Understanding Customer Purchase Intention of IT Product on Indonesia

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Abstract

In this digital revolution all industries are competing to innovate to attract consumers' attention. One of the most competitive competition is in the electronics industry. This study aims to determine the effect of brand awareness, brand image and perceived quality towards purchase intention of IT products. The object in this research is one of the leading laptop brand in Indonesia in one of the growing provinces in Indonesia. This study uses sampling by purposive sampling technique. The number of samples in this study were 142 respondents. Data obtained through questionnaires distributed directly to the field and through the Google Form. Data analysis techniques using SEM showed that brand awareness has no significant effect on perceived quality, brand image has a significant effect on perceived quality, brand awareness has a significant effect on purchase intention, brand image has a significant effect on purchase intention and perceived quality have a significant effect on purchase intention. In generaly, ASUS brand laptops have managed to attract consumers' attention through their brand image and awareness.

Keywords

Brand awareness, brand image, perceived quality, purchase intention

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Introduction

Today, the world entered an era of disruption marked by the advancement of technology. Based on research found by Munro (2018) that technology is described as a tool to advance marketing and open wider access to global marketing. This causes business competition to increase sharply, consumer preferences and consumer behavior change, information technology develops rapidly in the business world to focus on responding to consumer satisfaction (Nuryakin & Farida, 2016). With intense competition, all industries are competing to innovate to attract consumers' attention. One of the most competitive competition is in the electronics industry. In this industry the role of technology is very visible, products that fall into this industry category are smartphones, personal computers, notebooks (laptops), televisions and other electronic devices.

But this research will discuss the tight competition in the notebook (laptop) industry. Hidayanti et al. (2018) said laptops are currently used for daily activities, especially for high school students and college students. Customers who will buy a laptop will find information about specifications, functions, brands, prices, designs, and advantages.

ASUS is one of the laptop manufacturers that exists until now. The Taiwanese company includes newcomers playing in the electronics industry compared to other brands. Founded in 1989 in Taipei, ASUS has now managed to penetrate the top 5 ranks of the world's best laptop brands. Old brands that have been present in the computer industry like Hewlett-Packard, Dell and Lenovo are still leading the world market. But in the Indonesian market, ASUS, which just arrived in 1989, has been able to compete with some of the old brands. If you look at the facts, then in 2018 ASUS will have a great opportunity to continue to expand their marketshare. Until the end of 2017, Top Brand Award has released a list of top laptops based on Top Brand Index. ASUS in 2017 came in second with TBI 18.1%. Even if seen since 2012, the percentage of consumer assessments of Acer laptops as the top laptop brand based on top brand index tends to decline. The opposite was demonstrated by ASUS, whose Top Brand Index continues to increase (www.topbrand-award.com).

Meanwhile, researchers are trying to connect ASUS 'success in recent years through several factors such as brand awareness, brand image and perceived quality of laptops that are linked to the intention of buying ASUS consumers. The choice of buying intention as the dependent variable is assumed because consumers who have the intention to buy an item tend to assume that the item is in their mind and has a good image in their eyes. Macdonald & Sharp (2000) explains that the most important thing to influence a consumer's decision to buy is brand awareness, even though the item is already familiar to consumers. Signs of a product that has a high brand awareness is when a product is purchased by a consumer, a consumer has already thought of a brand in his mind at the first time. A similar factor was shown in a study conducted by Wijaya (2013) about the intention to purchase Apple...
brand smartphone products that brand awareness provides the most significant influence among other variables on a person's intention to buy a product. Such things can also be practiced on laptop products where smartphones and laptops are electronic products with rapid technological development. Brand awareness is a common choice among consumers who are facing new choices, consumers who are aware of one brand in a choice tend to try other brands less, consumers who are aware of a brand tend to choose the brand they already know even when the brand has quality which is lower than other brands (Hoyer & Brown, 1990).

