Strategic Business Analysis by Using Determinants of Buying Decision on Products: Lessons from an International Company in Indonesia

Sidik Budiono
Department of Management Faculty of Economics and Business
Universitas Pelita Harapan, Tangerang-15811, Indonesia
sidik.budiono@uph.edu

John Tampil Purba
Department of Management Faculty of Economics and Business
Universitas Pelita Harapan, Tangerang-15811, Indonesia
john.purba@uph.edu

Gidion P. Adirinekso
Department of Management Faculty Economics and Business
Universitas Kristen Krida Wacana, Jakarta, 11470 Indonesia
gidion.adirinekso@ukrida.ac.id

Abstract

 Besides purchasing power, knowing buying decisions from consumers is the key to the success of a business. The company will be able to carry out business planning and its sustainability. This study wants to know how far the buying decision is influenced by customer satisfaction, brand image and country of origin in the Jakarta Region, Indonesia. Researchers analyze the behavior of Apple brand users in Indonesia. Data collection was carried out by sending research questionnaires electronically to 195 users of the Apple brand in the Jakarta Capital of Indonesia. The results of the validity and reliability test conclude that the data is valid and reliable. So, the authors want to test how customer satisfaction, brand image and country of origin can support buying decision. The econometrics model in this study is the effect of customer satisfaction, brand image and country of origin on buying decision on Apple product in Indonesian. The analytical method in this study is Robust Least Squared Model. The results of the analysis of this study conclude that an increase in customer satisfaction, brand image and country of origin can significantly increase buying decision on Apple product in Indonesia.

Keywords
customer satisfaction, brand image, country of origins, buying decisions.

1. Introduction

 Efforts to improve a country's performance at a solid level can be through business development. The measurement of a country's performance is the gross domestic product which reflects all activities in making goods and services (John Tampil Purba & Budiono, 2019). The quantity of real GDP demanded, $Y$, is the total amount of final goods and services produced in Indonesia that people, businesses, governments, and foreigners plan to buy. Through the expenditure approach, this quantity of real GDP is the sum of consumption expenditures, $C$, investment, $I$, government expenditure, $G$, and net exports, $X – M$ (Budiono, 2009). That is, $Y = C + I + G + X – M$.

 Buying plans depend on many factors and some of the main ones are the price level, expectations, fiscal policy and monetary policy, and the world economy. Therefore, the aggregate demand curve slopes downward for two reasons: wealth effect and substitution effects (Budiono et al, 2020). In other words, this is demand-side
A strong business always considers the final decision of the consumer, namely a buying decision. Therefore, a business strategy that includes various variables and indicators is very important. Especially products that must be formulated with technology that is constantly developing (Budiono and Purba (2019), Rajagukguk et al (2020)).

Since the first computer was founded, as we can see the development of information technology is very fast. On the first encounter, technology moves rapidly faster than ever before. Smartphones are one of the results of technological development. Technological development that is produced by the brand showed us how they want to compete in the market (Purba et al, 2020). Furthermore, we can see the competition from every brand to make the best smartphones in the market and reach the most customers. It has led to various brands making their innovation to their product to attract customers. Not only focus on developing, but also there are a lot of new brands emerging and competing in the market (Budiono, 2011). According to experts, today’s competition made manufacturers realize they need to reach every segment they could. The competition in the market showed us how promising and growing the market of electronic gadgets is. Another factor to be realized, there are various brands starting from the cheap price range until the expensive price range available in the market. Despite talking about electronic gadget brands, it is important to recognize Apple’s existence. It is often discussed that Apple to be one of the most famous and prestigious brands that produced smartphones.

