Evaluation of Brand Switching Factors for Smartphones Products in Surabaya, Indonesia

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Abstract

The purpose of this research is to analyze the factors influence the smartphone brand switching in Surabaya City, Indonesia during the pandemic. The research uses quantitative approach to analyze the data collected from 128 respondents by purposive sampling with exploratory factor analysis technique to analyze the possible factors in switching smartphone brands. The study found four factors influence the switching brands among consumers, namely, "Loyalty", "Comfort", "Knowledge" and "Cost". The higher the loyalty on currently used brand will make the possibility to switch brand is low. The "Comfort" factor shows that the consumers aren't likely to switch brands once they feel the enjoyment in using the current brand. The "Knowledge" factor about product quality, feature and performance can urge the consumers to stay or leave the current brand. The last factor "Cost" directs the consumers to switch the brand of their smartphones if the consumers do not need too much sacrifice. The suggestions for future study are the possibility to use other analysis technique and its implementation to other product types.

Keywords: Brand switching, Smartphones, Variety-Seeking Behavior, Consumer behavior

1. Introduction

The business in communication tools and infrastructures have been rapidly increasing since previous decades. The communication tools industries are also taking parts of this phenomenon and putting the telecommunication industry in the maturity phase (Hidayati, et al., 2018). Smartphone product is one of the telecommunication tools which are giving the consumers many choices of brands. Brands play the important role of a company so the loyalty of consumers toward the brand is very important (Atulkar, 2020).

In the massive competition era in all business sectors, the bargaining power of consumers is stronger than before. The companies regard the brand commitment as the important thing to maintain the consumers' choice toward their product instead of switching to another brand (Choi, & Ahluwalia, 2013). The consumers' decision to choose of specific product depend on the adequate information, their preferences and their expertise of the products (Ju, 2015). Brand is very essential for marketing (Emor & Pangemanan, 2015) thus it is very important for a company to manage their brand so that it can retain the customer to keep using the respected brand. The powerful brand will increase the market share and the profit of a company especially in this competition (Maymand & Razmi, 2017).

The smartphones products become popular in the digital era, especially when the Covid-19 pandemic has been hitting the entire world for more than two years which pushing back the people to their homes and do activities remotely. The needs of smartphones increase rapidly in all areas and various users, not only professionals but also students and businesses. Mobile phone which is a portable telephone can make easier for the users to make and receive calls and these electronic devices are used for entertainment, communication and other activities at home and office massively in this pandemic era (Vyshnavi & Rao, 2016).

However, consumers can select, use and dispose products to satisfy their needs and consider the impact given to their society apart of themselves (Vyshnavi & Rao, 2016). Thus, the brand loyalty can be another challenge for smartphone companies to retain their customers. The reduction of churn rate in this industry can be done in many ways to increase satisfaction among customers (Grigoriou, et al., 2018). Not all smartphone consumers will easily switch the brands because of consumer inertia that creates their satisfaction of past experience in using a brand (Goh, et al., 2016).

Brand switching is very interesting topic among young generation especially in smartphones products because young generation, especially Gen Y is difficult to be loyal for a brand (Fintikasari & Ardyan, 2018) although it is a complicated behavior and complex phenomenon, because the switch may be affected by behavioral, competition and also time factors (Hartono & Wahyono, 2018). During pandemic, the people use smartphones for their activities as replacement of their offline activities so they need more specification for the products to use instead of the price. Then, variety seeking is also the other reason for customer to switch brands of the products (Fintikasari & Ardyan, 2018).

There are other factors that may influence customers to switch brands, apart from the variety seeking and possible switching costs (Makwana, et al., 2014). The strong brand equity will give good effect to the product and customers' preferences (Emor & Pangemanan, 2015) but still, customers still have intention to evaluate the product of a brand. This research is aimed to analyze what factors may influence the customers to switch smartphone brands they use to other brands especially because of the increasing usage of smartphones in Surabaya City, Indonesia during the pandemic.

