

A Study on Factors Affecting Smartphone Purchase Decisions in Indonesia



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ABSTRACT: Smartphones are constantly developing and increasingly impacting human behavior, making them a key benchmark of current telecommunications technology. Smartphones, whether in our pockets or our hands, have become an indispensable component of our daily existence. Indonesia has one of the world's highest smartphone adoption rates. Additionally, Indonesia is the fourth-biggest smartphone market worldwide. However, the increase in smartphone users in Indonesia has not translated to an increase in smartphone sales, which have decreased in Indonesia. So, understanding customer behavior is crucial for smartphone companies. As a result, the aim of this study is to explore the role of social influence, product features, and brand image on smartphone purchase decisions in Indonesia. This research uses a quantitative method, with primary data gathered through a survey with a total sample size of 278 respondents. The Partial Least Square Structural Equation Model (PLS-SEM) with the help of SmartPLS software is the data analysis method used in this investigation. Findings from this study are that social influence, product features, and brand image all significantly influence on smartphone purchase intention. The study also found that Purchase Intention has significant effects on Purchase Decision. Then, to have more precise results, future research may consider about including additional segmentation characteristics like gender or income level.

KEYWORDS: Brand Image, Product Features, Purchase Decision, Purchase Intention, Smartphones, Social Influences

I. INTRODUCTION

Today, smartphones are an essential milestone of advanced telecommunications technology that is rapidly growing and affecting consumers in their daily routine activities. Therefore, in the current world of globalization, the smartphone market has become very important. Smartphones that have connectivity to the internet, for example, allow users to stay in touch with their associate and relatives. One of the countries with the highest smartphone usage in the world is Indonesia. Additionally, Indonesia is the fourth-biggest smartphone market worldwide, after the United States (US), China and India (Statista, 2023).

However, the expansion of smartphone users in Indonesia does not correspond to an increase in smartphone sales, which have declined in Indonesia. According to International Data Corporation (IDC), smartphone shipments in Indonesia in 2023 totaled 34.6 million units, a 1.2% decrease from the previous year (IDC, 2024). This trend follows the drop in smartphone sales in Indonesia, which fell 14.3% in 2022, the first time in 13 years (IDC, 2023). The reduction in smartphone sales in Indonesia corresponds to the negative annual growth of Indonesia's top three smartphone market share businesses which are Samsung, Vivo and Oppo. Meanwhile, smartphone businesses with lower market shares are growing and catching up to the three companies with the highest market shares in Indonesia (IDC, 2024). This suggests that the Indonesian smartphone market is highly competitive. This suggests that the Indonesian smartphone market is highly competitive. The competitive smartphone market in Indonesia can be seen in 2023, where the top five smartphone producers' market share changes quarterly years (IDC, 2023). This indicates that smartphone companies need to develop unique features and cutting-edge technology to stand out from competitors. Also, smartphone companies must understand their customers' behavior, particularly in Indonesia, where the market is still emerging.

Table 1. Smartphone Market Share in Indonesia

Brand	2022 Market Share	2023 Market Share
Samsung	21.7%	20%
Oppo	22.4%	19.1%
Vivo	17.9%	16.2%
Xiaomi	14.2%	14.8%
Transsion	9.3%	13.1%
Other	14.5%	16.7%

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For smartphone companies, it is very crucial to have an understanding of consumer behavior. Customer responses are important physiological processes that must be understood in order to understand consumer behavior. Drives such as environmental cues and marketing messages have the power to raise consumer awareness and trigger complex psychological processes that lead to the development of purchase intentions. (Kotler & Keller, 2022). Companies may better meet the requirements and desires of their target market by knowing why and how consumers purchase various things. Understanding consumer behavior can help businesses develop more successful marketing and advertising strategies for reaching and influencing potential customers.

II. LITERATURE REVIEW

Social Influence

Social Influence describes the way in which other individuals affect an individual's decision to buy a product (Hutahaean, 2020). Consumer behavior is influenced by social factors such as small consumer groups, family, social roles, and mental states (Kotler & Armstrong, 2018). According to Wang & Chou (2014), social influence consists of two dimensions which are subjective norms and visibility.

1. *Subjective norms*, which is social influence that is related to consumer perceptions of what should or should not be done.
2. *Visibility*, which is social impact developed owing to the state of consumer behavior that other customers can view.