Until today, many people claim that Apple Inc or well known as Apple to be the biggest information technology company in the whole world. Research has found that Apple also ranked in the first place in terms of technological brand. As a result of the title above, we could conclude that Apple has the best company performance in their field. Apple Inc established their company in 1975. As started off, Apple Inc based in Cupertino, California. For instance, In the early days they only produced computers but these days they are rapidly producing a brand-new variety of products to be sold in the market (G. J. Greene & Fischer, 2015). Ever since 2007, Apple has released their first smartphone which is known as ‘iPhone’. Thus, Apple has already moved their manufacturing plant into China by doing Contract Manufacturing (CM) with Foxconn Technology Group. Apple enlarges their company and makes the best out of it by manufacturing their plant toward the Foxconn Technology Group.

When it comes to manufacturing, Apple started moving their manufacturing to China. Due to the low costed labor in China that has led to China having numerous engineers that apples can hire to fulfil the demand of the product. Having high productivity in China factories could benefit Apple and fulfil the demand in between of their products in the market especially without running out of the product supplies (Budiono, 2016). In the aftermath, Apple could get more profit manufacturing in China than producing their product in their home country (Budiono & Purba, 2019). Apple also included in the top 10 list of Top Ten Smartphones Vendors Based on Percentage Sales in The World. In terms of that title, obviously there are many loyal customers of Apple around the world and the demand for Apple products in the world is quite high.

With the performance of the company, Apple became ‘The First Trillion Company’ in terms of market value in August 2018. The title showed us how big Apple’s customers are based around the world. For the last few years, it seems that Apple is one of the most competitive brands in the smartphones market. Their product is always highly awaited by their loyal customers (Adirinekso et al 2020). Apple held 16.4% of sales percentage around the world. Not only held the second position of the sales percentage, but also Apple iPhone became the best-selling phone in 2016. By the data from counterpoint research, in the last quarter of 2019 or Q4 Apple held 18% market shares, it is a huge percentage since Apple only sold a few products unlike other companies. The figure 1 showed market shares of Apple for the last two years, 2018 and 2019.
Figure 1. Apple Smartphone Market Share. Source: Counterpoint Research (2020)

From the chart above, Apple has maintained its market share as strong as possible. Attempts to seize the market have not resulted in a significant outcome where the increase in sales is slowdown. Marketing strategy is needed to influence buying decision of prospective consumer (Adirinekso et al 2020). From the achievement we can conclude that even though the price of Apple products is slightly expensive, there are many people willing to pay for their product without considering the prices and Apple smartphones market can keep growing based on the data shown (Budiono, 2011). Based on the description of the dynamics of consumer behavior, in this study the authors want to prove that the consumer satisfaction, brand images, and country of origin to influence buying decision on Apple smartphone in Jakarta Capital Area, Indonesia.

2. Literature Review

In terms of sustainable business, of course customer satisfaction is one of the supporting factors. Customer satisfaction was a satisfied feeling or disappointed feelings when it comes to performance or result of the product and any other expectations. It can be concluded that customers will evaluate the feelings when they are using the products or services. Customer satisfaction was one of the supporting factors because customer dissatisfaction could cause business difficulties and sustaining in the competition (Adirinekso et al 2020). In any case of course a company must fulfil their own customers expectation to keep sustaining in the business. These are few things that can measure customer satisfaction: overall customer satisfaction, confirmation of expectation, interest in re-purchase, willingness to recommend, and customer dissatisfaction (J.T. Purba, 2015).

By the explanations above, we can conclude that to measure customer satisfaction there are many approximations. A good company can be seen by how they fulfil their customer expectations for the company. Because customer satisfaction is a fundamental goal of a company (Purba & Panday, 2015). From the explanation above we can conclude that customer satisfaction is the expectation that customers wanted to achieve when they used a product.

Brand image was a bunch of ideas, beliefs, and impressions that every individual has when it comes to think about a brand. Therefore, we can conclude that brand images are a description of a brand when it comes to our minds. Because of the importance of brand images, companies have a strong purpose to build a strong brand image to customer minds when they hear about the brand (Mabkhot, 2017). According to a good image of a brand generates a perspective and appraisal some brands are better than other brands.

