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The Influence of Brand Image and Product Price on Purchase Decision (A Study on iPhone in Indonesia)

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Abstract:

Smartphone is used to support everyone's daily activities which explains how most people need at least one supportive smartphone. Smartphone user penetration rate in Indonesia was forecasted to be increased every year. The increasing number of smartphones users every year in Indonesia has caused an intense competition between smartphone vendors in Indonesia including iPhone.

This research aims to investigate the influence of the independent variables which are Brand Image and Product Price towards the dependent variable which is Purchase Decision of iPhone in Indonesia. There are 400 responses from 400 targeted respondents from around Indonesia have filled out 34 questionnaire items. The collected data is measured by using Multiple Linear Regression Analysis in a statistical analytic tool which is called SPSS 25 with non-probability and purposive sampling technique.

The results is Brand Image and Product Price both partially and simultaneously influence Purchase Decision. The result showed that Purchase Decision of iPhone in Indonesia is not only influenced by the brand image and product price, but also other factors that are not included in this research.

Keywords —**Brand Image, iPhone Smartphone, Product Price, Purchase Decision.**

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I. INTRODUCTION

According to e-Marketer, Indonesia is ranked as the 7th country with the highest number of smartphone users [1]. The number of smartphone users in Indonesia is forecasted by Statista to increase 3% every year [2]. The increasing of the number of smartphones users in Indonesia has caused an intense competition between smartphone vendors in Indonesia including iPhone, Samsung and China-based smartphone vendors like Xiaomi, Oppo, Huawei, etc.
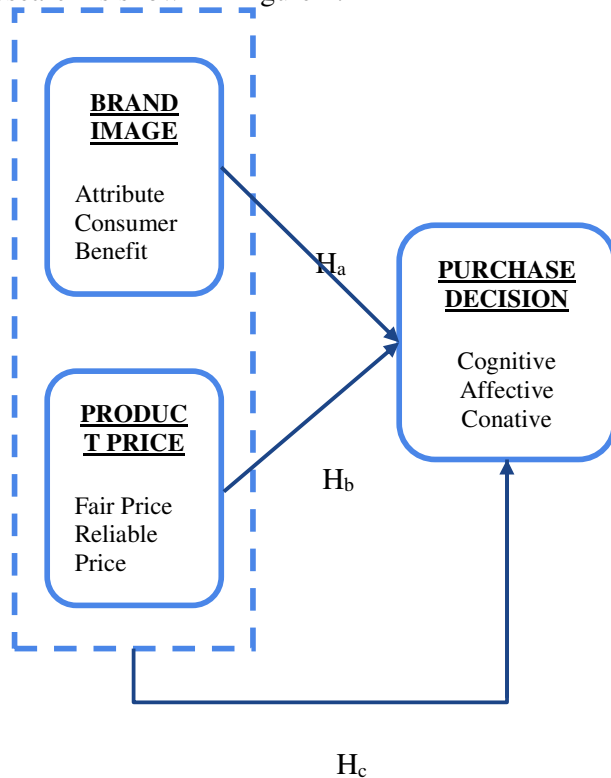
iPhone from Apple is ranked the sixth which means iPhone's market share in Indonesia is under the market shares of Samsung, Xiaomi, Oppo, ASUS, and Lenovo on September, 2017 to September, 2018 [3]. iPhone's global market share is in the second place under Samsung's global market share. The huge difference between iPhone's market share in Indonesia and iPhone's global market share shows iPhone has lost market in Indonesia[4]. According to Kiranjeet Kaur, an analyst with research firm IDC in Singapore, people these days do not have to stretch their budget anymore because China-based vendors boast features to compete with the top-end in the market [5]. Indonesia is in the second place of the rank of countries with the most expensive iPhone in the world [6]. Based on this phenomena, it is important to learn about how its brand image and product price influence its customers in making decision before purchasing iPhone products.

