Analysis of the Impact of Brand Image on Smartphone Product Purchase Decisions in Bandung

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Abstract

Most of the world's population is already using smartphones in their daily life. Smartphones are usually used as personal assistants because this tool can store important data for business matters as well as a reminder of the user's activities. smartphones are the highest contributor to sales in the technology industry. What can be done to create products that have high selling value and competitiveness in the process of innovation or creation, is that the company must be able to create the right business strategy. A company must be able to build a marketing strategy in the right way to reach the targeted market. Brand image has a big influence in the process of selling a product, as seen today, people are no longer competing to buy the best quality products, but consumers are more easily tempted by brands they already know or have a brand image. This study was conducted to determine whether brand image could have a significant impact on the smartphone's purchase decision. The analysis will be done using SPSS with simple linear regression analysis technique. The regression coefficient for variable advantage of product association (X1) is 2.602 with a significance level is 0.011 < 0,05. Based on the result, it can be concluded that Ho1 is rejected and Ha1 is accepted. It means that there is a positive or significant influence or significant contribution of advantage of product association toward purchase decision. The regression coefficient for variable strength brand association (X2) is 4.987 with a significance level is 0.000 < 0,05. Based on the result, it can be concluded that Ho2 is rejected and Ha2 is accepted. It means that there is a positive or significant contribution of strength brand association toward purchase decisions. The regression coefficient for variable uniqueness brand association (X3) is 3.323 with significance level is 0.001 < 0,05. Based on the result, it can be concluded that Ho3 is rejected and Ha3 is accepted. It means that there is a positive or significant contribution of uniqueness brand association toward purchase decisions. The conclusion of this research shows that there is a significant impact on brand image on customer's purchase decision of smartphones in Bandung. The implications for smartphone companies are they can make continual improvement of their brand image based on the result of this research that found that brand image has a positive impact on customer's purchase decision of smartphones product.

Keywords: Brand Image, Smartphone, and Purchase Decision.

1. Introduction

1.1 Background Problem

In this present age, the advancement of correspondence media is both continuous and unpredictable in people's lives, as well as unavoidable. The development of technology in the field of communication has progressed very rapidly in various aspects. This has changed the pattern of people's lives. One example is the development of mobile phones. This long-distance communication tool is also experiencing very rapid technological advances. A mobile phone has recently become one of the most popular media transmission media. Convenience is more appealing than fixed channels for media exchange because it allows for greater ease of sanctioning, innovation, use, and adaptability. As a result, various organizations are competing to provide the spotlight that can help address ongoing humanitarian concerns. Mobile phones have become one of the most basic and inexpensive items in today's world. Mobile phones have now evolved into very important and necessary gadgets for various segments of society, including young people, teenagers, and the more established. Mobile phones have changed the function of

remote communication tools into a very smart object that can be used for various things by users.

One of the phenomena that has piqued the world's interest is the rise of increasing sophisticated telecommunications, which promotes the development of smartphone products. The development of smartphones began in 1992, with IBM's invention of Simon. A calendar, phone book, world clock, notepad, e-mail, the ability to send and receive faxes, and games are also included in the 'Simon' smartphone. The advancement of smartphone technology has been accompanied by an increase in the number of smartphone users over time, ranging from children to the elderly who have used smartphones for daily needs. Smartphones can help with almost all aspects of human activity implementation. Starting with texting and calling and progressing to other activities such as chatting, games, GPS, and so on. Because the presence of this smartphone is regarded as extremely important, it is not uncommon for almost everyone to carry their smartphone with them wherever they go. At the same time, the human need to lead broadcast communications can already be seen as a significant need. This is because the presence of communication media can parse and set aside assets for the community to complete social corporations. As with broadcast communications, what should be far away can feel close, and data trading will take place more quickly. People are also confronted with more complex broadcast communications requirements as a result of increased innovation and data.

The smartphone industry in Indonesia has recently become more competitive. Because of the large number of new smartphone products that have emerged, companies have been encouraged to create as many products as possible in order to gain market share. Smartphone advantages are typically seen in specifications, unique features, competitive prices, appealing designs, and other advanced technologies such as the quality of the touch screen, camera, and others. Because of the intense competition, smartphone users may be able to switch to other brands. According to the research firm International Data Corporation (IDC), smartphone sales in Indonesia (RI) will reach 40.9 million units in 2021, up 11% from the previous year.

Figure 1.1: Graph 'Pengiriman Smartphone Indonesia 2021'

The data above shows that there is high competition in smartphone sales in Indonesia. This will affect the ability between brands to compete in the marketing field, where they will try to introduce and position their brand to attract customers.

Apple products have become a very special product compared to other technology products. Many companies are trying to compete with apple companies today. Even the closest competitor companies like Samsung are still trying to beat the high level of sales and brand image position compared to Apple. Apple is a strong brand that stands for high prices and stylish technological products. Its core values, innovative, easy to use, different and stylish in design contributes to the image of the brand: innovative but manageable products for people who think differently. The development of the Apple iPhone in Indonesia is not as big as what happened in America or other European countries, but looking at the characteristics of the market, Apple has succeeded in placing its position in consumers who are more focused than its competitors. Apple comfortably positioned itself in the upper middle to high end consumers. Apple Inc. reached revenue of US$123.94 billion in the first quarter of 2022. That number increased 11.22 percent from the previous quarter which reached US$111.43 billion. The iPhone is Apple's product with the biggest contribution. Apple iPhone consumers in Indonesia come from various walks of life, from students to parents who choose the iPhone as the cell phone they use every day. With a high price, of course the Apple iPhone also offers features that its competitors do not have. However, based on the author's personal experience, there are still many iPhone users who do not really understand the usefulness of the features provided on the iPhone device itself. Most of them choose the iPhone because of the good quality and image of the iPhone. In other words, Apple Inc.'s strategy, by building a brand image in such a way, it has succeeded in influencing consumers to make purchasing decisions.

1.2 Problem Statement

Brands can provide several benefits for sellers, namely brands facilitate the marketing process and troubleshooting, brands provide opportunities to attract loyal and profitable customers, brands help in market segmentation, and brands help in building image and in launching new brands (Kotler, 2009). Brand image is the perception of the brand in the mind of the customer. It is an aggregate of beliefs, ideas, and impressions that a customer holds regarding the brand. A simple definition of brand image could be the customers' perception of the brand based on their interactions and experience with the brand or their beliefs of what the brand could be. A brand can be perceived differently by different customers. Hence, the formation of a consistent brand image is a huge task for any business.

