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A QUANTITATIVE STUDY OF BRAND AWARENESS, BRAND ASSOCIATION, AND BRAND IMAGE IN THE IMPROVEMENT OF BRAND EQUITY FOR SMARTPHONE INDUSTRY IN SEMARANG

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Abstract

The background of the research came from the top brands of smartphones. The smartphone industry filled with many companies, which Apple is in the second behind Samsung as the first position. To take the first position, Apple has to build a strategy to be the top brand of smartphone in Indonesia. The objective of the study is to assess the impact of brand awareness, brand association, and brand image towards the brand equity. The sample population in the research is not precisely known, implementing MOE formula to gain 96 respondents. The sample collection is implementing purposive sampling. The analysis method implementing multiple linear regression. The result shows that brand awareness has impacting role towards brand equity, brand association has impact towards brand equity. Brand image has impact towards brand equity. Brand image become the most dominant variable in affecting brand equity with 0.360 regression score.

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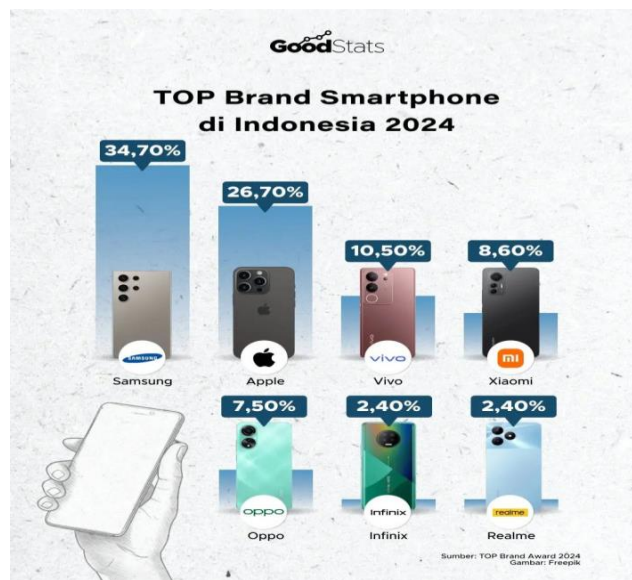
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INTRODUCTION

The competition across business means that the businesses have to realize that they have to optimize the assets of the company to survive. The competition among companies to gain consumers is not limited to the functional product's characteristics such as easiness to use, but also it is related to the brand that offers certain image to the consumers. Brand refers to certain name, certain sign, certain symbol, certain design, or those combinations, aimed to identify or determine products or services by one seller or group of sellers, and as they differ between them and their competitors (Kotler & Keller, 2012). There is a lot of development of brand from various technology in Indonesia.

The information technology provides the easiness for daily activities in society. Its development creates changes in the behavior of the society in how they access information, communication, and transaction. The Indonesian is now starting to respond to the rapid growth of the technology. It can be seen from the Indonesian are getting used to the smartphones in their daily life such as working, study, communicate, and obtaining information. These conditions are the result of how internet and the development of smartphones. The picture below shows the Top Brand Technology of smartphone market in Indonesia.

Figure 1. Top Brand Smartphone in Indonesia



Source: goodstats.id (2024)