There are three things that can construct and made brand images has a meaning: strength, favorability, and Uniqueness. With those three things fulfilled of course the brand images of a company will be constructed. In terms of business, brand images are a crucial thing because they give business identity and maintain sustainable growth (Budiono, 2020). That is why a strong brand image was considered as a crucial thing for a company, because when a company has weak brand images it is possible if they could not perform well in the competitions.

When it comes to a product, where it comes from also holds an important role to customers. Sometimes before buying the products customers tend to find out where it comes from before deciding to buy it or not. According to a
country of origins is a native country of a product is a mental picture of a brand that represents it countries. In conclusion a picture of a product quality determined by where it was produced. Country of origins of a product also gives description about whether a good quality product or not. Based on the description above we can conclude that customers could judge the quality of the product just from where it was produced before they even buy the product itself. Furthermore, a good perspective of a product is a must for a company to maintain their product sales (Budiono and Purba, 2020).

According to the explanation above, it was a crucial thing for companies to decide where their product was going to produce. Especially when it comes to judgment of product quality, it could be represented by where it was produced. It was because country of origins is more important in judgment of product quality than brand information or price information. Because Customer Satisfaction significantly affects buying decisions. Also, the previous research found out that 19.6% purchase decisions affected directly by customer satisfaction. When customers pay the price and gain the suitability benefits, they tend to do purchasing. Concluding from the previous research we can stated that when customers are satisfied with the products, they will do the purchase.

Buying decisions is an action taken by customers through some process started by the integration and evaluate any other alternatives in deciding the right choices to fulfil the needs or desire. From the explanation we can conclude that before buying some products they tend to consider any other options. Before making a buying decision, customers have several stages performed before making buying decisions. Customers will decide if a product could fulfil their desire or needs before making buying decisions. There are three things that affecting customers before making buying decisions, the factors are psychology factor, personal factor, and culture factor (Budiono et al 2020).

In terms of deciding, customers do not make decisions easily. These are the steps taken of customer before they make buying decisions according to Kotler & Amstrong (2018): introduction of the problem, search Information, alternatives evaluation, the decisions to buy, and behavior after purchase. As the result of the explanation above, we can conclude that there is a lot of process taken by customers whether they realized or not before making buying decisions. And then there are a lot of factors that could affect customers to make the buying decisions.

The stronger images of where the products come from the higher chance of buying decisions to happen. By the statement we can conclude that a good image of a country is holding an important role. Customer attitudes and trust toward Country of Origins could affect customers buying decisions. The statement informs that where the products come from is important to customer for doing purchase. If the product of a company generated in a country that has an image that is not beneficial for the product then companies will suffer to sell the product. Customer beliefs toward a country could affect decision making, in this case is buying decisions. A good product described by the country origins of a product, and when a product has a good images customer tend to purchase. Country of Origin have a positive influence towards Buying Decision (Adirinekso et al, 2020).

3. Methods

Based on the problems and possible causal relationships between consumer satisfaction with buying decision, brand image with buying decision, and country of origin with buying decision then we compile a research model as outlined in the figure 2.
Therefore, the conceptual definition and operational definition of variables that used for this research are shown in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Conceptual Definition</th>
<th>Operational Definition (Indicator)</th>
<th>Scale</th>
</tr>
</thead>
</table>
| Customer Satisfaction     | Customer Satisfaction is the extent to which product’s perceived performance matches a buyer’s expectations. (Kotler and Armstrong, 2004)                                                                                                                                   | 1. Apple fulfills customer expectation of the product.  
2. Apple products satisfy the users.  
3. Apple products are better than competitors                                                                                                                                                                                                                                                                                                                  | Likert Scale     |
| Brand Images              | Brand images was a representation from overall perspective towards brand and shaped by past experiences with the brand.                                                                                                                                                                                                 | 1. Apple is the best technological company.  
2. Apple is the most innovative company.  
3. Apple product will not disappoint their customer                                                                                                                                                                                                                                                                                                             | Likert Scale     |
| Country of Origin         | According to Kotler and Keller (2009), country of origin are associations and beliefs someone mentally about a product that is triggered by the country of origin of the product.                                                                                                               | 1. Country of Origin of Apple products were made (China) is an innovative country.  
2. Country of Origin of Apple products were made (China) have a good reputation.  
3. Country of Origin of Apple products were made (China) is a good manufacturing country.  
Country of Origin of Apple products were made (China) is a developed country  
Country of Origin of Apple products were made (China) is a developed country                                                                                      | Likert Scale     |
| Buying Decisions          | According to Kotler (2000) process decision-making. The purchase consists of five stage: introduction needs, search information, evaluating alternative, decision purchase, and behavior after purchase.                                                                 | 1. I bought Apple devices because capable to fulfill my needs.  
2. I bought Apple devices because past experiences.  
3. I bought Apple devices because very satisfied with Apple.                                                                                                                                                                                                                                                                                               | Likert Scale     |

