment, for the indicator of durability most determined by product outwear from a period to warranty, and for the indicator of esthetics most determined by external desain appearance which is innovatif.

Brand image variable there is one item which is invalid, that is X24. Brand image measured with three (3) indicators, that is : 1) indicator strength of brand have most contribution on facility functioning maximally, 2) for the indicator of brand association most determined by Logo brand is easy to recognized, and 3) for the indicator of uniqueness brand have unique color blend.

Variable of quality of service X38 item is invalid. Quality of service measured with five (5) indicators, that is : 1) Indicator of evidence physical most determined by providing comfortable seating for customer, 2) Indicator of reliability most determined by giving service without any errors, 3) Indicator of durability most determined with handling customer problem quickly, 4) Indicator of guarantee most determined to give repair guarantee for the product of damage, and 5) Indicator of empathy most determined by serving customer respectably/friendliness.

Variable of trust of customer measured with indicators : integrity, competency, consistency, and transparency. 1) Indicator of integrity most determined to trust in company to produce product high quality and trust in greatness of product. 2) indicator of competency determined by trust in ability of employees in giving best service. 3) Indicator of consistency determined by company adopt the latest technology. 4) Indicator of transparency determined by company to communicate with consumer through social program.

Customer loyalty measured with four (4) indicators. 1) behavioral contribution of rebuying is blase at other product. 2) other contribution to indicator purchasing of product and service from one brand, that is will buy
more than one type of product in the future and electronic product. 3) indicator recommend to friend to buy the product. 4) Indicator pay no regard to others suggestion to use other product.

Table 1. Value AVE and Alpha Cronbach

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Product</td>
<td>0.610</td>
<td>0.773</td>
</tr>
<tr>
<td>Brand Image</td>
<td>0.635</td>
<td>0.706</td>
</tr>
<tr>
<td>Quality of service</td>
<td>0.527</td>
<td>0.764</td>
</tr>
<tr>
<td>Customer Trust</td>
<td>0.609</td>
<td>0.785</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>0.735</td>
<td>0.875</td>
</tr>
</tbody>
</table>

The result of discriminant validity to all variable show all variable have value of roots AVE bigger than value of correlation between variable latent.

The result of test influence between variable obtained five variable have significant effect and two variable have not significant effect. Indirect influence from model entirely significant to Customer loyalty.

Quality of Product have significant effect on Customer trust. obtained path coefficient of 0.210 and CR = 3.08* significant effect at α = 0.05. Quality of product Sharp brand have high features, among other things: a) low power consumption. b) using the latest technology. c) technology friendly of environment. Consumer trust (Z) related to transparency, for example concerning: a) Sharp open to help consumer. b) Sharp have solution of best financing to consumer which ability of economics is limited. c) trust in the company to organize social programs for the community. and d) trust Sharp settle for complain to the product bought by consumer.

The result of this research is supported by research conducted by Eid (2011) which proving the Quality of Information (as a product) have significant effect on consumer trust. Research of Anuwihanont and Mechinda (2009) is also supported by result of this research which prove the quality of product have significant effect on consumer trust.

Brand Image have significant effect on consumer trust. Result of GeSCA obtained by path coefficient 0.260 and CR = 3.09* have significant effect at α = 0.05. Result of this research is supported by Ball et.al. (2006) which also prove brand image have significant effect on consumer trust. It also supported research by Flavian, Guinalu, and Torres (2005), result of this research indicate that brand image have significant effect on consumer trust that the influence coefficient 0.85 and contribution 72% error rate of 1%. The different is the influence coefficient generated in this study is lower than both research.

The result of this research prove the quality of service have significant effect on consumer trust. Result of GeSCA obtained by path coefficient 0.438 and CR = 5.43* (significant). Result of this research is supported by Aydin and Ozer (2005) which indicate that quality of felt service by consumer have significant effect on consumer trust. Next research which supported by research conducted by Chen (2006), the result indicate that quality of service have significant effect on consumer trust.

The result of this research indicate that Quality of product have significant effect on consumer trust. Result of GeSCA obtained by path coefficient 0.371 and CR = 5.48* (significant). The result of this study support theory that quality of service have significant effect on loyalty. Griffin (2007) more emphasizing on the process of creating consumer loyalty as a result of interpersonal relationship that occur between the consumer and the employees who provide services. Futher said Griffin (1995) that there are two main factors in building customer loyalty, the attention to the “value” of the products or services and relation development with customers.

The result of this study support the result of previous studies conducted by Jahanshahi et.al (2011) concluded that the quality of product significant effect on consumer loyalty. Next also supported of research conducted by Bei and Chiao (2001) also concluded that quality of product have effect on consumer loyalty.

The result of research of Sondoh (2007) and Bei and Chiao (2001) indicate that quality of product have significant effect on consumer loyalty. Sondah prove overall satisfaction have significant effect on Loyalty Intention, while research of Bei and Chiao (2006) prove that Perceived Product Quality have significant effect on Customer Satisfaction and Consumer Loyalty.

