

## THE ANTECEDENT VARIABLES OF ATTITUDE IN FORMING INTENTION TO SWITCH SMARTPHONE (The Survey Study: Samsung Brand in Surakarta)

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### ABSTRACT

**T**he intention to switch smartphone is an interesting issue to be studied, because it can be used to elaborate the consumers' intention to switch otherwise give insights and stimuli for marketer to maintain their relationship with customers. The survey study based on descriptive research used to describe characteristic of a population or phenomenon being studied. The results obtain from a consumer perception's questionnaire of intention to switch Samsung smartphone. The questionnaire contain of six variables and thirty one items. Four variables are independent variables namely: product attributes, price fairness, convenience, and perceived value. The dependent variable is intention to switch smartphone, and mediating variable is attitude toward switching. Convenience sampling technique was used to collect 250 respondents and there are 23 responses categorized as unusable. The remaining 227 respondents (90,8 %) are usable questionnaires were analyzed with SEM by using AMOS 16 computer programm. The findings have revealed that there are two of variables are not supported, they are product attributes and price fairness. Consumers will consider beyond phisical attributes and price, they are: beneficial and image attribute. They engage in a form value of benefit-cost ratio. Beside that, convenience and perceived value were found positive significant on attitude toward switching. This circumstance are the same with mediating variable attitude toward switching on intention to switch smartphone. In this study, implications of the results were also discussed.

**Keywords:** *intention to switch smartphone, attitude toward switching, product attributes, price fairness, convenience, perceived value.*

## INTRODUCTION

The switching intention of smartphone is interesting issue to be observed hence of looking at the symptom it is expected to give insight for marketers to provide a larger perspective to know the background of underlying why consumers switch smartphones and to create effective strategies for marketers to maintain customer retention and increase customer loyalty. The competition of smartphone market has grown rapidly all over the world, even in Indonesia. According to Frost & Sullivan survey (2012), for a feature phone, the Indonesian change between 7 to 9 months while smartphone, every 8 to 14 months to replace it.

The intention to switch smartphone represents a customer's migration value from their old feature phone to new feature one even from existing brand to another brand. The smartphones manufacturer's performance will be disrupted due to displacement of consumers in purchasing a product. Keaveney & Parthasarathy (2001) suggested that switching is a term denoting a movement by a customer as the result of increased competition among brands.

In this study the constructed model was based on six variables. Among of these variables are: product attributes, price fairness, convenience and perceived value as independent variables, and intention to switch smartphone as a dependent variable. The last variable is attitude toward switching smartphone as a mediating variable.

## Theoretical Background and Hypotheses

Based on the study by Lefkoff-Hagius & Mason (1990), product attributes were divided into the three categories, namely: characteristics attributes, beneficial attributes and image attributes. Characteristics attributes are related to the physical properties of a product; beneficial attributes refer to benefits or risks that the product may cause; and image attributes are properties of the product that have an ability to define the product owner's relation to other people or self.

Another study constructed that product attributes were about characteristics or features of object, may/may not have and includes both intrinsic and extrinsic features (see Gwin et al., 2003). The extrinsic values associated with smartphones include design, materials, features, and style. The intrinsic values consist of performance software, this context are protection technique for safe operation, memory capacity and technological capability.

In this study the product attributes means the quality of the product. The study will determine whether with the higher quality of the product attributes will further increase consumer attitudes in planning the purchase of smartphone products. This hypothesis is formulated:

*H1. The higher quality of product attributes, the higher of attitude toward switching*

Price fairness was constructed by Xia et al., (2004) as a consumer's assessment and associated emotions of whether the difference between a seller's price and the price of a comparative other party is reasonable, acceptable, or justifiable. This opinion accordance with Herrmann, et al., (2007) which emphasis that price fairness of procedure and offering such information to consumers could enhance perceived fairness and furthermore will positively influencing judgments satisfaction.

The phenomenon explain there are positive relationship between price fairness and attitude. By knowing reasonable prices, consumers will encourage their attitude toward switching smartphone. In this research model, the price fairness is conceptualized has a positive relationship to attitude. The hypothesis is formulated:

*H2. The higher of price fairness, the higher of attitude toward switching*

The next variable was convenience. Convenience has become a useful concept in terms of saving customers time and effort during the purchasing process (Berry et al., 2002). Further Lee et al., (2005) explained perceived convenience proved its positive influence on attitude of using a technology. His study described an individual will intentionally continue to repeat and get involved in doing something if certain feel happy and comfortable.