Source: Kotler and Amstrong (2018)

Sekaran and Bougie (2016) stated that scale is an instrument or system by which people are recognized concerning how they contrast from each other on the factors important to our investigation. There are 4 types of measurement scales named: nominal, ordinal, interval, and ratio scale. For this research, author decided to use interval measurement scale to complete the research. The scale author used for this research is 5 points Likert Scale. Authors decided to use 5 points Likert Scale to find out how strong the agreement or disagreement given by the respondent.

Definition of validity as stated by Kalhe & Malhotra (1994) is “validity as the degree to which the observed scale difference represents the true difference between objects on the measured feature”. To get perfect validity, researcher need to gain zero measurement error. Validity consisted in three different type namely content validity, criterion validity, and construct validity. In general, content validity or usually called face validity involves evaluating the new survey instrument to make sure that it contains all the elements that are crucial and eliminates undesirable elements from the specified domain of construction. Criterion validities indicate whether validity indicates whether the scale shows the expected effect on other variables selected as a meaningful criterion. The last type of validity is construct validity. This is the most complicated validity among the other two. Construct validity is a kind of validity, that capable to examine the problem of the structure or characteristics that the scale is measuring. Convergent validity and determinant validity also part of the construct validity.

Reliability is how far a scale generate a consistent result if the measurement is made on some characteristic frequently (Papadopoulos & Malhotra, 2007). However, systematic errors do not have a harmful effect towards reliability. Reliability measurement considered perfect and reliable if $X_R = 0$ it means that the measurement is free from random errors. The internal consistency reliability method is used to evaluate the reliability of the calculated scale, in which multiple items are added to form a total score. According to explanation stated by Sekaran and Bougie (2016), consistency can be examined by using interitem consistency reliability and split-half reliability tests.
The function of interitem consistency reliability is to test the consistency of the response answered by respondents to all the instrument included in the measure. Cronbach’s alpha is the most popular testing in interitem consistency reliability. In Cronbach’s alpha testing if the coefficient number is high it capable to give positive effect towards measuring instrument. In the other hand, split-half reliability capable to show us the connection between two halves of instrument. If the Cronbach's Alpha value is more than 0.7, stated as valid and fulfill the reliability measurement.

The least-squares method is generally used for estimation purposes in the multiple-regression model. Once regression coefficients are obtained, a prediction equation can then be used to predict the value of a continuous output (target) as a linear function of one or more independent inputs. Regression models may be attributed to the interpretability of model parameters and ease of use. However, the major conceptual limitation of all regression techniques is that one can only ascertain relationship but can never be sure about underlying causal mechanism (Tso & Yau, 2007).