According to Thi et al. (2020) purchase intention on smartphone is significantly affected by social influence on study in Ho Chi Minh City, Vietnam. Subsequent research in Malaysia discovered that buying intentions were influenced by friends and family (En & Balakrishnan, 2022). Based on the background information given above, this research proposed:

H1: Social influence has a positive and significant effect on smartphone purchase intention in Indonesia

Product Features

Features, as defined by Kotler & Armstrong (2018), are characteristics of a product designed to meet the demands and preferences of the customer and is a part of competitive strategy used by businesses to set their products apart from those of their rivals. One of the best ways to outperform rivals is to be the first company to introduce new features that will benefit customers. A feature is a product characteristic that tries to meet the user's wishes and desires by providing them control over the product. Products include features such as software and hardware. Smartphone hardware includes the phone's size, weight and dimension. Smartphone software includes the operating system, memory, and applications (Thi et al., 2020). When buyers make a purchase, they always want a product to have multiple features to meet their various wants. For a product to draw in customers, it must be competitive (Iskamto, 2021).

Study on university student by Zamrie et al. (2021) stated that product features have significantly affecting smartphone purchase intention in Malaysia. Then other research in Malaysia found out that product features have a positively impacting smartphone purchase intention among college students (Rahim et al., 2016). Based on the background information given above, this research proposed:

H2: Product features has a positive and significant effect on smartphone purchase intention in Indonesia

Brand Image

A company's most important asset is its brand. A name and logo are only two parts of a brand. Additionally, it influences how a business and a client interact (Kotler & Armstrong, 2018). Customers' intentions to purchase smartphones are positively impacted by brands, and most customers are influenced by well-known brands, thus it is imperative that the brand remain deeply ingrained in their brains. Customers can identify a product, assess its quality, reduce the risk of making a purchase, and receive unique satisfaction from product distinction through the brand (Thi et al., 2020). A positive brand image can differentiate a business, boost demand, and pave the way for future growth (Ngian et al., 2023). Where it is discovered that the intention to buy a smartphone is positively and significantly impacted by brand image (Mao et al., 2020). Also, it is in line with study on Chinese smartphone, where brand image is significant factors of purchase intention (Darmawan et al., 2021). Based on the background information given above, this research proposed:

H3: Brand image has a positive and significant effect on smartphone purchase intention in Indonesia

Purchase Intention

Intention to purchase is an aspect of the process for making decisions that indicate how likely or eager they are to purchase a specific good or service (Kotler & Keller, 2022). Widodo & Maylina (2022) believe that purchase intention is the single most important predictor of customer behavior. A customer's strong purchase intentions indicate that they are more likely to make a purchase of a good or service. Purchase intention is a measure of a customer's willingness to buy (Rakib et al., 2022). Where it is found that in smartphone industry in Millennial Generation, it is found out that purchase intention positively and significantly effecting purchase decision (Sarjono et al., 2019). Based on the background information given above, this research proposed:

H4: Purchase intention has a positive and significant effect on smartphone purchase decision in Indonesia