2. Literature Review

2.1 Smartphones Product
As one of the high technology products, smartphones are massively used now. The innovation is very critical for consumers' perception. The technology products have many attributes that will be valued in either utilitarian, hedonic or social attributes. Either it is defined as a product for collective needs or for pleasure in hedonic ways. The ownership of the product will be the other consideration of using the product (Nunes & Filho, 2018).

The smartphone products are very popular in this current digital era and when pandemic Covid-19 has pushed people back to work from homes. As the portable device, smartphones help

people to work remotely. To make their works run well, the specification of the smartphones will be more complicated. The capacity of data processing and saving are becoming crucial for users.

2.2 Consumer Behavior

Customer satisfaction will affect customer loyalty (Chigwende & Govender, 2020). The satisfying products will keep the customers' hearts to the products. Although based on that study, customer satisfaction is not supported directly to influence consumer switching behavior but with the antecedent corporate brand image to the customer satisfaction, the switching behavior is influence by brand image. So this is very important to manage the product brand. Consumer behavior is not easy to predict because it is affected by many factors, such as marketing, personal, situational, social and even the cultural factors (Vysnavi & Rao, 2016).

Towards the high technology products, the consumer behavior is treated differently as the context is extended into technology development and adoption issues. The theories following this context is about consumer intention in terms of diffusion, adoption, utilitarianism and also hedonism which give effects to the consumer behavior (Nunes & Filho, 2018).

The changes in consumer behavior is also influenced by augmented reality, which is defined as the incorporation of software-engendered 3D as the simulated object to improve the insight between users and actual. This AR is becoming important because it can affect the decision making of consumer based on their proficiency (Kazmi et al., 2021).

2.3 Brand switching

Brand switching can occur for any products. Brand switching is the customers shift from a brand to another brand in same category (Guo, et al., 2021). It is also a condition when a consumer moves his brand loyalty to other brands and even end up using the previous brand (Astuti & Santoso, 2019). One of the considerations among customers to switch brand is switching cost (Grigoriou, et al., 2018) which can be barriers for customers to switch brands. Switching cost can be defined as psychological, physical and even economic costs a customer should face when changing to another brands (Makwana, et al., 2014).

Switching cost usually gives barrier so the customers feel so difficult to switch brands (Yang & Liu, 2018). Other reasons of brand switching based on other study (Hartono & Wahyono, 2018) are because of the customer satisfaction and attractiveness alternatives. However, to prevent brand switching of the customers, the company may try to do brand extensions to meet the varieties required by the customers (Koschmann & Sheth, 2018).

A previous study found that perceived product usefulness, ease of use and relative advantage are the vital factors drive intention to switch to other brand of high-technology products (Msaed, et al., 2017). As smartphone is one of high-technology products, so those factors could be relevant too. Other study found that mooring factor is the strongest driver to switch smartphone brands (Guo, et al., 2021). Mooring factor can be cultural or spatial effect that helps a customer to make the decision either to switch or stay in the brand. This study underlined that social influence is part of mooring factors.

2.4 Variety-Seeking Behavior

The studies about the variety-seeking behavior concluded its definition as tendency to choose product simultaneously rather than sequentially (Ju, 2015). The variation seeking behavior is about how the consumers try to find the differences between brands in the same products and usually happened in low involvement level (Astuti & Santoso, 2020). The variety seeking activity is about psychological aspect because people prefer choosing a more diverse products, greater risk and freedom seeking (Ju, 2015).

Variety seeking can be caused by intrinsic or extrinsic motivation. The intrinsic is from the customer's behavior and the extrinsic is from the goal of objective (Bose, 2017). Sometimes the mood of customers also creates the purchase decision of a product. A study found that the negative mood of a customer will increase the tendency to seek variety in buying products (Huang, 2017).

In mobile phones products, the behavior of consumers influenced by brand preference, usage patterns and also satisfaction level (Vyshnavi & Rao, 2016), although this study found that the purchase is majorly affected by the income or suggestions. The variety seeking starts when a consumer does sneak-peak to other products. It also relevant to smartphone products, especially Generation Y who are very picky and demanding. Thus, for this category, the smartphone companies should improve their brand image, do the more interesting advertising products and improve the product features as well (Redda & Shezi, 2019).