Next, the analysis tools used are the econometrics and statistics methods to test the models and their respective parameters. Based on the problems and possible causal relationships between customer satisfaction with buying decision, brand image with buying decision and country of origin with buying decision, we are compiling a research model. Next, the analysis tools used are the econometrics and statistical methods to test the model and their respective parameters (W. H. Greene, 2018). The unknown parameters of the stochastic relation \( y_i = x_i' \beta + \epsilon_i \) are the objects of estimation. It is necessary to distinguish between population quantities, such as \( \beta \) and \( \epsilon_i \), and sample estimates of them, denoted \( b \) and \( e_i \). The population regression is denoted

\[
\hat{y}_i = x_i' \beta
\]

The disturbance associated with the \( i \)-th data point is

\[
\epsilon_i = y_i - x_i' \beta
\]

For any value of \( b \), we shall estimate \( \epsilon_i \) with the residual.

\[
e_i = y_i - x_i' \beta
\]

From the definitions, so The basic framework for analyzing cross section data is a regression model of the form (W. H. Greene, 2018)

\[
y_i = x_i' \beta + e_i = x_i' \beta + e_i
\]

This study uses cross section data that includes in 195 respondents in Jakarta Area, Indonesia. The purpose of this study is to analyze impact of customer satisfaction (CS), brand image (BI) and country of origin (CO) towards buying decision (BD). A multiple regression model with more than one explanatory variable may be written as the applied regression model for this study is.

\[
BD = \beta_0 + \beta_1 CS + \beta_2 BI + \beta_3 CO
\]

Subsequently a calculation is made by estimating the suitability of the econometric model that is the magnitude of the R-squared and F-test with a significance level of 5%.

Based on the theoretical estimates for each parameter to achieve the desired model conditions in mathematical equations are as follows.

\[
\beta_1 = \frac{\partial BD}{\partial CS} > 0, \beta_2 = \frac{\partial BD}{\partial BI} > 0 \text{ and } \beta_3 = \frac{\partial BD}{\partial CO} > 0
\]

Based on the calculus equation, the partial test of each independent variable is one way. customer satisfaction affects buying decision in the same direction, brand image affects buying decision in the same direction and country of origin also affect buying decision in the same direction. Thus, the value of each parameter \( \beta \) is expected to be positive.

While the partial testing of each independent variable on the dependent variable is carried out by t-test with a significance level in this study amounting to 5%.

By using the null hypothesis (H0) and alternative hypothesis (H1) for partial testing on the \( \beta_1 \) parameter as follows:

- \( H_0 : \beta_1 = 0 \), customer satisfaction does not affect buying decision.
- \( H_1 : \beta_1 > 0 \), customer satisfaction affects buying decision in the same direction.

The null hypothesis (H0) and the alternative hypothesis (H1) for partial testing on the \( \beta_2 \) parameter are as follows

- \( H_0 : \beta_2 = 0 \), brand image does not affect buying decision.
- \( H_1 : \beta_2 > 0 \), brand image influences buying decision in the same direction.
La\[72x711]st, the null hypothesis (H\(_0\)) and the alternative hypothesis (H\(_1\)) for partial testing on the \(\beta_2\) parameter are as follows.

- **H\(_0\)**: \(\beta_3 = 0\), country of origin does not affect buying decision.
- **H\(_1\)**: \(\beta_3 > 0\), country of origin influences buying decision in the same direction.

Thus, it is clear, in practical econometrics there is always outlier data which means the data do not follow general patterns. This problem becomes very serious and complex. A model is considered robust if it meets the requirements of basic assumptions. In regression analysis, a method for estimating parameters is needed to meet the best linear unbiased estimator (BLUE). One popular method used is Ordinary Least Square (OLS). The classic assumption that must be fulfilled in OLS so that the estimation results are robust is homoscedasticity. Violation of the assumption of homoscedasticity is called heteroscedasticity, which means that the error is not constant. The consequence of heteroscedasticity can result in the OLS estimator obtained still meets the requirements of unbiased, but the resulting variant becomes inefficient which means the variant tends to enlarge so that it is no longer the smallest variant. Therefore, the best traits will not be fulfilled (W. H. Greene, William, & Greene, 2007).

