Consumer-Brand Identification and Brand Loyalty: Analysis on Customer Satisfaction and Brand Trust as Mediators

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ABSTRACT
Consumers who have used Apple-branded smartphones have greater probability that they will continue to buy iPhones in the future. This is because customers feel satisfied and have identified the product before making a purchase, creating loyalty for the Apple brand. The purpose of this study is to examine the role of customer satisfaction and brand trust as mediators in the relationship between consumer-brand identification and brand loyalty. Participants in this study consisted of 155 consumers and obtained by using accidental sampling technique. Data analysis used the Hayes Process model 4, which explains that customer satisfaction can act as a mediator in the relationship between consumer-brand identification and brand loyalty, while brand trust cannot act as a mediator. Brand loyalty is not sufficiently formed when consumers can identify the brand well or there is satisfaction with the brand, but rather by the essential emotional bond that makes consumers rely on the brand. However, this has not been fulfilled by the iPhone to make consumers have brand loyalty.
BACKGROUND

In the era of globalization, the Indonesian society is experiencing rapid development in various forms of technology, including smartphones. Users of smartphones have increased substantially in recent years. Based on a survey by Databook, worldwide smartphone users amount to 3.3 billion people in 2017 and 3.6 billion people in 2018, increasing again to 3.8 billion users in 2019 (Pusparisa, 2019). In 2019, Indonesia ranked sixth in the top ten countries with the highest number of smartphone users (Herdyanto, 2019).

The need for novel technology on smartphones encourages smartphone brands to release new models in increasingly shorter duration between releases (Lee, 2014; Sembiring et al., 2019), which has resulted in intense competition among existing and new brands to attain and maintain market share (Chen et al., 2016). In the effort to win the market, each brand emphasizes its competitive factors such as quality, price, customer service (both during and post-purchase), and marketing strategy (Kim et al., 2020).

In Indonesia, the two leading operating systems (OS) in smartphones with the largest market share are Android and iOS. Brands using the Android OS include Samsung, Oppo, Xiaomi, Redmi, and Realme, while the only brand using iOS is Apple. A survey conducted by Consumer Intelligence Research Partners (CIRP) indicates that there had been a decline in the numbers of iOS users, but many smartphone users still use Apple smartphones with iOS. In 2014, 83% of all smartphone owners use iOS, while 78% use Android. By the end of 2014, Android users increased to equal iOS users. In 2017, Android users increased to 91%. In 2018, the competition between iOS and Android OS intensified, with 85% smartphone owners use iOS and 88% use Android (Bohang, 2018). The percentages of total Android and iOS users exceed 100% because one person can have and operate more than one smartphone.

Rahmawan (2013) stated that a company with a large market share tends to have competitive advantages. iOS, which is exclusive to the Apple’s iPhone brand of smartphones, has experienced multiple upgrades over the years—with several key advantages including a faster operating system, easier to operate, a clearer camera, lack of bloatware, a stronger defense for viruses, a more responsive fingerprint scanner, and the additional features of iCloud and AirDrop. This is confirmed by a survey conducted by Statcounter GlobalStats on the number of iPhone users in Indonesia that has experienced a steady increase from 5.85% in 2018 to 6.38% in 2019 (Statcounter, 2019).

So et al. (2013) suggested that a company is deemed successful when it can fulfill one of many indicators, i.e., the number of customers loyal to the company or its brands. Customers are considered loyal when they continually purchase the same or different products marketed under the same brand (Anderson & Srinivasan, 2003; Budiman et al., 2020; Li et al., 2014). There are several determinants of customer loyalty, including consumer-brand identification (Stokburger-Sauer et al., 2012), consumer value (Yeh et al., 2016), and self-brand connection (Lin et al., 2017).

Research by Stokburger-Sauer et al. (2012) indicated a positive correlation between consumer-brand identification and brand loyalty, particularly for products and services. When consumers intend to purchase a product or service, they tend to conduct identity search for certain brands such that the consumers form a certain perception on said brands. Yeh et al. (2016) explicate that brands that can visualize the customers’ ideal self, with a match between the brand and the customers’ emotions, and able to increase the customers’ self-esteem.
tend to attain greater loyalty from their customers—as the brands can help customers achieve their self-representation. A study by Hami & Sidik (2017) indicated that users of Apple smartphone brands tend to have higher self-esteem compared to users of other smartphone brands. In addition, iPhone users are often regarded as middle to upper class individuals in terms of economic welfare (Mario, 2018). The positive perception on iPhone users may attract more consumers to switch to purchasing the iPhone as their brand of choice for personal smartphone (Susanti, 2017). The study by Yeh et al. (2016) suggested a positive correlation between consumer-brand identification and brand loyalty in smartphone brands.