By using these concepts, convenience to use smartphone means users can easily decide whether to search for desired information in smartphone at any time. Lee et al.,(2005) explained that perceive convenience has a positive relationship toward attitude using a technology. The convenient functions can increase users' perceptions towards smartphone. Therefore, the hypothesis is formulated:

*H3. The higher of convenience, the higher attitude toward switching*

The last of independent variable is perceived value. The perceived value is a variable that influences the purchase decisions of consumers in the smartphone products because perceived value is buyers' perceptions about mental trade-offs between what they believe to gain from a purchase and what they get sacrifice by paying the price (see Monroe, 2003). Perceived costs include monetary payments and nonmonetary sacrifices such as time consumption, energy consumption, and stress experienced by consumers.

Based on the study Yang & Peterson (2004) mention that there was a positive relationship between perceived value and customer satisfaction. This study will examine whether there is a relationship between perceived value and attitude of consumers associated with the purchase of smartphone products. The hypothesis is formulated:

*H4. The higher perceived value of smartphone, the higher attitude toward switching*

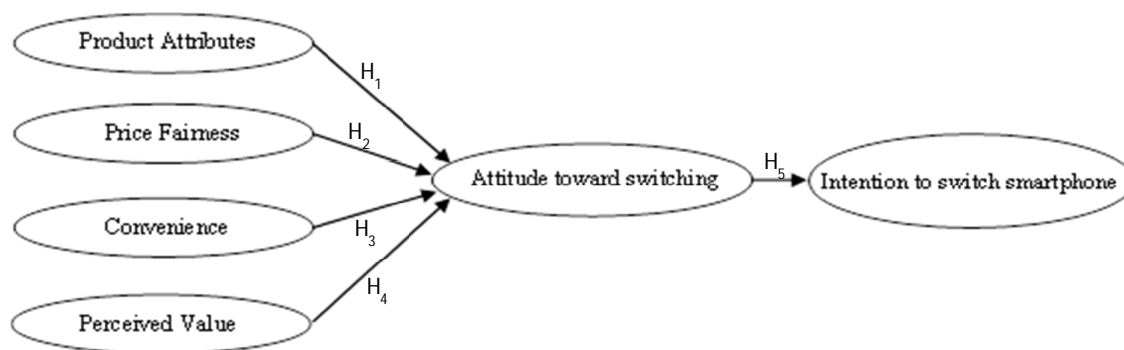
In the model, attitude toward switching was conceptualized as a mediating variable because in the process of purchasing a smartphone, consumers do not directly have the intention to buy, but through the process of attitude form stage. A person must have an attitude first before determining the intentions and decided to buy.

Attitude toward switching smartphone can be related to alternative attractiveness as other excellent attractive products or service accelerate a customer's migration decision. Customers could feel that their switching behavior to a new manufacturer's smartphone would be good, beneficial, wise and desirable, see Keaveney (1995).

The attitude toward switching is about a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor toward switching product (see Eagly & Chaiken, 1998).

In this study attitude suspected of having a role to shape intention to switch smartphone because attitude is designed as a relevant variables to determine the purchase intention. The hypothesis is formulated:

*H5: The higher of attitude towards switching, the higher intention to switch smartphone*



(Source: Keaveney, 1995; Mc. Dougall & Levesque, 2000; Berry et al., 2002; Gwin et al., 2003; Xia et al., 2004; Lee et al., 2005; Herrmann et al., 2007).

Figure I.1. The framework model of Intention to switch smartphone

## Research Methods

This study was done in the Surakarta region with the methodological consideration is focused on a specific local area because when taken outside of Surakarta respondents is possible there are external variables which will inflate the model constructed. The study sites are in the phone market counters or smartphone distributors with a sample by guessing people which are allegedly have the intention to switch the smartphone. Convenience sampling technique was used to collect 250 respondents with consideration to keep there may be incomplete answer, still maintaining the quality and constrained the minimum range of statistical tools used.