The influence of brand image is considered as the most important factor in terms of marketing a product or service. Companies must pay attention to anything related to branding. Every company strives to build a strong image as it helps in fulfilling their business motives. A strong brand image has advantages such as being able to increase sales numbers because new customers are attracted to the brand. Easily introduce new products under the same brand, increase the trust of existing customers, and can also help in maintaining better business-customer relationships. This is done so that smartphone companies can find out whether their products are well received by consumers, whether their products are in accordance with the needs and desires of consumers in terms of communication. From the description above, it can be seen that there is a relationship between Brand Image and consumer purchasing decisions, so that researchers are interested in analyzing

Currently, most of the world's population is already using smartphones in their daily life. Smartphones are usually used as personal assistants, because this tool can store important data for business matters as well as a reminder of the user's activities. Smartphones can include various applications for chat, e-mail, telephone, social media, and entertainment purposes. The smartphone business in Indonesia has a very fast market competition as indicated by the many smartphone brands on the market. There are several smartphone manufacturers that are well known to the public. Currently, smartphones are the highest contributor to sales in the technology industry. What can be done to create products that have high selling value and competitiveness in the process of innovation or creation, is that the company must be able to create the right business strategy. One of them is to create quality products and have good service.

A company must be able to build a marketing strategy in the right way to reach the targeted market. In addition to determining prices, determining the target market, a company must also build their brand. In running a business, the brand has an important role to be able to distinguish whether the business is new or has existed before. Brand image is not just a logo or company name, but as an embodiment of someone's image or perception about your product and company. Consumer interest in a product is one of the effects of brand image on purchasing decisions. Brand image is one of the most important things for a product. Brand image is the first impression that product users get. The image or impression that appears in the head will affect purchasing decisions and consumer loyalty to the product.

Brand image has a big influence in the process of selling a product, as seen today, people are no longer competing to buy the best quality products, but consumers are more easily tempted by brands they already know or have a brand image. which has a good reputation. good. Brand image is the perception of the brand in the minds of customers. It is the collection of beliefs, ideas, and impressions that customers have about a brand. Most entrepreneurs and small business owners don't think much of their brand image until there is a problem with the image they develop. I know I didn't think seriously about my own brand image until years after founding my agency 10 years ago. (Timothy, 2016). Maintaining a quality brand image is not only important for big businesses, but small businesses too.

Some companies recognize the relevance of brand image to the success of market and organizational offerings, as an indication that a good brand image can improve customer experience and satisfaction for long-term commitment. Evidence suggests limited studies on the impact of brand image on key marketing and organizational components, including the impact of brand image on customer loyalty and commitment (Zhenzhen, 2009). Customer loyalty is often the reason consumers choose one product or service over another, and your business will be their first choice. The lifetime value of a loyal customer is much higher than that of a disloyal customer, and the cost of retaining a customer is always cheaper than acquiring a new customer (Karen, 2020). Basically, it's all about customer retention, which includes your ability to make sure customers decide to keep buying from you. The process revolves around increasing the lifetime value of your customers so you don't just depend on turning new leads into sales (Ricky, 2021).

1.3 Research Question

Based on the background of the problem above, the formulation of the research question can be stated as follows:

What factors can help a smartphone brand (Apple) to build a brand image so that it can influence consumer purchasing decisions?

1.4 Research Objective

According to the research question, the objective of this was to test the smartphone purchasing decision model by placing the independent variable, namely brand image that can be measured by the three factors (advantage, strength and uniqueness), by taking smartphone users as objects in the city of Bandung, Indonesia.

2. Literature Review

2.1 Purchase Decision

Purchase decision is the perspective that drives a buyer from distinguishing a need, creating choices, and picking a particular item and brand. Purchaser decision is a critical thinking process coordinated at targets. Buy choices include a succession of decisions framed by shoppers prior to making a buy that starts after he has a readiness to satisfy a need. Customers should arrive at choices connected with the spot of procurement, wanted brand, model, measure of procurement, time to buy, measure of cash to be spent and strategy for installment. These choices can be affected by advertisers by giving data about their items or administrations that can illuminate the buyer evaluation process. The core of consumer decision making is the process of integrating knowledge to evaluate two or more alternative behaviors and choose one of them (Akbar,2012). (Schiffman, et al., 2008) Expressed that purchasers typically look for data important about a predetermined utilization related need from their previous encounters prior to searching for outside wellsprings of data. All in all, past buy experience is viewed as an inside wellspring of data that a shopper depends on prior to going with a choice. The components of this consumer model's decision process are the following Input - information processing - decision process - variables influencing the decision process (Engel J.F., et al.,1968). A theory of repurchase decision-making (TRD) that more comprehensively explains individuals' post-purchase decision-making processes can be found in this journal (Han & Ryu, 2012). Many theories about how customers make decisions have been aimed at understanding how customers think about the future and what they will do (Han et al., 2010). This journal will help to understand the antecedents of social media marketing and their effects on purchase intention (Hasan and Sohail, 2020). an examination of the factors affecting consumer's purchase decision can be found in this journal (Hanaysha, 2018).

2.2 Brand Image

To gain an in-depth understanding of the basic background of the research topic, knowledge of the understanding of how brand image can impact customers. Brand image is a description of the association and consumer confidence in certain brands. Having a good brand image will help the product to be easily accepted by consumers over time to prove quality and meet buyer expectations (Prasetya et al., 2018). Factors supporting the formation of a Brand Image in

relation to brand associations are (Keller, 2003), advantage of brand association, strength of brand association, uniqueness of brand association. The capacity of a brand to impact buying is not set in stone when verification of how the items bought by purchasers can measure up to the assumptions and necessities of purchasers (Mamahit et al, 2015). Perspective on the brand is the impression of the customer's memory about his relationship with the brand. Therefore, it can be concluded that the brand image is a consequence of the buyer's perspective or assessment of lucky or unlucky brands. This depends on the thought or determination to contrast the differences that exist in certain brands, so that the brand whose proposition fits the needs will be chosen. A solid and positive image is one of the important things. Without a solid and positive image, it is very difficult for organizations to attract new clients and retain existing clients. The right brand image of an item will definitely help the buyer, because the brand image will affect the customer's assessment of the brand of choice he faces. This journal (Chang, et al., 2019) will help this research to find out about the impact of narrative person and brand image on customer-brand interactions. Not only that, this journal is also useful for this research because this journal discusses the effect of brand image on purchase decisions (Saktiawan and Harsono, 2021). While being familiar with brand image to purchase intention, these two journals will help (Upamannyu, N. K., & Mathur, G. 2013) (Diamantopoulos, A, et al., 2011).

2.3   Relationship Between Brand Image and Purchase Decision

The brand will continue to be remembered by customers where its products have excelled in terms of convincing both in terms of quality, cost, and the expectation of meeting the value that mobile phones can provide for correspondence and lifestyle purposes. Assuming the brand image of an item is known by the customer, the buyer will not consider buying the item, especially if there is a personal relationship between the buyer and the brand. Brand Image is the perception and belief held by customers about a particular product (Lau & Phau, 2007). Previous research conducted by Tosan Widodo (2016) said that brand image has a positive influence on customer purchasing decisions. Many studies ascribing that there is a solid connection between brand image and purchasing decision had been led by specialists including different viewpoints. The strength of the relationship between brand image and purchasing decisions in buying branded goods in Malaysia (Sasmita & Suki, 2015). There is a positive and significant impact on the relationship between brand image and consumer's buying decisions (Watson et al., 2015). The results of the study found that brand image is able to give a positive influence on purchasing decisions.