3. Research Methodology

This quantitative research used 128 respondents by purposive sampling because the respondents are required to have ever switched from one brand to other brand of smartphone products. The analysis technique used in this research is exploratory factor analysis to analyze the possible factors in switching smartphone brands.

The data collection used questionnaire with 28 initial items. These 28 items will be checked for the validity and reliability before proceeded to further process. The research is taken in Surabaya city, Indonesia and the respondents projected are the young people (17 to 40 years old). All the items in the questionnaire will be scored using Likert scale from 1 (strongly disagree) to 5 (strongly agree). The initial questionnaire consists of 28 items adopted from Van Trijp, et al. (1996). In the initial questionnaire, item number 1 to 13 are for motivation to switch brands and item number 14 to 28 refer to variety seeking-behavior. The initial questionnaire items are shown in Table 1 as follows:

Table 1. Initial Questionnaire Items

No.	Items
1.	I switch smartphone product brand to try new product
2.	I switch smartphone product brand just to make a change
3.	I switch smartphone product brand because I bought the smartphone in another store.
4.	I switch to other smartphone product brand because the brand I used to buy was out of stock
5.	I switch smartphone product brand because it is recommended to me.
6.	I switch smartphone product brand because I want to buy something new for someone else.
7.	I change the smartphone product brand because I prefer the new brand.
8.	I switch smartphone brand because the new brand is packaged differently.
9.	I switch the smartphone brand because the new brand is different product type.
10.	I switch the smartphone brand to other brands because the previous brand I used is too expensive.
11.	I change to the new brand which is cheaper.
12.	I switch smartphone brand because the there is a price discount for new brand.
13.	I switch to the other smartphone brand which I ever used before.
14.	I prefer to be loyal to the current smartphone brand to trying the untrusted brand.
15.	I feel saver by purchasing the familiar smartphone product.
16.	If I like a smartphone brand, I rarely change to others just to try something different.
17.	I am very careful to try new smartphone product which is different to the product I usually use.
18.	I tend to use the same variant of smartphone brand although the brand has many variants.
19.	I buy the other brand of smartphone to variate my purchase.
20.	The smartphone I have now is more important than other brands.
21.	The smartphone I used now is uninteresting
22.	If I buy a smartphone, I will be very detailed in choosing the brand.
23.	I think there are big differences among the smartphone brands.
24.	I think the differences among the smartphone brands are difficult to recognize.
25.	I think the best brand in smartphone category is difficult to decide.
26.	I bought this smartphone because it brings positive mood to me.
27.	I bought this smartphone to give myself enjoyment.
28.	My preference to my favorite brand of smartphone is very strong compared to other brands.

4. Results and Discussions

4.1 Profile of the Respondents

Based on some data collected, the profile of the respondents then can be known that most of the 128 respondents used in this study are less than 24 years old (50.8%), 25-34 years old (42.2%) and the rest 7 % is more than 35 years old. Most of the respondents who gave the responses to the questionnaire are males (53.9%) and the rest of 46.1% are females. The other profiles collected from the primary data are about job, education background, income and the smartphone brands which were ever used. Most of the respondents are employees in private companies (70.3%) and the rest are students (13%)., entrepreneurs (17%)., employees in state owned companies (4%) and housewives (4%). The composition of education background also varied, but the most education level of the respondents are high school level (76.6%). Higher education is 21.1% and the rest is junior high school (2.4%).

The respondents are also profiled by their income, brands they have ever used before and after switching and their duration of using their previous brands. Most of the respondents get the monthly income IDR 3-5 Million (70%). The other respondents get IDR 3 million (37%) and more than IDR 5 million (21%). There are so many smart phone brands which used before and after switching (Table 2). Most of respondents had used the previous smartphone brands for 1-2 years before switching (50%), the other respondents had used previous brands less than 1 year (32%) and the least usage duration is more than 2 years before switching (18%).

