

# The Mediating Role of Customer Satisfaction and Brand Trust between the Relationship of Perceived Value and Brand Loyalty

## Abstract

**Purpose** –This study aims to determine the mediating effect of customer satisfaction and brand trust between perceived value and brand loyalty of telecommunications services.

**Design/methodology/approach** – The population in this study are customers of telecommunications services in Aceh Province. The method of data analysis used in this study is a quantitative approach consisting of Structural equation modeling (SEM) with Amos 2.2 and Sobel Test for testing the mediation effect.

**Findings** – This study finds that perceived value significantly influences customer satisfaction and brand trust, which means that telecommunications service providers must always provide products with values that exceed customer expectations to increase customer satisfaction and trust. Then, customer satisfaction and brand trust have a significant effect on brand loyalty. It means that telecommunications service providers must always evaluate the conditions of customer satisfaction and increase customer trust in the brands of telecommunications service to increase customer loyalty to the brand. Besides, value also affects directly and indirectly on brand loyalty through customer satisfaction and brand trust.

**Originality/Value**–This study examines the role of mediating variables of customer satisfaction and brand trust in measuring the level of brand loyalty of telecommunications service providers. This study is one of several studies that comprehensively evaluates the influence of customer brand loyalty determinants to create a competitive advantage in the telecommunications services industry and as an effort of telecommunications service companies in increasing the growth of company revenue. There has never been a similar previous study examining this relationship at the same research location.

**Keywords:** Perceived value, Customer Satisfaction, Brand Trust, and Brand Loyalty

**Paper type** Research Paper

## 1. Introduction

Technological developments have transformed the telecommunications industry in the world. At the beginning of the digital economy era or the industrial era 4.0, the telecommunications industry is an important sector with the high market concentration and has contributed to the GDP of Indonesia as the largest contributor to non-tax state revenues (DG SDPPI, 2018). Cellular telecommunications in Indonesia was introduced in 1984 and made Indonesia one of the first countries to adopt a commercial version of cellular technology (DG SDPPI, 2014). The cellular technology used at that time was NMT (Nordic Mobile Telephone) from Europe, followed by AMPS (Advanced Mobile Phone System), both with analog systems.

Statistically, the growth of cellular phones since 2004 was 29.8 million customers and continued to grow until January 2019 of 355.5 million customers (Websindo.com, 2019). The high growth of Indonesian cellular telephone customers can drive the growth of the cellular phone market share to be higher and can make Indonesia as one of the potential areas for the telecommunications market. A customer is an important unit in telecommunications services that operates in a competitive brand environment, where telecommunications brand service providers need to be aware of various factors driving customer loyalty to a brand to build effective business strategies for customer retention (Lim, Widdows, & Park, 2006). The researchers find that each dissatisfied customers tend to communicate their bad experiences to an average of 5 to 15 people, and 13% of them continue negative promotions to more than 10 potential customers (Harari, 1997). The worst part is when dissatisfied customers take action as soon as possible to move (customer churn) by bringing negative experiences through word of mouth communication and the average level of brand telecommunications company switching each year between 10 to 67 percent (Andres Kuusik & Varblane, 2009).

The managers of the service industry company try to create profitable strategies for the company and try to maintain customer loyalty to the brand to develop a larger market share. Their main concern is focused on customer loyalty through developing strategies to increase customer perceived

value and increase customer satisfaction and build brand trust (Rasheed & Abadi, 2014). Some researchers have proven that consumer loyalty to brands can be identified through various variables, such as opinions (C. C. Chang, 2015; Yeh, Wang, & Yieh, 2016a) states the perceived value through the dimensions of emotional value, social value, price value, and quality value can increase service brand loyalty. Meanwhile, (Dehghan, Alizadeh, & Mirzaei-Alamouti, 2015) states that the dimensions of utilitarian values, hedonistic values, perceived value, customer satisfaction, and customer value can measure customer loyalty to brands in Iran.

Furthermore, (Park & Kim, 2016) say that brand loyalty can be measured through the dimensions of brand value, brand trust, and brand effects. Furthermore, (Hou & Wonglorsaichon, 2016; S. Y. Lam & Shankar, 2014) use the dimensions of perceived value, brand satisfaction, and trust to increase brand loyalty. Other arguments, such as (Chiou, Wu, & Chuang, 2010; Karjaluoto, Jayawardhena, Leppäniemi, & Pihlström, 2012) also say that customer satisfaction and brand trust can act as mediators between loyalty and determinants. This research is also expected to be a comprehensive and dynamic new model development by involving emotional factors (customer satisfaction), relational (brand trust) as mediating variables, and brand loyalty in the service context, especially in the cellular telecommunications market area in Aceh Province.

## **2. Literature Review**

### **2.1 Perceived Value**

Customers will choose a product from several other products because they believe that the product they choose will provide better value. In competitive marketing practices, (Floh, Zauner, Kohler, & Rusch, 2014) identify customer segments through perceived value, but previous researchers often ignore the effect of perceived value on loyalty. The superior value received and felt by customers after the use of services is widely accepted as a competitive advantage for marketers (Rasheed & Abadi, 2014).

Providing superior customer value will have a positive effect on customers and employees (Bayraktar, Tatoglu, Turkyilmaz, Delen, & Zaim, 2012), and high customer value will be related to strong customer orientation. Most of the empirical studies in the telecommunications industry assess perceived service value (perceived service value) related to the evaluation of other service constructs such as customer satisfaction (Danish, Himayon, Iqbal, Raza, & Shahid, 2018; Morgan, Govender, & Govender, 2017; Nurysh, Naghavi, Chan, & Fah, 2019), brand trust (Kungumapriya & Malarmathi, 2018), and matters relating to service outcomes, especially brand loyalty (Kungumapriya & Malarmathi, 2018; Marakanon & Panjakajornsak, 2017).

### **2.2 Customer Satisfaction**

Customer satisfaction is one of the objectives of marketing activities, which connects the purchasing and consumption process with the phenomenon of post-purchase. Satisfying customers is the key to a successful business (Hussein, 2012). Satisfaction is the response of consumers in meeting their needs (Ameer, 2014). Satisfying customers is an important element in the marketing concept (Kotler & Armstrong, 2010), because it can influence future consumer buying behavior, and can affect profitability.

According to (Saeed et al., 2013), satisfaction is a combination of customer emotions and cognition after product use, or often referred to as brand response by consumers. Satisfaction is the level where customers feel happy after using a product that suits the needs and desires of customers (Ahmed, Rizwan, Ahmad, & Haq, 2014). Consumer satisfaction or dissatisfaction is the response to the evaluation of discrepancies or perceived disconfirmation between previous expectations and the actual performance of the products felt after use (Afifah & Asnan, 2015). Overall, the researchers agree that customer satisfaction does not only determine brand loyalty but also mediates the relationship between service quality, perceived value, and brand image on brand loyalty.