This assumption is very important in the regression analysis because it relates to the estimated standard error of the regression coefficient. Standard error regression has a role in the formation of t-counts and F-counts will be overestimated which may subsequently produce conclusions that appear to be significant but not significant. Therefore, if the assumption of homoscedasticity is not fulfilled the results of the t-test are uncertain (Greene, 2018).

As Greene (2018) suggests the regression method is done by weighting the data with an appropriate multiplier factor. By using the Stata Software application version 15, automatically the selected weighting is the right weighting so that robustness is met the requirements. The results of the t-test and F-test will show the true value and are significant. Data analysis was performed by following the ordinary least square (OLS) econometric model framework.

4. Data Collection

To gather the data, authors must decide what kind of data that is more suitable for processing the research. Authors decided to use primary data for this research since it is more suitable than secondary data. Primary data is the data that is taken directly from the sample. The method used to collect the data is questionnaire. Questionnaire chosen because of its efficiency and accuracy. The questionnaire will use Likert scale as the measurement scale and the result will be served in numbers.

Based on Sekaran and Bougie (2016) statement questionnaire divided into 3 types of questionnaire named: personal administered questionnaires, mail questionnaires, and electronic and Internet questionnaires. For this research, authors decided to use electronic and internet questionnaires since the condition make it not possible to share the questionnaire directly to the respondents. Author going to use google form as the questionnaire platform and the questionnaire going to be shared through social media such as Line, Instagram, Facebook, and others platform with hope to reach the expected number of respondents.

According to Sekaran and Bougie (2016), sample size for most of the research are approximately around 30-500 samples to be considered as an appropriate. So, author uses non-probability sampling. To fill the questionnaire each sample, need to fill this requirement criteria: (1) Aged 16 (sixteen) or older, (2) An active Apple devices user, and (3) Currently living in Jakarta area or used to live in Jakarta area for the past one year. Every individual who belongs in this group have a well knowledge about Apple devices. This research consisted 13 indicators, it means the amounts of sample needed is 13 times by 10. Which means there are 130 samples minimum needed to complete the research (Hair, Black, Babin, & Anderson, 2017). However, authors decided to collect 195 samples for this research to retrieve more accurate data from the respondents. The data collected for this were processed by the STATA Application Release 15 version.

5. Results and Discussion

According to the measurement in validity and reliability mentioned earlier. All indicators of research variables were tested for validity and reliability in table 2.
Table 2 Result of Validity and Reliability Testing on all Indicators.

<table>
<thead>
<tr>
<th>Item</th>
<th>Obs</th>
<th>Sign</th>
<th>item-test correlation</th>
<th>item-rest correlation</th>
<th>average interitem correlation</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>cs1</td>
<td>195</td>
<td>+</td>
<td>0.7487</td>
<td>0.6925</td>
<td>0.4152</td>
<td>0.8950</td>
</tr>
<tr>
<td>cs2</td>
<td>195</td>
<td>+</td>
<td>0.7052</td>
<td>0.6414</td>
<td>0.4211</td>
<td>0.8972</td>
</tr>
<tr>
<td>cs3</td>
<td>195</td>
<td>+</td>
<td>0.7212</td>
<td>0.6602</td>
<td>0.4189</td>
<td>0.8964</td>
</tr>
<tr>
<td>bi1</td>
<td>195</td>
<td>+</td>
<td>0.7292</td>
<td>0.6695</td>
<td>0.4178</td>
<td>0.8960</td>
</tr>
<tr>
<td>bi2</td>
<td>195</td>
<td>+</td>
<td>0.6800</td>
<td>0.6121</td>
<td>0.4245</td>
<td>0.8985</td>
</tr>
<tr>
<td>bi3</td>
<td>195</td>
<td>+</td>
<td>0.6302</td>
<td>0.5549</td>
<td>0.4312</td>
<td>0.9010</td>
</tr>
<tr>
<td>co1</td>
<td>195</td>
<td>+</td>
<td>0.6920</td>
<td>0.6260</td>
<td>0.4229</td>
<td>0.8979</td>
</tr>
<tr>
<td>co2</td>
<td>195</td>
<td>+</td>
<td>0.6741</td>
<td>0.6053</td>
<td>0.4253</td>
<td>0.8988</td>
</tr>
<tr>
<td>co3</td>
<td>195</td>
<td>+</td>
<td>0.6495</td>
<td>0.5770</td>
<td>0.4286</td>
<td>0.9000</td>
</tr>
<tr>
<td>co4</td>
<td>195</td>
<td>+</td>
<td>0.5998</td>
<td>0.5202</td>
<td>0.4353</td>
<td>0.9024</td>
</tr>
<tr>
<td>bd1</td>
<td>195</td>
<td>+</td>
<td>0.6948</td>
<td>0.6294</td>
<td>0.4225</td>
<td>0.8977</td>
</tr>
<tr>
<td>bd2</td>
<td>195</td>
<td>+</td>
<td>0.5705</td>
<td>0.4872</td>
<td>0.4392</td>
<td>0.9038</td>
</tr>
<tr>
<td>bd3</td>
<td>195</td>
<td>+</td>
<td>0.8000</td>
<td>0.7535</td>
<td>0.4083</td>
<td>0.8922</td>
</tr>
<tr>
<td>Test scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.4239</td>
<td>0.9054</td>
</tr>
</tbody>
</table>