Table 2. Smart Phone Brands Used by Respondents

Brand	Previous Brand		Switching to Brand	
	Freq.	%	Freq.	%
iPhone	22	17%	9	7%
Samsung	42	33%	44	34%
Xiaomi	27	21%	2	2%
Asus	1	1%	15	12%
Oppo	14	11%	20	16%
Vivo	16	13%	25	20%
Sony	6	5%	13	10%
Total	**128**	**100%**	**128**	**100%**

4.2 Data Processing

The validity and reliability tests are done before proceeding items to further process. The result of validity test shows that not all items in the initial questionnaire items are valid. Table 3 shows the 16 valid items among the 28 items in initial questionnaire.

Table 3. Valid Items

Item	Item No.	Statement	Pearson Correlation	Total
M4	4	I switch to other smartphone product brand because the brand I used to buy was out of stock	Pearson Correlation	.459**
M6	6	I switch smartphone product brand because I want to buy something new for someone else.	Pearson Correlation	.409**
M10	10	I switch the smartphone brand to other brands because the previous brand I used is too expensive	Pearson Correlation	.368**
M11	11	I change to the new brand which is cheaper	Pearson Correlation	.351**
M12	12	I switch smartphone brand because the there is a price discount for new brand	Pearson Correlation	.388**
M13	13	I switch to the other smartphone brand which I ever used before	Pearson Correlation	.416**
V1	14	I prefer to be loyal to the current smartphone brand to trying the untrusted brand.	Pearson Correlation	.398**
V2	15	I feel saver by purchasing the familiar smartphone product	Pearson Correlation	.355**
V3	16	If I like a smartphone brand, I rarely change to others just to try something different	Pearson Correlation	.307**
V5	18	I tend to use the same variant of smartphone brand although the brand has many variants	Pearson Correlation	.427**
V7	20	The smartphone I have now is more important than other brands	Pearson Correlation	.394**
V10	23	I think there are big differences among the smartphone brands	Pearson Correlation	.407**
V11	24	I think the differences among the smartphone brands are difficult to recognize	Pearson Correlation	.468**
V12	25	I think the best brand in smartphone category is difficult to decide	Pearson Correlation	.416**
V13	26	I bought this smartphone because it brings positive mood to me	Pearson Correlation	.336**
V14	27	I bought this smartphone to give myself enjoyment.	Pearson Correlation	.311**
TOTAL	**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).		Pearson Correlation	1
			Sig. (2-tailed)	
			N	128

There is also no excluded data from 128 respondents used. Table 4 shows the complete data collected from questionnaire.

Table 4. Case Processing Summary

		N	%
Cases	Valid	128	100
	Excluded[a]	0	0
	Total	128	100

a. Listwise deletion based on all variables in the procedure.

Since there are only 16 items valid, so the reliability test will be based on the valid items only. The result of the reliability test, based on Cronbach's Alpha, is 0.736 (Table 5) so it is considered reliable.

Table 5. Reliability Statistics

Cronbach's Alpha	N of Items
0.736	16

As for the 16 items are valid and reliable, then the items will be used for KMO and Bartlett's Test (Table 6). From 16 items proceeded to factor test, only 10 items are eligible for explaining factors. After some retest by eliminating ineligible items, the analysis can be done.

Table 6. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.671
Bartlett's Test of Sphericity	Approx. Chi-Square	250.251
	Df	45
	Sig.	0.000

The output KMO and Bartlett's Test is used to know the feasibility of a variable whether can be processed further in Factor analysis or not. Since the KMO MSA value is 0.671 (more than 0.5) and the Bartlett's test significance value is 0.000 (less than 0.05), so the factor analysis can be continued.

Table 7. Communalities

Item	Initial	Extraction	Item	Initial	Extraction
M12	1	0.616	V10	1	0.764
V1	1	0.688	V11	1	0.660
V2	1	0.633	V12	1	0.713
V3	1	0.676	V13	1	0.701
V7	1	0.582	V14	1	0.705

Extraction Method: Principal Component Analysis.

The Table 7 shows all values are more than 0.5, so then all items are eligible for further process because the values of each are less than 0.5 and however, the items will explain the factors.

