



The Influence of Brand Image on Laptop Purchase Decisions

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Abstract. In today's technological era, electronic needs are very necessary to help human work. Computers and laptops are electronic devices resulting from technological developments. In marketing, companies must be able to compete with other companies, one of which is in increasing the brand image of a product. If a brand image of a product is good, then the purchase decision will increase. This research was descriptive and verificative research with an explanatory survey, and the research design used was a cross-sectional method. The data analysis technique used was a simple linear regression with Statistical Product for Service Solutions (SPSS) 28.0 software for windows. Based on the results of the data analysis conducted, it can be concluded that brand image had a positive effect on purchasing decisions with a high category influence.

Keywords: Brand Image · Purchase Decision

1 Introduction

In today's technological era, the need for electronics is indispensable to assist human work in the fields of education, economics, politics, and others. Computers and laptops are electronic devices resulting from technological developments [1]. The world of technology continues to attract attention to always be observed, marked by the development of the internet and information technology such as increasingly sophisticated laptops that attracts the attention of everyone to buy it [2].

The diversity of laptop brands encourages consumers to identify in making purchasing decisions when determining a brand that they think meets the criteria of an ideal product [1]. This competence will continue because several laptop brands such as HP, Asus, Lenovo, Toshiba, and Acer continue to make variations in order to get a good brand image among the public. This is also evidenced by the control of market share in Acer products [3].

Companies must display the best products and satisfy the ever-changing tastes of consumers in order to win the competition with other companies. Therefore, it is important for companies to understand consumer behavior that determines their purchasing decisions [2]. Higher purchasing decisions of customers will increase profits for the

company while purchasing lower levels of products will cause a decrease in company revenues [4].

The purchase decision is an important thing that must be considered because it will be a marketing strategy implemented by the company to achieve business success [5]. Before consumers make purchasing decisions, they usually go through a stage where they have a need to choose, own, and use certain products [6].

When consumers have the decision to buy a product, consumers will definitely choose the product with the most preferred brand. If consumers are satisfied with the product, it is likely that they will make repeat purchases and allow them to recommend the product to the people around them [2]. However, if consumers are not satisfied, they will look for alternative brands [7].

Building a brand image in business is important because a positive brand image will have a positive impact on purchasing decisions [8]. The higher the brand image made by the company, the higher the level of purchasing decisions [9]. Brand image is an important factor in purchasing a product because branded products make them satisfied with certain thoughts, statements, qualities, and long-term satisfaction [10].

2 Methods

The method used in this research was a survey method or explanatory survey. This method aims to determine the effect between variables by means of hypothesis testing. The unit of analysis in this study was UPI's 2018 Economic and Business Faculty student. The sampling technique used in this study was simple random sampling because every student of the Economic and Business Faculty UPI 2018 has the same opportunity for the entire population to be sampled.

The sample in this study was 70 students of the Faculty of Economics and Business Education UPI 2018 with sampling using the Tabachnick and Fidel sample method (2013: 123). The data collection technique used in this study was the distribution of questionnaires. The data analysis technique used in this research was simple linear regression verification analysis.

The variables in this study consist of brand image and purchasing decisions using interval scale data measurement.

3 Results and Discussion

This research consists of the independent variable, namely brand image (X), and the dependent variable, namely purchasing decision (Y). To determine the effect of brand image on purchasing decisions, a simple linear regression analysis test was conducted.

3.1 Responses on Brand Image from Students of the Faculty of Economics and Business Education UPI 2018

Based on the results of data processing, it can be seen that the overall dimensions of the Brand Image (X) consist of first, Favorability of Brand Association with a score of 1958

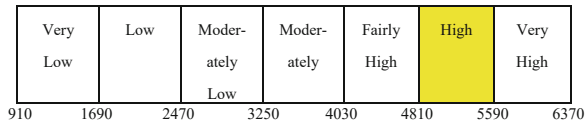


Fig. 1. Brand Image Continuum Line

and an ideal score of 2450 with a percentage value of 79.92%. The second is Strength of Brand Association with a score of 1558 and the ideal score of 1960 with a percentage of 79.49%. The third is Uniqueness of Brand Association with a score of 1484 and the ideal score of 1960 with a percentage of 75.71%.