II. LITERATURE REVIEW

Djatmiko and Pradana (2016) proved that brand image and product price influence the purchase decision. The brand image (X1) and product price

(X2) as the independent variables, meanwhile purchase decision (Y) as the dependent variable. This research is intended to find the influence of the brand image and the product price of iPhone by Apple Inc. towards its consumer purchase decision in Indonesia. The theoretical framework of this research is shown in Figure 1:

Fig.1 Research Model (Replicated from Djatmiko&Pradana, 2016)

Brand image and product price are the main factors of the phenomenons in this research which match the variables on the theoretical framework that was used by Djatmiko and Pradana in 2016.

Based on Kotler and Keller (2012), brand images is an association that arises in the minds of consumers when remembering a particular brand. To measure the brand image, there are some items that can be used which are product attributes, consumer benefits, and brand personality (Aaker, 2011) [7].

According to Kotler and Armstrong (2012:312), price is the sum of all values given by customers to gain benefit from owning or using a product or service. The items which can be used to measure product price are fair price, fix price, reliable price, and relative price [8].

Kotler and Armstrong (2012:177) explains that purchase decision is buyer's decision about which brand to buy as the most preferred brand. The items that can be used to measure purchase decisions are cognitive, affective, and conative (Schifman, 2010) [9].

III. METHODOLOGY

Quantitative method is used as the basic foundation to finish this research. Quantitative research tries to measure some things such as consumer behaviour, knowledge opinions, or attitudes accurately[10]. The sampling technique used in this research is non probability sampling, while the type of non probability sampling used is Convenience Sampling technique.The 400 responses were collected through the online questionnaire which was spread all around Indonesia that is categorized as Area I (Sumatera), Area II (Java), Area III (Bali & Nusa), Area IV (Kalimantan), Area V (Sulawesi), and Area VI (Maluku & Papua). The collected data was analyzed by using Multiple Linear Regression on SPSS 25. The questionnaire items is shown in Table 1:

TABLE 1
QUESTIONNAIRE ITEM

Item in this research	Item Code
iPhone is a versatile communication tool	BI 1
iPhone is able to facilitate the users.	BI 2
iPhone gives confidence for the users because Apple is a well-known brand	BI 3
iPhone gives elegant impression to the users.	BI 4
iPhone gives luxury impression	BI 5

Item in this research	Item Code
for the users.	
iPhone gives classy impression for the users.	BI 6
iPhone gives expensive impression for the users.	BI 7
iPhone is more popular in the smartphones users	BI 8
iPhone gives modern impression for the users.	BI 9
iPhone seems eye-catching.	BI 10
iPhone packaging is elegant.	BI 11
iPhone has an affordable price.	PP 1
iPhone has an acceptable price.	PP 2
iPhone has a suitable price.	PP 3
Consumers can afford the price of iPhone.	PP 4
iPhone has a fix price.	PP 5
iPhone prices are commensurate with the features offered.	PP 6
iPhone qualities commensurate with the prices offered.	PP 7
iPhone offers honest prices.	PP 8
iPhone has good prices.	PP 9
iPhone has worthy prices.	PP 10
iPhone has reliable prices.	PP 11
iPhone has a brand trust.	PP 12
iPhone has a variation of price comparisons.	PP 13
iPhone has a competitive price.	PP 14
The relativity price of iPhone is obvious.	PP 15
The price updates of iPhone are helping consumers	PP 16
Knowledge about iPhone is important before buying the smartphones	PD 1
It is importan t to understand the features before buying iPhone.	PD 2
Sense of like that consumers have before buying iPhone is	PD 3

Item in this research	Item Code
important.	
I am interested to iPhone.	PD 4
I have a willingness to buy iPhone.	PD 5
I have a plan to buy iPhone.	PD 6
I want to buy iPhone in near future.	PD 7