2.4   Brand Associations (Advantages, Strength, Uniqueness)

Brand affiliation assists individuals with recollecting your image and its interesting characteristics, including those that separate you from your rivals. By cultivating commonality and supporting conspicuous traits, brand affiliation furnishes clients with ideas, visuals, and mentalities that can assist with working with brand review. the components of brand image, focusing on the capacities or worth of the brand as seen by shoppers. Along these lines, four classifications of capacities are recognized: ensure, individual distinguishing proof, social ID and status. Via theories, it has been suggested that these capacities impact the buyer's eagerness to suggest the brand, address a cost premium for itself and acknowledge brand augmentations (Belén del Río, Vázquez and Iglesias, 2001).

2.5 Conceptual Framework

Based on the theoretical explanations the research model can be described as shown as in
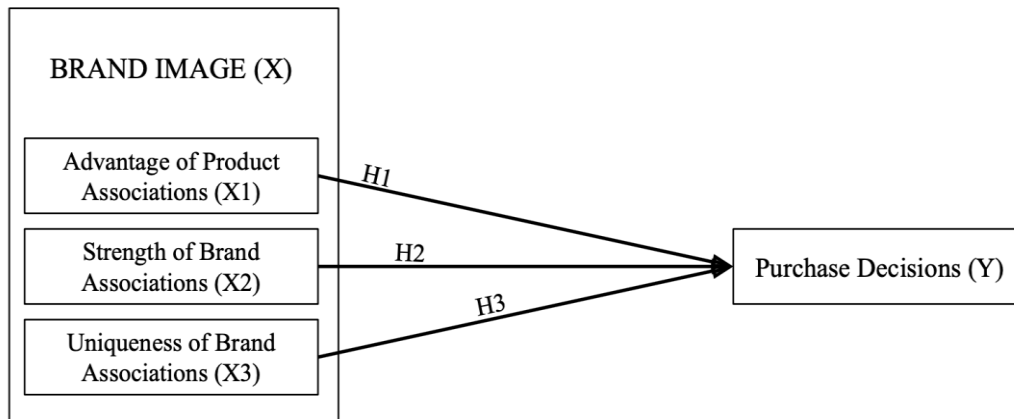

Figure 2.1: Framework

2.6 Hypothesis

Concerning the matters above, the researcher formulated hypotheses that brand image has a positive and significant impact on the consumer's purchase decision of smartphones.

H1 : There is a positive effect of Advantage of Product associations on Purchase decisions.

H2 : There is a positive effect of Strength of Brand associations on Purchase decisions.

H3 : There is a positive effect of Uniqueness of Brand associations on Purchase decisions.

3. Methodology

This section will discuss the methodology used to determine the significant influence of brand image on consumer purchasing decisions. This research uses quantitative research methods. Quantitative methodology is the leading research framework in the social sciences. It refers to a set of strategies, techniques, and assumptions used to study psychological, social, and economic processes through the study of numerical patterns. Quantitative research collects various numerical data. The variables to be studied in this study are:

The Dependent Variable (Y) is the Smartphone Purchase Decision in the City of Bandung.

The independent variable (X1) is advantage product associations, (X2) is strength brand associations, and (X3) Uniqueness brand associations.

The research method is based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative/statistical, with the aim of testing predetermined hypotheses (Sugiyono, 2011).

This section will focus on using a questionnaire to examine problem areas. The following sections of this paper will demonstrate how the chosen study design is important for linking theory and method. Complete explanation of the aim of research Study , sampling, data collection, and analysis will also be investigated. Possible research design constraints, as well as compliance with ethical requirements, will be examined.

3.1   Aim of Research Study

The aim of this research study is to analyze the following research question: What factors can help a smartphone brand (Apple) have a brand image so that it can influence consumer purchasing decisions?

3.2   Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be collected, analyzed and used. This research adopts a positivism approach. This positivism is the view that main real information got through perception (detects), including estimation, can be relied upon. Positivism adopts a clear quantitative approach to investigating phenomena. as opposed to post-positivist approaches, which aim to describe and explore in-depth phenomena from a qualitative perspective (Crossan, F. 2003). In the investigation of positivism, the job of the scientist is restricted to gathering information and deciphering it impartially.

3.3   Data Collection Methods

3.3.1   Research Population and Sample

The population used in this study will be focused on individual smartphone users in the city of Bandung. The sample data that will be collected are 100 people aged 16 to 25 years who are willing to fill out the questionnaire form. Based on the sampling criteria, the number of samples used in this study were 100 respondents, the reasons the researcher used 100 respondents were, a good sample of at least more than 30 respondents, a sample of 100 respondents was representative of the population studied, and based on the consideration of a relatively faster time and relatively cheaper cost. Jogiyanto (2004), and also the number of samples of 100 is deemed to have met the requirements of a representative sample. This agrees with Fraenkel and Wallen, the minimum sample size for this study is 100 sampling, also known as selective, judgmental or subjective sampling, is a form of non-probability sampling in which the researcher relies on his or her own judgment when selecting members of the population to participate in the study.

3.3.2   Research Design

This research will use quantitative research, This study used questionnaires to obtain primary data. The required data will be collected using an online survey which will be distributed via email and several other social media such as Instagram, Whatsapp, Lines, etc. The questionnaires included three main sections, The first part contains the consent form given to the respondent which contains agree/disagree statements with several mutual agreements that have been made, one of which is agreeing that the data provided can be used as one of the samples used in this study. In addition, the respondent also agrees to anonymize their data that has been provided so that the researcher also agrees to keep the data that has been provided confidential. The second section that asks the respondent's identity, such as; age, sex and occupation. The third section is about what smartphone brand that they use/want to buy, and the last section which contains instruments that ask respondents' perceptions of the variables studied, including brand image and consumer buyer decisions.

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3.3.3 Survey Question

The survey set of questions is designed for each variable and demographic question (respondents' background), which requires a response using Likert scale from 1 (Strongly disagree) to 5 (Strongly agree) for the variables and multiple choice for the demographic question. Questions are translated to Indonesian for respondents' comprehension purposes since the respondents are Indonesian citizens. The measurements used in this research are divided into 5:

Table 3.1: Measurement

Number	Statement	Description of Statement
1	Strongly Disagree	Respondent is **strongly disagree** with the statement
2	Disagree	Respondent is **disagree** with the statement
3	Neutral	Respondent is **neutral** with the statement
4	Agree	Respondent is **agree** with the statement
5	Strongly Disagree	Respondent is **strongly disagree** with the statement

Advantage of Product Association

Variable	Label	Item
Advantage of Brand Association	**APA1**	The price of the smartphone you have / want to buy is in accordance with the quality of the product provided.
	APA2	The smartphone that you have / want to buy provides benefits for you.
	APA3	You feel that the quality of the smartphone product you have/want to buy has a high product quality
	APA4	The use of smartphones makes it easier to communicate.
	APA5	The smartphone brand that you have chosen is according to what you need.
	APA6	You already know the smartphone product you have.
	APA7	You are familiar with the use of Smartphones from the Smartphone brand of your choice.