Furthermore, (Bayraktar et al., 2012) claim from various literature on customer satisfaction that various customer satisfaction models have been developed based on various cumulative views on satisfaction. For this purpose, many Customer Satisfaction Indexes have been designed, among which the most prominent are the Swedish Customer Satisfaction Barometer (SCSB), the American Customer Satisfaction Index (ACSI), and the European Customer Satisfaction Index (ACSI).

## **2.3 Brand Trust**

Trust is the basic structure of business activities. Business transactions that occur between two or more parties will occur if each party trusts one another. Trust cannot just grow in someone and be recognized by other parties (business partners), but must be built from scratch and can be proven. Brand trust is built and developed through direct customer experience through brands (Liao, 2015), and according to (Melewar, Kitchen, Foroudi, Gupta, & Foroud, 2017), trust can be linked to consumer perceptions about the company's ability to meet customer loyalty. So, it concludes that trust and loyalty have a direct relationship with repurchase decisions.

Furthermore, (Veloutsou, 2015) defines trust as a form of trust in the reliability, truth, ability, and sincerity of the brand by costumers. Trust is a willingness to depend on an exchange partner that someone trusts (Hossaina, Kimb, Jahanc, & Mind, 2018). According to (Davis, 2017) three factors shape a person's trust in another individual or organization, namely ability, benevolence, and integrity. Trust in a relationship can be based on rational cognitive performance evaluation and based on emotional and affective responses (Zur, Leckie, & Webster, 2012), and (Bilgihan, 2016) concludes that trust is the most important antecedent of e-loyalty for young customers.

## **2.4 Brand Loyalty**

Brand loyalty is a concept that has garnered a lot of interest over the past few decades, with many companies trying to build brand loyalty from their consumers (Russell-Bennett, Härtel, & Worthington, 2013). According to (Oliver, 1999) brand loyalty is a very strong commitment to consistently return or replace selected products/services in the future and cause repeated brand or brand purchases despite situational influences and marketing efforts that have the potential to cause switching behavior. High brand loyalty can increase trade and can attract new customers because they have the belief that buying branded products minimally reduces risk. According to (Ahmad, Ahmad, & Nadeem, 2014), building brand loyalty can be conducted through brand credibility and brand awareness.

### **2.6.1 Relationship between Perceived Value and Customer Satisfaction**

In the telecommunications industry, increasing customer satisfaction is a major determinant of financial performance in competitive markets (Kungumapriya & Malarmathi, 2018). Customer satisfaction arises from the response of customers to the perceived value. According to (C. Chang, 2015; S. Y. Lam & Shankar, 2014), there is a very significant relationship between perceived value and customer satisfaction in measuring the loyalty of cellular phone brand devices.

The research findings confirm several other findings made in various developed countries, such as (Chua, Lee, Goh, & Han, 2015; Dehghan et al., 2015; Deng, Lu, Wei, & Zhang, 2010; Ishaq, Bhutta, Hamayun, Danish, & Hussain, 2014; Lai, 2015). Furthermore (Velooso, 2017), perceived value is the main determinant of customer satisfaction. On the contrary, (Ahmed et al., 2014; Akbar, Mat Som, Wadood, & Jamil Alzaidiyeen, 2010), the perceived value of the customer does not have a significant effect on customer satisfaction. From the previous research, the relationship between variable perceived value and customer satisfaction can be described as follows:

H1: Perceived value has a positive and significant effect on customer satisfaction in telecommunications services in Aceh Province.

### **2.6.2 Relationship between Perceived Value and Brand Trust**

Perceived value and brand trust are the determining variables of brand loyalty in the telecommunications industry. Building a strong brand in the market is based on offering value of customer expectations, so they believe that the brand can be relied upon under various conditions. Meanwhile, (Ahmed et al., 2014; Karjaluoto et al., 2012) reveal that the perceived value of customer directly affects customer trust toward a brand.

Perceived value is a determinant of increasing customer trust in a brand. Besides, (K.-C. Chang, 2014) the perceived value does not only affect customer trust directly but also becomes a moderating variable between customer trust and the intention to repurchase a brand. If customers feel the perceived value and highly trust, they will repurchase the brand. This finding is in line with the study (Kungumapriya & Malarmathi, 2018; Prameka, Do, & Rofiq, 2016), which find that the perceived value

can directly influence brand trust or by involving customer satisfaction as a mediating variable in measuring brand loyalty.

H2 : Perceived value has a positive and significant effect on brand trust in telecommunications services in Aceh Province.

### **2.6.3 Relationship between Perceived Value and Brand Loyalty**

The expectations of each consumer on a product are different, such as in terms of the number of purchases, quality of service, comfort (before, during use, and after purchase), and so on. The sacrifices of each consumer are also different in terms of time, money, energy/business, and so on. According to (Rasheed & Abadi, 2014), perceived value is an important factor to measure loyalty. Several other surveys related to the loyalty model, such as (A. Y. C. Lam, Lau, & Cheung, 2016; S. Y. Lam & Shankar, 2014) report that in the initial adoption of intergenerational technology adopters, and telecommunications devices emphasize the use of perceived value in the development of loyalty, while the latter adopters depend on satisfaction with the brand in developing brand loyalty, but in developing loyalty in a new generation of consumers, it depends more on trust than on perceived value.

Furthermore, (Dehghan et al., 2015; Yeh, Wang, & Yieh, 2016b) find that perceived values that include functional values, emotional values, social values, and brand identification have a positive influence on brand loyalty of cellular phones in Taiwan. In line with previous researchers, (Nikhashemi, Tarofder, Gaur, & Haque, 2016; Rahmani, Ranjbar, Gara, & Gorji, 2017) conclude that the creation of customer value will influence the high customer loyalty in consuming telecommunications brands.

H3 : Perceived Value has a positive and significant effect on Brand Loyalty in telecommunications services in Aceh Province.

### **2.6.4 Relationship between Customer Satisfaction and Brand Loyalty**

Theoretically, it can be argued that customer satisfaction is a key influence on consumer purchasing behavior, which can lead to high customer loyalty in certain brands (Wongsuchat & Ngamyan, 2014; Yeboah-Asiamah, Nimako, Quaye, & Buame, 2016). Over several decades, customer satisfaction predictors have been able to increase brand loyalty (Afifah & Asnan, 2015; Ahmed et al., 2014). Customers who are satisfied after consuming the brand will have an impact on loyalty (Rahmani et al., 2017). These findings have validated previous studies showing that satisfaction has a significant effect on brand loyalty (Mittal, 2016; Morgan et al., 2017).

It is almost the same with previous researchers (Barusman & Riorini, 2016; C. C. Chang, 2015; Chua et al., 2015; Dehghan et al., 2015; Drennan et al., 2015; Oh, Chung, & Park, 2016) who also find that customer satisfaction has a positive and significant effect on brand loyalty in examining the conceptual model of brand loyalty of mobile phone users.