IV. RESULTS

A. *The Characteristic of Respondents*

From the obtained data, most of the respondents are female with a percentage of 60.75% which is 243 people and the rest of the respondents are male as many as 157 people with a percentage of 39.25%. By the age, the respondents are mostly 18 to 25 years old with a percentage of 63% of the total respondents. It is followed by more than or equal to 41 year-old-people with a percentage of 16.75% of the total respondents, less than or equal to 17 years old with a percentage of 6.5%, 36 to 40 years old with a percentage of 5.5%, 31 to 35 years old with a percentage of 4.5%, and the least of the respondents are 26 to 30 years old with a percentage of 3.75% of the total respondents. Meanwhile, from the occupation category, the respondents are mostly college students with a percentage of 46.25% of the total respondents and it is followed by 154 employees or 38.5% of the total respondents as the second largest number of respondents. The rest of the respondents are 34 students or 8.5% of the total respondents, 14 entrepreneurs or 3.5% of the total respondents, and 13 respondents with other occupations or 3.25% of the total respondents.the most respondents are from Area II (Java) with total number of 270 respondents which is 67.5% of the total respondents.The second largest number of respondents is 77 respondents or 19.25% of the total respondents are from Area I (Sumatera). It is followed by the number of respondents from Area IV (Kalimantan) with the total number of 23 respondents or 5.75% of the total respondents, Area V (Sulawesi) with the total number of 12 respondents or 3% of the total respondents, Area III

(Bali & Nusa) with the total number of 10 respondents or 2.5% of the total respondents, and the least is from Area VI (Maluku & Papua) with the total number of 8 respondents or 2% of the total respondents.

B. Descriptive Analysis

Descriptive analysis is used to identify the score of each variable. This research consists of 2 independent variables which are Brand Image and Product Price, and also 1 dependent variable which is Purchase Decision. The results of descriptive analysis are summarized in Table 2:

TABLE 2
DESCRIPTIVE ANALYSIS SUMMARY

Variable	Total Score	Maximum Score	Percentage	Category
Brand Image (X1)	17528	22000	79.67%	High
Product Price (X2)	20315	32000	63.48%	Enough
Purchase Decision (Y)	9769	14000	69.77%	High

Table 2 shows that brand image variable has the highest score and it is followed by purchase decision in the second place. Meanwhile, product price got the lowest score.

C. Classical Assumption Test
1) Normality Test

The result of Normality Test is shown in Figure 2:

Normal P-P Plot of Regression Standardized Residual
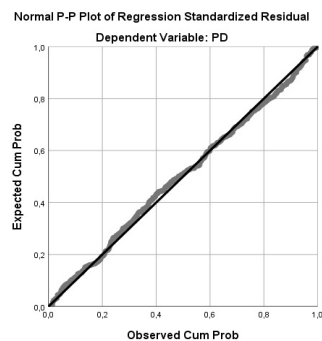Dependent Variable: PD

Fig.2 Normality Test Result

The collected data is spread around the diagonal line which means the regression model meets the normality assumption and it is normally distributed.

2) Multicollinearity Test

The result of Multicollinearity Test is shown in Table 3:

TABLE 3
MULTICOLLINEARITY TEST RESULT

Model		Collinearity Statistics	
		Tolerance	VIF
1	Brand Image	.787	1.270
	Product Price	.787	1.270

There is no multicollinearity problem if the value of tolerance is greater than 0,1 and the value of Variance Inflation Factor (VIF) is less than 10 which means there is no multicollinearity problem in this regression model.

3) Heteroscedasticity Test

The result of Hetereoscedasticity Test is shown in Figure 3:

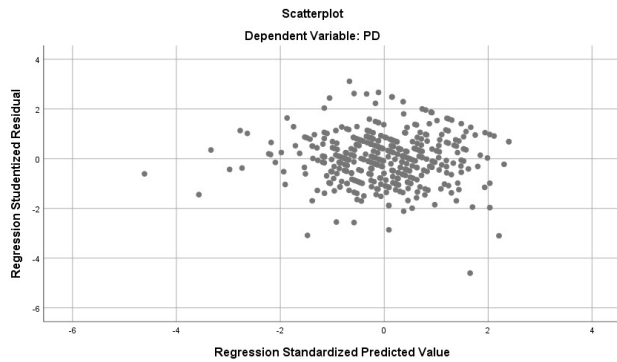| Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,360	1,354		2,482	,013
	Brand Image	,308	,032	,423	9,548	,000
	Product Price	,149	,022	,300	6,770	,000

Fig.3 Heteroscedasticity Test Result

Figure 3 shows the dots spread widely above and below the zero number on the Y which means there is no heteroscedasticity. Hence, it is a good regression model.