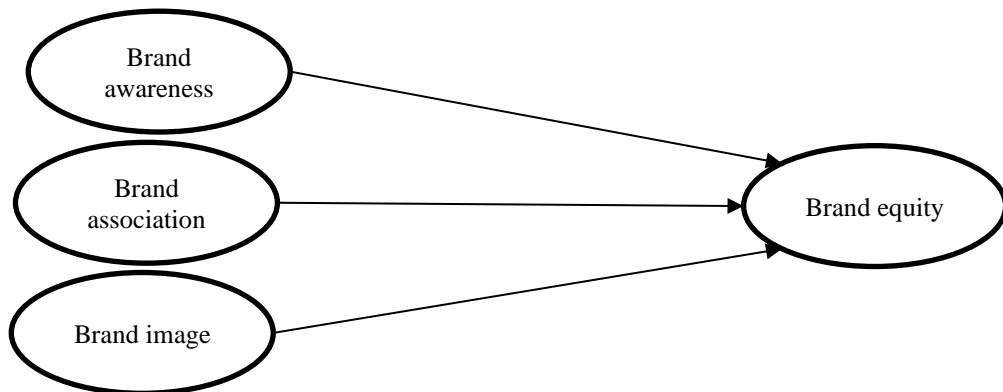
Figure 1 shows the competition among smartphone brands in Indonesia. Brand with good equity able to win the market competition. Samsung and Apple remains the head to head in leading the Indonesian market. As Apple currently in the second position behind Samsung, it needs to build brand equity strategy to be market leader in Indonesia. If it is unable to have a good brand equity, Apple would experiencing setbacks. Therefore, Apple needs to increase its brand equity.

Brand equity is the positive differentiating effect from consumer's reaction towards a certain products and services due to the consumer's knowledge of the brand's name (Kotler & Armstrong, 2019). company should increase the the brand equity to retain consumers turn into the competitors. Brand equity is the asset and liability which is linked with the brand, name, symbol which able to add or subtract the value given by the company or consumer (Aaker, 1996). A high brand equity can be defined if the consumers acknowledge a brand more than the competitors (Nandiroh, 2023).

Brand awareness defined as the ability of the expected or can be referes as prospective buyers to acknowledge or recall that brand is part of a certain products category. The role of brand awareness in the whole brand equity equity depends on how high the level of awareness reach by a certain brand (Ermawati, 2016). Brand association is all the things that related to the memories of a certain brand (Humdiana, 2005). Brand association can be product attributes, intangible attributes, benefits for consumers, relative price, usage, user, famous person, lifestyle or personality, class of products, competitors, dan nation or geographic. The research held by Nugroho (2020) obtained that brand equity affected by brand awareness. The research conducted by Ermawati (2016) shows that brand equity affected by brand association (Nugroho, 2020).

According to Kotler and Armstrong (2019), brand awareness is a set of consumer's trust towards certain brand. The benefit of positive brand image is the development of a product line using positive image gained from the older brand's product. Company should concern about how to retain and improve the positive brand image. The research conducted by Nandiroh (2020) shows that the brand equity affected by brand image. The proposed hypothesis in the research are, brand awareness has impact towards brand equity (H1), brand association has impact towards brand equity (H2), brand image has impact towards brand equity (H3).

Figure 2. Theoretical Framework



Source: Processed data (2024)

METHOD

The research implementing quantitative as the research method. A quantitative method can be defined as method of research which based on positivism philosophy (Sugiyono, 2017). The implementation is used to learn population or certain sample and data collecting with the aim to assess the hypothesis. The collecting data method through distribution of predetermined questionnaire. In this research, the population is Apple smartphone users in Semarang. The data processed using SPSS.

RESULTS AND DISCUSSION

The research has results that have met the validity and reliability test. Below shows the results of classic assumption test consist of normality test, multicollinearity and heterokedasticity so that it can be carried out to the regression model.

Normality test

The application of normality test is to assess whether the data used in the regression model is normally distributed or not (Ghozali, 2018). Kolmogorov-smirnov can be used to identify the data used in the regression model is normally distributed or not. If Kolmogorov-smirnov value is larger than $\alpha = 0,05$, so the data is normal (Ghozali, 2018).

According to the result of normality test shows Asymp. Sig. (2-tailed) value is 0.097, it is higher than 0.05. So, it means that the data used in the research is defined as normal.