Then, another important factor for purchase intention is brand image. Simonian et al (2012), explained that the brand image of a product would increase the intention of a consumer to buy the product, meaning that there was a significant effect of the brand image on buying intention. Thus, the brand image of a product is indeed closely related to the intention to buy someone. The study belongs to Bian and Moutinho (2011) about the role of brand image on a person's buying behavior, giving a conclusion that there is a positive influence between the two variables. Thus, the brand image in a product is closely related to one's buying intention. Good perceived quality from a consumer is also able to excite their buying intention. Kakkos et al. (2015) in his research tested the perceived quality of purchase intention on private labeled bottled water products, the results showed that there was a positive relationship between perceived quality and purchase intention. But before creating quality based on the perception of each consumer a brand must be able to create awareness and image of the brand. In this case the researcher will make perceived quality as a mediation between brand awareness and brand image of purchase intention. Where the study was conducted by Aberdeen et al. (2016) tested the four variables. The study conducted on carbonated drinking water and concluded that the three variables of brand awareness, brand image and perceived quality do play an important role in purchase intention.

**Literature Review**

**Brand Awareness**

According to Saleem et al. (2015), consumer knowledge plays a very important role in the selection of a product and service, as well as awareness that plays an important role in recall and recognition. Brand awareness is the ability of a prospective buyer to recognize and recall that a brand is part of a particular product category. Chi et al (2009) showed that brand awareness can be distinguished from depth and breadth. Depth means how to make consumers remember or identify brands easily, and the extent of disclosure concludes when consumers buy products, brand names will come to their minds at once. According to Macdonal & Sharp (2000), brand awareness is a very important thing in selecting products for consumers, even when dealing with a product that is familiar or while doing the same selection activities (repeat choice), consumer awareness of the product is very determine these consumers to prioritize the product. Whereas according to Hoyer & Brown...
brand awareness can influence several factors towards consumers, the first factor that is brand awareness is a common thing as a foundation for consumers who will choose new products but do not have experience with these products. The second factor, when faced with several brand choices with the same category, consumers who are aware of one brand tend to be reluctant to do a trial of another brand. The third faculty, consumers who are aware of one brand, among several brand choices, tend to choose the brand that they already know even when the brand has lower quality compared to other brands.

**Brand Image**

According to Fianto et al. (2014), brand image is something that is considered capable of forming opinions and perceptions of consumer confidence in a product. Manorek et al. (2015), in his study explained that brand image has a positive impact on a product, it can even be the most influential variable. Meanwhile, Kotler & Armstrong (2012) said that brand image is something that is owned by someone in the form of a set of ideas, beliefs and impressions of a brand, therefore the brand image has a determination of consumer attitudes and actions. Wijaya (2013), explained that brand image is the most important factor in influencing the quality of an item and service, thus making consumers have the intention to buy.

**Perceived Quality**

Kakkos et al. (2015) also explained that perceived quality is the way consumers assess whether a product is worth buying and entering into the consumer experience. Aaker (1997) also explained that perceived quality has important attributes that apply to all product classes. Objective is an inappropriate word for perception of quality. A customer's perception of an important attribute for him is the impression of quality.

**Purchase Intention**

Purchase Intention is a series of consumer behavior processes before buying behavior occurs. The circuit begins with the effort made by the company and other stimuli, which then enter into consumer psychology and consumer behavior. After a selection process occurs in the psychology and characteristics of consumers, then the decision process to buy (Kotler & Keller, 2009) occurs. According to Simonian et al (2012), specific purchase intention can also be influenced by brand image. A high brand image of a product can influence someone to have a high intention to buy the product. Meanwhile, according to Schifman & Kanuk (2007) writes that intention is something related to the tendency of individuals to act or behave in relation to certain attitudes. Tslotsou (2006) stated that purchase intention can be influenced by several factors, these factors include perceived quality and satisfaction, managers must understand the important role of perceived quality and satisfaction involvement to be able to predict purchase intention. The higher the value of consumer perceptions of the quality of a brand, the higher the intention of a consumer to buy the brand. According to Simonian et al. (2012), specific purchase intention can also
be influenced by brand image. A high brand image of a product can influence someone to have a high intention to buy the product.

