Analysis Of The Effect Of Product Quality On Customer Satisfaction And Customer Loyalty Of Indihome ATPT Telkom Regional 1 Sumatera, Medan, North Sumatra, Indonesia

Juwita Magdalena Sitanggang, Sukaria Sinulingga, and Khaira Amalia Fachruddin

1 Postgraduate Program, Magister Management, Universitas Sumatera Utara, Medan, North Sumatra, Indonesia
2 Lecturer, Postgraduate Program, Magister Management, Universitas Sumatera Utara, Medan, North Sumatra, Indonesia
3 Faculty of Industrial Engineering, Universitas Sumatera Utara, Medan, North Sumatra Indonesia
4 Faculty of Economics & Business, Universitas Sumatera Utara, Medan, North Sumatra Indonesia

*Correspondence Author: Juwita Magdalena Sitanggang

ABSTRACT:- The purpose of this research is to formulate a policy to solve the problem concerning product quality to increase customer loyalty of IndiHome at PT Telkom Regional 1 Sumatera, with customer satisfaction as an intervening variable. This research aims to analyze the direct and indirect effects of product quality on customer satisfaction and customer loyalty of IndiHome. The type of research used is survey research type with simple sampling method. Sample requirement in this study is sample is an IndiHome service user in Medan. Sample size in this study was 396 customers. This study uses the Path Analysis. In this case, path analysis will analyze the magnitude of the direct and indirect effects of variables as to the resulting variables. The direct effect of product quality on customer loyalty is smaller than the indirect influence of product quality on customer loyalty through customer satisfaction, and it can be stated that customer satisfaction is useful as an intervening variable between product quality and customer loyalty. The most influential variables of customer loyalty are product performance variables.

Keywords: Performance, Features, Reliability, Conformance, Durability, Serviceability, Perceived Quality, Satisfaction, Loyalty, Customers

I. INTRODUCTION

Based on a survey conducted by the Indonesian Internet Service Association Association (APJII) in 2017 which obtained data from the 262 million inhabitants of Indonesia, there were 143.26 million Internet users or equivalent to 54.68% of the total population of Indonesia with a total the second most after Java Island (58.08%), Sumatra which is 19.09%.

Internet service users are among the youngest with age ranges between 19-34 years at 49.52%, followed by parents with age ranges between 35-54 years by 29.55%, adolescents between the ages of 13-18 and 16, 68%, and parents aged 54 years and over as much as 4.24%. With the normal price perception of 51.3%, expensive 27.7% and cheap 21% (www.apjii.or.id, 2018).

From the data above, we can see that internet business is excellent business. Establishing a company is not easy, as well as maintaining and developing the already established company is also a much more difficult task. Problems will always emerge from both within and outside the company.

In principle every company when selling its products will be faced with a good strategy and sales technique so that the goods/services it offers can be sold well. One of the sales techniques is related to how and how high the quality of the product is given to consumers so consumers will be satisfied, and when the consumer is satisfied, the company hopes that the consumer will be loyal to the goods/services offered.

At the moment, the increase in services offered is getting more attention for the company. This case is because service quality can be used as a tool to achieve a competitive advantage. Implementation of service quality by a service company is to provide the best service quality for the customer with the goal of creating customer satisfaction. However, there are often differences between customer expectations and customer perceptions of the quality provided by the company. According to Jahanshahi, et al. (2011) that the quality of the roaster service and product quality are part of promoting its customer satisfaction. Customer satisfaction is an emotional response to an evaluation of a product or service consumption experience. Customer satisfaction is an alternative evaluation option selected at least beyond customer perceptions. As suggested by Cristopher and Lauren (2007) that customer satisfaction is an adequate response to a specific consumption experience or
evaluation of conformity or perceived mismatch between previous perceptions and actual performance of the product after use.

PT Telekomunikasi Indonesia, Tbk is the provider of information and telecommunications (InfoComm) and the largest full service and network provider in Indonesia. PT Telekomunikasi Indonesia, Tbk to innovate by making Internet services under the name of Indonesia Digital Home or the so-called IndiHome which is one of Telkom's services in the form of communication and data services packages such as voice, internet (Internet on Fiber or High Speed Internet), and television services interactive (USee TV Cable, IP TV).