Table 1. Normality Test
One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|----------------------------|
| | N | 96 |
| Normal Parameters ^{a,b} | Mean | .0000000 |
| | Std. Deviation | 1.17032471 |
| Most Extreme Differences | Absolute | .083 |
| | Positive | .065 |
| | Negative | -.083 |
| Test Statistic | | .083 |
| Asymp. Sig. (2-tailed) | | .097 ^c |

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: Processed Data (2024)

Multicollinearity Test

According to Ghozali (2018) the test aimed to assess the existence of correlation among the independent variables. An excellent model of regression should not perform any correlation among the independent variables. In detecting multicollinearity, it can be identified from the value of tolerance and value of variance inflation factor (VIF). It is identified as multicollinearity when the value tolerance shows less than 10% and value of VIF is more than 10.

The data shows that the result of multicollinearity test shows tolerance value for brand awareness is 0.793, brand association shows 0.703, and brand image shows 0.688. For the VIF value, brand awareness shows 1.261, brand association shows 1.422, and brand image 1.453. Those tolerance value of each independent variable is above 0.1 and the VIF value less than 10. So, it means that the data used in the research shows no multicollinearity.

Table 2. Multicollinearity Test

| | | Coefficients ^a | | | | | |
|-------|-----------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics |
| | | B | Std. Error | Beta | | | Toleranc e VIF |
| 1 | (Constant) | 2.312 | 1.106 | | 2.091 | .039 | |
| | Kesadaran Merek | .198 | .089 | .197 | 2.222 | .029 | .793 1.261 |
| | Asosiasi Merek | .234 | .085 | .258 | 2.745 | .007 | .703 1.422 |
| | Citra Merek | .359 | .095 | .360 | 3.784 | .000 | .688 1.453 |

a. Dependent Variable: Ekuitas Merek

Source: Processed Data (2024)

Heterokedasticity Test

Heterokedasticity Test aimed to assess the variance dissimilarity of residual from across different observations. In case the the variance of residual between observations is constant, so it is refered as homokedasticity. A fine model of regression is homokedasticity or no heterokedasticity (Ghozali, 2018). The presence of heterokedasticity of an regression can be seen with some methods, such as Glesjer test. If the independent variable statistically significance impacting dependent variable, so there is an indication of heterokedasticity (Ghozali, 2018). If the significance of trust is above 5%, so it shows there is heterokedasticity.

The result of heterokedasticity test obtained each independent variables has significance value more than 0.05. So, it can be defined that the research has no heterokedasticity symptoms occurred.

Table 3. Heterokedasticity Test

| | | Coefficients^a | | | | |
|-------|-----------------|---------------------------------|------------|-------------|--------|------|
| Model | | Unstandardized | | Standardize | t | Sig. |
| | | Coeffiients | | d | | |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.714 | .667 | | 4.070 | .000 |
| | Kesadaran Merek | -.101 | .054 | -.209 | -1.876 | .064 |
| | Asosiasi Merek | .035 | .051 | .081 | .688 | .493 |
| | Citra Merek | -.097 | .057 | -.203 | -1.698 | .093 |

a. Dependent Variable: ABS_res

Source: Processed Data (2024)

Table 4. Multiple Regression

| | | Coefficients^a | | | | | Collinearity | |
|-------|-----------------|---------------------------------|------------|--------------|-----|------------|---------------------|--|
| Model | | Unstandardized | | Standardized | | Statistics | | |
| | | B | Std. Error | Beta | t | Sig. | Tolerance VIF | |
| 1 | (Constant) | 2.312 | 1.106 | | 2.0 | .039 | | |
| | Kesadaran Merek | .198 | .089 | .197 | 2.2 | .029 | .793 1.26 | |
| | Asosiasi Merek | .234 | .085 | .258 | 2.7 | .007 | .703 1.42 | |
| | Citra Merek | .359 | .095 | .360 | 3.7 | .000 | .688 1.45 | |

a. Dependent Variable: Ekuitas Merek

Source: Processed Data (2024)

Brand Awareness towards Brand Equity

The t test result of brand awareness has impact towards brand equity, has regression coefficient value at 0.197, with 0.029 significance. The awareness from

consumers towards a brand will drive their daily transaction needed and will focus on certain brand, so it will increase the brand equity of products.