Popp & Woratschek (2017a) determined the role of customer satisfaction as a mediator between consumer-brand identification and brand loyalty. Customer satisfaction is depicted as the response of customers’ satisfaction on whether certain products have met their personal expectations (Homburg et al., 2009; Popp & Woratschek, 2017b). There are two types of customer responses as a form of satisfaction, i.e., expectancy response and disconfirmation. Expectancy is the customer expectation on a certain product’s performance, while disconfirmation is the difference between customer expectations prior to and post purchase in terms of product performance (Oliver in Al-Eisa & Alhemoud, 2009). Brand loyalty emerges when a product from a certain brand are able to satisfy customers (Chen et al., 2016). Additionally, external environment and marketing strategy may also play a role in forming brand loyalty (Homburg et al., 2009).

Furthermore, brand loyalty may emerge due to brand trust. A study by Rather et al. (2019) found that brand trust may play a role as mediator between consumer-brand identification and brand loyalty. Brand trust refers to the willingness of consumers to rely on and trust product performance of a certain brand (Chaudhuri & Holbrook, 2001; Halim, 2006; Kuleh & Setyadi, 2016). Trust on a certain brand could ensure consumers that the product performance is reliable and not harmful (Shariff et al., 2012). Brand trust may emerge after consumers conduct a purchase and evaluate the product being purchased (So et al., 2013).

A previous study by Yeh et al. (2016) measured the correlation between consumer-brand identification and brand loyalty. The current research modified that study by adding customer satisfaction and brand trust variables, referring to three previous studies. Popp & Woratschek (2017a) suggested that customer satisfaction acts as a mediator influencing brand loyalty on certain brands. So et al. (2013) determined full mediation, including three variables simultaneously (i.e., brand trust, perceived value, and service quality) in the relationship between customer brand identification and brand loyalty. This study found brand trust as the strongest mediator, evidenced by the correlation between customer-brand identification and brand trust ($\beta=0.50$, $p<0.001$), as well as the correlation between brand trust and brand loyalty ($\beta=0.28$, $p<0.001$). Rather et al. (2019) stated that brand trust and affective commitment play important roles in the relationship between customer-brand identification and customer behavioral intention of loyalty. Brand trust was determined as the strongest mediator, evidenced by the correlation between customer-brand identification and brand trust ($\beta=0.20$, $p<0.01$), as well as the correlation between brand trust and brand loyalty ($\beta=0.35$, $p<0.0001$). Examining these published studies, none of the studies have tested the role of customer satisfaction and brand trust as mediators simultaneously. Thus, the objective of the current study is to
test and explain the mediating roles of customer satisfaction and brand trust in the relationship between consumer-brand identification and brand loyalty, particularly on iPhone products. The hypothesis of this study is that there exists the roles of customer satisfaction and brand trust as mediators in the relationship between consumer-brand identification and brand loyalty.

**RESEARCH METHODS**

**Research Design**

This study employed the quantitative correlational approach using the survey method. There are four variables in this research namely brand loyalty as a dependent variable, consumer-brand identification as an independent variable, and customer satisfaction and brand trust two mediating variables.

**Research Subjects**

The participants in this study were Indonesian iPhone users. As the total population was unknown, the Lemeshow formula was used to determine the number of samples needed. The sample size calculation using Lemeshow formula is shown as follows:

\[
n = \frac{s_{amp}^2 \times P (1-P)}{\alpha^2}
\]

\[
n = \frac{(1.96)^2 \times 0.5 (1-0,5)}{(0,1)^2}
\]

\[
n = 96,04 = 97
\]

Information:

- **n** = sample size
- **z** = z-score with 95% confidence = 1.96
- **P** = maximum estimation = 0.5
- **α**= sampling error = 10%

Based on the calculation from Lemeshow formula, the minimum sample size was determined to be 97 participants with 10% sampling error and 95% confidence level. The sampling technique used was accidental sampling, i.e., subjects were chosen incidentally as long as they meet the inclusion criteria for research (Neuman, 2014). There were 155 participants in this study (38 males and 117 females), aged 18 to 25 years old (Mean= 20.86; SD= 1.955); with a specific participant characteristic of having purchased iPhones at least two times.