H4 : Customer Satisfaction has a positive and significant effect on Brand Loyalty in telecommunications services in Aceh Province.

### **2.6.5 Relationship between Brand Trust and Brand Loyalty**

The brand will have a reputation if the quality is always maintained consistently and has credibility so that makes consumers interested in consuming it. Besides, the brand must also be able to increase customer emotional involvement so that customers have a bond and are loyal to the brand (Barusman & Riorini, 2016). Satisfaction driven by trust in a brand will better explain true loyalty.

Therefore, an understanding of customer loyalty to the brand is less than perfect without an explanation of brand trust. Furthermore, (Hasan, Kiong, & Ainuddin, 2014) say that the shared trust and the perceived value have a long-term relationship with the brand. The brand trust will ultimately direct customers to their commitment and loyalty to the brand. Meanwhile, (Hou & Wonglorsaichon, 2016) states that brand trust has a positive effect on loyalty. It means that the perceived value is objective and based on a rational process that determines whether the other party in the relationship can be trusted.

H5 : Brand trust has a positive and significant effect on Brand Loyalty in telecommunications services in Aceh Province.

### 2.6.6 Customer Satisfaction memediasi hubungan antara Perceived Value dengan Brand Loyalty

The indirect relationship between perceived value and consumer loyalty to the brand can occur through the involvement of other variables such as satisfaction. Researchers, such as (Chua et al., 2015; Lee, Moon, Kim, & Yi, 2015; Seiler, Rudolf, & Krume, 2013) say that satisfaction and trust are mediating factors for the indirect effect between usability and brand loyalty. Other research (Moriuchi & Takahashi, 2016) identifies the importance of the role of customer brand identification to build customer brand loyalty through brand satisfaction and trust. Furthermore, (Hew, Lee, Ooi, & Lin, 2016) claim that customer satisfaction can be a mediating variable in confirming and strengthening the influence of all channels in the loyalty model for cellular phone brand users in Selangor, Malaysia. Besides, (Oh et al., 2016; Rahmani et al., 2017) find that customer satisfaction mediates an indirect relationship between perceived value and brand loyalty.

H6 : Customer Satisfaction can mediate well the relationship between perceived value and brand loyalty in telecommunications services in Aceh Province.

### 2.6.7 Brand Trust memediasi hubungan antara Perceived Value dengan Brand Loyalty

The growth of the telecommunications industry has been predicted based on the high perceived value of customers through an intermediary trust towards brand loyalty (Karjaluto et al., 2012). The ability of the trust variable to explain the indirect relationship between variables has been tested in various contexts, including in explaining the indirect relationship between the perceived value of customers to brand loyalty (Lee et al., 2015). Furthermore, (Moriuchi & Takahashi, 2016) identify the importance of the role of customer brand identification to build customer brand loyalty through brand trust variables.

Studies outside the telecommunications context (Bennur & Jin, 2017) find that customer trust can be a strong predictor between hedonic utilitarian value and brand loyalty. Meanwhile, (Rahmani et al., 2017) conclude that trust is a predictor of an indirect relationship between perceived value and customer loyalty to brands. The utilitarian value is considered more important in building brand trust, and function to increase consumer loyalty to the brand (Oh et al., 2016).

H7 : Brand Trust can mediate well the relationship between Perceived Value and Brand Loyalty in telecommunications services in Aceh Province.

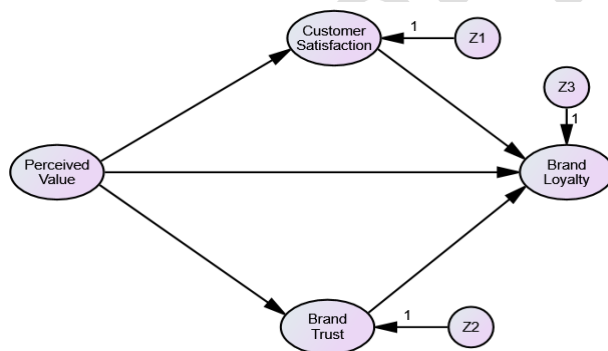


Figure 1.  
Proposed Conceptual Model

## 3. Research Methodology

This research is conducted on customers of the cellular phone service providers in Aceh Province. The method used in analyzing data is a tiered structure model, and the hypotheses proposed are examined using the SEM (Structural Equation Modeling) analysis technique operated through the AMOS (Analysis of Moment Structure) program. SEM is used to see the relationship between variables and measurement errors. Each variable is described in indicators and measured through a scale of 1-5 intervals.

The population in this study are customers or service users of cell phone providers. The determination of the samples is done by taking into account the data analysis tool, namely structural equation modeling (SEM) using the Amos 2.2. In determining the sample size for SEM, several assumptions must be met, one of which depends on the method of estimating the sample size used (Hair et al., 2010). By using the Maximum Likelihood (MLE) parameter method, the recommended sample

size is between 100-200. The number of samples is 304 respondents collected through the Google Form tool.

## 4. Results

### 4.1 Characteristics of Respondents

Table 1 presents the profile of the respondents. Most of them are male (50.7%) with ages between 18 and 30 years old (49.20%), have undergraduate education (52.69%), married (73.50%) and work as Civil Servants (61.10%).

	Demographic Characteristics	Frequency	Percentage
Gender	Male	169	55,6%
	Female	135	44,4%
	Total	304	100%
Age	<20 Tahun	47	15,5%
	20 – 30 Tahun	85	28,0%
	30 – 40 Tahun	140	46,1%
	31 – 35 Tahun	20	9,1%
	>40 Tahun	32	10,5%
	Total	304	100%
Employment Status	Student (Pelajar/Mahasiswa)	83	27,3%
	Government Employess (PNS)	91	29,9%
	Entrepreneur (wiraswasta)	39	12,8%
	Private Employess (Pegawai swasta)	76	25,0%
	TNI/Polri	15	4,9%
	Total	304	100%
Alasan Utama Penggunaan Merek	Lebih berkualitas	150	49,3%
	Lebih Murah	45	14,8%
	Mudah diperoleh	109	35,9%
	Total	304	100%

Table 1.  
Sampel demographic  
Characteristics

### 4.2 Reliability and Validity of the Measurement Model

Statistical model measurements are in Table 2. CFA through SEM procedures is performed to evaluate the reliability and validity of measurement instruments. All constructs are reliable because the values of Cronbach and construct reliability are higher than 0.70, as recommended (Hair et al. 2014). The validity of the instrument is measured using a Likert scale (scale 1-5). Discriminate Validity is confirmed by Average Variance Extracted (AVE), as recommended (Malhotra, 2010). The AVE value for each construct is greater than the value of the recommended shared variance that shows discriminant validity. AVE values above 0.50 indicate convergent validity. The measurement model also shows Fit statistically (see Table 3) with degrees of freedom ( $\chi^2 / df = 1.726$ ), Tucker-Lewis index (TLI = 0.965), comparative fit index (CFI = 0.969) and root mean square error of approximation (RMSEA = 0.049) and confirm the construct validity. Thus, it can be concluded that the model is statistically fit.