Com-ponent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.729	27.287	27.287	2.729	27.287	27.287	1.985	19.853	19.853
2	1.668	16.679	43.966	1.668	16.679	43.966	1.954	19.543	39.396
3	1.314	13.144	57.110	1.314	13.144	57.110	1.416	14.162	53.558
4	1.029	10.290	67.400	1.029	10.290	67.400	1.384	13.842	67.400
5	0.777	7.766	75.165						
6	0.686	6.865	82.030						
7	0.519	5.193	87.223						
8	0.459	4.585	91.808						
9	0.440	4.397	96.204						
10	0.380	3.796	100.000						

Extraction Method: Principal Component Analysis

The table above is to explain the value of each item analyzed. In this study, there 10 components to be analyzed and the number of variables found are 6 variables and the factors formed here have 4 variances (from component 1, 2, 3, and 4). All the components which values are more than 1 (components 1, 2, 3, and 4) can explain 67.4 % variances.

Table 9. Rotated Component Matrix[a]

	Component			
	1	2	3	4
M12	0.127	-0.154	0.259	**0.713**
V1	**0.813**	0.030	0.126	0.097
V2	**0.735**	0.258	-0.066	0.149
V3	**0.810**	0.137	-0.018	0.032
V7	0.081	**0.743**	0.034	0.149
V10	0.116	0.208	-0.023	**0.841**
V11	0.140	-0.024	**0.783**	0.162
V12	-0.101	0.080	**0.835**	0.017
V13	0.135	**0.819**	-0.062	0.091
V14	0.208	**0.756**	0.113	-0.280

Extraction Method: Principal Component Analysis

The four factors formed use the variables with values > 0.5 only. In the end, there are only 11 variables that proceed into factor analysis. Each item represents the factors are written in shaded values. Each component (Table 9) will have some items with high values to represent the factors.

The four factors found in this research are then named based on the relevant and identical description of each item representing the component (Table 10). The four factors are:

a) Loyalty = factor 1 (from variable V1, V2, V3)
b) Comfort = factor 2 (from variable V7, V13, V14)
c) Knowledge = factor 3 (from variable V11, V12)
d) Cost= factor 4 (from variable M12, V10)

Table 10. Factors

Item	Item No.	Statement	Factor
V1	14	I prefer to be loyal to the current smartphone brand to trying the untrusted brand.	F1
V2	15	I feel saver by purchasing the familiar smartphone product	F1
V3	16	If I like a smartphone brand, I rarely change to others just to try something different	F1
V13	26	I bought this smartphone because it brings positive mood to me	F2
V14	27	I bought this smartphone to give myself enjoyment.	F2
V7	20	The smartphone I have now is more important than other brands	F2
V11	24	I think the differences among the smartphone brands are difficult to recognize	F3
V12	25	I think the best brand in smartphone category is difficult to decide	F3
M12	12	I switch smartphone brand because the there is a price discount for new brand	F4
V10	23	I think there are big differences among the smartphone brands	F4

The Table 10 shows the four factors found in this study. The author then names the factors based on the similarities of the characteristics and meanings of the items. Factor 1 is named as "Loyalty" and consists of the item V1, V2 and V3. The statements of the three items explaining the factor are mainly about the loyalty of consumers to use the current smartphone because they feel comfortable and unlikely to change the brand only to try something new and different than previous brand. Goh, et al. (2016) stated that not all smartphone consumers will easily switch the brands because of their satisfaction of past experience in using a brand. Before pandemic Covid-19 hit the world, the usage of smartphone had been massive already especially among the young people as they need this to access the internet for their social media, online-games, e-learning, etc.

Thus, no wonder if most respondents feel more comfortable to stay in the previous brands they used to operate before pandemic instead of changing the brands. The consideration to change smartphone brands is something special because the consumers need innovation and more budget

to buy the new one or changing brand. Based on this research, in average, the consumers will still use the current smartphone for 1-2 years but some consumers as respondents also use the current phone for more than 2 years. This factor indicates the higher the loyalty of the consumers towards the current brands, the lower possibility to change the brands.

