Journal of International Economics and Management

journal homepage: http://jiem.ftu.edu.vn

The impacts of consumer value and brand identification on brand loyalty and electronic word of mouth: the case of smartphone market in Ho Chi Minh City

Tran The Nam[1]

University of Finance - Marketing, Ho Chi Minh City, Vietnam

Tieu Van Trang

University of Finance - Marketing, Ho Chi Minh City, Vietnam

Received: 27 April 2020; **Revised:** 06 July 2020; **Accepted:** 25 July 2020

https://doi.org/10.38203/jiem.020.2.0011

Abstract

Finding out the antecedents of brand loyalty is an interesting topic. The paper's target is answering the question "Do consumer value and consumer-brand identification lead to consumer's loyalty with the brand and positive electronic word of mouth in the context of smartphone market in Ho Chi Minh City?". The authors used the PLS-SEM (Partial least squares structural equation modeling) to verify the relationship between independent variables and dependent variables using data collected from 320 smartphone users. The study shows that proposed antecedents have influences on dependent constructs. Such discoveries have both theoretical and practical implications. In theory, they support the theory of consumer value and the approach of brand identification. In practice, smartphone producers should provide gadgets with excellent performance and unique identity to keep consumers' loyalty. As a result, companies will have active ambassadors for their brand.

Keywords: Consumer value, Brand identification, Brand loyalty, Electronic word of mouth, Smart PLS

1. Introduction

The competition in the smartphone markets is becoming stronger and stronger not only in Vietnam but also around the world (Mishra, 2018). How to keep customers' loyalty to buy again or to recommend others buying their products is an important question for every smartphone producer. Consumer's loyalty brings numerous advantages for organizations such as better market shares or profits. Loyal customers often have positive word-of-mouth, easily

[1] Corresponding author: tranthenam@ufm.edu.vn

accept the premium price or resist offers from other companies (Chaudhuri and Holbrook, 2001; Shankar *et al.*, 2003; Thu and Nhung, 2019). According to the consumer value theory, people will be loyal to a brand when they perceive products' value (Kim *et al.*, 2011; Sweeney and Soutar, 2001). According to Hansen *et al.* (2013), the outstanding value of a product or service recognized by customers will lead to their loyalty with a brand. Obviously, when people buy a product, they will consider the value they might receive. For smartphones, especially flagship ones, they could be categorized as luxurious goods, therefore, customers will compare carefully the values they receive and the cost they pay. Furthermore, the identification approach pointed out that brand loyalty was also influenced significantly by consumer-brand identification (Bhattacharya and Sen, 2003). People connect themselves and the brand when they find the similarity between them and the product/service's features (Stokburger-Sauer *et al.*, 2012). A smartphone might provide some ideas for other people about the owner. For example, a person who owns a Samsung Galaxy Note can be seen as an innovative person to others.

Thanks to the theory of consumer value and the approach of brand identification, the research analyzes the impacts of brand identification and consumer value on brand loyalty. Moreover, the authors examine the influences of brand loyalty with one of its vital consequences: electronic word-of-mouth. Electronic word of mouth (eWOM) is an unofficial way of communication that affects customers' buying decisions via the Internet (Cheung and Thadani, 2012). For the smartphone market, eWOM is very popular. Customers often use smartphones to access the Internet and social network, therefore, they can share their feelings and experiences about the smartphone they use.

The contributions of this paper are twofold. Firstly, it analyzes the simultaneous impacts of brand identification and consumer value on brand loyalty while previous researches studied independently the impacts of two essential antecedents on consumer's loyalty with a brand. Secondly, several researchers recognized the "consumer value" as a second order. Nevertheless, they just analyzed the direct relationship of the first order constructs that belong "Consumer value" with other constructs. Using the second order construct with the independent variable "Consumer value" helps to reduce the complication of the research model.