The data collection method is collected by a questionnaire which expected to be immediately and directly to obtain corresponding responses result. The questionnaire is containing a list of questions about the profile of respondents with regard to demographic and geographic characteristics, namely: gender, age, level of education last, marital status, employment status, and income per year. More over the form of personal data of respondents were classified into 6 questions questionnaire which includes intention to switch, attitude toward switching, product attributes, price fairness, convenience and perceived value. Each respondent is given the opportunity within a certain time to fill out the questionnaire, then pulled back directly to be used as primary data for the study. The following are the indicators of each type of variables:

(1) Product attributes was characterized by: more superior quality, more practical design, product more uniqueness, and more product feature. (2) Price fairness was characterized by: more fairness, more logical, more rational, more unburden, and more appropriate. (3) Convenience was characterized by: more saving times, more saving effort, more playfulness, and more easiness. (4) Perceived value was characterized by: more attractive product, more improving performance, more increasing productivity, more enhancing effectiveness, more serviceable, more beneficial, more useful, and provide more added value. (5) Attitude toward switching was characterized by: more sense of excitement, more happiness, more pleasure, and more enjoy. (6) Intention to switch was characterized by: I likely to switch, I expect to switch, I certain to switch, I tend to switch, I intent to switch, and I will buy for preference in future.

All the items were measured with 5-point Likert scale anchored from “strongly disagree” to “strongly agree”. Furthermore the data was analyzed with SEM by using AMOS 16 computer program.

## Results and Discussion

### 1. The Validity and Reliability Test

The results of the analysis begin by testing the validity and reliability of research instruments. It is intended to ensure the quality of research data to be analyzed with statistical methods. Validity test is done by using Confirmatory Factor Analysis (CFA).

Indicators	Estimate	S.E.	C.R.	P	Label	Indicators	Estimate	S.E.	C.R.	P	Label
pa1 <--- PA	1.000					at1 <--- AT	1.000				
pa2 <--- PA	.833	.171	4.860	***		<b>at2 &lt;--- AT</b>	<b>.323</b>	<b>.174</b>	<b>1.856</b>	<b>.064</b>	
pa3 <--- PA	1.086	.187	5.810	***		at3 <--- AT	.962	.164	5.873	***	
pa4 <--- PA	1.347	.226	5.969	***		at4 <--- AT	.838	.144	5.826	***	
pf1 <--- PF	1.000					is1 <--- IS	1.000				
pf2 <--- PF	1.250	.172	7.274	***		is2 <--- IS	1.137	.198	5.748	***	
pf3 <--- PF	1.545	.195	7.908	***		<b>is3 &lt;--- IS</b>	<b>.355</b>	<b>.239</b>	<b>1.485</b>	<b>.138</b>	
pf4 <--- PF	1.306	.173	7.535	***		is4 <--- IS	1.881	.290	6.484	***	
cv1 <--- CV	1.000					pf5 <--- PF	1.236	.178	6.944	***	
cv2 <--- CV	.910	.097	9.355	***		<b>pv5 &lt;--- PV</b>	<b>-.052</b>	<b>.116</b>	<b>-.449</b>	<b>.653</b>	
cv3 <--- CV	.693	.097	7.169	***		pv6 <--- PV	.679	.120	5.669	***	
cv4 <--- CV	.961	.106	9.099	***		<b>pv7 &lt;--- PV</b>	<b>-.078</b>	<b>.150</b>	<b>-.522</b>	<b>.602</b>	
pv1 <--- PV	1.000					pv8 <--- PV	.814	.113	7.202	***	
pv2 <--- PV	.634	.095	6.701	***		is5 <--- IS	1.356	.230	5.903	***	
pv3 <--- PV	1.314	.130	10.116	***		is6 <--- IS	1.371	.232	5.899	***	
<b>pv4 &lt;--- PV</b>	<b>.041</b>	<b>.139</b>	<b>.294</b>	<b>.769</b>							

Table1. Convergent Validity Variables Result

In the table above shows that all indicators of product attributes generates estimated values with the critical ratio (CR) greater than two times the standard error (SE) with  $p < 0.05$ , it can be concluded that the indicator variable product attributes used are valid. The same circumstance for others indicators: price fairness and convenience. For the fifth indicators, they are: pv4, pv5, pv7, at2, is3 indicate not valid so can not be used as an instrument in exposing the variables and should be dropped (reduced).