Unfortunately, there is a phenomenon reversing the IndiHome service with a varied amount each month. The pre-research result by distributing questionnaires to 20 users of Indihome, obtained data that there are as many as 85% of respondents expressed dissatisfaction with the quality of Indihome products. This case is due to the gap between what customers expect and the perceptions of the facts occurring in the field, such as network unstable (63%), numerous network interruptions (10%), and sluggish handling complaints (12%).

The literature describes how customer satisfaction or dissatisfaction is formed the expectancy disconfirmation model, which suggests that satisfaction and dissatisfaction are the effects of comparison between consumer expectations before purchase with the acquired consumer of the purchased product. When consumers buy a product, consumers have a hope of how the product works. The product works better than expected so that consumers will be satisfied.

Concerning the above issues, some research questions that highlighted are:
RQ1: What are the factors that cause an increase in the number of IndiHome revocation at PT Telkom Regional 1 Sumatera, Medan?
RQ2: What are the indicators of each Product Quality Variance, Customer Satisfaction, and Customer Loyalty that can be informed to solve problems that occur with IndiHome customers at PT Telkom Regional 1 Sumatera, Medan?
RQ3: What are the right criteria that can be proposed to answer Product Quality issues to improve Customer Loyalty with Customer Satisfaction as an intervening variable to IndiHome customers at PT Telkom Regional 1 Sumatera, Medan?

II. LITERATURE REVIEW

Product quality

Product quality is an effort to meet or exceed customer expectations. A product that has a quality that meets the standards of quality that have been determined, and quality is a continually changing condition as the consumer's taste, or expectation of a product is always changing. So that the better quality change and improvement are meant to keep the product created to a standard that has been set for consumers to lose confidence in the product concerned. Quality is a factor in a product that causes the product to be worth the purpose of what the product is producing.

Quality is a mix of properties and characteristics that can determine the extent to which the output can meet the needs of the consumer. The quality of a product, whether goods or services can be determined through its dimensions. The dimension is called product quality dimension (Tjiptono, 2008). According to Garvin in Tjiptono and Diana (2003), there are eight dimensions of product quality. The dimensions are 1) Performance. 2) Features. 3) Reliability. 4) Conformance to specifications. 5) Durability. 6) Serviceability. 7) Aesthetic. 8) Perceived quality

Kotler and Armstrong (2001) use three dimensions to measure the quality of a product, namely: 1) Performance. 2) Reliability. 3) Conformance. Furthermore, Mowen and Minor (2002) simplify the four main dimensions, namely: 1) Features 2) Reliability. 3) Durability. 4) Safety

Customer satisfaction

Kotler and Keller (2011) argue that consumer satisfaction is the level of one's feelings after comparing performance or perceived results as expected. According to Tjiptono and Fandy (2008), customer satisfaction or dissatisfaction is a consumer response to the discrepancy or discrepancy felt between the previous perception and the perceived performance of the wearer. So basically customer satisfaction includes differences in perceptions of perceived results by consumers or customers. Customer Satisfaction or often referred to as total customer satisfaction, is the focus of the Customer-Driven Project Management (CDPM) process, even if it is stated that customer satisfaction is of quality. Similarly, the definition of quality is customer satisfaction.

According to Kotler and Keller (2011), that customer satisfaction is the level of a person's feelings after comparing the performance (or results) perceived in the hope. Thus, the level of satisfaction is a function of the difference between the perceived performance and the expectation. According to Giese & Cote, (2000) satisfaction consists of three necessary components, a meeting with the product or service, the response to the product or service by the consumer, and the time dimension, after purchase. According to Tjiptono and Fandy
(2008), customer satisfaction is a buyer's evaluation where alternatives are selected at least to give the same result or beyond consumer perceptions, while customer dissatisfaction arises when the outcome is unsuitable. Customer satisfaction is a function of the performance that is considered to exist on the product and the customer's expectations. To get the advantage of every company demanded to be able to satisfy its customers, so the management commitment to improving the quality of the product is achieved perfectly. According to Shing (2012) satisfaction is a physiological response, feeling of pleasure or disappointment of someone who appears after comparing the perceptions or impressions on the performance (result) of a product and its expectations before and after consuming the product or service. Tse and Wilton (2008) state that consumer satisfaction or dissatisfaction is consumer response to the evaluation of the perceived mismatch between previous expectations and the actual performance of the product perceived after its use.