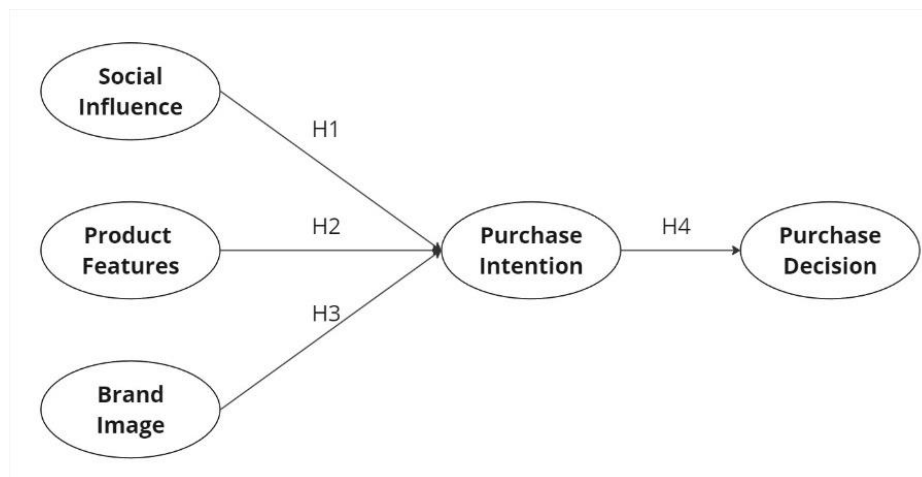


Figure 1. Research Framework

III. RESEARCH METHOD

The objective of this research is to look on how social influence, product features, and brand image affecting purchase decisions of smartphone in Indonesia's highly competitive market. To achieve the objective, the methodology for this study is quantitative research. Because quantitative methods are good for testing models or hypotheses, they are employed in many types of investigations. Hypothesis testing is done to see if the alternative hypothesis is rejected and the null hypothesis is accepted, and vice versa. (Indrawati, 2015). The online survey created with Google Form is the method employed in this study to collect data, and it is given to Indonesian consumers who own smartphones. 278 responders in all were found using the distribution. A five scale Likert was used in this study to measure the data that was distributed. This study used a cross-sectional methodology, which entails doing this research over the course of one period of time, processing the data, analyzing it, and drawing conclusions (Indrawati, 2015). This study is using multiple variables, where it can be studied using multivariate analysis. Whereas Structural Equation Model was used to analyze multivariate with the help of SmartPLS 3.2.9. The Outer Model and Inner Model are the two processes involved in using PLS-SEM for hypothesis testing (Hair et al., 2022). In in PLS-SEM, the outer model is what's utilized to assess validity and reliability (Fitriany & Ariyanti, 2024). For the outer model, this study will evaluate convergent validity, reliability, and discriminant validity. Meanwhile, the inner model is useful to analyze the relationships and predictability between latent variables or constructs using substantive theory (Iskamto & Gunawan, 2023). In inner model, this research will evaluate R square and Path Coefficient. In this investigation, a one-tailed test was conducted with a 5% significance level.

IV. RESULT AND DISCUSSION

Reliability

The reliability of a measure reflects the consistency and stability with which the tool examines ideas and aids in judging the determining the "goodness" of the measure (Sekaran & Bougie, 2016). To meet reliability standards, the Composite Reliability and Cronbach's Alpha values must be at or above 0.70 (Damayanti & Indrawati, 2024). Table 2 shows that in this study all the variables have passed the reliability test due to having scores of CA and CR above 0.70.

Table 2. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Evaluation
Social Influence	0.766	0.865	Reliable
Product Features	0.874	0.908	Reliable
Brand Image	0.841	0.893	Reliable
Purchase Intention	0.806	0.885	Reliable
Purchase Decision	0.827	0.885	Reliable

Convergent Validity

Convergent validity describes how well a notion explains the variance in its indicators (Hair et al., 2022). To be called convergent, the AVE must have a value larger than 0.5 (Indrawati et al., 2023). Table 3 shows that all of the indicators in this study have AVE values higher than 0.50 and factor loading score more than 0.70, indicating the validity all of the variables and indicator in this study

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Table 3. Convergent Validity

Variable	Indicator	Factor Loading	AVE	Evaluation
Social Influence	SIN1	0.857	0.681	Valid
	SIN2	0.788		
	SIN3	0.829		
Product Features	PRF1	0.816	0.664	Valid
	PRF2	0.809		
	PRF3	0.838		
	PRF4	0.823		
	PRF5	0.789		
Brand Image	BRI1	0.839	0.677	Valid
	BRI2	0.841		
	BRI3	0.805		
	BRI4	0.806		
Purchase Intention	PIN1	0.862	0.720	Valid
	PIN2	0.844		
	PIN3	0.839		
Purchase Decision	PDE1	0.839	0.659	Valid
	PDE2	0.841		
	PDE3	0.805		
	PDE4	0.806		

Discriminant Validity

Discriminant validity assesses how well a construct distinguishes itself from others in the structural model. The Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT) calculations can be used to evaluate the discriminant validity (Hair et al., 2022). Where Table 4 provide the information that all the constructs in this study have a higher square root is higher compare to other construct. This mean that the construct has greater variation with its indicators than with other constructs, showing good discriminant validity.

Table 4. Fornell-Larcker Criterion

	BRI	PDE	PRF	PIN	SIN
BRI	0.823				
PDE	0.436	0.812			
PRF	0.450	0.513	0.815		
PIN	0.599	0.680	0.645	0.849	
SIN	0.454	0.467	0.496	0.632	0.825

HTMT is derived by comparing the average correlation of indicators measuring distinct constructions to the average correlation of the same construct. The test is considered to have poor discriminant validity if the HTMT score is higher than the threshold which is 0.90 (Hair et al., 2022). Table 5 reveals that all constructs in this investigation have HTMT values less than 0.90. This indicates that the construct has excellent discriminant validity. It indicates that the constructs are separate and not strongly connected with one another.

Table 5. Heterotrait-Monotrait Ratio (HTMT)

	BRI	PDE	PRF	PIN	SIN
BRI					
PDE	0.519				
PRF	0.523	0.602			
PIN	0.724	0.830	0.768		
SIN	0.559	0.587	0.606	0.799	

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R square



Figure 2. Inner Model

R-squared is a statistical metric that represents the proportion of the dependent variable in a regression model that can be described by one or several independent variables (James et al., 2021). Table 6 shows that the coefficients of determination of Purchase Intention is 0.602, which means that Social Influence, Product Features, and Brand Image influence 60.2% of Purchase Intention and other 38.8% explain by other factors that was not study in this research. Meanwhile the R-squared of Purchase Decision is 0.460. It explains that purchase intention influences 46% of Purchase Decision, and the other 54% is explained by another construct.