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Strength of Brand Association

Variable	Label	Item
Strength of Brand Association	SBA1	The smartphone brand that you have/want to buy is able to meet your needs and desires
	SBA2	The Smartphone brand that you have/want to buy has a product design innovation that is always modern
	SBA3	The Smartphone brand that you have/want to buy has software performance that is always excellent
	SBA4	The Smartphone brand that you have/want to buy is a Smartphone that has a good reputation.

Uniqueness of Brand Association

Variable	Label	Item
Uniqueness of Brand Association	UBA1	You can quickly remember the logo / symbol of the Smartphone you have / want to buy.
	UBA2	The smartphone brand that you own / want to buy is the first brand that comes to your mind.
	UBA3	The features provided by the Smartphone brand that you have/want to buy has its own uniqueness.
	UBA4	The smartphone brand that you have/want to buy has many types of products with their own uniqueness
	UBA5	By using the smartphone brand that you use / want to buy it will promise an added value to you.

Purchase Decisions

Variable	Label	Item
Purchase Decisions	PD1	You buy a Smartphone from a certain brand after evaluating alternatives on several products.
	PD2	After searching for information about Smartphone brands, you become convinced of one of the smartphone brands.
	PD3	You feel confident buying a Smartphone with a certain brand as your personal cell phone.
	PD4	You feel confident buying a Smartphone with a certain brand as your personal cell phone.

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3.3.4 *Validity and Reliability*

Validity and Reliability Test is used to test whether the research questionnaire questions are valid and reliable for the purpose of this study before being distributed. All questionnaire questions can be said to be valid if the value of r count > r table (0.256).

Validity and reliability tests will be utilized to assist with understanding how the Reliability and Validity of the scales are estimated accurately by scientists. The basic role of this review is to give data on how the analysts test the validity and reliability of the scales utilized in their exact examinations and to give assets to future exploration. (SÜRÜCÜ and MASLAKÇI, 2020).

Respondent demographic profile results are represented by gender, age, occupation

Statement	Calculated value	Table value	Result
Advantage Brand Associations (X1)			
Brand Image 1	.613**	0.256	Valid
Brand Image 2	.837**	0.256	Valid
Brand Image 3	.719**	0.256	Valid
Brand Image 4	.702**	0.256	Valid
Brand Image 5	.693**	0.256	Valid
Brand Image 6	.740**	0.256	Valid
Brand Image 7	.761**	0.256	Valid
Strength Brand Associations (X2)			
Brand Image 8	.803**	0.256	Valid
Brand Image 9	.750**	0.256	Valid
Brand Image 10	.761**	0.256	Valid
Brand Image 11	.823**	0.256	Valid
Uniqueness Brand Associations (X3)			
Brand Image 12	.757**	0.256	Valid
Brand Image 13	.692**	0.256	Valid
Brand Image 14	.775**	0.256	Valid

Brand Image 15	.651**	0.256	Valid
Brand Image 16	.536**	0.256	Valid
Purchase Decision (Y)			
Purchase Decision 1	.636**	0.256	Valid
Purchase Decision 2	.775**	0.256	Valid
Purchase Decision 3	.795**	0.256	Valid
Purchase Decision 4	.757**	0.256	Valid

Source: processed by researchers (2022)

The table above shows the smallest r value of 0.536 and the largest count of 1. Then, the table also shows that each item has a value of r value greater than r table 0.256. Referring to the provisions of the value of r count > r table, the research questionnaire was declared valid. Therefore, they were able to express something measured by the research questionnaire.

The following result of reliability test:

Variable	Cronbach's Alpha	N of item	Result
Advantage Brand Associations (X1)	.886	7	Reliable
Strength Brand Associations (X2)	.866	4	Reliable
Uniqueness Brand Associations (X3)	.826	5	Reliable
Purchase Decision (Y)	.807	4	Reliable

Source: processed by researchers (2022)

The basis for taking Cronbach Alpha according to (Sujerweni, 2014) the questionnaire is said to be reliable if the Cronbach Alpha value is > 0.6.

The table 2 4.2 shows that X and Y variables have Cronbach's Alpha values above 0,80 which means that all variables in this research are reliable.

The reason for taking Cronbach Alpha as per (Sujerweni, 2014) the poll is supposed to be solid if the Cronbach Alpha worth is > 0.6. It tends to be presumed that all ideas of the estimation of every variable of the poll are solid. In this manner, the things in every one of the variable ideas were pronounced possible and could be utilized as an estimating instrument.

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3.4   Construct and Measure

In this section, it is explained that this extensive and abstract data is one thing that can be done to get a proper understanding. After the technique used is explained in detail, it will be easier for researchers to relate the technique to be used with questions that match each measurement of each of the existing variables. Constructs are mental deliberations that we use to communicate the thoughts, individuals, associations, occasions and additionally protests/things that we are keen on. Builds are an approach to bringing hypotheses sensible, assisting with making sense of the various parts of speculations, as well as measuring/notice their way of behaving. In this study, purchasing decisions can be measured by the advantages of the following product associations, the strength of the brand associations and the uniqueness of the brand associations.

3.5   Analysis of Data

The researcher will start by making questions based on the factors that can influence these variables. After making questions, the researcher will analyze the questions that have been made using the validity and reliability test before the questions are made into questionnaires and distributed, to avoid errors in this analysis. The required data will be collected using an online survey which will be distributed via email and several other social media such as Instagram, Whatsapp, Lines, etc. Researchers spent about 2 weeks to get the number of samples used in this research. This sample data collection is the most time-consuming agenda in the process of making this research. The data that has been collected will be processed using SPSS. SPSS is short for Statistical Package for the Social Sciences. SPSS is able to access data from various types of existing formats, so that data that is already available in various formats can be used directly to perform data analysis. The display of data provided by SPSS is more informative, making it easier for users to read the results provided. This research will be using SPSS because it is a flexible, customizable way to get super granularity on even the most complex data sets. This will give the researcher more time to do what you do best identifying trends, developing predictive models, and drawing informed conclusions.

The data will be processed using a multiple linear regression analysis technique. Multiple linear regression refers to a statistical technique that uses two or more independent variables to predict the outcome of a dependent variable. The technique enables analysts to determine the variation of the model and the relative contribution of each independent variable in the total variance. Multiple linear regression will produce 3 outputs, namely a r-square test (model summary), namely this section to get the coefficient of determination, t-test (coefficient) and f-simultaneous (ANOVA). In addition to the 3 outputs, there is also an additional output, namely by making a regression equation. A t-test is a type of inferential statistic used to determine if there is a significant difference between the means of two groups, which may be related in certain features. It is mostly used when the data sets, like the data set recorded as the outcome from flipping a coin 100 times, would follow a normal distribution and may have unknown variances. A t-test is used as a hypothesis testing tool, which allows testing of an assumption applicable to a population. The coefficient of determination is a statistical measurement that examines how differences in one variable can be explained by the difference in a second variable, when predicting the outcome of a given event.