Source: Data Processing

All test results already passed minimum requirement in order to declared as valid which item test correlation more than 0.50 and reliable which must pass 0.70 for Cronbach’s Alpha 0.9054.

Data analysis was performed by following the Ordinary Least Square econometric model with robustness as follow in Table 3.

Table 3 Result of Robust Least Square Estimation for Buying Decision

<table>
<thead>
<tr>
<th>Linear regression</th>
<th>Number of obs</th>
<th>= 195</th>
</tr>
</thead>
<tbody>
<tr>
<td>F(3, 191)</td>
<td>= 75.34</td>
<td></td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>= 0.0000</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>= 0.5824</td>
<td></td>
</tr>
<tr>
<td>Root MSE</td>
<td>= 0.3246</td>
<td></td>
</tr>
</tbody>
</table>

| BD    | Robust Coef. | Std. Err. | t     | P>|t|   | [95% Conf. Interval] |
|-------|--------------|-----------|-------|-------|----------------------|
| CS    | .2436481     | .0681672  | 3.57  | 0.000 | .1091909 .3781053    |
| BI    | .2176827     | .0729179  | 2.99  | 0.003 | .0738549 .3615104    |
| CO    | .2398486     | .0600721  | 3.99  | 0.000 | .1213587 .3583386    |
| _cons | 1.567945     | .2128086  | 7.37  | 0.000 | 1.148189 .1987702    |

Source: Data Processing

Based on the value of R-squared = 0.58 shows that 58% changes in buying decision (BD) are influenced by independent variables in the model, while the influence of variables outside the model is 42%. The test results for the proposed model that the results of the value of F-test = 75.34 and probability F = 0.00 smaller than the significance level of 5%, we reject the null hypothesis. The independent variable customer satisfaction (CS), brand image (BI) and country of origin (CO) simultaneously influence the buying decisions (BD) on Apple device in Indonesia.
Based on the results of partial testing of the customer satisfaction (CS) is \( t = 3.57 \) and probability value \( t = 0.000 \) states that we reject null hypotheses and accept alternative hypotheses. Customer satisfaction (CS) significantly influences the buying decision (BD). Subsequent partial testing of the brand images (BI) variable is \( t = 2.99 \) and probability value \( t = 0.003 \) states that we reject null hypothesis and accept alternative hypotheses. Brand images (BI) significantly influences the buying decision (BD). At last, partial testing of the country of origin (CO) is \( t = 3.99 \) and probability value \( t = 0.000 \) states that we reject null hypotheses and accept alternative hypotheses. The country of origin (CO) significantly influences the buying decision (BD). So, testing together or partially shows the behavioral model in this study has met the statistically requirements. Next, we construct the equation of the econometric model in this study as follows.

\[
BD = 1.567 + 0.244 \cdot CS + 0.218 \cdot BI + 0.240 \cdot CO
\] (7)

From the results equation the customer satisfaction (CS), brand images (BI), and country of origin (CO) affects buying decision (BD) as the foundation of the hiring market strategy in Business.