In addition to validity, the next is a discussion on the results of reliability testing is performed using Cronbach's Alpha (see Table 2). The test results indicate that all the observed variables are reliable because  $> 0.70$  (Hair et al., 1998). In summary, based on the results of validity and reliability tests can be summarized that the data deserves to be analyzed with the use of whatever the statistical method chosen.

Number	Variable		PA		PF		CV		PV		AT		IS	
			Const	Error (δ)	Const	Error (ε)	Const	Error (ε)	Const	Error (ε)	Const	Error (ε)	Const	Error (ε)
			(λ)		(λ)		(λ)		(λ)		(λ)		(λ)	
1	pa1	PA	0,687	0,528										
2	pa2	PA	0,514	0,736										
3	pa3	PA	0,647	0,581										
4	pa4	PA	0,724	0,476										
5	pf1	PF			0,629	0,604								
6	pf2	PF			0,721	0,480								
7	pf3	PF			0,82	0,328								
8	pf4	PF			0,756	0,428								
9	pf5	PF			0,686	0,529								
10	cv1	CV					0,861	0,259						
11	cv2	CV					0,746	0,443						
12	cv3	CV					0,578	0,666						
13	cv4	CV					0,714	0,490						
14	pv1	PV							0,777	0,396				
15	pv2	PV							0,561	0,685				
16	pv3	PV							0,938	0,120				
17	pv4	PV												
18	pv5	PV												
19	pv6	PV							0,521	0,729				
20	pv7	PV												
21	pv8	PV							0,57	0,675				
22	at1	AT									0,777	0,396		
23	at2	AT												
24	at3	AT									0,651	0,576		
25	at4	AT									0,609	0,629		
26	is1	IS											0,577	0,667
27	is2	IS											0,58	0,664
28	is3	IS												
29	is4	IS											0,837	0,299
30	is5	IS											0,627	0,607
31	is6	IS											0,692	0,521
<b>Σ of λ</b>			<b>2,572</b>		<b>3,612</b>		<b>2,899</b>		<b>3,367</b>		<b>2,037</b>		<b>3,313</b>	
<b>Σ of ε</b>				<b>2,321</b>		<b>2,370</b>		<b>1,858</b>		<b>2,605</b>		<b>1,602</b>		<b>2,758</b>
<b>Reliability</b>			<b>0,74</b>		<b>0,85</b>		<b>0,82</b>		<b>0,81</b>		<b>0,72</b>		<b>0,80</b>	

Table2. Reliability Variables Testing Results

The table show that overall value of variables result are greater than the limit used to assess a level of reliability that is 0.70, so the items are considered reliable or reliable to measure each variable.

## 2. The Hypothesis Testing Result

Evaluation of the model fit can be seen in table 3. Test results indicate that the model has a relatively good fit, so it can therefore be used as a prediction model that can be accounted for righteousness in statistical side.

The table below shows a summary of the results obtained in the study and recommended to measure the value of the model's fit. As shown in the table, the value of chi-square should fit (probability values > 0.05) are met with a probability value of 0.284 > 0.05, and accompanied by measurements fit other models that have been declared fit. In overalls or all of the six measurements of goodness of fit models declared fit.

Index	Cut-off	Model	Conclusion
Model Goodness of Fit	Value	Result	
Chi Square	Expected small	271,501	Fit
Probability Chi Square (p)	$\geq 0,05$	0,284	
CMIN/DF	$\leq 2,00-3,00$	1,048	Fit
Adjusted goodness of fit index (AGFI)	$\geq 0,90$	0,875	Marginal
Comparative fit index (CFI)	$\geq 0,95$	0,969	Fit
Tucker-Lewis Index (TLI)	$\geq 0,95$	0,961	Fit
Root mean square error approximation (RMSEA)	$\leq 0,08$	0,015	Fit

Table 3. Evaluation Goodness-of-Fit Indices after Modified

Variable Relationship	Estimate	S.E.	C.R.	P	Conclusion
AT <--- PA	.011	.102	.112	.910	Not Significant
AT <--- PF	.131	.115	1.139	.255	Not Significant
AT <--- CV	.188	.090	2.088	.037	Significant
AT <--- PV	.233	.089	2.622	.009	Significant
IS <--- AT	.592	.095	6.208	.000	Significant

Table 4. Hypothesis Testing Results

a. H1 : The higher of quality of product attributes, the higher of attitude toward switching

The first test result in this study indicates that the hypothesis H1 is not supported or not significant (Estimate value = 0.011; SE = 0.102; CR = 0.112; p = 0.910). It can be concluded where there are no relationship between the quality of product attributes and attitude toward switching. In another word the higher quality of product attributes, not increase consumer attitude toward switching smartphone.