4. Result of Analysis

4.1 *Variable Analysis Test*

4.1.1 Advantage of Product Association Variable Descriptive Test

Indikator	SD		D		QA		A		SA	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
APA1	2	2	4	4	9	9	42	42	43	43
APA2	2	2	0	0	5	5	30	30	63	63
APA3	2	2	5	5	10	10	32	32	51	51
APA4	1	1	2	2	3	3	22	22	72	72
APA5	1	1	4	4	13	13	31	31	51	51
APA6	2	2	3	3	10	10	23	23	62	62
APA7	2	2	1	1	6	6	30	30	61	61

Based on the table above, it is found that the average respondent's answer strongly agree with each statement on the advantage of the product association variable. Of the seven indicators, the highest average answer is in the fourth statement which states that using smartphones makes it easier to communicate with a percentage of 72%.

4.2.2 Strength of Brand Association Variable Descriptive Test

Indikator	SD		D		QA		A		SA	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
SBA1	1	1	2	2	10	10	36	36	51	51
SBA2	2	2	4	4	10	10	32	32	52	52
SBA3	2	2	4	4	12	12	38	38	44	44
SBA4	2	2	1	1	7	7	37	37	53	53

Based on the table above, it was found that the average respondent's answers strongly agree with each statement on the strength of the brand association variable. Of the four indicators, the highest average answer is in the fourth statement which states that the smartphone brand that is owned or wants to be purchased is a smartphone that has a good reputation with a percentage of 53%.

4.2.3 Uniqueness of Brand Association Variable Descriptive Test

Indikator	SD		D		QA		A		SA	
	Freq	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
UBA1	2	2	1	1	8	8	25	25	64	64
UBA2	1	1	3	3	19	19	27	27	50	50
UBA3	3	3	1	1	14	14	32	32	50	50
UBA4	1	1	4	4	19	19	40	40	36	36
UBA5	2	2	2	2	26	26	31	31	39	39

Based on the table above, it is found that the average respondent's answer strongly agree with each statement on the uniqueness of the brand association variable. Of the five indicators, the highest average answer is in the first statement which states that consumers can quickly remember the logo or symbol of the smartphone they own or want to buy with a percentage of 64%.

_4.2.4 Purchase Decisions Variable Descriptive Test_

Indikator	SD		D		QA		A		SA	
	Freq	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
PD1	4	4	3	3	13	13	33	33	47	47
PD2	2	2	1	1	9	9	29	29	59	59
PD3	2	2	1	1	10	10	30	30	57	57
PD4	2	2	0	0	12	12	35	35	51	51

Based on the table above, it is found that the average respondent's answer strongly agree with every statement on the purchase intention variable. Of the four indicators, the highest average answer is in the second statement which states that after searching for information about smartphone brands, consumers become confident with one smartphone brand with a percentage of 59%.

## 4.3 Classical Assumption Test

4.3.1 Normality Test Result with P-Plot Graph

The researcher calculated the Normality Test using the SPSS application for IOS, and the results of the Normality test were obtained with the P-Plot graph as follows:

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Normal P–P Plot of Regression Standardized Residual

Dependent Variable: PURCHASE DECISION
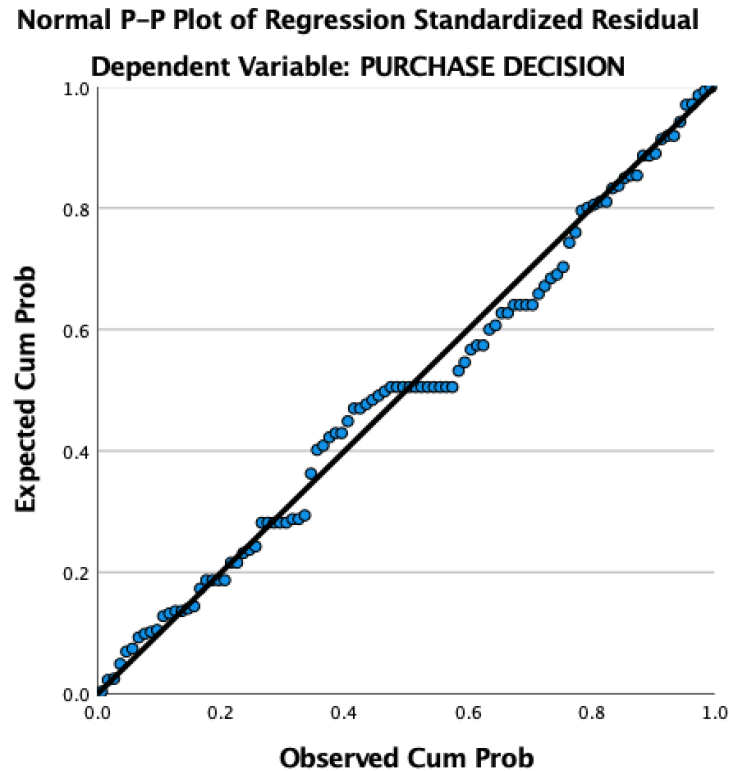
In light of the outcomes above, it very well may be seen that the P-Plot chart shows focuses that spread around the inclining and follow the corner to corner line, so it tends to be reasoned that the information is typically disseminated.

4.3.2   Heteroscedasticity Test with Normal Probability Plot Graphic Model

Scatterplot

Dependent Variable: Purchase Decision
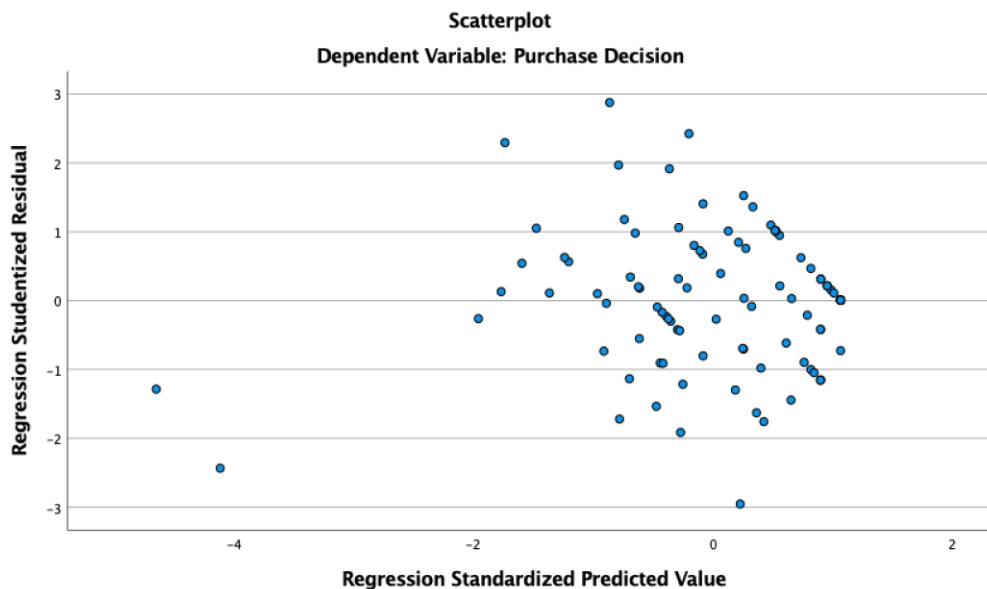
As we can see in the figure x, it can be seen that in the diagram there is no clear pattern, and the dots spread out and do not form a certain clear pattern. So it can be concluded that there is no heteroscedasticity problem.