C. Multiple Linear Regression

TABLE 4
MULTIPLE LINEAR REGRESSION RESULT

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3,360	1,354		2,482	,013
	Brand Image	,308	,032	,423	9,548	,000
	Product Price	,149	,022	,300	6,770	,000

Table 4 shows the result of multiple regression analysis by using SPSS 25. The following the equations:

Y = a + b1X1 + b2X2
Y = 3.360 + 0.308 X1 + 0.149 X2

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4212,764	2	2106,382	124,833	,000ᵇ
	Residual	6698,834	397	16,874		
	Total	10911,598	399			

The equation of the multiple linear regression is explained as follows:
1. The constant value of Purchase Decision Variable (Y) is 3.360, there is no changes in neither brand image (X1) nor product price (X2) that affect the value of a. The value of a is still 3.360;
2. The value of X1 combined with regression coefficient value of 0.308 which means that if the variable X1 has increased one unit, then variable Y value will increase to 0.308 unit;
3. The value of X2 combined with regression coefficient value of 0,149 which means that if the variable X2 has increased one unit, then variable Y value will increase to 0,149 unit.

D. Hypothesis Testing
1) t Test

TABLE 5
T TEST RESULT

Based on the table 5 above, the result of t Test is below:
1. Brand Image
To test the hypothesis, from the table showed the value of t table in this research is 1.649(df = 400, α = 0,05). Because of the t calculated value is > the value of t table (9.548 > 1.649) and has significant value (0,000 < 0,05), according to the method then Hypothesis of H0 is rejected. It can be concluded that brand image positively influences towards purchase decision.
2. Product Price
The value of t table in this research is 1.649 (df= 400, α = 0,05). According from the method hypothesis of H0 is rejected because from the table result showed that the t calculated value is > the value of t table (6.770> 1.649) and has significant value of t is (0,000 < 0,05). It can be concluded that product price positively influence towards purchase decision.

2) f Test

TABLE 6
F TEST RESULT

1. Significance value of F with 0,05
From the result of SPSS program, the significance level of F is 0,000. Based in the table above, the significant value of F ≤ 0,05 (0,000 ≤ 0,05), it

means H0 is rejected. It can be concluded that the independent variables of brand image (X1) and product price (X2) simultaneously have a positive influence towards the dependent variable purchase decision (Y).

2. Calculated value of F with value of F table

In this research, from the table showed the value of F table is 3,01 (df1 = 2, df2 = 400-2-1=397, α = 0,05). Since F calculated > F table (124.833 > 3.01), it means F calculated is greater that F table then H0 is rejected. It can be concluded that the independent variables of brand image (X1) and product price (X2) simultaneously have a positive influence towards the dependent variable purchase decision (Y).

E. *Coefficient of Determination (R Square)*

TABLE 7
F TEST RESULT

Model Summary[b]			
R	R Square	Adjusted R Square	Std. Error of the Estimate
,621[a]	,386	,383	4,108

Table 7 shows that the independent variables which are brand image and product price simultaneously influence dependent variable which is purchase decision as many as 0,386 or 38,6%. This explains that brand image and product price have an impact of 38,6% to purchase decision, while the remaining amount that is equal to 61,4% is explained by other variables that are not included in this research.

V. CONCLUSION

Based on the result of analysis and discussion on the previous chapter, some conclusions that can be concluded by the writer are as follows:

1. The result of consumer assessment shows that Brand Image has the highest score of 79.67% which is followed by Product Price with the percentage of 63.48%. It means that the purchase decision making of iPhone in Indonesia is more affected by brand image rather than product price;

2. The consumer assessment of purchase decision of iPhone in Indonesia is 69.77% which

means there is a possibility that the respondents will purchase iPhone, but not in the near future;

3. The brand image has positive influence towards purchase decision with the amount of 0,308. Meanwhile, the product price positively influences purchase decision with the amount of 0,149. Therefore, the brand image and product price which were perceived by the potential users of iPhone in Indonesia influence the purchase decision.