**Data Collection Method**

Data collection was conducted between 2-18 October 2020 using Google Forms. There were four instruments in this study, i.e., brand loyalty, consumer-brand identification, customer satisfaction, and brand trust.

- The instrument for brand loyalty was adapted from Anderson & Srinivasan (2003). This instrument was also used in a study by Yeh et al. (2016) to measure brand loyalty of smartphone products. The instrument consists of seven items using a 7-point Likert scale (1 = not appropriate to 7 = very appropriate) with Cronbach’s Alpha of 0.91.

- The instrument for consumer-brand identification was developed by Stokburger-Sauer et al. (2012), consisting of five items with a 7-point Likert scale (1 = extremely disagree to 7 = extremely agree) with Cronbach’s Alpha of 0.84.

- The instrument for customer satisfaction was adapted from Homburg et al. (2009). This instrument was used in a study by Popp & Woratschek (2017a) to measure customer satisfaction in marketing research. This instrument consists of three items using a 7-point Likert scale (1 = extremely disagree to 7 = extremely agree) with Cronbach’s Alpha of 0.89.

- The instrument for brand trust was adapted from Chaudhuri & Holbrook (2001).
This instrument was also used in a study by So et al. (2013), and it has been tested on measuring consumers’ brand trust. This instrument consists of four items using a 7-point Likert scale (1 = extremely disagree to 7 = extremely agree) with Cronbach’s Alpha of 0.85. Content validity test was conducted on all four instruments by going through expert judgment.

**Data Analysis Technique**

Data analysis was conducted using the Hayes Process Model 4, with 95% confidence interval. The Hayes Process is a technique of data analysis developed by Preacher & Hayes (2008) that explains the role of intervening variables by examining indirect effects (and standard of error) using bootstrapped. The confidence interval value is used to determine the significance of the indirect effects. If there are no zero values observed in the confidence interval values, then it can be concluded that the indirect effect in the testing is significant.

The current study utilized four variables, further divided into one independent variable, one dependent variable, and two intervening variables. The research framework is depicted in Figure 1.

![Figure 1. Research Framework](image)

**RESULTS**

Table 1 depicts the demographic data of the 155 research participants. From the findings, it is known that 49.7% of respondents have less than or equal to IDR 2,000,000 of monthly pocket money, while 34.2% participants plan on purchasing an iPhone every three years, and 54.2% of the respondents use their parents’ money as the means to purchase their iPhones. However, in the process of decision making to purchase iPhones, most of the participants reported that they made the decision independently (87.7%). The participants hold the view that iPhone is a quality smartphone brand (40.9%), with most of the participants agreeing that the amount of money spent to purchase iPhones is in line with the benefits sought (95.5%). The majority also perceives that iPhone quality is in line with their expectations (95.5%), with 52.9% of respondents reported being satisfied with their iPhone purchase. The primary reason to purchase iPhones is reliable performance (28.6%).
Table 1. Demographic Data (N=155)