Table 6. R Square

Variables	R Square
Purchase Intention	0.602
Purchase Decision	0.460

Hypothesis Testing

In this investigation, a one-sided test was conducted with a 5% level of significance, meaning that the hypothesis will be accepted if the t value is higher than 1.65. The p value, which must be less than 0.05 to be accepted, is another metric used to assess whether the hypothesis is accepted (Hair et al., 2022). Where Table 7 displays the outcome of the hypothesis testing in this research.

Based on the result it is found that Social Influence is positively and significantly effecting Purchase Intention. Based on the analysis's results, the route coefficient indicates a positive direction which has path coefficient of 0.324, and the t-statistic value is 6,078 > 1.65, with a p value of 0.000 < 0.05. From the finding, this means the H1 can be accepted.

Then on the second relationship it is found that Product Features is positively and significantly effecting Purchase Intention. Based on the analysis's results, the route coefficient indicates a positive direction which has path coefficient of 0.352, and the t-statistic value is 6,652 > 1.65, with a p value of 0.000 < 0.05. From the finding, this means the H2 can be accepted.

The third relationship is on the effect of Brand Image on Purchase Intention. It is found that Brand Image has positively and significantly affected Purchase Intention. Based on the analysis's results, the route coefficient indicates a positive direction which has path coefficient of 0.293, and the t-statistic value is 5.716 > 1.65, with a p value of 0.000 < 0.05. From the finding, this means the H3 can be accepted.

The last relationship that was studied in this research is the effect of Purchase Intention on Purchase Decision. It is found that Purchase Intention has positively and significantly affected Purchase Decision. Based on the analysis's results, the route coefficient indicates a positive direction which has path coefficient of 0.680, and the t-statistic value is 19.145 > 1.65, with a p value of 0.000 < 0.05. From the finding, this means the H4 can be accepted.

Table 7. Hypothesis Testing

	Original Sample	T Statistic	P Values	Evaluation
H1: Social Influence -> Purchase Intention	0.324	6.078	0.000	Accepted
H2: Product Features -> Purchase Intention	0.352	6.652	0.000	Accepted
H3: Brand Image -> Purchase Intention	0.293	5.716	0.000	Accepted
H4: Purchase Intention -> Purchase Decision	0.680	19.145	0.000	Accepted

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V. DISCUSSION

It is found that all the hypotheses in this study are supported. The first finding shows that Social Influence has a positive and significantly affecting smartphone Purchase Intention. It is consistent with the earlier study conducted by Thi et al. (2020) that the intention to purchase a smartphone is significantly influenced by social influence in Ho Chi Minh, Vietnam, and En & Balakrishnan (2022) on how social influence can significantly affect consumer intention to purchase a smartphone in Malaysia. Therefore, it shows that consumers are influenced by their friends and family on how they make a decision on purchasing a smartphone. Then the second finding shows that Product Features have a significant effect on smartphone Purchase Intention. It is in line with that design, operating system, and quality of the camera of a smartphone significantly affect smartphone purchase intention in Bangladesh (Rakib et al., 2022). Also, this finding supported a study in Malaysia by Zamrie et al. (2021) that found out that good product features can influence smartphone purchase intention among university students. This means that consumers evaluate the product features of smartphones such as camera, design, and operating system on influencing their decision of purchasing a smartphone. The third finding shows that Brand Image has a positive and significantly affecting smartphone purchase intention. It is in line with a study by Darmawan et al. (2021) that found that a good brand image can significantly affect Chinese smartphone purchase intention. Also, it is in line with Mao et al. (2020), brand image is a significant factor on smartphone purchase intention. This concludes that a positive brand image can boost the consumer's smartphone purchase intention. The last finding shows that Purchase Intention has a positive and significantly affecting smartphone Purchase Decision. It is in line with Sarjono et al. (2019), where it is found that purchase intention has a positive and significantly affected smartphone purchase decision on the Millennial Generation. Therefore, the probability that customers will follow through on their plan to buy a smartphone rises with purchase intention.

VI. CONCLUSION

According to the findings from this research, purchase intentions for smartphones are highly influenced by product features, social influence, and brand image. Also, it is found that Product Features is the key influence factor on smartphone purchase intention. Therefore, smartphone companies need to continue to come up with innovative concepts and improve the features of smartphones such as camera, design, operating system, and application store to meet and surpass user expectations. In order to influence potential customers, smartphone companies should also effectively employ social media, influencer marketing, and word-of-mouth strategies. This is because research shows that friends and family can influence consumers' intentions to acquire smartphones. Research indicates that brand image significantly influences smartphone purchase intention, so it is crucial for smartphone companies to make an investment in branding initiatives to build a powerful, favorable brand perception. Last, purchase intentions have a big impact on smartphone decisions, therefore, businesses need to consider them. Therefore, it is crucial for smartphone companies to provide discounts, promotions, and time-limited deals in order to turn customers' intentions into actual purchases. Additionally, make sure that the purchasing process is easy to navigate both online and offline to ensure a smooth transition from intention to the end.

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