Brand Association towards Brand Equity

The t test result of brand association has impact towards brand equity, has regression coefficient value at 0.258 with 0.007 significance. The brand association which has unique product attributes, high benefits for consumers, relatively affordable quality, so it will increase the product's brand equity.

Brand Image towards Brand Equity

The t test result of brand image affecting brand equity, has regression coefficient value at 0.360 with 0.000 significance. A good brand image will not harm its consumers, make consumers perceive that the brand image of a certain brand is good, and will increase the brand equity of Apple products in Semarang

DISCUSSION

Brand Awareness towards Brand Equity

Derived from the research, brand awareness identified as one of the key components impacting the brand equity. Brand awareness including the consumer's knowledge level related to the brand, and their ability to identify and recall the brand in any situation. The result shows that the relation among brand awareness and brand equity. A brand with high level awareness, will tent to have stronger brand equity. Consumers that aware of a certain brand will tent to have better perception towards a certain brand, this shows that the effective marketing effort to increase brand awareness, such as advertising campaign and promotion, can contribute significantly in increasing brand equity. This study supported by the result of the research conducted by Ermawati (2016) that brand awareness has impact towards brand equity.

Brand Association towards Brand Equity

One of the key element to build brand equity is brand association. The brand association including anything related to consumer's mind when they think about a certain brand. It can be quality, value, experience, emotion that related to a certain brand. Derived from the research, it shows that brand awareness has significant impact towards brand equity. A positive and strong association of a brand can strenghten the consumer's perception of a certain brand, that will lead to increase the brand equity. Consumers who

have positive association towards a certain brand will tend to be more loyal, frequently recommending the brand to people around them, and willingly to pay higher price for a product or services from the certain brand.

A positive brand association will create added value for the brand and provide differentiation from its competitors, that will make the brand more attractive and easier to be remembered. Example, a brand that associated with high quality or innovation will be identified as more valuable and has higher brand equity compared to the other brand without having any of those association. This research supported by the result of the research conducted by Ermawati (2016) that brand association has impact towards brand equity.

Brand Image towards Brand Equity

The perception and what consumers assess towards a certain brand based on experience, information, and interaction to a certain brand is brand image. In the context of brand equity, a positive and strong image of a certain brand increase the value perceived by the consumers towards that brand.

The result shows brand image has significant impact towards brand equity. Consumers tend to choose brand with positive image because they believe that the brand will provide certain benefits and values. A strong brand image shows the consumer's trust towards quality, reputation, and reliability of a certain brand that will strengthening the consumer's loyalty and increase brand equity.

Brand with positive image will has higher attractiveness in the market because consumers not only choose products based on functionality but also based on their perception towards brand image. As an example, brand that associated with innovation and sustainability will tend to have higher brand equity because they created added value for the consumers who have concern on those aspects. This study supported by the result of the research conducted by Nandiroh (2020) that brand image has impact towards brand equity.

CONCLUSIONS AND SUGGESTIONS

Derived from the conducted hypothesis test, can be concluded, (1) Brand equity affected by brand awareness, a high brand awareness will able to increase the brand equity. (2) Brand equity affected by brand association, a high brand association will able to increase

the brand equity. (3) Brand equity affected by brand image, a high brand image will able to increase brand equity. (4) Brand image become the most dominant variable impact towards brand equity with 0.360 regression coefficient.

The research is limited only in Semarang, one of the city in Indonesia. with difficulties in questionnaire spreading, where not everyone willing to fill the questionnaire. Then, the other limitation is that the research has only 3 independent variables. Derived from the research, Apple has to increase the brand equity in Indonesia with more concern in combination of the image, awareness, and association of the brand.

Our suggestion is that it remains some spaces in conducting the research in broader area, and adding more other independent variables in the research such as brand loyalty so that provide more explanation about brand equity and other impacting factors. In further research, it might need to build and develop the strategy to improve the brand strategy in smartphone market in Indonesia to become the market leader.

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