Based on the results of the model estimation and measurement, each parameter coefficient can be interpreted measuredly. Each increase of a unit level scale of customer satisfaction will increase the buying decision by 0.244 level of scale. Each increase of a unit level scale of brand images will increase the buying decision by 0.218 level of scale. At the last, each increase of a unit level scale country of origin will increase the buying decision by 0.240 level of scale.

6. Conclusion

Because all independent variables affect the buying decision variable positively and significantly, efforts to increase consumer satisfaction, brand image and country of origin must be made. With regard to the company must be able to meet the expectations and satisfaction of consumers, so explore consumer desires in the form of product durability, trends, and innovation. Furthermore, the company must be able to provide products that are superior to products of its competitors. Research on the advantages and disadvantages of products compared to competitors' products so that companies can improve their products.

Brand image significantly affects buying decision. Efforts to increase brand image need to be carried out as follows: promotion, maintaining and enhancing reputation, especially "the big brand". Company must also develop sustainable technology and product innovation. Every technological advancement used by the company must always be reported as good news to all people. Furthermore, companies must be able to prevent consumers from being disappointed in products and services.

Consideration of the Country of origin is one of the keys that consumers make purchasing decisions. A government that focuses on innovation and science and the country itself always maintains a good reputation will have a certain image advantage by society. A country known for its manufacturing industry will have certain advantages. The status of a country that produces products as a developed country has certain advantages. So, all economic decisions on the view of companies and countries are the focus of science and technology and innovation.

From the results of research and discussion, it can be understood that the experiences of multinational companies provide valuable lessons, especially for domestic entrepreneurs. Improving consumers to decide to buy is the key to business continuity. We must fix the determining factors which are as follows, consumer satisfaction, brand image and country of origin. The government should be able to encourage the development of science and technology in the business sectors.

References


© IEOM Society International 1241
Acknowledgements

The researchers would like to thank to Office of Research and Publication (ORP) of Faculty of Economics and Business Universitas Pelita Harapan, Karawaci, Tangerang Indonesia for the support this research.

Biographies

Sidik Budiono is currently serves as an Associate Professor in Economics at Department of Management Faculty of Economics and Business Pelita Harapan University, Lippo Karawaci Tangerang Banten Indonesia. Dr. Budiono was graduated Bachelor of Economics from Department of Economics, Universitas Kristen Satya Wacana, Salatiga Central Java, Master and Doctor of Economics from Faculty of Business and Economics Universitas Indonesia, Jakarta. He interests in research around national, regional development and international economics.

John Tampil Purba, obtained a degree of Doctor (S3) majoring Management from De La Salle University Systems Manila, Philippines in 2002. Dr. Purba also has several certifications with internationally recognized in management and information systems and also technology, among others; MCP, MCSA, MCSE, MCSES, MCSAS, MCDL and MCT from Microsoft Technologies, USA and CSE from Cisco System USA. He is also Professional Membership of IEOM Society. He has a number of managerial experiences in the big companies and Service Industries more than 25 years. He is currently served as Associate Professor at the Faculty of Economics and Business Pelita Harapan University, Lippo Karawaci Banten, Tangerang Indonesia.

Gidion P. Adirinekso joint with the Department of Management Faculty of Economics and Business Krida Wacana Christian University in Jakarta. Dr. Adirinekso graduated with his master's and a doctoral degree from the Departement of Economics Faculty of Economics and Business Universitas Indonesia Jakarta after completing his bachelor's degree from the Department of Economics, Satya Wacana Christian University. His interests in research on economic behavior, urban dan regional economics, also urban community development and economic development.