Engel et al. (2007) state that consumer satisfaction is an after-sales evaluation where alternative alternatives are at least equal or beyond consumer expectations, while dissatisfaction arises when the outcome does not meet expectations. Thus, it can be concluded that the definition of consumer satisfaction is the response of the behavior shown by the consumer by comparing the performance or the perceived results to the expectation. Kotler and Keller (2012) state some ways to measure customer satisfaction, namely: a) suggestion and recommended b) Periodic surveys c) Mystery shoppers d) Customer loss rate

Customers loyalty

Purwani and Dharmmesta (2002) loyalty is the attitude towards tangible products expressed by consumers in the likes of dislike or dislikes and decides whether to buy the product or not. High loyalty if the consumer has a firmness in the product he or she chooses, while low loyalty if the consumer is vulnerable to switching to another product.

According to Wu (2013), to achieve customer loyalty, the company should focus on customer satisfaction because it positively affects the customer's future behavioral intent, which implies that satisfied customers will buy more and more, and more importantly, recommending their favorite goods and services to their friends and family. Kotler and Keller (2012) stated loyalty or loyalty was a firmly held commitment to buy or subscribe to particular products or services in the future despite the influence of the situation and marketing efforts potentially leading to behavioral transitions.

Griffin (2005) argues that a customer is said to be loyal or loyal if the customer shows a buying behavior regularly or there is a condition that requires customers to buy at least twice within a certain time interval. Customer satisfaction efforts are made to influence customer attitudes, while customer loyalty concepts are more closely related to customer behavior than customer behavior. Griffin (2005) believes that reliable measures to predict sales growth are customer loyalty, and customer loyalty can be defined based on consistent purchasing behavior. Characteristicsof customer loyalty area) Make repeated purchases regularly b) Purchase across product and service lines c) Refers other.

Mowen and Minor (2002) describe the aspects that shape consumer loyalty are: 1) Confidence (cognitive) means that product information held by consumers should refer to superior products in competition. 2) Attitude (affective) means that the level of consumer's preferences should be higher than the rival product, so there is a clear affective preference in the focal product. 3) Consumer intent (conative) towards the focal product means that consumers should have the intention to purchase a focal product instead of other products when the purchase decision is made.

The relationship between product quality and customer satisfaction

Product quality according to Lupiyodi and Hamdani (2013) is the extent to which the product or service meets its specifications. The consistency of the quality of a product or service can contribute to the success of a company reviewed from customer satisfaction, employee satisfaction, and company profitability. Quality service products play an essential role in establishing customer satisfaction (Kotler and Armstrong, 1996). The more qualified the product and the services provided, the higher the customer satisfaction. When customer satisfaction is higher, it can generate profit for the business entity. Satisfied customers will continue to make purchases on the business entity. That is, if analyzed further, between long-term quality and profit is seen in 2 (two) things, namely external profit factor derived from customer's fraud and internal gain derived from improved product or service efficiency (Sviokla, 2009).

According to Sviokla in Lupiyodi and Hamdani (2013), such external benefits may have implications in the production process of goods or services, i.e., the quality of the product or service provided by the company can create a positive perception of the customer against the company and generate a satisfaction and customer loyalty. In the meantime, what is meant by internal gain is seen at the same time as gaining external gains with a company focus on quality that can bring the company's internal positive value in the process of improving its product quality? Quality is closely linked to customer value and satisfaction. In a more narrow
sense, quality can be interpreted as "free from damage." However, most customer-centric companies interpret quality based on value creation and customer satisfaction (Kotler and Armstrong, 2001).