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4.3.3 *Multicollinearity Test*

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.891	.952		.936	.352		
	Advantage Product Associations	.142	.055	.231	2.602	.011	.295	3.386
	Strength Brand Associations	.445	.089	.463	4.987	.000	.271	3.687
	Uniqueness Brand Associations	.209	.063	.256	3.323	.001	.393	2.543

a. Dependent Variable: Purchase Decision

Based on table , the result of the multicollinearity test can be seen from tolerance and variance inflation factor (VIF).

The tolerance value of variable advantage product associations (X1) is 0.295, strength brand associations (X2) is 0.271, and uniqueness brand associations (X3) is 0.393.

The VIF value of variable advantage product associations (X1) is 3.386, strength brand associations (X2) is 3.687, and uniqueness brand associations (X3) is 2.543.

All result tolerance values are >0.10 and VIF values are <10. So, it can be concluded that there is no multicollinearity problem between all independent variables.

4.4 *Hypothesis Test*

4.4.1 *Variable Entered/Removed*

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Uniqueness Of Brand Associations (X3), Advantage Of Product Association (X1), Strength Of Brand Associations (X2)[b]	.	Enter

a. Dependent Variable: Purchase Decision (Y)

b. All requested variables entered.

Explain the variables entered and the methods used. In this case, the variables included are the advantages of brand association (X1), strength of brand association (X2), and uniqueness of brand associations (X3) as the independent variable and purchase decision as the dependent variable and the method used is the Enter method.

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4.4.2   R-Square Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.881[a]	.776	.769	1.380

a. Predictors: (Constant), Uniqueness Of Brand Associations (X3), Advantage Of Product Association (X1), Strength Of Brand Associations (X2)

Explaining the magnitude of the correlation value / R relationship, which is equal to 0.881. From the output, the coefficient of determination (R square) is 0.776, which means that the influence of the independent variable (advantage of brand associations, strength of brand associations, and uniqueness of brand associations) on the dependent variable (Purchase Decisions) is 77.6%.

4.4.3   F- Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	632.146	3	210.715	110.627	.000[b]
	Residual	182.854	96	1.905		
	Total	815.000	99			

a. Dependent Variable: Purchase Decision (Y)

b. Predictors: (Constant), Uniqueness Of Brand Associations (X3), Advantage Of Product Association (X1), Strength Of Brand Associations (X2)

Explaining that from the data calculation results, it is known that the F-count value is 314,029 with a significance level of 0.000 < 0.05. Then the regression model can be used to predict the purchase decision variable or in other words there is an influence from the Brand Image (X) variable on the Purchase Decision (Y) variable.

4.4.4   T-Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.891	.952		.936	.352
	Advantage Of Product Association (X1)	.142	.055	.231	2.602	.011
	Strength Of Brand Associations (X2)	.445	.089	.463	4.987	.000
	Uniqueness Of Brand Associations (X3)	.209	.063	.256	3.323	.001

a. Dependent Variable: Purchase Decision (Y)

Based on the table above, the result of regression coefficient as follow:

1) The regression coefficient for variable advantage of product association (X1) is 2.602 with a significance level is 0.011 < 0,05.

Based on the result above, it can be concluded that Ho1 is rejected and Ha1 is accepted. It means that there is a positive or significant influence or significant contribution of advantage of product association toward purchase decision.

2) The regression coefficient for variable strength brand association (X2) is 4.987 with a significance level is 0.000 < 0,05.

Based on the result above, it can be concluded that Ho2 is rejected and Ha2 is accepted. It means that there is a positive or significant contribution of strength brand association toward purchase decisions.

3) The regression coefficient for variable uniqueness brand association (X3) is 3.323 with significance level is 0.001 < 0,05.

Based on the result above, it can be concluded that Ho3 is rejected and Ha3 is accepted. It means that there is a positive or significant contribution of uniqueness brand association toward purchase decisions.

Based on data analysis using SPSS, the results of the regression equation are as follows:

Y = a + bX1 + bX2 + BX3

Y = 0.891 + 0.142X1 + 0.445X2 + 0.209X3

From these equations it can be stated that:

The regression coefficient of advantage product association variable has a positive direction in its influence on purchasing decisions.

The regression coefficient of strength brand association variable has a positive direction in its influence on purchasing decisions.

The regression coefficient of uniqueness brand association variable has a positive direction in its influence on purchasing decisions.

The X1 regression coefficient of 0.142 states that for every 1% addition of the advantage brand associations, the purchase decision value increases by 0.142. The regression coefficient is positive, so it can be said that the direction of the influence of the variable X on Y is positive.

The X1 regression coefficient of 0.445 states that for every 1% addition of the strength brand associations, the purchase decision value increases by 0.445. The regression coefficient is positive, so it can be said that the direction of the influence of the variable X on Y is positive.

The X1 regression coefficient of 0.209 states that for every 1% addition of the uniqueness brand associations, the purchase decision value increases by 0.209. The regression coefficient is positive, so it can be said that the direction of the influence of the variable X on Y is positive.

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4.5   Discussions

After the researcher conducted several studies and analyzed the primary and secondary data collected about the influence of brand image on the purchasing decision of an Apple smartphone product (iPhone), the researcher found that brand image has an important role in the customer's purchasing decision process. Data has been collected from 100 respondents who use Apple smartphone products (iPhone). Since researchers are unfamiliar with Apple's entire customer base, I, as a researcher, adopted a simple random sampling strategy for data collection. In order to understand what stimulates customers to interact, choose, and buy an Apple smartphone product (iPhone), a conceptual model of the influence of brand image on purchasing decisions is tested. The findings of the 100 participants from Bandung can be discussed as follows.