Contract and item	Factor loading	Composite Reliability	AVE	Shared Variance	Cronbach Alpha
<i>Perceived Value</i>					
Val1	0,782	0,929	0,686	0,570	0,940
Val2	0,844				
Val3	0,842				
Val5	0,863				
Val6	0,829				
Val9	0,807				
<i>Customer Satisfaction</i>					
Sat1	0,807	0,920	0,697	0,848	0,912
Sat2	0,844				
Sat3	0,883				
Sat4	0,823				
Sat5	0,816				
<i>Brand Trust</i>					
Trust1	0,706	0,872	0,584	0,377	0,873
Trust2	0,741				
Trust3	0,791				
Trust4	0,815				
Trust5	0,740				
<i>Brand Loyalty</i>					
Loy1	0,862	0,944	0,707	0,695	0,942
Loy2	0,855				

Table 2.  
Reliability and  
Convergent and  
Discriminant Validity  
Result Summary

Loy3	0,853
Loy4	0,851
Loy5	0,879
Loy7	0,814
Loy9	0,765

Selected Indices	Result	Acceptable Level of Fit	Source for Suggested Cut off
Normed $\chi^2/df$	1.726	$(\chi^2/df) \geq 3$ ; 5 Sometimes Permissible	Hair et al. (2014), Malhotra
TLI	0.965	TLI > 0.90	
CFI	0.969	CFI > 0.90	
RMSEA	0.049	RMSEA < 0.05 good; 0.05 to 0.10 Acceptable	

Table 3.  
Goodness of fit indices  
in the measurement  
model

### Structural Model Analysis

Structural models are used to assess the relationships between constructs and to validate the hypothesis of this study (H1-H4) that was formulated earlier. The theoretical model (see Figure 1) was tested with the Amos SEM tool with maximum likelihood estimates of the model parameters. These parameters include standardized regression weights ( $\beta$ ) and significance values (P-values) from different paths. The results of the analysis are presented in Table 5 and Figure 2. Table 5 and Figure 2 show the coefficient of standardized regression weights for the direct relationship between research constructs and confirm the hypothesis relationship. First, there is a positive and significant relationship between perceived value and customer satisfaction ( $\beta = 0.447$ ,  $t = 5.926$ ,  $p = 0.00$ ). These results are consistent with H1 and the hypothesis is accepted. Second, the test results determine that the perceived value has a positive and significant effect on brand trust ( $\beta = 0.247$ ,  $t = 4.604$ ,  $p = 0.000$ ). These results are consistent with H2 and the hypothesis is accepted. Third, customer satisfaction has a positive and significant effect on brand loyalty with a value ( $\beta = 0.211$ ,  $t = 3.638$ ,  $p = 0.000$ ), which accepts H3.

Fourth, brand trust has a positive and significant effect on brand loyalty ( $\beta = 0.344$ ,  $t = 0.3770$ ,  $p = 0.00$ ). This result is consistent with the H4 statement, and the hypothesis is accepted. As shown in Table 3, the structural model is also statistically fit, which is indicated by ( $\chi^2 / df = 1.726$ , TLI = 0.965, CFI = 0.969, and RMSEA = 0.049). So, it concludes that the research model supports the data as suggested by Hair et al. (2010).

Research constructs	Perceived_Value	Brand_Trust	Customer_Satisfaction	LP
Perceived_Value	1.000			
Brand_Trust	0.305	1.000		
Customer_Satisfaction	0.370	0.113	1.000	
Brand Loyalty	0.165	0.283	0.264	1.000

Hypotheses	Direct path estimates ( $\beta$ )	t-Statistics	Probability value (P)	Hypotheses result ( $p < 0.05$ )
H1 : Perceived Value $\rightarrow$ Customer Satisfaction	0.443	5,860	0.000	Supported
H2 : Perceived Value $\rightarrow$ Brand Trust	0.239	4,474	0.000	Supported
H3 : Customer Satisfaction $\rightarrow$ Brand Loyalty	0.144	2,480	0.013	Supported
H4 : Brand Trust $\rightarrow$ Brand Loyalty	0.271	3,031	0.002	Supported
H5 : Perceived Value $\rightarrow$ Brand Loyalty	0,270	3,918	0,000	Supported

Tabel 5  
Hypothesis testing and results for the structural model

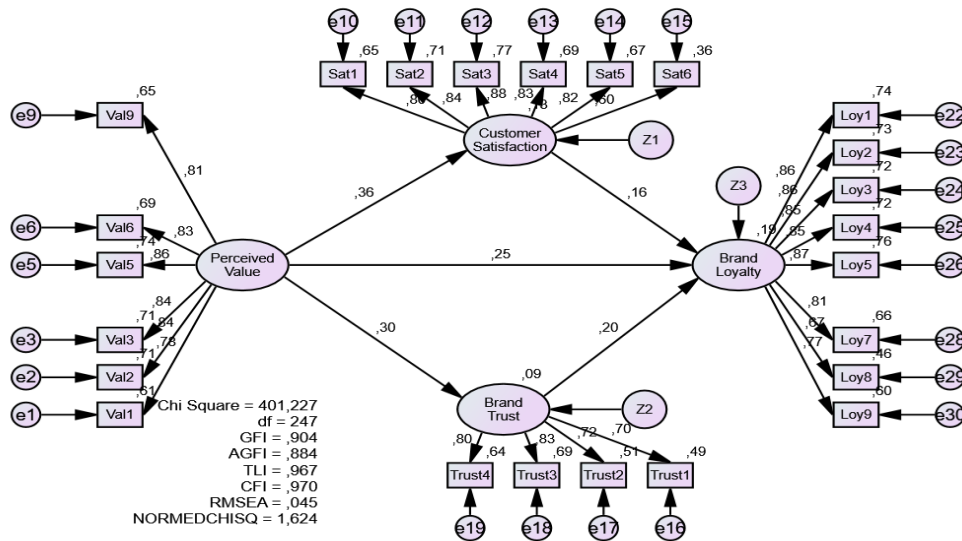


Fig 2. SEM model

Figure 2 shows the direct effect between latent variables to prove the hypothesis (H1, H2, H3, H4, and H5) in this study. The result shows that perceived value has a positive and significant effect on customer satisfaction, brand trust, and brand loyalty. Then, customer satisfaction and brand trust also affect positively and significantly on brand loyalty. Furthermore, based on Figure 3, mediation testing for H6 and H7 directly influences the shape of the mediation role. Figure 3 shows that customer satisfaction and brand trust act as mediating variables as (Baron & Kenny, 1986) assessment criteria. The results of the theoretical assessment by (Baron & Kenny, 1986) function to explain the role of mediation, then all paths a, b, and c must have a significantly lower value than alpha 0.05. For H6 and H &, the significance values of paths a, b and c are lower than 0.05 (significant), So, it means that customer satisfaction and brand trust mediate well the relationship between perceived value and brand loyalty.