The relationship between product quality and customer loyalty
Consumer loyalty to a product offered by the company is reflected in the consumer's habits to see the quality of the product, so consumers make ongoing purchases; the company should note this. Thus the company needs to observe the customer's loyalty to meet the needs and needs of consumers and to achieve the company's goals. The consumer is an asset that is not biased for a product or service business. This case is because of the consumer as a party that needs the product or service offered by the company. Good product quality will make consumers like the products offered by the company. Product quality is a whole of the characteristics and characteristics of the product that affects its ability to satisfy the expressed or implied needs (Kotler, 2002). The criteria for assessing a product is said to be of good quality is relative, meaning that everyone will have different ratings. Quality can prove a product by comparing the quality of similar products with different brands by testing them in some aspects of its ease of maintenance. Kotler (2002) says that consumers love products that offer quality, performance, and best features. Good product quality creates, maintains satisfaction, and makes loyal consumers.

Product quality is a whole of the characteristics and characteristics of the product that affects its ability to satisfy the expressed or implied needs (Kotler, 2002). The criteria for assessing a product is said to be of good quality is relative, meaning that everyone will have different ratings. Its quality can prove a product by comparing the quality of similar products with different brands by testing them in some aspects of its ease of maintenance. Kotler (2002) says that consumers like products that offer quality, performance, and best features. Good product quality creates, maintains satisfaction, and makes loyal consumers.

The relationship between customer satisfaction and customer loyalty
Many experts argue that loyalty with customer satisfaction is relevant, although sometimes the linkage is not always in sync. Oliver (2010) states that satisfaction is an essential step in establishing loyalty, but it is important to note that satisfied customers will not necessarily be loyal customers. Because in essence humans have curiosity and try something new. Although satisfaction for a customer has been achieved and is very satisfied with the quality of the product or service, but is not absolute assurance that a consumer will be loyal and it is still a lot that has moved to another brand. According to Maulana (2005) states that a consumer is said to be loyal if he has a strong commitment to using or repurchasing regularly a product or service.

While according to research conducted by Bloemer and Ruyter (1998) explains that satisfaction is often viewed as the basis of loyalty. Satisfaction has a positive effect on loyalty. Research on Nguyen and Le Blanc (1994) in Wiyaja E.M (2011) also proved a positive and significant influence between satisfaction and customer loyalty. Satisfaction will arise if customers value their transaction experience.

Customer loyalty is the manifestation and continuity of consumer satisfaction in using the facilities and services provided by the company, and to remain a consumer in the company. Consumer satisfaction is an essential part of customer loyalty. Customer loyalty usually leads to repeat buying and recommended buying. If consumers are satisfied with a particular brand and often buy the product then it can be said that the level of loyalty of the customer is high, on the contrary if consumers are not too satisfied with a particular brand and tend to buy products with different brands then the level of customer loyalty to the product is low (Foedjiawati, 2005). Therefore every part of the company must be able to understand that satisfaction is the thing that should be given to its customers.

Hypotheses Development
The hypotheses of this study are as follows:

H1: Product quality (X) has a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

H2: Product quality (X) has a positive and significant effect on customer loyalty (Z) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

H3: Product Satisfaction (Y) has a positive and significant effect on customer loyalty (Z) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

H4: Performance (X1) has a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

H5: Features (X2) have a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

H6: Reliability (X3) has a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

*Corresponding Author: Juwita Magdalena Sitanggang  www.aijbm.com
H7: Conformance (X4) has a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan
H8: Durability (X5) has a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan
H9: Serviceability (X6) has a positive and significant effect on customer satisfaction (Y) IndiHome users at PT Telkom Regional 1 Sumatera, Medan
H10: Perceive Quality (X7) has a positive and significant effect on customer satisfaction (Y) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan
H11: Product quality (X) through customer satisfaction (Y) has a positive and significant effect on customer loyalty (Z) of IndiHome users at PT Telkom Regional 1 Sumatera, Medan

III. RESEARCH METHODS

This research is conducted to test the proposed hypothesis using the research method that has been designed according to the variables to be investigated to get an accurate result. This research type is causal descriptive. According to Sinulingga (2014) that causal descriptive research is a type of research undertaken to investigate causal relationships by observing the consequences and the possible causes of the consequences. This study uses path analysis, a causal relationship pattern. Independent variables affect the dependent variable either directly or indirectly (Rutheford, 1993). In this case, path analysis will analyze the magnitude of the direct and indirect effects of variables as to the resulting variables. Direct influence is the effect of one variable on the cause of the direct consequence without going through other variables. The indirect effect is the effect of one variable causing the variables as a result indirectly because of the other variables (Sinulingga, 2014).