According to a journal (Kotler, P, & Keller, K, 2015) A positive brand image can be measured through three factors: advantage of brand association, strength of brand association, uniqueness of brand association. Of the three factors, it has been proven that all three have a positive relationship with purchasing decisions. Based on the T-test that has been carried out in this research, the first hypothesis, Advantage of product associations, has a significant contribution to purchase decisions. It is proven and the hypothesis is accepted with a t-test result of 2.602 with a significance level of 0.011 which is smaller than 0.05. The advantages of the brand are also considered by respondents before making a purchase. This is indicated by the suitability of the price with the quality of the product, the suitability of the product to the needs of consumers, and the familiarity of the smartphone brand. The second hypothesis, strength of brand associations has a significant contribution to purchase decisions. It is proven and the hypothesis is accepted with a t-test result of 4.987 with a significance level of 0.000 which is smaller than 0.05. Brand strength can be traced from the customer's perception and understanding of what they get, observe, feel, and hear about a brand as a consequence of customer involvement with a particular brand in the past (Keller, 2003). The third hypothesis, uniqueness of brand associations has a significant effect on purchase decisions. It is proven and the hypothesis is accepted with a t-test result of 3.323 with a significance level of 0.001 which is smaller than 0.05. The uniqueness in terms of shape that distinguishes smartphones from other competitors can stimulate respondents to decide to buy certain brands. The uniqueness of a product will give an impression that is quite imprint on the customer's memory of the uniqueness of the brand. A brand that has a characteristic must be able to give birth to a customer's desire to find out more about the dimensions of the brand contained in it (Wijiyanty, et al., 2020).

From the three hypotheses that have been proven, it turns out that there is a positive or significant contribution from the advantage of product, strength of brand, and uniqueness of brand to the decision to purchase apple product smartphone (iPhone). Various associations that consumers remember can be assembled so as to form an image about the brand (brand image) in the minds of consumers. Consumers who are accustomed to using certain brands tend to have consistency towards brand image (S Handayani (2013).

From the three factors, based on data that has been collected from 100 respondents who use Apple, buy because it is in accordance with product quality, provides benefits to customers, has high product quality, makes it easy to communicate, chooses products according to needs, and has knowledge about the product to be purchased also has a positive effect on the customer

purchasing decision process but does not provide a significant change compared to having brand strength and brand uniqueness, where the data that has been processed using spss produces a regression coefficient of 0.142 states that for every 1% addition of the advantage brand associations, the purchase decision value increases by 0.142. Compared to the factor that has the greatest effect on purchasing decisions, the strength of brand associations from the results of the data processing using SPSS, the resulting regression coefficient of 0.445 states that for every 1% addition of the strength brand associations, the purchase decision value increases by 0.445. Being able to meet customer needs and desires, having modern product design innovations, having software performance that is always excellent, and having a good reputation are things that can significantly influence customer purchasing decisions.The regression coefficient is positive, so it can be said that the direction of the influence of the variable X on Y is positive. In terms of predictors of purchasing decisions, the current empirical results obtained indicate that brand image has a direct and positive effect on consumer purchasing decisions. If the brand image of the product has a positive value in consumers' eyes, it will lead to high buying interest in the product desired by consumers (Kotler & Keller, 2012). consumers will lead to high buying interest for the products desired by consumers in meeting consumer needs. Consumer purchasing decisions are a positive function of their brand image, based on a long-term interaction process with existing smartphone brands. al.(2020); Erdil (2015); and Mo & Zhai (2013), thus confirming the proposed hypothesis that states brand image has a positive effect on consumer purchasing decisions.

5.   Conclusion and Recommendation

Analyzing Apple's brand image strategy and its impact on purchasing decisions. The researcher has set several study objectives before starting the investigation. As a result, the entire study project was completed to achieve all three research objectives. The suggestions in this section have so far accomplished this goal. This section may also serve as a summary of the entire study project. As a result, research findings and suggestions are as follows:

Based on the descriptive analysis of respondents, it shows that smartphone brand companies must improve or renew the strength of their brands so that they can better influence potential consumers, and also for better consumer buying behavior because consumers will believe in smartphone products and do not hesitate to make purchasing decisions. Companies can also maintain and increase the strength of the brand image of smartphone products, apart from increasing brand strength, it can also be through brand uniqueness and advantage product associations so that they can influence consumer purchasing decisions to buy products.

The purpose of this study is to integrate the background of Apple's marketing strategy by using brand image. As a result, researchers found that companies were able to improve purchasing decisions by utilizing the advantages of product associations, strength of brand associations and uniqueness of brand associations. Apple is also considered to have a fairly strong brand image where Apple has comfortably positioned itself in the upper middle to high end consumers. Apple iPhone consumers in Indonesia come from various walks of life, from students to parents who choose the iPhone as the cell phone they use every day. With a high price, of course the Apple iPhone also offers features that its competitors do not have. However, based on the author's personal experience, there are still many iPhone users who do not really understand the

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usefulness of the features provided on the iPhone device itself. Most of them choose the iPhone because of the good quality and image of the iPhone. In other words, Apple Inc.'s strategy, by building a brand image in such a way, has succeeded in influencing consumers to make purchasing decisions.

In this final chapter, I reflect on my research journey in carrying out this research. Part of my research journey is to ensure the trustworthiness of current research. In this research, I share the knowledge that I have gained that brand image has a significant impact on purchasing decisions. I want to prove how significant the brand image is to the decision to purchase smartphone products in the city of Bandung. Many small businesses and even successful businesses can fall because they can't maintain their brand image without them knowing it. Brand image has an important role in increasing the sales figures of a company, especially those discussed in the field of smartphone technology. Almost half of the human population on earth has used smartphones as a tool that helps in daily activities, this has led to intense competition in the field of smartphone technology. With this fierce competition, all companies are trying to get the biggest sales figures by regulating the marketing strategy used, technology and innovation used. Brand image is a description of the association and consumer confidence in certain brands. Having a good brand image will help the product to be easily accepted by consumers over time to prove quality and meet buyer expectations (Prasetya et al., 2018). By developing their brand image, the company will be able to increase their sales figures.

For further research, it is necessary to develop research variables that influence purchasing decisions. This is based on the magnitude of the influence exerted by the brand image (advantage of product associations, strength of brand associations, and uniqueness of brand associations) which does not reach 100% which indicates that there are other variables that have the potential to influence customer decisions to buy smartphone products. Every company must innovate to improve their brand to increase their brand sales. The addition of these variables is expected to find new things that can be useful for the development of science, especially in the field of marketing. The author proposes suggestions to the company so that it can continue to build and manage the brand image that has been owned by Apple iPhone, it is even hoped that the company will be able to combine the brand image variable with other supporting variables to maintain the success of the Apple iPhone in the global industry, considering the competition in the mobile phone industry has increased fiercely in recent years.

References

[1] Diamantopoulos, A., Schlegelmilch, B. and Palihawadana, D. (2011). The relationship between country-of-origin image and brand image as drivers of purchase intentions. International Marketing Review, 28(5), pp.508-524.

[2] Genoveva. (2015). Analyzing of Customer Satisfaction and Customer Loyalty Based on Brand Image and Perceived Service Quality. Journal of US-China Public Administration, 12(6)..