The result is different with previous studies by Zhang et al., (2010) which states there was a positive relationship between the mobile phone with the consumer attributes attitudes. The insignificant research does not support the previous concept and indicate inconsistencies of the theory related to relationship between product attributes and attitude.

Another study by Lefkoff-Hagius & Mason (1990) divide product attributes into three categories, they were: characteristics attributes, beneficial attributes, and image attributes. Futhermore explained that characteristic attributes are related to the physical properties of a product. In this study is more focused tested on the characteristic attributes of Samsung smartphones products and after tested stated that hypothesis 1 is not supported. This is certainly a limit study conducted by researchers because not to test another attributes that might impact on consumer attitudes as: beneficial, and image attributes.

b. H2 : The higher of price of fairness , the higher of attitude toward switching.

The second test in this study findings that the price fairness is not significant effect on attitude toward switching so the hypothesis H2 is not supported (Estimate value = 0.131; SE = 0.115; CR = 1.139;  $p = 0.255$ ). Thus, there are no relationship between price fairness and attitude toward switching smartphone.

This result is inconsistent with previous study by Xia et al., (2004 ) and Herrmann et al., (2007) that states price fairness was conceptualized positively related to attitude. By knowing reasonable prices, will encourage consumers to switch their attitude towards smartphones.

In this study the consumers assumes that price fairness is not an important variable in determining attitudes to switch smartphones. This can be happen because consumers decide to switch smartphone with preference of the advantages higher than cost should be paid, further they engage in a form of value of benefit-cost ratio (B/C). If the value is  $<1$  then the consumers perceived value was not economically viable, and if  $>1$  means feasible.

c. H3 : The higher of convenience, the higher attitude toward switching

The third test result indicate there is a significant effect between convenience and the attitude toward switching (Estimate value = 0.188; SE = 0.090; CR = 2.088;  $p = 0.037$ ). Thus, the third hypothesis in this study H3 is supported, where the higher convenience, it will increase consumer attitude toward switching smartphone.

The findings in this study is consistent with the study conducted by Lee et al., (2005) who have shown that the perceived convenience have a positive influence on the attitude of using a technology. His study described that intentionally an individual will continue to repeat and get involved in doing something if certain feel happy and comfortable.

d. H4 : The higher perceived value of Smartphones, the higher attitude toward switching

The next test results obtained that there is a significant relationship between perceived value and attitude toward switching (Estimate value = 0.233; SE = 0.089; CR = 2.622;  $p = 0.009$ ). Thus, the fourth hypothesis in this study is supported, where the higher perceived value, it will increase consumer attitude toward switching smartphone.

The findings in this study is strengthening with the previous by Yang & Peterson (2004) which mention that there was a positive relationship between perceived value and attitude toward switching.

e. H5 : The higher of attitude towards switching, the higher intention to switch smartphone

The last test results in this study showed positive significant effect between attitude toward switching and the intention to switch (Estimate value = 0.592; SE = 0.095; CR = 6.208  $p = 0.000$ ). Thus, the fifth hypothesis in this study is supported, where the higher attitude toward switching, it will increase consumer intention to switch smartphones.

This results are consistent with the study conducted by Sung & Woochul (2012), there was a relationship between the switching intention and switching behavior.



## **Conclusion and Implications**

This study can be concluded that the attitude toward switching can be elevate through convenience and perceived value. Otherwise product attributes and price fairness although this result are insignificant but still be important to the marketers and manufacturer as a perspective model to learn. Conversely the intention to switch smartphone is strong influenced by attitude toward switching. The consumer who have initial intentions to switch to other manufacturer 's smartphones eventually tend to more switch rather than who have their intention to stay with their current manufacturer.

For the practical marketing implication, this study hopes to give a larger perspective to the marketers, which can be used to design possible stimuli which can improve and elevate strategy through those variables that can increase customer loyalty. For the manufacturer can take steps to increase the effort in developing a more sophisticated product design and have a more superior quality than competitors.

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