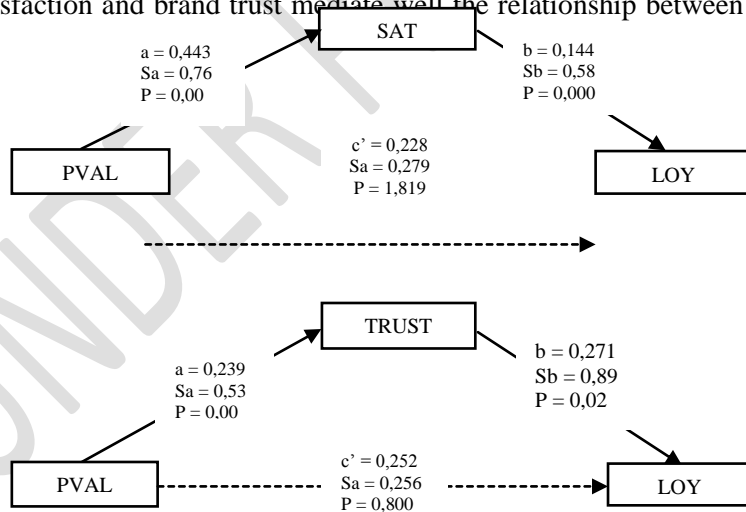


Fig 3: Hasil uji mediasi

### Discussions

The results show that telecommunications service customers in Aceh Province perceive that the perceived value of the services used can affect customer satisfaction positively and significantly with a coefficient value of 0.443. This study concludes that customers perceive well the products and services provided by telecommunications service providers, and can encourage increased customer satisfaction with products and service brands. Furthermore, the perceived value perceived by the customer is also able to increase brand trust in the service brand with a coefficient value of 0.239. These findings are in

line with research (Berraies, Ben Yahia, & Hannachi, 2017; Carnevale, Loureiro, & Kabadayi, 2018), which say that customer trust in telecommunications service brands is positively and significantly related to products value. Then, perceived value also affects brand loyalty with a coefficient of 0.270. This finding is in line with several previous empirical studies, such as (Chuah, Marimuthu, Kandampully, & Bilgihan, 2017; Limpasirisuwan & Donkwa, 2017), which say that perceived value significantly influences customer loyalty, and perceived value will usually increase customer commitment to loyalty on brands (Berraies et al., 2017).

Then, in examining the effect of customer satisfaction on brand loyalty, it finds that customer satisfaction can affect brand loyalty by 0.144. The results of this study reinforce the research (Chuah et al., 2017; Díaz, 2017; Nobre & Silva, 2014), which indicated that customer satisfaction is an important factor in strengthening customer loyalty to brands. This research also confirms that brand trust can encourage an increase in the loyal attitude of telecommunications service customers, and is in line with research (Berraies et al., 2017; Shi, Lin, Liu, & Hui, 2018), brand trust has a positive and significant effect on brand loyalty. Therefore H1, H2, H3, H4, and H5 are accepted and indicate that perceived value is a strong predictor for customer satisfaction and brand trust. Furthermore, customer satisfaction and brand trust are predictors of brand loyalty (Dauch, 2016). This shows that the better the perceived value of customers, the higher the satisfaction and trust of customers to the brand, and the more customer loyalty to the telecommunications service brand in Aceh Province.

Furthermore, in examining the role of mediation shows that customer satisfaction can properly mediate the relationship between value and loyalty. This finding confirms the study (Chuah et al., 2017; Hew et al., 2016), which says that customer satisfaction is a mediating variable that can confirm the effect of values in the telecommunications service brand user loyalty model. Several other studies also find that satisfaction is a mediating variable between values and loyalty, such as (Ashraf, Ilyas, Imtiaz, & Ahmad, 2018; Oh et al., 2016; Rahmani et al., 2017). Kemudian brand trust juga ditemukan berperan sebagai variabel mediasi antara nilai dan loyalitas, dimana hasil penelitian ini sesuai dengan kesimpulan (Chinomona, 2016; Limpasirisuwan & Donkwa, 2017) bahwa kepercayaan pelanggan dapat berpengaruh sebagai variabel penting dalam membangun loyalitas pelanggan pada merek jasa telekomunikasi.

## **Conclusions**

This study aims to determine the effect of perceived value, customer satisfaction, brand trust on brand loyalty in the telecommunications service industry in Aceh Province. The results of this study indicate that perceived value has a positive and significant relationship to customer satisfaction and trust and also to brand loyalty. Furthermore, the results of the study reveal that customer satisfaction and brand trust have a relationship to the formation of customer loyalty attitudes in the brand of telecommunications service providers. Then, in examining the indirect relationship, it shows that customer satisfaction and brand trust can mediate well the relationship between perceived value and brand loyalty. Finally, this research is expected to influence the development of the marketing strategy of the telecommunications industry on an ongoing basis through the process of increasing customer loyalty to the brand. The application of this guideline must enable the telecommunications industry as one of the business actors that can drive the economic growth of Indonesia by increasing the use of telecommunications services (especially cellular telephones) as an alternative media to support the marketing of other products. This effort will enable the telecommunications industry to improve business competitiveness through the involvement of information technology-based marketing media.

## **Theoretical implications**

This research proposes theoretical and practical benefits. From a theoretical perspective, the results of the study confirm that the measurement scale used to measure indicators of perceived value, customer satisfaction, brand trust, and brand loyalty are reliable and valid statistically. This research model is developed from theory and has been verified so that the research model can confirm the relationship between perceived value constructs with customer satisfaction and brand trust and customer satisfaction and brand trust toward brand loyalty of the telecommunications industry in Aceh Province. It concludes that this study provides an important contribution to the relationship marketing theory by exploring the relationship of variables in strengthening customer loyalty to the brand of telecommunications service providers in Aceh Province.

From a practical perspective, the results of this study make an important contribution in helping service providers and their customers to understand how perceived value affects customer satisfaction, which in turn will lead to increased customer loyalty of corporate brands and telecommunications products in Aceh Province in the long run. This study suggests that there is a positive relationship between perceived value, customer satisfaction, brand trust, and brand loyalty, as strengthened by empirical research (Gandhi, Sachdeva, & Gupta, 2019; Russell-Bennett, McColl-Kennedy, & Coote, 2007).

### **Managerial implications**

First, telecommunications service providers must pay attention to various important factors such as value, customer satisfaction, and trust in their brands to increase customer loyalty to companies and brands. Increasing the value of products and services will have an impact on high customer satisfaction so that it can foster the brand trust of customers. In the long run, all these factors will greatly benefit telecommunications service providers because the company can improve and maintain loyalty. To achieve this, service providers need to improve product performance and the ability of service delivery employees. Such efforts tend to lead to beneficial results in the long run, such as competitive advantage, increased market share, and increased customer relations. This finding can help service providers in developing their marketing strategies through the delivery of customer value, high satisfaction, and customer trust, which will ultimately affect the high customer loyalty to the company and brand.