**Hypothesis Development**

**The relationship between brand awareness on perceived quality**

The quality of a product can be measured by several instruments in the product, it can also be measured from the brand attached to the product. The easier it is to remember the brand of a product, then spontaneously consumers consider the product to be of good quality. The author found a study by Aberdeen et al. (2016) about carbonated drinks in the city of Bogor that included brand awareness and perceived quality as a variable, concluding that brand awareness of Big Cola brands had a very positive role towards perceived quality. In the study of Chi et al. (2009) on mobile phones also discusses these two variables in which the study concludes that brand awareness has a significant influence on perceived quality. Similar results were also published by Kim & Lee (2018) which examined brand equity from tourist destinations where brand awareness had a significant influence on perceived quality. Thus, the relationship between brand awareness and perceived quality is formulated in a hypothesis.

H1 : brand awareness has positive influence on perceived quality

**The relationship between brand image on perceived quality**

The stronger the image of a brand, the more people will be convinced of the quality of the brand, so that people's perception of the brand will get better. This statement was reinforced by a study conducted by Aberdeen et al. (2016) on carbonated drinks in Bogor resulting in conclusions about the brand image of the Coca-Cola and Big Cola brands having a significant influence on perceived quality. Likewise in the study of Cretu & Brodie (2005) about the influence of brand image and company reputation, there is a variable relationship between brand image and perceived quality where brand image has a significant influence on perceived quality. Another study conducted by Wang & Tsai (2014) regarding the selection of mutual funds as the most popular investment concluded that perceived quality was significantly influenced by the brand image. The same thing was produced by Severi & Ling (2013) where the perceived quality variable was significantly influenced by the brand image. From several previous studies, a hypothesis can be formulated.

H2 : brand image has positive influence on perceived quality

**The relationship between brand awareness on purchase intention**

A person's awareness of a brand is believed to lead to their intention to behave. The more consumers are aware of the brand, the higher the possibility of behaving to buy products from the brand. Malik et al. (2013) conducted a study of the importance of brand awareness and brand loyalty in assessing purchase intention, proving that brand awareness has an important role in purchase intention. The study by Wijaya (2013) on the influence of
brand image, brand personality and brand awareness on the intention to purchase Apple smartphone products, concluded that brand awareness has a significant role in purchase intention. Other studies conducted and concluded that brand awareness significantly influence consumer intention to buy a product (Jalilvand, 2011; Shabbir, 2009). After finding several studies on the relationship of brand awareness and purchase intention, a hypothesis was formulated that brand awareness has a positive influence on purchase intention.

H3 : brand awareness has a positive influence on purchase intention.

The relationship between brand image on purchase intention

A product is closely related to a brand, a good brand will have the possibility of being chosen by consumers. Therefore, the brand image on a product affects the intention of someone to choose a product. The study of Bian & Moutinho (2011) on the role of brand image, product involvement and knowledge in purchase behavior, mentions the brand image variable on purchase intention, and the conclusion is a positive effect of brand image on purchase intention. The author also found a study conducted by Wijaya (2013) about the influence of brand image, brand personality and brand awareness on the intention to purchase apple smartphone products, concluding that brand awareness has a significant role in purchase intention. In a study conducted by Manorek et al. (2015) on Samsung smartphones concluded that there was a positive relationship between brand image and purchase intention. Another studies of brand image and purchase intention, concludes that brand image has a very positive role in purchase intention (Aberden et al, 2016; Simonian, 2012). The findings of the previous research reinforce that there is a positive influence from the brand image on purchase intention

H4 : brand image has positive influence on purchase intention

The relationship between perceived quality on purchase intention

Quality cannot be assessed objectively because each person's perception of quality is in accordance with the interests of each customer. The higher a person's perception of quality, the higher the possibility of someone's intention to buy. This was clarified by a study conducted by Aberdeen et al. (2016) on carbonated drinks in Bogor that used perceived quality and purchase intention variables, resulting in several conclusions, one of which was about perceived quality in carbonated drinks with Coca-Cola and Big Cola brands having a significant effect on purchase intention. In another study conducted by Wang & Tsai (2014) on the most popular mutual funds concluded that there was a positive relationship between brand image and purchase intention. Likewise, as expressed by Tslotsou (2006), perceived quality has an important role in purchase intention. In this study using sports shoes as an object of research.