2. Background

2.1 The conceptualization of key variables

2.1.1 Brand loyalty

"Brand loyalty refers to the deeply bonded relationship between a brand and its consumers, and consumers' intention to continue to use or repurchase the preferred brand products in the future, despite the marketing efforts of competitive brands to lure consumers for brand switching" (Oliver, 1999). According to Oliver (1999), a consumer's loyalty has a four-stage framework: cognitive, affective, conative, and action loyalty. This element will bring some advantages for producers. Customers tend to repurchase and that leads to revenues for companies.

2.1.2 Electronic word of mouth (eWOM)

The development of information technology led to eWOM (Cheung and Lee, 2012). Hennig-Thurau *et al.* (2004) define eWOM as "any positive or negative statement made by potential, actual or former customers about a product or company that is made available to a multitude of people and institutions via the Internet". There are numerous online tools where people share their opinions (Luo and Zhong, 2015). Facebook or Instagram are perfect examples. eWOM has specific characteristics in comparison with traditional WOM because of the expansion of information technology. One of these characteristics is the multi-way exchange of information. Positive eWOM communication is proved as a prominent promotional tool (Chu and Kim, 2011). It is essential to understand that buyers believe information shared by others rather than the information provided by the marketers (Kim *et al*., 2015).

2.2 Theoretical framework

2.2.1 Consumer value theory

The value that customers perceived from a brand is an important key of a successful transaction, and customers' repurchase is influenced by what they perceived (Holbrook, 1994). People continue to buy the same product instead of finding a new one if they experience a product positively (Anderson and Srinivasan, 2003). Initially, researchers agreed that the product's values are equivalent to functional values. It means that consumers highly appreciate useful functions of a product and they will be loyal when producers can provide products with as much as functions possible. Later, other values of a product are recognized such as emotional, social, conditional and epistemic value (Sheth *et al.*, 1991). Despite the different classification of value types (Karjaluoto *et al.*, 2012; Pihlström and Brush, 2008), the functional, emotional, and social values are the most popular part of customer value.

2.2.2 Brand identification approach

Brand identification is defined as "consumers share the same self-definitional attributes with a brand" (Lam *et al.*, 2010). According to this statement, a brand has a specific identity/ personality (Stokburger-Sauer *et al.*, 2012). Prior studies provided two techniques that support consumer-brand identification. The first one is the requirement of solidity. When people perceived the similarity between them and a brand, they will have a closer relationship with the brand (Lam *et al.*, 2010). The demand of self-esteem is the second technique. Buyers think appropriate products might improve their self-image (He *et al.*, 2012). Consumers feel more confident when they buy and use ideal products (Kressmann *et al*., 2006).

2.3 Hypotheses

A smartphone is a high technology product. It can provide all three kinds of value (functional, emotional, and social value) to users. Nowadays, a smartphone can replace several gadgets. For example, people can use functions of watch, compass, and calculator on smartphones, thanks to the powerful processor (Liao and Hsieh, 2013; Park and Han, 2013). Obviously, with numerous components, a smartphone provides good functional benefits to users.

Moreover, users also perceive the value of emotion like joyfulness or recreation when they use smartphones daily (Alba and Williams, 2013; Arruda Filho *et al.*, 2010). Furthermore, smartphones' beautiful appearance also brings emotional value to users (Liao and Hsieh, 2013). Finally, smartphones bring social value to owners. In Vietnam, the first reason people buy iPhones is that this product is very expensive and it is appropriate for their society (ShopDunk, 2020). It is clear that the higher value people perceive, the greater brand loyalty buyers have with that brand (Pihlström and Brush, 2008). Hence, the impact of consumer value on consumer's loyalty to a brand is hypothesized as follows:

H1: Consumer value positively relates to brand loyalty.

A smartphone is a good gadget for self-identity expression (Walsh *et al.*, 2010). Smartphone brands have specific characteristics that support the owners' identity (Lam *et al.* (2010). For example, people who have high incomes often buy iPhone products while people who are innovative prefer a Samsung Note product. Therefore, the authors suppose that brand identification leads to consumers' loyalty with a brand. The second hypothesis is as follows:

H2: Brand identification influences positively on brand loyalty.