Second, service provider companies need to improve their marketing strategies by focusing on increasing customer involvement in brands through customer relationships, product reviews, quality assurance, and trust as a strategy to increase customer repurchase intentions. Therefore, this strategy is expected to be able to equip service providers about determinants that stimulate customer loyalty with ongoing purchase decisions.

### **Limitations and future research**

This study aims to understand the process of forming brand loyalty and its antecedent variables on the telecommunications industry in Aceh Province. As a result, this study has limitations in the context of geography and the involvement of participants in research, and the use of research variables. Therefore, further research must be carried out in a wider geographic area and involve more participants and other research variables such as customer service quality and price as important factors in service marketing activities, especially telecommunications service businesses with high levels of competition.

### **References**

- Afifah, N., & Asnan, A. (2015). The Impact of Corporate Social Responsibility, Service Experience and Intercultural Competence on Customer Company Identification, Customer Satisfaction and Customer Loyalty (Case Study: PDAM Tirta Khatulistiwa Pontianak West Kalimantan). *Procedia - Social and Behavioral Sciences*, 211(September), 277–284. <https://doi.org/10.1016/j.sbspro.2015.11.035>
- Ahmad, A., Ahmad, N., & Nadeem, M. (2014). the Study of Brand Credibility and Brand Awareness As Positive Predictors for Brand Loyalty. *Arabian Journal of Business and Management Review (Nigerian Chapter)*, 2(1), 22–28.
- Ahmed, Z., Rizwan, M., Ahmad, M., & Haq, M. (2014). Effect of brand trust and customer satisfaction on brand loyalty in Bahawalpur. *Journal of Sociological Research*, 5(1), 306–326. <https://doi.org/10.5296/>
- Akbar, S., Mat Som, A. P., Wadood, F., & Jamil Alzaidiyeen, N. (2010). Revitalization of Service Quality to Gain Customer Satisfaction and Loyalty. *International Journal of Business and Management*, 5(6), 113. <https://doi.org/10.5539/ijbm.v5n6p113>
- Ameer, I. (2014). Satisfaction- A behavioral perspective on consumer : Review , criticism and contribution. *International Journal of Research Studies in Management*, 3(1), 75–82.

<https://doi.org/10.5861/ijrsm.2013.406>

Andres Kuusik, & Varblane, U. (2009). How to avoid customers leaving : the case of the Estonian telecommunication industry. *Baltic Journal of Management*, 4(1), 66–79.  
<https://doi.org/10.1108/17465260910930458>

Ashraf, S., Ilyas, R., Imtiaz, M., & Ahmad, S. (2018). Impact of Service Quality , Corporate Image and Perceived Value on Brand Loyalty with Presence and Absence of Customer Satisfaction : A Study of four Service Sectors of Pakistan Impact of Service Quality , Corporate Image and Perceived Value on Brand Loya. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 452–474. <https://doi.org/10.6007/IJARBS/v8-i2/3885>

Baron, R. M., & Kenny, D. a. (1986). The Moderator-Mediator Variable Distinction in Social The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.  
<https://doi.org/10.1037/0022-3514.51.6.1173>

Barusman, A. R. P., & Riorini, S. V. (2016). Zone-of-tolerance moderates satisfaction, customer trust and inertia - Customer loyalty. *International Journal of Applied Business and Economic Research*, 14(6), 4847–4865.

Bayraktar, E., Tatoglu, E., Turkyilmaz, A., Delen, D., & Zaim, S. (2012). Measuring the efficiency of customer satisfaction and loyalty for mobile phone brands with DEA. *Expert Systems with Applications*, 39(1), 99–106. <https://doi.org/10.1016/j.eswa.2011.06.041>

Bennur, S., & Jin, B. (2017). The mediating role of brand trust and affect in clothing brand loyalty formation: a cross-cultural examination of U.S. and India. *Journal of the Textile Institute*, 108(1), 1–9. <https://doi.org/10.1080/00405000.2015.1133105>

Berraies, S., Ben Yahia, K., & Hannachi, M. (2017). Identifying the effects of perceived values of mobile banking applications on customers. *International Journal of Bank Marketing*, 35(6), 1018–1038. <https://doi.org/10.1108/ijbm-09-2016-0137>

Bilgihan, A. (2016). Gen y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, 61, 103–113.  
<https://doi.org/10.1016/j.chb.2016.03.014>

Carnevale, M., Loureiro, Y. K., & Kabadayi, S. (2018). Customer Value Creation for Risky Products: The Role of Brand Trust and Trusting Beliefs. *Journal of Creating Value*, 4(1), 1–21.  
<https://doi.org/10.1177/2394964317752731>

Chang, C. (2015). Exploring mobile application customer loyalty : The moderating effect of use contexts. *Telecommunications Policy*, 39(8), 678–690. <https://doi.org/10.1016/j.telpol.2015.07.008>

Chang, C. C. (2015). Exploring mobile application customer loyalty: The moderating effect of use contexts. *Telecommunications Policy*, 39(8), 678–690. <https://doi.org/10.1016/j.telpol.2015.07.008>

Chang, K.-C. (2014). The Impact of Website Quality and Perceived Trust on Customer Purchase Intention in the Hotel Sector: Website Brand and Perceived Value as Moderators. *International Journal of Innovation, Management and Technology*, 5(4).  
<https://doi.org/10.7763/IJIMT.2014.V5.523>

Chinomona, R. (2016). Brand Communication, Brand Image and Brand Trust as antecedents of Brand Loyalty in Gauteng Province of South Africa. *African Journal of Economic and Management Studies*, 7(1).

Chiou, J. S., Wu, L. Y., & Chuang, M. C. (2010). Antecedents of retailer loyalty: Simultaneously investigating channel push and consumer pull effects. *Journal of Business Research*, 63(4), 431–438. <https://doi.org/10.1016/j.jbusres.2009.04.001>