| Demographics                              | Group          | Frequency | Percentage (%) |
|-------------------------------------------|----------------|-----------|----------------|
| Monthly pocket money                      | ≤2.000.000     | 77        | 49.7           |
|                                           | 2.000.001-3.000.000 | 35        | 22.6           |
|                                           | 3.000.001-4.000.000 | 17        | 11.0           |
|                                           | 4.000.001-5.000.000 | 10        | 6.5            |
|                                           | ≥5.000.000     | 16        | 10.3           |
| New iPhone purchase period                | ≤2 years       | 48        | 31.0           |
|                                           | 3 years        | 53        | 34.2           |
|                                           | 4 years        | 25        | 16.1           |
|                                           | 5 years        | 15        | 9.7            |
|                                           | ≥6 years       | 14        | 9.0            |
| Source of funds to purchase iPhone        | Funds from parents | 84    | 54.2           |
|                                           | Personal funds | 62        | 40.0           |
|                                           | Combination of parents and personal funds | 7       | 4.5            |
|                                           | Gift from extended family | 2 | 1.3           |
| Decision making process in purchasing iPhone | Self (independently) | 136 | 87.7          |
|                                           | Parents        | 16        | 10.3           |
|                                           | Discussion with parents | 3 | 1.9           |
| Perception of iPhone                      | Quality product | 115 | 40.9          |
|                                           | Exclusive product | 76 | 27.0          |
|                                           | Easy to use    | 72        | 25.6           |
|                                           | Worth the price | 6         | 2.1            |
|                                           | Long lasting   | 4         | 1.4            |
|                                           | Cool factor    | 4         | 1.4            |
|                                           | Secure system  | 3         | 1.1            |
|                                           | Best service   | 1         | 0.4            |
| Benefit received is worth the money spent | Yes            | 148       | 95.5           |
|                                           | No             | 7         | 4.5            |
| Quality of iPhone is in line with expectations | Yes       | 148       | 95.5           |
|                                           | No             | 7         | 4.5            |
| Satisfied with iPhone purchase            | Yes            | 82        | 52.9           |
|                                           | No             | 73        | 47.1           |
| Reason to purchase iPhone                 | Reliable performance | 132 | 28.6          |
|                                           | Long lasting   | 109       | 23.6           |
|                                           | Updated features | 106 | 22.9          |
|                                           | Secure and trustworthy product | 106 | 22.9          |
|                                           | Already dependent | 5    | 1.1           |
|                                           | Good design    | 2         | 0.4            |
|                                           | Camera         | 2         | 0.4            |
| Ever experienced malfunction on iPhone    | Yes            | 94        | 60.6           |
|                                           | No             | 61        | 39.4           |

Table 2 explains the intervariable test that was conducted. The results indicate significant correlations between consumer-brand identification and brand loyalty (r=0.65, p<0.01), consumer-brand identification and customer satisfaction (r=0.58, p<0.001), consumer-brand identification and brand trust (r=0.70, p<0.01), customer satisfaction and brand loyalty (r=0.67, p<0.01), brand trust and brand loyalty (r=0.63, p<0.01), and
customer satisfaction and brand trust \((r = 0.72, p<0.01)\).

### Table 2. Intervariable Test Results (Consumer-Brand Identification, Customer Satisfaction, Brand Trust and Brand Loyalty)

| Variable                        | 1   | 2         | 3         | 4         |
|---------------------------------|-----|-----------|-----------|-----------|
| Brand Loyalty                   |     | 0.650**   | 0.666**   | 0.634**   |
| Consumer-Brand Identification   |     | 0.578**   | 0.704**   | 0.717**   |
| Customer Satisfaction           |     |           |           |           |
| Brand Trust                     |     |           |           |           |

**p < 0.01; *p < 0.05

Table 3 depicts the result from mediator role test using the Hayes Process Model 4. Hypothesis testing on the relationship between consumer-brand identification and brand loyalty with two simultaneous mediating variables indicate that customer satisfaction may play a role as a mediator \((\beta = 0.34; SE = 0.12; CI = 0.11, 0.58)\), while brand trust does not play a role as a mediator \((\beta = 0.12; SE = 0.12; CI = -0.97, 0.38)\), thus determining that the hypothesis is not confirmed. Consumer-brand identification has a positive correlation with customer satisfaction \((\beta = 0.29, p<0.01)\), and consumer-brand identification has a positive correlation with brand trust \((\beta = 0.45, p<0.01)\). Consumer-brand identification has a positive correlation with brand loyalty \((\beta = 0.53, p<0.01)\), while customer satisfaction has a positive correlation with brand loyalty \((\beta = 1.14, p<0.01)\), yet brand trust does not have a correlation with brand loyalty \((\beta = 0.26, p>0.05)\). The indirect effect without brand trust (customer satisfaction excluding brand trust) is \(\beta = 0.21, SE = 0.13, CI = -0.21, 0.61\).