It is essential to understand that people will have positive emotion with the brand which they become loyal to (Dick and Basu, 1994). The brand is more approachable in loyal customers' minds. Loyal customers might have associations with a brand, which come from wonderful direct involvement (Baumgartner *et al.*, 1992; Thanh *et al.*, 2020). Therefore, when loyal consumers contact others, they easily share positive feelings and experiences with the brand. Moreover, in the era of the Internet and social networking, people can share their thinking extensively. As a result, the hypothesis about the connection between brand loyalty and eWOM is as follows:

H3: Brand loyalty positively relates to eWOM.

3. Methodology

The authors used a quantitative methodology to evaluate the proposed relationships between the variables. The authors also inherit items from previous researchers. Firstly, the research of Kim *et al.* (2011) offered items of consumer value. Three indicators of Brand identification were adopted from Stokburger-Sauer *et al.* (2012). Four items of Brand loyalty were adopted from Anderson and Srinivasan (2003) and Zeithaml *et al.* (1996). Finally, the research of Hsieh and Tseng (2017) provided three items for Electronic word of mouth. Furthermore, the authors used a five-point Likert-type scale with a minimum of 1 (strongly disagree) and a maximum of 5 (strongly agree) to evaluate indicators. A questionnaire was established to gather customers' primary data in Ho Chi Minh City. This city market brings the most turnover for not only smartphone sellers but also of other sellers. Therefore, a survey in the most crowded metropolitan of Vietnam is more necessary for businesspeople.

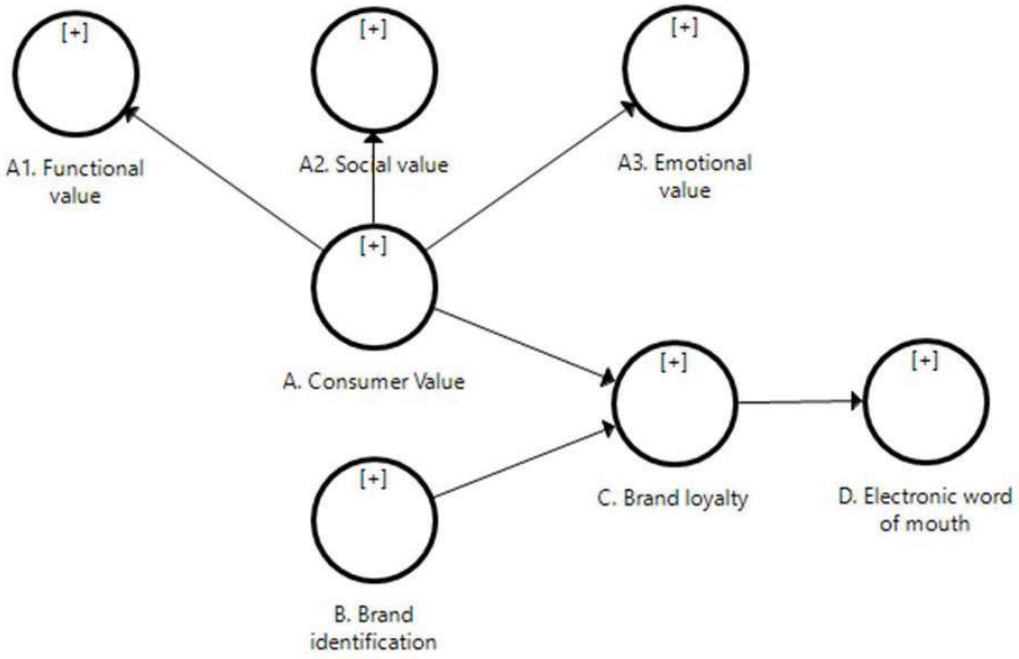

Figure 1. The proposed research model

The survey has two stages. Firstly, the authors run a pilot with 56 respondents who are close friends and using smartphones. Checking the reliability and validity of indicators is the main target of this pilot. The authors also contacted respondents to check the meaning of the questionnaires and to revise the questionnaires (if necessary). Next, the authors did an official survey. The authors collected 320 questionnaires for analysis.