- Chua, B. L., Lee, S., Goh, B., & Han, H. (2015). Impacts of cruise service quality and price on vacationers' cruise experience: Moderating role of price sensitivity. *International Journal of Hospitality Management*, 44, 131–145. <https://doi.org/10.1016/j.ijhm.2014.10.012>
- Chuah, S. H. W., Marimuthu, M., Kandampully, J., & Bilgihan, A. (2017). What drives Gen Y loyalty? Understanding the mediated moderating roles of switching costs and alternative attractiveness in the value-satisfaction-loyalty chain. *Journal of Retailing and Consumer Services*, 36(July 2016), 124–136. <https://doi.org/10.1016/j.jretconser.2017.01.010>
- Danish, R. Q., Himayon, A. A., Iqbal, H. J., Raza, S., & Shahid, J. (2018). The Impact of Service Quality, Customer Satisfaction and Loyalty Programs on Customer's Loyalty: An Evidence from Telecommunication Sector. *European Online Journal of Natural and Social Sciences*, 7(1), 40–47.
- Dauch, K. A. O. (2016). The Influencing Factors toward Brand Loyalty of Smartphone in Phnom Penh , Cambodia. *YIEJOURNAL*, 2(1), 1–15.
- Davis, J. H. (2017). An Integrative Model of Organizational Trust Author ( s ): Roger C . Mayer , James H . Davis and F . David Schoorman Source : The Academy of Management Review , Vol . 20 , No . 3 ( Jul . , 1995 ) , pp . 709-734 Published by : Academy of Management Stable UR. *The Academy of Management Review*, 20(3), 709–734.
- Dehghan, A., Alizadeh, H., & Mirzaei-Alamouti, S. (2015). Exploring the customer perceived values as antecedent of purchase behavior. *Serbian Journal of Management*, 10(2), 173–188. <https://doi.org/10.5937/sjm10-7844>
- Deng, Z., Lu, Y., Wei, K. K., & Zhang, J. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. *International Journal of Information Management*, 30(4), 289–300. <https://doi.org/10.1016/j.ijinfomgt.2009.10.001>
- Díaz, G. R. (2017). The influence of satisfaction on customer retention in mobile phone market. *Journal of Retailing and Consumer Services*, 36(January), 75–85. <https://doi.org/10.1016/j.jretconser.2017.01.003>
- Drennan, J., Bianchi, C., Cacho-Elizondo, S., Louriero, S., Guibert, N., & Proud, W. (2015). Examining the role of wine brand love on brand loyalty: A multi-country comparison. *International Journal of Hospitality Management*, 49, 47–55. <https://doi.org/10.1016/j.ijhm.2015.04.012>
- Floh, A., Zauner, A., Kohler, M., & Rusch, T. (2014). Customer segmentation using unobserved heterogeneity in the perceived- value - loyalty-intentions link. *Journal of Business Research*, 67(5), 974–982. <https://doi.org/10.1007/s10551-011-0925-7>
- Gandhi, S. K., Sachdeva, A., & Gupta, A. (2019). Impact of service quality on satisfaction and loyalty at manufacturer-distributor dyad. *Journal of Advances in Management Research*, 16(1), 91–122. <https://doi.org/10.1108/JAMR-12-2017-0120>
- Harari, O. (1997). Thank Heavens for Complainers. *Management Review*, 25, 25.
- Hasan, H., Kiong, T. P., & Ainuddin, R. A. (2014). Effects of Perceived Value and Trust on Customer Loyalty towards Foreign Banks in Sabah, Malaysia [www.globalbizresearch.org](http://www.globalbizresearch.org). *Global Journal of Emerging Trends in E-Business, Marketing and Consumer Psychology (GJETeMCP) An Online International Research Journal* GJETeMCP) An Online International Research Journal, 1(2), 2311–3170. <https://doi.org/2311-3170>
- Hew, J. J., Lee, V. H., Ooi, K. B., & Lin, B. (2016). Mobile social commerce: The booster for brand loyalty? *Computers in Human Behavior*, 59, 142–154. <https://doi.org/10.1016/j.chb.2016.01.027>
- Hossaina, M. A., Kimb, M.-H., Jahanc, N., & Mind, B.-Y. (2018). Origins of Brand Image, Customer Satisfaction, and Loyalty toward Telecommunication Service: An Emerging Market Perspective. *Asia-Pacific Journal of Business*, 9(2), 39–57.

- Hou, C., & Wonglorsaichon, P. (2016). the Relationship Among Brand Awareness, Brand Image, Perceived Quality, Brand Trust, Brand Loyalty and Brand Equity of Customer in China'S Antivirus Software Industry. *UTCC International Journal of Business & Economics*, 8(1), 153–170. Retrieved from <http://esc-web.lib.cbs.dk/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=116484624&site=ehost-live&scope=site>
- Hussein, A. (2012). Customer' s satisfaction and brand awareness. *Haaga-Helia University of Applied Sciences*, 2(1), 49–55.
- Ishaq, M. I., Bhutta, M. H., Hamayun, A. A., Danish, R. Q., & Hussain, N. M. (2014). Role of Corporate Image , Product Quality and Customer Value in Customer Loyalty : Intervening Effect of Customer Satisfaction. *Journal of Basic and Applied Scientific Research*, 4(4), 89–97. Retrieved from file:///C:/Users/Steven Chin/Downloads/J. Basic. Appl. Sci. Res., 4(4)89-97, 2014.pdf
- Karjaluoto, H., Jayawardhena, C., Leppäniemi, M., & Pihlström, M. (2012). How value and trust influence loyalty in wireless telecommunications industry. *Telecommunications Policy*, 36(8), 636–649. <https://doi.org/10.1016/j.telpol.2012.04.012>
- Kotler, P., & Armstrong, G. (2010). Principles of Marketing. *World Wide Web Internet And Web Information Systems*, 785. <https://doi.org/10.2307/1250103>
- Kungumapriya, A., & Malarmathi, K. (2018). The Role of Service Quality, Perceived Value and Trust on Calculative Commitment and Loyalty Intention. *Chinese Business Review*, 17(6), 287–301. <https://doi.org/10.17265/1537-1506/2018.06.003>
- Lai, I. K. W. (2015). The Roles of Value, Satisfaction, and Commitment in the Effect of Service Quality on Customer Loyalty in Hong Kong–Style Tea Restaurants. *Cornell Hospitality Quarterly*, 56(1), 118–138. <https://doi.org/10.1177/1938965514556149>
- Lam, A. Y. C., Lau, M. M., & Cheung, R. (2016). Modelling the Relationship among Green Perceived Value, Green Trust, Satisfaction, and Repurchase Intention of Green Products. *Contemporary Management Research*. <https://doi.org/10.7903/cmr.13842>
- Lam, S. Y., & Shankar, V. (2014). Asymmetries in the effects of drivers of brand loyalty between early and late adopters and across technology generations. *Journal of Interactive Marketing*, 28(1), 26–42. <https://doi.org/10.1016/j.intmar.2013.06.004>
- Lee, D., Moon, J., Kim, Y. J., & Yi, M. Y. (2015). Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty. *Information and Management*, 52(3), 295–304. <https://doi.org/10.1016/j.im.2014.12.001>
- Liao, Y. (2015). The role of trust on brand loyalty and brand equity. In *Joint International Conference* (pp. 603–612).
- Lim, H., Widdows, R., & Park, J. (2006). M- loyalty: winning strategies for mobile carriers. *Journal of Consumer Marketing*, 23(4), 208–218. <https://doi.org/10.1108/07363760610674338>
- Limpasirisuwan, N., & Donkwa, K. (2017). A Structural Equation Model for Enhancing Online Brand Community Loyalty. *International Journal of Behavioral Science*, 12(1), 95–110.
- Marakanon, L., & Panjakajornsak, V. (2017). Kasetsart Journal of Social Sciences Perceived quality , perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products. *Kasetsart Journal of Social Sciences*, 38(1), 24–30. <https://doi.org/10.1016/j.kjss.2016.08.012>
- Melewar, T. C., Kitchen, P. J., Foroudi, P., Gupta, S., & Foroud, M. M. (2017). Integrating identity , strategy and communications for trust , loyalty and commitment. *European Journal of Marketing*, 51(3), 572–604. <https://doi.org/10.1108/EJM-08-2015-0616>