VI. SUGGESTION

A. *Suggestion for The Company*

From the results of this research, it can be known that brand image and product price influence positively towards purchase decision of iPhone. Some suggestions for the company are as follows:

1. Related to the brand image, the items of the questionnaire which got low scores compared to the other items of brand image variable are BI8 (iPhone is more popular in between smartphones users), BI1 (iPhone is a versatile communication tool), and BI2 (iPhone is able to facilitate the users). Hence, the company should make the products more popular in between all smartphones users. In addition, the company has to make people know that iPhone is a versatile communication tool which is able to facilitate the users. This can be one of the way to increase the brand image of iPhone in Indonesia which has an impact to the purchase decision of iPhone in Indonesia;

2. For the product price, the items of the questionnaire which got low scores compared the other items of product price variable are PP1 (iPhone smartphones have affordable prices), PP2 (iPhone smartphones have acceptable prices), and PP4 (Consumers can afford the price of iPhone). Thus, the company should try to sell their products with affordable and acceptable prices in Indonesia which have an impact to the purchase decision.

3. Related to the purchase decision, the items of the questionnaire which got low scores compared the other items of purchase decision variable are PD7 (I want to buy iPhone in near future), PD 6 (I have a plan to buy iPhone), and PD5 (I have a willingness to buy iPhone). It means there is a possibility that people in Indonesia will

purchase iPhone, but not in the near future. Therefore, the company should make the products worth to buy by improving the popularity as a versatile communication tool which is able to facilitate the users and considering to sell the products with affordable and acceptable prices. So, level of purchase decision of iPhone in Indonesia can be increased by the potential consumers in Indonesia who want to buy iPhone, but not in the near future.

B. Suggestion for Future Research

The suggestion for future researcher is to gain more knowledge about brand image, product price, and purchase decision, and to add more variables such as word of mouth, advertising, and social influence so that the result can be related to not only brand image and product price

REFERENCES

[1] 2 Billion Consumers Worldwide to Get Smart(phones) by 2016 - eMarketer. (2018). Retrieved from https://www.emarketer.com/Article/2-Billion-Consumers-Worldwide-Smartphones-by-2016/1011694

[2] Smartphone user penetration in Indonesia 2014-2019 | Statistic. (2018). Retrieved from https://www.statista.com/statistics/257046/smartphone-user-penetration-in-indonesia/

[3] Mobile Vendor Market Share Indonesia | StatCounter Global Stats. (2018). Retrieved from http://gs.statcounter.com/vendor-market-share/mobile/indonesia

[4] Mobile Vendor Market Share Worldwide | StatCounter Global Stats. (2018). Retrieved from http://gs.statcounter.com/vendor-market-share/mobile/worlwide

[5] Purnell, N. (2018, February 19). Why the iPhone Is Losing Out to Chinese Devices in Asia. Retrieved from https://www.wsj.com/articles/why-customers-from-india-to-indonesia-prefer-chinese-devices-to-iphones-1519036203

[6] McCarthy, N., & Richter, F. (n.d.). Infographic: The Countries With The Most Expensive iPhones. Retrieved from https://www.statista.com/chart/5683/the-countries-with-the-most-expensive-iphones/

[7] Kotler, P., & Keller, K. L. (2012). Marketing Management 14e Global Edition. Harlow: Pearson Education Limited.

[8] Kotler, P., & Armstrong, G. (2012). Principles of Marketing Fourteenth Edition. Harlow: Pearson Education, publishing as Prentice Hall.

[9] Kotler, P., & Armstrong, G. (2012). Principles of Marketing Fourteenth Edition. Harlow: Pearson Education, publishing as Prentice Hall.

[10] Cooper, D. R., & Schindler, P. S. (2011). Business Research Model (11e ed.). McGraw-Hill.