H5 : perceived quality has positive influence on purchase intention
Based on the development of the hypothesis described above, we developed a model with a framework as shown in the figure 1 above. From the picture above, it can be explained that hypothesis 1 explains that there is an effect of brand awareness on perceived quality, hypothesis 2 explains that there is an influence of brand image on perceived quality, hypothesis 3 explains the influence of brand awareness on purchase intention, hypothesis 4 explains the influence of brand image of purchase intention and hypothesis 5 explain the influence of perceived quality on purchase intention.

Research Method and Scale Measurement

Data was obtained through distributing questionnaires with open and closed questions about ASUS brand laptops. The sample in this study amounted to 142 respondents in Yogyakarta Special Region and the selection of respondents was conducted using purposive sampling method. The criteria for respondents are domiciled in the Special Region of Yogyakarta, have visited a laptop shop, more than the same age as 15 years and have a desire for ASUS brand laptops. Hypothesis testing is using SEM with AMOS software. The variables in this study include brand awareness, brand image, perceived quality and purchase intention. These variables will be measured using a Likert scale on answers to a scale of 1 to 5. Where from the lowest "strongly disagree" to the highest "strongly agree".

CFA Analysis and Reliability

Based on the Confirmatory Factor Analysis, researchers tested the validity and reliability of the indicators in the full SEM model. The provisions are valid an indicator and can still be tolerated if the loading factor is at a value of > 0.50 or > 0.60 (Ghozali, 2014). Reliability test in this model to measure and reflect the construct, thus providing consistent measurements for each item in the instrument. Items are consistently measured using Construct Reliability.
(CR), with the provisions of CR > 0.7 (Ghozali, 2011).

Instrument testing uses validity test, one indicator has been eliminated because the value of the loading factor does not meet the requirements. The remaining indicator is 18 with the value of loading factor above 0.60. This indicates that all indicators are suitable for use. In addition, reliability testing shows that all variables are reliable because they meet CR criteria.

Table 1. Results of Testing Confirmatory Factor Analysis and Construct Reliability

<table>
<thead>
<tr>
<th>Construct and Indicator</th>
<th>Standardized Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand Awareness (CR = 0.875)</strong></td>
<td></td>
</tr>
<tr>
<td>• Be aware / know the brand name (BA_1)</td>
<td>0.904</td>
</tr>
<tr>
<td>• Be aware of brands when dealing with laptops (BA_2)</td>
<td>0.839</td>
</tr>
<tr>
<td>• Be aware of the brand with help (clue) (BA_3)</td>
<td>0.710</td>
</tr>
<tr>
<td>• Brands are on top of mind (BA_4)</td>
<td>0.661</td>
</tr>
<tr>
<td>• Be aware / know the brand logo (BA_5)</td>
<td>0.695</td>
</tr>
<tr>
<td><strong>Brand Image (CR = 0.864)</strong></td>
<td></td>
</tr>
<tr>
<td>• Dominant brand (BI_1)</td>
<td>0.680</td>
</tr>
<tr>
<td>• Good reputation brand (BI_2)</td>
<td>0.898</td>
</tr>
<tr>
<td>• Familiar brand (BI_3)</td>
<td>0.695</td>
</tr>
<tr>
<td>• Trusted brand (BI_4)</td>
<td>0.848</td>
</tr>
<tr>
<td><strong>Perceived Quality (CR = 0.858)</strong></td>
<td></td>
</tr>
<tr>
<td>• Attractive and up to date features (PQ_1)</td>
<td>0.714</td>
</tr>
<tr>
<td>• Satisfactory performance (PQ_2)</td>
<td>0.844</td>
</tr>
<tr>
<td>• Stable operation (PQ_3)</td>
<td>0.757</td>
</tr>
<tr>
<td>• Good Service Center (PQ_5)</td>
<td>0.695</td>
</tr>
<tr>
<td>• According to expectations (PQ_6)</td>
<td>0.684</td>
</tr>
<tr>
<td><strong>Purchase Intention (CR = 0.914)</strong></td>
<td></td>
</tr>
<tr>
<td>• Desire to explore more information (PI_1)</td>
<td>0.831</td>
</tr>
<tr>
<td>• Desire to be reference (PI_2)</td>
<td>0.861</td>
</tr>
<tr>
<td>• Desire to buy (PI_3)</td>
<td>0.870</td>
</tr>
<tr>
<td>• Desire to be priority (PI_4)</td>
<td>0.853</td>
</tr>
</tbody>
</table>