In this research, the type of research used is the type of survey research with the method of sampling in simple random sampling that is a technique to get a sample directly conducted at the sampling unit. Thus each sampling unit as an isolated population element gets the same chance to be a sample or to represent the population (Margono, 2004). Sample requirement in this study is that the sample is an IndiHome service user in Medan Witel. sample size in this study was 396 customers.

IV. RESULTS & DISCUSSION

Results

Model Line Relation Analysis 1

The effect of product quality (X) simultaneously on customer satisfaction (Y)

Here is the regression equation between the variables of communication ability, workload, and wage on employee performance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>314,011</td>
<td>7</td>
<td>44,859</td>
<td>309,378</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>56,259</td>
<td>388</td>
<td>0,145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>370,270</td>
<td>395</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It can be seen that the significance value <0.005 (0.000), meaning there is a significant effect between product quality (performance, product diversity, reliability, suitability, durability, service capability, and perceived quality) with customer satisfaction. Furthermore, to see how much influence strength is used, the Coefficient of Determination (KD) with the formula:

\[ KD = R^2 \times 100\% \]

KD = 0.848 x 100%
KD = 84.8%

Thus, customer satisfaction can be explained by using performance, product diversity, reliability, conformity, durability, service capability, and perceived quality are 84.8% while the rest are other unexplored variables.
The effect of product quality (X) partially on customer satisfaction (Y)

Table 2. Results from T-test

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Performance</td>
<td>0.191</td>
<td>0.042</td>
<td>0.183</td>
<td>4.576</td>
<td>0.000</td>
</tr>
<tr>
<td>2.</td>
<td>Features</td>
<td>0.34</td>
<td>0.023</td>
<td>0.031</td>
<td>1.502</td>
<td>0.134</td>
</tr>
<tr>
<td>3.</td>
<td>Reliability</td>
<td>0.023</td>
<td>0.030</td>
<td>0.017</td>
<td>0.784</td>
<td>0.433</td>
</tr>
<tr>
<td>4.</td>
<td>Conformance</td>
<td>0.075</td>
<td>0.060</td>
<td>0.073</td>
<td>1.247</td>
<td>0.213</td>
</tr>
<tr>
<td>5.</td>
<td>Durability</td>
<td>0.123</td>
<td>0.032</td>
<td>0.104</td>
<td>3.791</td>
<td>0.000</td>
</tr>
<tr>
<td>6.</td>
<td>Serviceability</td>
<td>0.567</td>
<td>0.059</td>
<td>0.548</td>
<td>9.646</td>
<td>0.000</td>
</tr>
<tr>
<td>7.</td>
<td>Perceived Quality</td>
<td>0.088</td>
<td>0.038</td>
<td>0.081</td>
<td>2.311</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-0.080</td>
<td>0.124</td>
<td></td>
<td>-0.644</td>
<td>0.520</td>
</tr>
</tbody>
</table>

Dependent Variable: Satisfaction

It can be seen that the performance value significance value (0.000), durability (0.000), serviceability (0.000) and perceived quality (0.021) is smaller than 0.05. Thus it can be said that there is the influence of product quality, in this case, performance, durability, serviceability and perceived quality to customer satisfaction

Model Line Relation Analysis 2

The effect of product quality (X) and customer satisfaction (Y) simultaneously on loyalty (Z)

Table 3. Results from F-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>58,997</td>
<td>8</td>
<td>7,375</td>
<td>5,094</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>560,296</td>
<td>387</td>
<td>1,448</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>619,293</td>
<td>395</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Loyalty

Constants: performance, features, reliability, conformance, durability, serviceability, perceived quality, satisfaction

R: 0.309
R Square: 0.095

It can be seen that the significance value <0.005 (0.000), meaning there is significant influence between product quality (performance, features, reliability, Conformance, durability, serviceability and perceived quality) and customer satisfaction with customer loyalty. Furthermore, to see how much influence strength is used, the Coefficient of Determination (KD) with the formula:

KD = R² x 100%
KD = 0.095 x 100%
KD = 9.5%

Thus, customer loyalty can be explained by using performance, features, reliability, Conformance, durability, serviceability, perceived quality and customer satisfaction is 9.5% while the rest are other unexplored variables