Further research of conducted by Luarn and Lin (2003) prove that value of consumer which in it there are aspect of Quality of product have significant effect on customer loyalty.
The result of this research prove brand image have significant effect on consumer loyalty. Obtained path coefficient 0.159 and CR = 1.78* at α = 0.05. Brand image have not significant effect on customer loyalty become finding in this research because the theoretically brand image have effect on loyalty, for example Setiadi (2003), suggested that brand image related to attitude which is in the form of preferences and confidence to a brand. Consumer who have a positive image to a brand, would be more likely to make a purchase. Sutisna (2002) suggests with the positive image on product, it allows consumers to make purchases.

The result of this study do not support the result of research conducted by Sondoh Jr. et al (2007) who proved among five aspect of brand image that significant effect to customer loyalty is functional image and enhanced display. It also does not support the result of research conducted Ogba and Tan (2009) who also studied the effect of brand image on loyalty to mobile phone users in the city of Chengdu, China, where the conclusion of brand image significant effect on loyalty with a coefficient of 0.777.

The result of this research prove the quality of service not have significant effect on customer loyalty. Result of GeSCA obtained by path coefficient 0.139 and CR = 1.7* (significant) at α = 0.05. Result of this research into the finding because its did not support previous research and also the theory. The theoretically mentioned that quality of service have effect on customer loyalty.

The result of this research clearly can’t strengthen the theory told by Kotler, Parasuraman, and Garvin suggest that quality of service have an effect on customer loyalty. Customer loyalty can only be formed if customer feel satisfaction in accepted it.

Result of this research did not support the previous research that quality of service have an effect on loyalty. Result of research of Aydin and Ozer (2005 p.915) that quality of service have significant effect on customer loyalty. Further other research conducted by Bloemer, de Ruyter and Peeters (1998) that Quality of service have significant effect on customer loyalty.

Previous research indicate that quality of service have significant effect on customer loyalty is which the research conducted on the service sector, rather than the goods sector. It mean of form of customer loyalty in the service sector influenced by goodness not the quality of given services. It occurs due to the dominant services sector was accepted by the customer is service (intangible) so that the perception of these variables will determine loyalty.

It given a logical explanation about have not effect of Service quality on customer loyalty is evident from this study, because the core product is the goods and not services. This research taken object electronic product brand Sharp which core not services but goods. For the product of which is in form of customer interaction goods to quality of service of its more less than interaction with pertinent goods (quality of product). Other assumption which can be suggest is conducted promotion by Sharp competitor.

The result of this research prove that customer trust have significant effect on customer loyalty. Result of GeSCA obtained by path coefficient 0.259 and CR = 2.19* (significant). Result of this research is supported finding at research of Flavian and Guinalu (2006) which also prove that customer trust have an effect on customer loyalty that the influence coefficient 0.29, its different is the influence coefficient in this research is lower. Research of Dagger and O’Brien (2010) its object is consumen service industry in Australia. Result of this research indicate that consumer trust have significant effect on consumer loyalty with beta coefficient 0.19 and error rate 5%. The result of the research of Dagger and O’Brien (2010) is supported by this research and its coefficient is lower than this research. The last of this research is also supported result of Ndubisi (2007) in its research is loyalty of banks customer, one of is predicted by the trust.

Quality of product have significant effect on customer loyalty with path coefficient 0.317 and CR= 5.48* (significant), while customer trust have significant effect on customer loyalty with path coefficient 0.259 and CR= 2.19* (significant), so that the effect of quality of product on customer loyalty through customer loyalty have significant effect with indirect path coefficient 0.054 and the total effect is 0.371.

The result of this research is supported result of research by Eid (2011). Flavian and Guinalu (2006) and Dagger and O’Brien (2010) prove that trust have effect on customer loyalty. The result this research is supported research of Eid (2011) its result among other showed quality of information (as a product) have significant effect on customer trust. Research of Anuwichanont and Mechinda (2009) also supported by result of this research which the same prove is quality of product have significant effect on trust.

The result of research is supported by previous research conducted by Jahanshahi et.al (2011) and Bei and Chiao (2001) and Luarn and Lin (2003) that quality of product have effect on customer loyalty.

Brand image have significant effect on customer trust with path coefficient 0.260 and CR = 3.09* (significant),
while consumer trust have significant effect on consumer loyalty with path coefficient 0.259 and \( CR = 2.19^* \) (significant), so that brand image have significant effect on consumer loyalty through consumer trust with indirect path coefficient 0.067 and the total effect is 0.226.

This result is supported theory and the previous research. Research of conducted by Ball et.al (2006) prove brand image have significant effect on trust. Its also supported research of conducted by Flavian, Guinalu, and Torres (2005). This result is supported the result of research by Flavian and Guinalu (2006) and Dagger and O’Brien (2010) prove that trust have significant effect on consumer loyalty.

Existence of variable trust at this research have very important position in the model were tested. Its existence became important finding in this research, because giving effect to the indirect. For example the direct influence of brand image on consumer loyalty is proven is not significant, but indirect influence of brand image on consumer loyalty through consumer trust is proven significant effect. It clearly showed that variable of consumer trust as variables which very determine in formed of consumer loyalty.