**Result**

Empirical model testing using Structural Equation Modeling. The model indicates Chi-square = 172.619 with a probability value = 0.006 at the Degree of Freedom = 129; GFI = 0.885, AGFI = 0.847 and TLI = 0.969, while the values on CFI = 0.974 and RMSEA = 0.049. The results on the model can be said to be fit. Based on statistical analysis, the results of this research model have met the predetermined criteria standards.
The framework is explained in the context of a full model analysis through regression weights. There are 4 hypotheses accepted and 1 hypothesis rejected. In this study, brand awareness on IT products has a tremendous value so consumers who are aware of the product tend to have a desire to buy. However, brand awareness is not able to influence perceived quality, which means that the higher or lower level of awareness does not have any impact on perceived quality. Meanwhile brand image has a positive influence on perceived quality, which means that the better the brand image will make the perceived quality higher. And brand image also has a significant influence on intention purchase, meaning that the better the brand image, the higher the consumer purchase intention. The communication process in order to create consumer knowledge of the product is still very important. Brand awareness and brand image are two things that the company must really pay attention to because of its enormous influence in creating consumer purchase intentions.
Table 2. Results of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>Prob.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Brand Awareness (\rightarrow) Perceived Quality</td>
<td>0.187</td>
<td>0.097</td>
<td>1.916</td>
<td>0.055</td>
<td>Not sig.</td>
</tr>
<tr>
<td>H2 Brand Image (\rightarrow) Perceived quality</td>
<td>0.590</td>
<td>0.116</td>
<td>5.076</td>
<td>0.000</td>
<td>Sig.</td>
</tr>
<tr>
<td>H3 Brand Awareness (\rightarrow) Purchase Intention</td>
<td>0.478</td>
<td>0.097</td>
<td>4.914</td>
<td>0.000</td>
<td>Sig.</td>
</tr>
<tr>
<td>H4 Brand Image (\rightarrow) Purchase Intention</td>
<td>0.255</td>
<td>0.126</td>
<td>2.017</td>
<td>0.044</td>
<td>Sig.</td>
</tr>
<tr>
<td>H5 Perceived Quality (\rightarrow) Purchase Intention</td>
<td>0.338</td>
<td>0.141</td>
<td>2.387</td>
<td>0.017</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

*Note: significant if Prob. ≤ 0.05, or C.R ≥ 1.96

Discussion

The results of the first hypothesis test are not supported by the findings of previous studies which stated that brand awareness will affect perceived quality. As found by Chi et al. (2009) and Hoyer & Brown (1990) states that perceived quality arises when a brand is easily remembered by consumers, which means that the greater brand awareness, the greater the perceived quality. But this study is supported by the study of Aberdeen et al. (2016) which concluded that brand awareness does not have a significant effect on perceived quality. Factors that cause brand awareness do not significantly influence perceived quality because of the lack of a positive attachment in terms of the quality of product introduction made by IT products (especially ASUS), the introduction of products is still the same as that of competitors.