The authors applied a convenient sampling method. The authors decided to make a survey on the Internet. The link to the survey was sent to the community of people who use smartphones. With the software SmartPLS, the number of 200 respondents is satisfiable for analysis, (Hair *et al.*, 2017), however, based on experience, the authors decided to collect more than 300 samples.

The Partial least squares structural equation modeling (PLS-SEM) was used with SmartPLS version 3.2.8. PLS-SEM has more advantages when compared to CB-SEM. It is: (1) Suitable when the size of sample is small; (2) Suitable when the normality of the distribution of the variables is not perfect; (3) Appropriate when conceptual framework is complex (Hair *et al.*, 2017). PLS-SEM includes evaluating the measurement and the structural model.

4. Results

4.1 Respondents' profiles

The majority of the respondents were less than 35-year-old (80%), and had bachelor's degrees and above (84%). A quarter of reviewees earned less than 300 USD/month, and less than 700 USD/month was the popular salary of respondents as shown in the Table 1.

Table 1. Respondents' profiles

Demographic profile of respondents			
Criteria		**Frequency** *(people)*	**Percent** *(%)*
Gender	Female	174	54
	Male	146	46
	Total	**320**	**100**
Age band	Under 25	115	36
	From 25 to 34	140	44
	From 35 to 44	40	13
	From 45 to 54	13	4
	Over 55	12	4
	Total	**320**	**100**
Education	High school	49	15
	College/University	207	65
	Postgraduate	62	19
	Others	2	1
	Total	**320**	**100**
Occupation	Officer	62	19
	Technical personnel	40	13
	Sales	85	27
	Manager	47	15
	Public servant	40	13
	Others	46	14
	Total	**320**	**100**
Income band	Less than 300 USD/month	78	24
	From 300 to 700 USD/month	146	46
	From 700 to 1200 USD/month	69	22
	Over 1200 USD/month	27	8
	Total	**320**	**100**

Source: From the survey

Table 2. Statistics of smartphones' using

Brand name	No	%
iPhone	165	47
Samsung	90	26
Sony	15	4
Nokia	13	4
LG	8	2
Oppo	30	9
Xiaomi	18	5
Other	9	3
Total	**348**	**100**

Source: From the survey

From Table 2, it is essential to note that Apple product (iPhone) is the first choice of Vietnamese consumers, followed by Samsung, a Korean brand name. These two brand names accounted for 73% of the statistic. No other smartphone brand name accounted for more than 10%. This fact supports the opinion that the Vietnamese smartphone market is very attractive, however, it is dominated by a few giants (Zingnews, 2014).

4.2 Results and discussion

Customer value is the second order construct that has three first order constructs (Functional value, Social value, Emotional value) (Kim *et al.*, 2011). Thanks to the software SmartPLS, the authors can treat this construct as a second order construct. It helps the model of research to reach parsimony.

It is necessary to analyze the relationship between the second order construct and its first order constructs before assessing the influences of independent variables on dependent variables.

4.2.1 Assessment of the relationship between the second order construct and its first order constructs

The authors verify the indicator reliability, the internal consistency, the convergent validity, and the discriminant validity.

Outer loading, CR, and AVE information of indicators are presented in Table 3. The authors used the outer loading value to evaluate the items' reliability. According to Bagozzi *et al.* (1991), we should remove items that have the outer loading value which are below 0.4 and keep others which are higher than 0.7 from the constructs. Furthermore, when items have other outer loadings value, we just remove them if this decision improves the composite reliability or the average variance is extracted. From the information in Table

3, the authors kept only 13 indicators and removed 9 indicators. With the CR value higher than 0.7, all constructs achieve the internal consistency (Hair *et al.*, 2017). Thanks to the AVE value higher 0.5, it is possible to conclude that all variables have convergent validity (Hair *et al.*, 2017).