Quality of service have significant effect on consumer trust with path coefficient 0.438 and \( CR = 5.43^* \) (significant), while consumer trust have significant effect on consumer loyalty with path coefficient 0.259 and \( CR = 2.19^* \) (significant), so that quality of service have significant effect on consumer loyalty through consumer trust with indirect path coefficient 0.113 and the total effect is 0.252.

This result is supported previous research which conducted by Aydin and Ozer (2005), Chen (2006), Flavian and Guinalu (2006) and also Dagger and O’Brien (2010) is proven that trust have significant effect on consumer loyalty.

The result testing effect of quality of service on consumer loyalty is proven have not significant, and indirect effect of quality service on consumer loyalty through consumer trust is proven have significant. this is the same as the effect on brand image on loyalty is not significant effect, but indirect significant effect through variable of consumer trust.

Both of these result strengthen finding, its important of variable of consumer trust. Consumer trust is variable between that has a very important position in the model of indirect causality. Variables of brand image and quality of service on consumer loyalty consumer trust is significant as the variable between that makes the effect indirectly effect, both variables have significant effect, although have not significant effect on consumer loyalty.

![Path Diagram Hypothesis Testing Result](image)

Figure 1. Path Diagram Hypothesis Testing Result

The result of Fit Global Optimization obtained value of 0.971 is accordance with the requirements, that is: GFI > 0.90. while of Goodness of Fit Inner models obtained value of \( FIT = 0.535 \). This indicate that the models can explain effect more variable (as a models in conceptual framework) on variabel of loyalty 53.5%. Thus there are are several variables that have not been entered into the model and added with an error with contribution 46.5%.
Table 2. Path Coefficient and t-statistics

<table>
<thead>
<tr>
<th>No</th>
<th>Effect of inter-variable</th>
<th>Estimate</th>
<th>CR</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality of Product &gt; Consumer Trust</td>
<td>0.210</td>
<td>3.08*</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>Brand Image &gt; Consumer Trust</td>
<td>0.260</td>
<td>3.09*</td>
<td>Significant</td>
</tr>
<tr>
<td>3</td>
<td>Quality of Service &gt; Consumer Trust</td>
<td>0.438</td>
<td>5.43*</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>Quality of Product &gt; Consumer Loyalty</td>
<td>0.317</td>
<td>5.48*</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Brand Image &gt; Consumer loyalty</td>
<td>0.159</td>
<td>1.78</td>
<td>Not Significant</td>
</tr>
<tr>
<td>6</td>
<td>Quality of Service &gt;Consumer loyalty</td>
<td>0.139</td>
<td>1.7</td>
<td>Not Significant</td>
</tr>
<tr>
<td>7</td>
<td>Consumer Trust &gt;Consumer Loyalty</td>
<td>0.259</td>
<td>2.19</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Note: * = significant at $\alpha = 5\%$

Table 3. Path coefficient Indirect Influence

<table>
<thead>
<tr>
<th>No</th>
<th>Effect Between Variables</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
<th>Keterangan</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality of Product → Consumer Trust</td>
<td>0.210 (3.08*)</td>
<td>-</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>Trust → Consumer Loyalty</td>
<td>0.259 (2.19*)</td>
<td>-</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>3</td>
<td>Quality of Product → Consumer Loyalty</td>
<td>0.317 (5.48*)</td>
<td>-</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>Quality of Product → Consumer Trust → Consumer Loyalty</td>
<td>-</td>
<td>0.054</td>
<td>0.371</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Brand Image → Consumer Trust</td>
<td>0.260 (3.09*)</td>
<td>-</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>6</td>
<td>Consumer Trust → Consumer Loyalty</td>
<td>0.259 (2.19*)</td>
<td>-</td>
<td>-</td>
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<td>7</td>
<td>Brand Image → Consumer Loyalty</td>
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</tr>
<tr>
<td>8</td>
<td>Brand Image → Consumer Trust → Consumer Loyalty</td>
<td>-</td>
<td>0.067</td>
<td>0.226</td>
<td>Significant</td>
</tr>
<tr>
<td>9</td>
<td>Quality of Service → consumer Trust</td>
<td>0.438 (5.43*)</td>
<td>-</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>10</td>
<td>Consumer Trust → Consumer Loyalty</td>
<td>0.259 (2.19*)</td>
<td>-</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>11</td>
<td>Quality of Service → Consumer Loyalty</td>
<td>0.139 (1.7)</td>
<td>-</td>
<td>-</td>
<td>not Significant</td>
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<tr>
<td>12</td>
<td>Quality of Service → Consumer Trust → Consumer Loyalty</td>
<td>-</td>
<td>0.113</td>
<td>0.252</td>
<td>Significant</td>
</tr>
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</table>

5. Conclusions and Recommendations
Quality of Product, Brand Image, and Quality of service have significant effect on Consumer Trust. Quality of Product have significant effect on Consumer Loyalty, while Brand Image and Quality of service have not significant effect on Consumer Loyalty. Consumer Trust have significant effect on Consumer Loyalty.

6. References


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