- Mittal, B. (2016). Retrospective: why do customers switch? The dynamics of satisfaction versus loyalty. *Journal of Services Marketing*, 30(6), 569–575. <https://doi.org/10.1108/JSM-07-2016-0277>
- Morgan, S., Govender, K., & Govender, K. (2017). Exploring customer loyalty in the South African mobile telecommunications sector. *Cogent Business & Management*, 7(1). <https://doi.org/10.1080/23311975.2016.1273816>
- Moriuchi, E., & Takahashi, I. (2016). Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade. *Australasian Marketing Journal*, 24(2), 146–156. <https://doi.org/10.1016/j.ausmj.2016.02.006>
- Nikhashemi, S. R., Tarofder, A. K., Gaur, S. S., & Haque, A. (2016). The Effect of Customers' Perceived Value of Retail Store on Relationship between Store Attribute and Customer Brand Loyalty: Some Insights from Malaysia. *Procedia Economics and Finance*, 37, 432–438. [https://doi.org/10.1016/S2212-5671\(16\)30148-4](https://doi.org/10.1016/S2212-5671(16)30148-4)
- Nobre, H., & Silva, D. (2014). Social Network Marketing Strategy and SME Strategy Benefits. *Journal OfTransnational Management*, 19(October 2014), 138–151. <https://doi.org/10.1080/15475778.2014.904658>
- Nurysh, N., Naghavi, N., Chan, B., & Fah, Y. (2019). Study on Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Malaysia. *International Journal of Recent Technology and Engineering (IJRTE)*, 7(5), 299–306.
- Oh, J., Chung, K., & Park, G. (2016). The Relationship among Perceived Value, User Satisfaction, Brand Trust, and Loyalty in Mobile Phone Context. *International Journal Science and Technology*, 9(7), 139–146. <https://doi.org/10.14257/ijunesst.2016.9.7.14>
- Oliver, R. (1999). Whence Consumer Loyalty? *The Journal of Marketing*, 63(Journal Article), 33–44. <https://doi.org/10.2307/1252099>
- Park, H., & Kim, Y. K. (2016). Proactive versus reactive apparel brands in sustainability: Influences on brand loyalty. *Journal of Retailing and Consumer Services*, 29, 114–122. <https://doi.org/10.1016/j.jretconser.2015.11.013>
- Prameka, A. S., Do, B., & Rofiq, A. (2016). How Brand Trust is Influenced by Perceived Value and Service Quality : Mediated by Hotel Customer Satisfaction, 2, 73–88. <https://doi.org/10.21776/ub.apmba.2016.005.02.2>
- Rahmani, Z., Ranjbar, M., Gara, A. A. N., & Gorji, M. A. H. (2017). The study of the relationship between value creation and customer loyalty with the role of trust moderation and customer satisfaction in sari hospitals. *Electronic Physician*, 9(6), 4474–4478. <https://doi.org/10.14661/2015.971-976>
- Rasheed, F. A., & Abadi, M. F. (2014). Impact of Service Quality, Trust and Perceived Value on Customer Loyalty in Malaysia Services Industries. *Procedia - Social and Behavioral Sciences*, 164(August), 298–304. <https://doi.org/10.1016/j.sbspro.2014.11.080>
- Russell-Bennett, R., Härtel, C. E. J., & Worthington, S. (2013). Exploring a functional approach to attitudinal brand loyalty. *Australasian Marketing Journal*, 21(1), 43–51. <https://doi.org/10.1016/j.ausmj.2012.08.001>
- Russell-Bennett, R., McColl-Kennedy, J. R., & Coote, L. V. (2007). Involvement, satisfaction, and brand loyalty in a small business services setting. *Journal of Business Research*, 60(12), 1253–1260. <https://doi.org/10.1016/j.jbusres.2007.05.001>
- Saeed, R., Lodhi, R. N., Mehmood, A., Ishfaq, U., Dustgeer, F., Sami, A., ... Ahmad, M. (2013). Effect of brand image on brand loyalty and role of customer satisfaction in it. *World Applied Sciences Journal*, 26(10), 1364–1370. <https://doi.org/10.5829/idosi.wasj.2013.26.10.1343>

- Seiler, V., Rudolf, M., & Krume, T. (2013). The influence of socio- demographic variables on customer satisfaction and loyalty in the private banking industry. *International Journal of Bank Marketing*, 31(4), 235–258. <https://doi.org/10.1108/IJBM-10-2012-0101>
- Shi, X., Lin, Z., Liu, J., & Hui, Y. K. (2018). Consumer loyalty toward smartphone brands: The determining roles of deliberate inertia and cognitive lock-in. *Information and Management*, 55(7), 866–876. <https://doi.org/10.1016/j.im.2018.03.013>
- Veloutsou, C. (2015). Brand evaluation, satisfaction and trust as predictors of brand loyalty: the mediator-moderator effect of brand relationships. *Journal of Consumer Marketing*, 32(6), 405–421. <https://doi.org/10.1108/JCM-02-2014-0878>
- Wongsuchat, P., & Ngamyang, A. (2014). A study of relation among perceived consumption value and customer satisfaction of boutique hotel in Thailand. *International Journal of Scientific and Research Publications*, 4(7), 2250–3153. Retrieved from [www.ijsrp.org](http://www.ijsrp.org)
- Yeboah-Asiamah, E., Nimako, S. G., Quaye, D. M., & Buame, S. (2016). Implicit and explicit loyalty: the role of satisfaction, trust and brand image in mobile telecommunication industry. *Int. J. Business and Emerging Markets J. Business and Emerging Markets*, 8(1), 94–115. <https://doi.org/10.1504/IJBEM.2016.073402>
- Yeh, C. H., Wang, Y. S., & Yieh, K. (2016a). Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives. *International Journal of Information Management*, 36(3), 245–257. <https://doi.org/10.1016/j.ijinfomgt.2015.11.013>
- Yeh, C. H., Wang, Y. S., & Yieh, K. (2016b). Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives. *International Journal of Information Management*, 36(3), 245–257. <https://doi.org/10.1016/j.ijinfomgt.2015.11.013>
- Zur, A., Leckie, C., & Webster, C. M. (2012). Cognitive and affective trust between Australian exporters and their overseas buyers. *Australasian Marketing Journal*, 20(1), 73–79. <https://doi.org/10.1016/j.ausmj.2011.08.001>