The effect of product quality (X) and customer satisfaction (Y) partially on customer loyalty

Table 4. Results from T-test

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Performance</td>
<td>0.297</td>
<td>0.135</td>
<td>0.220</td>
<td>2.190</td>
<td>0.029</td>
</tr>
<tr>
<td>2.</td>
<td>Features</td>
<td>0.066</td>
<td>0.073</td>
<td>0.046</td>
<td>0.911</td>
<td>0.363</td>
</tr>
<tr>
<td>3.</td>
<td>Reliability</td>
<td>0.095</td>
<td>0.095</td>
<td>0.053</td>
<td>1.009</td>
<td>0.314</td>
</tr>
<tr>
<td>4.</td>
<td>Conformance</td>
<td>0.065</td>
<td>0.191</td>
<td>0.049</td>
<td>0.340</td>
<td>0.734</td>
</tr>
<tr>
<td>5.</td>
<td>Durability</td>
<td>0.227</td>
<td>0.104</td>
<td>0.149</td>
<td>2.180</td>
<td>0.030</td>
</tr>
<tr>
<td>6.</td>
<td>Serviceability</td>
<td>0.082</td>
<td>0.207</td>
<td>0.061</td>
<td>0.398</td>
<td>0.691</td>
</tr>
<tr>
<td>7.</td>
<td>Perceived Quality</td>
<td>0.305</td>
<td>0.121</td>
<td>0.216</td>
<td>2.514</td>
<td>0.012</td>
</tr>
<tr>
<td>8.</td>
<td>Satisfaction</td>
<td>0.544</td>
<td>0.160</td>
<td>0.421</td>
<td>3.392</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>3.263</td>
<td>0.391</td>
<td></td>
<td>8.347</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Dependent Variable: Loyalty
Test results of path analysis

**Direct effect**

1) Analysis of the influence of product performance to customer satisfaction: the obtained value of significance equal to 0.000 (<0.05), it can be concluded that directly there is an influence of product performance to customer satisfaction, with \( p_1 = 0.183 \).

2) Analysis of the influence of features on customer satisfaction: the obtained value of significance equal to 0.134 (> 0.05), it can be concluded that there is the indirect influence of features to customer satisfaction, with \( p_2 = 0.031 \).

3) Analysis of the effect of product reliability on customer satisfaction: obtained the significance value of 0.433 (> 0.05), it can be concluded that there is an insignificant influence of product reliability to customer satisfaction, with \( p_3 = 0.017 \).

4) Analysis of the effect of product conformity to customer satisfaction: obtained the significance value of 0.213 (> 0.05), it can be concluded that there is the indirect effect of product conformity to customer satisfaction, with \( p_4 = 0.073 \).

5) Analysis of product durability influence to customer satisfaction: the obtained value of significance equal to 0.000 (<0.05), it can be concluded that directly there is a significant influence of product durability to customer satisfaction, with \( p_5 = 0.104 \).

6) Analysis of the effect of serviceability on customer satisfaction: obtained the significance value of 0.000 (<0.05), it can be concluded that directly there is a significant effect of serviceability on customer satisfaction, with \( p_6 = 0.548 \).

7) Analysis of the influence of perceived quality to customer satisfaction: obtained the significance value of 0.021 (<0.05), it can be concluded that directly there is a significant influence of perceived quality to customer satisfaction, with \( p_7 = 0.081 \).

8) Analysis of the influence of product performance on customer loyalty: the obtained value of significance equal to 0.029 (<0.05), it can be concluded that directly there is a significant influence of product performance to customer loyalty, with \( p_8 = 0.220 \).

9) The analysis of the effect of features on customer loyalty: the obtained value of significance equal to 0.363 (> 0.05), it can be concluded that there is an insignificant influence of features to customer loyalty, with \( p_9 = 0.046 \).

10) The analysis of the effect of product reliability on customer loyalty: the obtained the significant value of 0.314 (> 0.05), it can be concluded that there is an insignificant effect of product reliability on customer loyalty, with \( p_{10} = 0.053 \).

11) The analysis of the effect of product conformity to customer loyalty: the obtained value of significance equal to 0.734 (> 0.05), it can be concluded that there is the indirect effect of product conformity to customer loyalty, with \( p_{11} = 0.049 \).