### Table 3. Mediator Role Test in the Relationship between Consumer-Brand Identification and Brand Loyalty

| X   | M   | R²  | Total effect | Direct effect | Indirect effect |
|-----|-----|-----|--------------|---------------|-----------------|
| CBI | CS  | 0.42| 0.98 0.80;1.17 | 10.58 0.53 0.30:0.76 | 4.51 0.34 0.11:0.58 |
| BT  |     |     | ***         | ***           | ***             |

***p<0.001. CBI = Consumer-Brand Identification, CS = Customer Satisfaction, BT = Brand Trust, BL = Brand Loyalty.

### DISCUSSION

The results of a study conducted on 155 iPhone users in Indonesia determine that customer satisfaction may play a role as mediator while brand trust does not play a mediating role in the relationship between consumer-brand identification and brand loyalty. This suggests that brand loyalty may emerge when customers feel satisfied with their iPhone purchase even though they have conducted identification on the products to be purchased, while brand trust is not sufficient in forming customer loyalty for the same brand.

Customer satisfaction may be measured by examining the paradigm of expectation disconfirmation, or it can be surmised that customers may feel satisfaction when the performance of a certain product or service can fulfill and exceed the customers’ expectations (Al-Eisa & Alhemoud, 2009; Popp & Woratschek, 2017b). Consumer-brand identification is known to increase satisfaction of the entire assessment of a product due to the affective...
brand formed by a certain brand (Chaudhuri & Holbrook, 2001; Graciola et al., 2018). Brand identification may emerge even before consumers become customers. Particularly when the identification is done continually, it can be said that identification may have an impact on consumers’ transactions—which may bring about satisfaction. This is because identification is a form of customers’ long term disposition (Haumann et al., 2014; He et al., 2012; Popp & Woratschek, 2017b). In this study, 148 participants also indicate that the amount of money spent purchasing iPhones is in line with the benefits sought, and that the quality of iPhone has met their expectations.

A study by Stokburger-Sauer et al. (2012) suggested that consumers may respond of provide evaluation upon conducting identification of brand identity among the existing products in the market, and eventually form a certain perception of the brand. Based on the demographic data, it is determined that the participants perceive iPhone as a high quality smartphone product. Popp & Woratschek (2017a) stated that consumer perception may cause them to tolerate certain product failures or imperfections, while still giving positive responses. This can be seen in the finding that 94 participants have experienced malfunction on their iPhones, but they remain loyal iPhone users and customers as the perceive iPhone as providing a high level of satisfaction.

However, in the current research brand trust is found to not play a role as a mediator, because brand trust does not indicate significant relationship with brand loyalty. This diverges from the previous concept put forth by So et al. (2013), which stated that consumers tend to remain loyal when they have trust on a certain brand based on personal experience with that brand. As such, it can be surmised that relational connection or exchange relationship is present. The presence of brand trust may form commitment and value on the part of the consumers to keep consuming or using a certain brand (Chaudhuri & Holbrook, 2001). Trust may be formed with a brand can demonstrate integrity, credibility, virtue, and consistency (Rather et al., 2019). The perception of consumer trust may continue to develop from time to time, as interactions with service providers intensify (Shukla et al., 2016). Based on the demographic data, it can be seen that the majority of the reasons why participants in this study chose iPhone is due to the excellent performance of the iPhone product itself, with not many participants citing certain emotional bond with the iPhone product. Prastika (2013) explains that consumer commitment may form because of a bond between material satisfaction and the fulfilment of certain emotional needs. This is further supported by Rather et al. (2019), stating that commitment may create loyalty when there is a strong emotional connection and a continuous relationship.

**CONCLUSION AND RECOMMENDATION**

**Conclusion**

This study finds that brand loyalty may emerge when consumers conduct identification on the brands to be purchased. Additionally, consumer expectation may also play a determining role. When a product can fulfil or exceed consumer expectation, consumers may engage in repurchase or engage in future purchases of products marketed under the same brand. Emotional connection is also important in forming consumer commitment in purchasing a certain brand. However, this study of iPhone users has not shown adequate emotional connection that cause consumers to form a commitment to keep purchasing the iPhone brand. Rather, the iPhone is depicted as having strong features and quality compared to delving with consumer emotion.
Recommendation

This study may have some implication for the Apple corporation, particularly from a psychological perspective, i.e., in conducting consumer approach based on emotional appeal. In terms of product quality and features, the iPhone has adequately satisfied its consumers, yet the commitment from existing customers is not yet attained. Therefore, the company may consider to better communicate the sense of relying on iPhone as the best smartphone brand.

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