The results of this second hypothesis test are in accordance with the findings of previous studies which stated that brand image will affect perceived quality. These results are reinforced by studies conducted by Aberdeen et al. (2016), Cretu & Brodie (2005) and Wang & Tsai (2014) concluded that perceived quality is significantly influenced by brand image. Before consumers determine their choice of a brand, the important thing that is imagined in the mind is how well the brand image has. A good image will be an added value for a product, so that a good image will increase consumer confidence in the brand. Then it can be ascertained if the brand image of a product is getting better, it will also be better the consumer's perceived quality on the brand.

The results of the third hypothesis test are in accordance with the findings of previous studies which stated that brand awareness will influence the intention of consumers to buy. As with the study of Malik et al. (2013), Wijaya (2013) and Jalilvand et al. (2011) which concluded that brand awareness has a significant effect on consumer intention to buy a product. In this situation IT products has succeeded in putting something crucial on their consumers' minds. So, people
who are aware of a brand put their intention to buy that brand.

The results of the fourth hypothesis test are in accordance with the findings of previous studies which stated that brand image will influence the intention to buy. As with the study of Bian & Moutinho (2011), Wijaya (2013) and Manorek et al. (2015) concluded that there was a positive and significant relationship between brand image and purchase intention. IT product 'way of communicating its brand has been done well which has an impact on a positive image. So that consumer responses to IT products have become positive.

The results of the fifth hypothesis test are in accordance with the findings of the previous study which stated that perceived quality will influence the purchase intention. As with the study of Tslotsou (2006), Kwak and Kang (2009) and Choi & Kim (2013) concluded that perceived quality has a significant effect on purchase intention. Good quality will be able to create a consumer's interest in an item. As with IT products, the majority of consumers who perceive the brand as quality laptops tend to intend to buy these laptops, of course, the strong foundation of the creation of these perceptions is what influences consumers' buying intentions.

**Conclusion And Limitation**

The analysis in this study uses Structural Equation Modeling (SEM) with the AMOS program. This study developed 5 hypotheses and resulted 4 hypotheses accepted and 1 rejected. That is as follows:

- This study found that brand awareness has no significant effect on perceived quality.
- This study found that brand image has a significant effect on perceived quality.
- This study found that brand awareness has a significant effect on purchase intention.
- This study found that brand image has a significant effect on purchase intention.
- This study found that perceived quality has a significant effect on purchase intention.

In general, IT Product has done good communication in providing consumer knowledge about brand awareness and brand image so consumers have the intention to buy the products. However, consumers' perceptions of IT Products quality are still low enough to need to make more messages about the quality of their own products.

This study has several limitations on several things such as:

- There is one indicator that is not included because the loading factor value is below 0.6.
- Selection of research subjects with coverage that is still classified as less specific.
- Selection of research objects, where ASUS laptops have a diverse series, while in this study only using the ASUS brand laptop object as a whole.
• Data uses the bootstrapping method because it does not match the normality test criteria.

Managerial Implications

Brand needs to pay special attention to the creation of consumer quality perceptions from a more specific communication process that addresses the quality of their products so consumers who are increasingly aware of their brand are able to better perceive the quality of the products. In addition, products need to look for brand ambassadors who have a stronger image in hopes of helping to strengthen the image of IT products. Companies should not only present the brand in the minds of consumers as ordinary products and other brands but also have to describe the quality side of products, so consumers will expect to see the promotion or advertisement that the products are a quality brand. Companies must continue to create a positive image of the company through attractive marketing, promotion and advertising strategies, companies must be able to create special advantages for the brand in order to be different from its competitors.

Companies must continue to be consistent in communicating their products. Conducting increasingly vigorous promotional activities either through internet media, television advertisements or at several computer/laptop exhibitions. Intensifying the procurement of events for the introduction of IT Products, displaying interesting sides on IT Products, posting positive reviews on youtube, collaborating with youtube reviewers and public figures to form a positive image, creating interesting content on the channel Instagram and youtube for example serials, tutorials, etc. Maintain and improve the quality of existing the products, continue to develop new features, expand and multiply service center services, increase battery life, improve performance and specifications and even provide a longer warranty. Thus the intention of consumers to buy IT products based on quality considerations will be even greater.

Notes on Contributors

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References


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