12) The effect of product durability on customer loyalty: the value of significance is 0.030 (<0.05), it can be concluded that there is a significant effect of product durability on customer loyalty, with \( p_{12} = 0.149 \).

13) Analysis of the effect of serviceability on customer loyalty: the obtained value of significance equal to 0.691 (> 0.05), it can be concluded that there is an insignificant influence of serviceability to customer loyalty, with \( p_{13} = 0.061 \).

14) Analysis of the influence of perceived quality to customer loyalty: the obtained value of significance equal to 0.012 (<0.05), it can be concluded that directly there is a significant influence of perceived quality to customer loyalty, with \( p_{14} = 0.216 \).

15) Analysis of the direct influence of customer satisfaction on customer loyalty: the obtained value of significance equal to 0.001 (<0.05), it can be concluded that directly there is a significant influence of customer satisfaction to customer loyalty, with \( p_{15} = 0.421 \).

**Indirect effect**

1) Analysis of the effect of product performance on customer loyalty through customer satisfaction: Total effect = \((p_8) + (p_1)(p_{15}) = (0.220) + (0.183)(0.421) = 0.297\)

The statistical analysis result shows that the direct effect of product performance on customer loyalty is 0.220 and the indirect effect is 0.297, which means that the value of indirect influence is greater than the value of direct influence. These results indicate that indirectly product performance has a significant effect on customer loyalty through customer satisfaction.

2) Analyze the effect of features on customer loyalty through customer satisfaction: Total effect = \((p_9) + (p_2)(p_{15}) = (0.046) + (0.031)(0.421) = 0.059\)

The statistical analysis results show the direct effect of features on customer loyalty at 0.046 and indirect effect of 0.059, which means that the value of indirect influence is smaller than the value of direct influence.

*Corresponding Author: Juwita Magdalena Sitanggang www.aijbm.com*
These results indicate that indirectly features has an insignificant effect on customer loyalty through customer satisfaction.

3) The analysis of the effect of product reliability on customer loyalty through customer satisfaction:
Total effect = (ρ10) + (ρ3) (ρ15) = (0,053) + (0,017) (0,421) = 0.060
The result of the statistical analysis shows that the direct effect of product reliability on customer loyalty is 0.053 and the indirect effect is 0.60, which means that the value of indirect influence is greater than the value of direct influence. These results indicate that indirectly product reliability has a significant effect on customer loyalty through customer satisfaction.

4) Analyze the effect of product conformity to customer loyalty through customer satisfaction:
Total effect = (ρ11) + (ρ4) (ρ15) = (0,049) + (0,073) (0,421) = 0.079
The statistical analysis results show the direct effect of the product's conformity on customer loyalty is 0.049 and the indirect effect is 0.079, which means that the value of indirect influence is greater than the value of direct influence. These results indicate that indirectly the product conformity has a significant effect on customer loyalty through customer satisfaction.

5) Analysis of the effect of product durability on customer loyalty through customer satisfaction:
Total effect = (ρ12) + (ρ5) (ρ15) = (0,149) + (0,104) (0,421) = 0.192
The result of the statistical analysis shows the direct effect of product durability on customer loyalty is 0.149, and indirect effect is 0.192, which means that the value of indirect influence is greater than the direct influence value. These results indicate that indirectly product resilience has a significant effect on customer loyalty through customer satisfaction.

6) Analysis of the effect of serviceability on customer loyalty through customer satisfaction:
Total effect = (ρ13) + (ρ6) (ρ15) = (0,061) + (0,548) (0,421) = 0.289
The statistical analysis result shows the direct effect of serviceability on customer loyalty at 0.061 and indirect effect of 0.289, which means that the value of indirect influence is greater than the direct influence value. These results indicate that indirectly the serviceability has a significant effect on customer loyalty through customer satisfaction.

7) Analysis of the influence of perceived quality to customer loyalty through customer satisfaction:
Total effect = (ρ14) + (ρ7) (ρ15) = (0,216) + (0,081) (0,421) = 0.250
The statistical analysis result shows the direct influence of perceived quality to customer loyalty of 0.216 and the indirect effect of 0.250, which means that the value of indirect influence is greater than the value of direct influence. These results indicate that indirect quality is perceived to have a significant effect on customer loyalty through customer satisfaction.