[3] Eka Saputri, M. and Ratna Pranata, T. (2014). PENGARUH BRAND IMAGE TERHADAP KESETIAAN PENGGUNA SMARTPHONE IPHONE. Jurnal Sosioteknologi, 13(3), pp.193-201.

[4] Sari, D.P. and Nuvriasari, A. (2018). PENGARUH CITRA MEREK, KUALITAS PRODUK DAN HARGA TERHADAP KEPUTUSAN PEMBELIAN PRODUK MEREK EIGER (KAJIAN PADA MAHASISWA UNIVERSITAS MERCU BUANA YOGYAKARTA). Jurnal Penelitan Ekonomi dan Bisnis, 3(2).

[5] Churchill, G.A. and Surprenant, C. (1982). An Investigation into the Determinants of Customer Satisfaction. Journal of Marketing Research, 19(4), p.491.

[6] Thompson, C.J., Rindfleisch, A. and Arsel, Z. (2006). Emotional Branding and the Strategic Value of the Doppelgänger Brand Image. Journal of Marketing, 70(1), pp.50–64

[7] Cooper, L. (2010, September 9). Marketing Week : BRAND LOYALTY: How to retain customers and build brand loyalty

[8] Pahwa, A., and consultant, A. P. A. startup. (2021, January 8). What Is Brand Image? - Importance & Examples. Feedough.

[9] Thimothy, S. (2017, September 13). Council Post: Why Brand Image Matters More Than You Think. Forbes.

[10] Ogba, I. and Tan, Z. (2009). Exploring the impact of brand image on customer loyalty and commitment in China. Journal of Technology Management in China, 4(2), pp.132–144

[11] Park, C. W., Jaworski, B. J. and MacInnis, D. J. (1986) 'Strategic Brand Concept-Image Management', Journal of Marketing, 50(4), pp. 135–145. doi: 10.1177/002224298605000401.

[12] Hung, C. (2008). "The Effect of Brand Image on Public Relations Perceptions and Customer Loyalty", International Journal of Management, vol. 25, no. 2, pp. 237-246.

[13] Kim, R.B. & Li, Y.J. (2016). "INFLUENCE OF COUNTRY & BRAND IMAGE ON CONSUMER LOYALTY UNDER EXPLICIT BRAND ORIGIN & MANUFACTURE IDENTIFICATION", Aktual'ni Problemy Ekonomiky = Actual Problems in Economics, , no. 179, pp. 95-102.

[14] Khan, M.T. (2013). "Customers Loyalty: Concept & Definition (A Review)", International Journal of Information, Business and Management, vol. 5, no. 3, pp. 168-191.

[15] Huang, L., Wang, M., Chen, Z., Deng, B. and Huang, W. (2020). 'Brand image and customer loyalty: Transmitting roles of cognitive and affective brand trust', Social Behavior and Personality: An International Journal, 48(5), 1J+, available: https://link.gale.com/apps/doc/A623791006/AONE?u=unihull&sid=summon&xid=16b74e1f [accessed 10 Mar 2022].

[16] Bian, X. and Moutinho, L. (2011). The role of brand image, product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits. European Journal of Marketing, 45(1/2), pp.191–216.

[17] Shi, X., Lin, Z., Liu, J. and Hui, Y.K. (2018). Consumer loyalty toward smartphone brands: The determining roles of deliberate inertia and cognitive lock-in. Information & Management, 55(7), pp.866–876.

[18] Chen, A., Lu, Y. and Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. International Journal of Information Management, [online] 37(6), pp.627–638.

[19] Han, H. and Ryu, K. (2012). The theory of repurchase decision-making (TRD): Identifying the critical factors in the post-purchase decision-making process. International Journal of Hospitality Management, 31(3), pp.786–797.

[20] Karimi, S., Papamichail, K.N. and Holland, C.P. (2015). The effect of prior knowledge and decision-making style on the online purchase decision-making process: A typology of consumer shopping behaviour. Decision Support Systems, 77, pp.137–147.

[21] Saktiawan, P. and Harsono, S., 2021. The Effect of Performance, Price Perception, Brand Image, and Brand Association on Purchase Decision of Honda CBR150R in Surabaya. Philippine Social Science Journal, 4(1), pp.97-107.

[22] Hanaysha, J., 2018. An examination of the factors affecting consumer's purchase decision in the Malaysian retail market.PSU Research Review, 2(1), pp.7-23.

[23] Sasmita, J. & Suki, N.M. (2015). "Young consumers' insights on brand equity", International Journal of Retail & Distribution Management, Vol. 43 No. 3, pp. 276 – 292.

[24] Lau, K.C. & Phau, I. (2007). "Extending symbolic brands using their personality: examining antecedents and implications towards brand image fit and brand dilution", Psychology and Marketing, Vol. 24 No. 5, pp. 421-444.

[25] SÜRÜCÜ, L. and MASLAKÇI, A. (2020). VALIDITY AND RELIABILITY IN QUANTITATIVE RESEARCH. Business & Management Studies: An International Journal, 8(3), pp. 2694-2726.

[26] Ahmadfajarn.wordpress.com. (2022). Perkembangan Teknologi Smartphone. [online] Available at: <https://ahmadfajarn.wordpress.com/2015/01/23/perkembangan-teknologi-smartphone/> [Accessed 7 May 2022].

[27] Media, K. (2022). IDC: 5 Besar Vendor Smartphone di Indonesia 2021, Oppo Teratas Halaman all - Kompas.com. [online] KOMPAS.com. Available at: <https://tekno.kompas.com/read/2022/03/23/07050067/idc--5-besar-vendor-smartphone-di-indonesia-2021-oppo-teratas?page=all> [Accessed 7 May 2022].

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[28] investor.id. (2022). Penjualan Ponsel di RI Tembus 40 Juta Unit. [online] Available at:<https://investor.id/it-and-telecommunication/287731/2021-penjualan-ponsel-di-ri-tembus-40-juta-unit> [Accessed 7 May 2022].

[29] Erdil, T. (2015). Effect of customer brand perceptions on store image and purchase intention: An application in apparel clothing. Procedia Social Behaviour Science, 207, 196–205.

[30] Mao, Y., Lai, Y., Luo, Y., Liu, S., Du, Y., Zhou, J., Ma, J., Bonaiuto, F. & Bonaiuto, M. (2020). Apple or Huawei: Understanding Flow, Brand Image, Brand Identity, Brand Personality and Purchase Intention of Smartphone. Sustainability. 12. 3391.

[31] Mo, L. & Zhai, S. (2013). The Effects of County-of-Origin, Brand Image, and Corporate Image Dimensions on Brand Evaluations and Purchase Intentions of Smart Phones of Five Brands: A Comparative Study of China and Korea. Journal of Distribution Science, vol. 11 Issue 7, p. 47-56.

[32] Crossan, F. (2003) 'Research philosophy: towards an understanding', Nurse Researcher, 11(1), 46+, available: https://link.gale.com/apps/doc/A109739567/AONE?u=unihull&sid=bookmark-AONE&xid=2ee0b22d [accessed 08 May 2