The findings or results of data processing indicate that the dimension that gets the highest score is the Favorability of Brand Association with a percentage value of 79.92%. While the response with the lowest score is the Uniqueness of Brand Association with a percentage value of 75.71%.

Overall, based on the recapitulation of responses regarding brand image, it can be seen that 5000 with a percentage of 78%, and it can be seen that the brand image in the 2018 UPI Economic and Business Faculty students is **high**. The score on a continuum can be described as shown in Fig. 1.

3.2 Purchasing Decision Responses from Students of the Faculty of Economics and Business Education UPI 2018

Based on the results of data processing, it can be seen that the overall dimensions of purchasing decisions (Y) consist of product selection with a score of 1174 and an ideal score of 1470 with a percentage of 79.86%, brand selection with a score of 1518 and an ideal score of 1960 with a percentage of 77.45%, selection of dealers with a score of 1515 and an ideal score of 1960 with a percentage of 77.29%, determination of the number of purchases with a score of 755 and an ideal score of 980 with a percentage of 77.04%, timing with a score of 1163 and an ideal score of 1470 with a percentage of 79.11%, and the determination of the payment method with a score of 779 and an ideal score of 980 with a percentage of 79.49%.

The findings or results of data processing indicate that the dimension that gets the highest score is the dimension of product selection with a percentage value of 79.86%. While the response with the lowest score is the dimension of determining the number of purchases with a percentage of 77.04%.

Overall, based on the recapitulation of responses regarding purchasing decisions, it can be seen that 6904 with an ideal score of 8820 and a percentage of 78.28% means that purchasing decisions for students of the Faculty of Economics and Business Education UPI class 2018 have high results, the score can be described as a continuum as shown in Fig. 2.

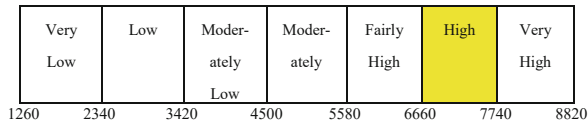


Fig. 2. Purchasing Decision Continuum Line

3.3 Simple Linear Regression Analysis Assumption

1. Normality Test

A normality test is carried out to determine whether the data obtained from the results of field research is normally distributed to see whether the data can be used or not in a simple linear regression analysis model. In order to know this, the Kolmogrow Smirnov statistical test was carried out with a significance result of 0.200. This value is > 0.05 so that the research variable data is declared to have a normal distribution of data.

2. Linearity Test

Based on the test results using the F-test F_{value} was 205.675 with a significance level of $0.001 \leq 0.05$, meaning that the brand image variable (X) as a whole was fit and there was a relationship between the brand image variable and purchasing decisions so that regression could be used to predict purchasing decisions. Based on linearity testing, it can be said that the resulting data meet the linearity standard.

3. Scatter diagram

The scatter diagram illustrates that the points in the scatter diagram below are spread out in a pattern from left to right. From this line, it can be seen that the covariance between X and Y is unidirectional, in the sense that if X changes larger then Y changes bigger. This shows that there is a relationship between X and Y. Based on the results of the classical assumption test that has been done, the research can be processed using simple linear regression analysis (Fig. 3).

4. Remote Point Test

Regarding the remote point test results, it can be seen that “the point is not a remote point, because the tcount results show values that are smaller than t_{table} ”. So that the criteria used for the calculation results are H_0 which means that suspicious points are not considered as remote points and do not need to be removed.

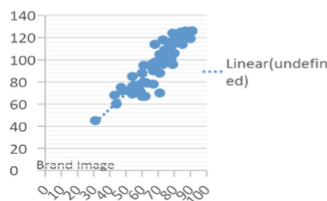


Fig. 3. Scatter diagram

Table 1. Regression results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,109	5,834		,704	,484
	Brand Image	1,328	,083	,890	16,071	< .001

5. Simple Linear Regression Analysis

The data analysis technique used to determine the causal relationship in this study was a simple linear regression analysis technique that aims to determine the effect of brand image on purchasing decisions (Table 1).

The table in column B lists constant values and simple linear regression coefficient values for the independent variables. Based on these values, a simple linear regression model can be determined which is expressed in the following equation:

$$Y = 4.109 + 1.328X(1).$$

6. Coefficient of Determination Analysis

The coefficient of determination analysis is used to state the size of the contribution of the variable X to Y so that it is known the percentage of the influence of the variable X against Y. The value of r is as shown in Table 2.