The second factor is "Comfort" which is different than "Loyalty". Comfort, in this study, is more personal because the respondents as consumers feel enjoyment using the new brands. The new brand they bought can give them joy and happiness, especially if the new brand gives more features. Nunes & Filho (2018) stated that the consideration of using the smartphones products is also about ownership of the products. Consumer also values the smartphones for pleasure in hedonic ways, so the comfort is important too. Using the smartphones which can give the consumers access to any interesting features is the source as the enjoyment of the smartphone usage.

In the pandemic Covid-19, as people are pushed back to work remotely, study from home and do many things virtually, the positive moods and enjoyment are mainly supported by the ability to access more information by operating smartphones, computers, laptops etc which can give people access to the world and its updated information. People cannot go to cinemas to watch movies, go to schools, and are limited to work at office along with other activities, so they really need entertainments, information and any other kind of enjoyment which avoid them from boredom. So, as long as the current brand of smartphone the consumer uses gives them enjoyment, they will not be easy to switch to the new brand.

The third factor found in this study is "Knowledge" which consists of the opinion of respondents towards the differences among the smartphone brands. The smartphone brands are difficult to differ. Most of the respondents are male and work as the employees in private companies, so the tendency to find information and literacy in using smartphones is high. Theoretically, variety seeking activity based on which this factor refers is about the aspect in psychology (Ju, 2015). Sometimes, consumers change the decision to buy product or choose another brand because of their moods (Huang, 2017). However, as the Gen Y is very picky and demanding towards the smartphone products, so the advertising program will attract them to switch the brand although they don't see the big differences between brands (Redda & Shezi, 2019). Synthesizing from the result of the analysis and the theory, the more knowledge the consumers have about the smartphone brand can either retain them in the current used brand or push them to buy the other brands. This decision may arise in terms of the products itself.

The last factor is "Cost" in which defined not only as monetary terms but also the other things the consumers have to sacrifice if they want to switch the smartphone brands. Yang & Liu (2018) stated that switching cost usually gives barrier so the customers feel so difficult to switch brands, so in this study cost factors can either push consumers to switch brands or stay in the current brands. Their decision to switch may arise due to the product itself. When consumers recognize big advantage differences in other brand and if they don't need to sacrifice a lot of things when choosing another brand, then they tend to switch the brands. Meanwhile, in the cost as monetary terms, the least the cost they have to pay when switching brand, the higher possibility of the consumers to switch the brands.

5. Conclusion and Suggestion

5.1 Conclusion

The results of the study are mainly to answer the research questions about factors may influence the consumers to switch smartphone brands they currently use to other brands in Surabaya City, Indonesia during the pandemic Covid-19. The massive usage of smartphones during the situation has arisen as people are pushed back to work or study from home and do activities virtually. The needs of smartphones as tools has been increasing rapidly.

The results of the study found there are four factors may influence the switching brands among consumers, namely, "Loyalty", "Comfort", "Knowledge" and "Cost". It is likely each of factors to have different directions in influencing the brand switching activity. The higher the loyalty towards the current used brand will tend to retain the consumers to stay in the brand and thus the possibility to switch brand is low. The other factor, "Comfort" gives similar direction to influence the brand switching. Once the consumers feel the enjoyment in using the current brand, so it is not likely for them to switch brands.

The third factor gives direction the influence in two ways. If the "Knowledge" as the third factor, about the smartphone brands in the market is sufficient, it can urge the consumers to stay or leave the current brand, depends on the product quality, feature and performance. The last factor "Cost" directs the consumers to switch the brand of their smartphones if the cost either monetary, technically or psychologically avoids them from many disadvantages after switching.

5.2 Suggestion

The study has found four factors to influence brand switching, "Loyalty", "Comfort", Knowledge" and "Cost. With the different tendencies among the factors in influencing the brand switch, so the next study may take another analysis technique to prove or decide the tendencies especially for this type of products. Future studies may also be implemented in other products with more respondents to make the generalization.

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