The regression equation of the above path is as follows:
Y1 = 0.183X1 + 0.031X2 + 0.017X3 + 0.073X4 + 0.104X5 + 0.548X6 + 0.081X7 + e1
Y2 = 0.220X1 + 0.046X2 + 0.053X3 + 0.049X4 + 0.149X5 + 0.061X6 - 0.216X7 + 0.421Y + e2
Total coefficient of determination: 1 - (0.389) (0.951) = 1 - 0.369 = 0.631
That is, the information contained in the data 63.1% can be explained by the model, the rest is explained by other variables and errors

V. CONCLUSIONS & SUGGESTIONS

Conclusion
Based on the results of the research and discussion, some of the conclusions that can be taken are as follows:
1) Product performance variables have a positive and significant effect on customer satisfaction and the direct effect of product performance of 0.183 on customer satisfaction
2) Product performance variables have a positive and significant effect on customer loyalty, and product performance have a direct effect of 0.220 on customer loyalty
3) Product performance variables have a positive and significant effect on customer loyalty through customer satisfaction as intervening variables and indirect effects of product performance by 0.297 on customer loyalty
4) Feature variables have no significant effect on customer satisfaction.
5) Feature variables have no direct effect on customer loyalty.
6) Feature variables have no direct effect on customer satisfaction.
7) Feature variables have no direct effect on customer loyalty.
8) Product conformity variables have no direct effect on customer satisfaction.
9) Product conformity variables have no direct effect on customer loyalty.
10) Product durability variables have a positive and significant effect on satisfaction and direct product durability of 0.104 to customer satisfaction.
11) Product durability variables have a positive and significant effect on loyalty and the direct effect of 0.199 on customer loyalty.
12) Product durability variables have a positive and significant effect on customer loyalty through customer satisfaction as intervening variables and indirect effectiveness of 0.192 to customer loyalty.
13) Serviceability variables have a positive and significant effect on customer satisfaction and direct service effectiveness of 0.548 to customer satisfaction.
14) Serviceability variables have no direct effect on customer loyalty.
15) Perceived quality variables had a positive and significant effect on customer satisfaction, and perceived the quality of 0.081 to customer satisfaction.
16) Perceived quality variables have a positive and significant effect on customer loyalty and direct influence between perceived quality directly by 0.216 to customer loyalty.
17) Perceived quality variables indirectly have a positive and significant effect on customer loyalty through customer satisfaction as the intervening variable and indirect Perceived quality influence by 0.250 to customer loyalty.
18) Variables of customer satisfaction with customer loyalty have positively influence, and significance is 0.421.
19) The direct effect of product quality on customer loyalty is smaller than the indirect effects of product quality on customer loyalty through customer satisfaction, and it can be said that customer satisfaction is effective as an intervening variable between product quality to customer loyalty.
20) The biggest variables of influence on customer loyalty are product performance variables.

Suggestions
Based on the results of the research, some suggestions can be presented as follows:
In order to increase customer loyalty, PT Telkom continues to improve customer satisfaction through product quality improvement in product performance dimensions, product endurance, and perceived quality so that with increased product quality, loyalty will also increase due to increased customer satisfaction.
PT Telkom should improve product performance such as internet network quality, home phone sound clarity, UseeTV channel quality to increase customer satisfaction which will certainly increase customer loyalty.
PT Telkom should improve the durability of Indihome products, especially on UseeTV's weatherproof weather.
PT Telkom should improve serviceability in the aspect of service polite, especially when customers complain that the network speed is suddenly declining.
PT Telkom should improve the perceived quality so that customers are always satisfied because the customer's perception of the quality of the Indihome product is appropriate, and of course this will be very useful for improving the installation of Indihome products.

REFERENCES


*Corresponding Author: Juwita Magdalena Sitanggang  www.aijb.com
[44]. Lupiyoadi, Rambat, 2001, Manajemen Pemasaran Jasa, Edisi 1, Salemba Empat, Jakarta

*Corresponding Author: Juwita Magdalena Sitanggang  www.aijbm.com