Based on the calculation results obtained KD value of 79.2% in the level of strong influence, which shows that brand image has an influence on purchasing decisions by 79.2%. While the remaining 20.8% is influenced by factors that are not examined in this study.

7. Hypothesis Testing (t-test)

T-test statistic shows how far the influence of one independent variable individually in explaining the dependent variable [11]. The test for the t-test is taken from the coefficients by using the t-test, namely $t_{value} > t_{table}$. With = 4.109 and degrees of freedom = $n - 2 = 70 - 2 = 68$, then the t_{table} 1.670. According to Ghozali (2011: 99), the t test is carried out by comparing the significance of t_{value} with t_{table} with the following conditions:

H_0 accepted and $H_{a_{is}}$ rejected if $t_{value} < t_{table}$ for = 0.05

H_0 rejected and $H_{a_{is}}$ accepted if $t_{value} > t_{table}$ for = 0.05

Due to $t_{value} > t_{table}$ or $16,071 > 1,670$ then H_a accepted meaning that *Brand Image* has an effect on Purchase Decisions, with the magnitude of the influence of *Brand*

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,890 ^a	,792	,789	8,513

Image on Purchase Decisions 79.2% is included in the strong category, while 20.8% is influenced by factors not examined.

4 Conclusions

Based on the data analysis results, it can be concluded that brand image had a positive effect on purchasing decisions with a good category effect. Thus, it is recommended for companies to take a more aggressive attitude by introducing new products, advertisements, and promotions in order to reduce the risk when there is a potentially damaging competitive action, which then that can improve purchasing decisions on its products.

References

1. Martins, J., Costa, C., Oliveira, T., Gonçalves, R. & Branco, F. How smartphone advertising influences consumers' purchase intention. *J. Bus. Res.* **94**, (2019).
2. Widyastutir, S. & Said, M. Consumer consideration in purchase decision of SPECS sports shoes product through brand image, product design and price perception. *Int. J. Supply Chain Manag.* **6**, (2017).
3. Marliawati, A. & Cahyaningdyah, D. Impacts the Brand of Experience and Brand Image on Brand Loyalty: Mediators Brand of Trust. *Manag. Anal. J.* **9**, (2020).
4. Andrianto, N. & Fianto, A. Y. A. Brand image among the purchase decision determinants. *J. Stud. Komun. (Indonesian J. Commun. Stud.)* **4**, (2020).
5. Ambarwati, M. F. L., Damaryanti, H., Prabowo, H. & Hamsal, M. The Impact of a Digital Influencer to the Purchase Decision. *IPTEK J. Proc. Ser.* **0**, (2019).
6. Pasharibu, Y., Soerijanto, J. A. & Jie, F. Intention to buy, interactive marketing, and online purchase decisions. *J. Ekon. dan Bisnis* **23**, (2020).
7. Alshare, F. *et al.* Factors influencing cellular device purchase decisions in Jordan. *Manag. Sci. Lett.* **10**, (2020).
8. Abidin, Z. & Triono, L. D. Fresh frozen fish consumer behavior: Effect of the mix and trust marketing on buying interest, purchase decision and customer satisfaction in E-commerce, silly fish Indonesia. in *IOP Conference Series: Earth and Environmental Science* vol. 493 (2020).
9. Hazrati Havidz, H. B. & Mahaputra, M. R. BRAND IMAGE AND PURCHASING DECISION: ANALYSIS OF PRICE PERCEPTION AND PROMOTION (LITERATURE REVIEW OF MARKETING MANAGEMENT). *Dinasti Int. J. Econ. Financ. Account.* **1**, (2020).
10. Rommy, A. S. N., Moh, N. B. H. H. & Nur, A. R. Y. N. Effect of Brand Image and Price Perception on Purchase Decision. *J. Bus. Manag.* **20**, (2018).
11. Ghozali, I. Ghozali, Imam. 2016. Aplikasi Analisis Multivariate dengan Program SPSS. Semarang: Badan Penerbit UNDIP. *Anal. Multivar. dengan Progr. SPSS* (2016).

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