Table 3. Variables' information

Variables	Outer loading		CR	AVE	Outer weight
	First order construct	Second order construct			
A1. Functional value (FUV)			0.922	0.855	
FUVA1	0.917	0.756			0.514
FUVA2	0.932	0.835			0.567
FUVA3	*				
FUVA4	*				
A2. Social value (SOV)			0.888	0.727	
SOVA1	0.883	0.807			0.408
SOVA2	0.896	0.824			0.416
SOVA3 (R)	0.773	0.683			0.345
SOVA4	*				
A3. Emotional value (EMV)			0.916	0.845	
EMVA1	*				
EMVA2 (R)	*				
EMVA3	0.917	0.802			0.535
EMVA4	0.922	0.828			0.552
A. Customer values (VALUES)					
Customer values is a second order construct that has 7 satisfactory indicators from its first order constructs: Functional value, Social value, and Emotional value.			0.922	0.628	
B. Brand identification (BRID)			0.904	0.825	
BRID1	*				
BRID2	0.906				0.544
BRID3	0.911				0.557
C. Brand loyalty (BRL)			0.906	0.828	
BRLO1	*				

Table 3. Variables' information *(continued)*

Variables	Outer loading		CR	AVE	Outer weight
	First order construct	Second order construct			
BRLO2	*				
BRLO3	0.910				0.549
BRLO4	0.910				0.550
D. Electronic word of mouth (EWOM)			0.903	0.823	
EWOM1	0.902				0.536
EWOM2	0.913				0.566
EWOM3	*				

**: Items are removed from the constructs (R): denotes that an item is in a reverse form*

Source: Result of SmartPLS analysis

HTMT ratio is an appropriate criterion to check the discriminant issue. When HTMT ratio is lower than 0.900, it is conclusive that all variables achieve discriminant validity (Henseler *et al.*, 2014). It is unnecessary to assess the discriminant validity between the construct "Customer values" and its first order constructs (Sarstedt *et al.*, 2019). The information in Table 4 confirms the difference between the constructs.

Table 4. HTMT ratio

	VALUES	FUNC	SOCI	EMOT	BID	BLOY
A. Values						
A1. Functional value						
A2. Social value		0.797				
A3. Emotional value		0.814	0.863			
B. Brand identification	0.896	0.805	0.821	0.881		
C. Brand loyalty	0.879	0.797	0.797	0.868	0.815	
D. Electronic word of mouth	0.883	0.771	0.814	0.881	0.846	0.880

Source: Result of SmartPLS analysis

4.2.2 Evaluating the measurement model

Thanks to the information in Table 3 and Table 4, it is conclusive that all four constructs achieve the convergent and the discriminant validity while the indicators have reliability and consistency.

4.2.3 Evaluating the structural model

It is necessary to evaluate six issues: the collinearity issues, the significance and relevance of the structural model relationships, the level of R2, the effect size of f2, the predictive relevance Q2, and the effect size of q2. We ran the complete bootstrapping on the model with

5000 subsamples (no sign changes), with the option of the Bias-Corrected and Accelerated (BCA) bootstrap and the test type of two-tailed.

Table 5. Inner VIF values

	VALUES	BID	BLOY	WOMO
A. Values			2.33	
B. Brand identification			2.333	
C. Brand loyalty				
D. Electronic word of mouth				

Source: Result of SmartPLS analysis

According to Table 5, all inner VIF values which are less than 5 mean the model does not have collinearity issues (Hair *et al.*, 2017).

Table 6. Path coefficient and P-value

Hypothesis	Content	Coefficient	P Values (%)	Conclusion
H1	VALUES ➔ BLOY	0.602		Supported
H2	BID ➔ BLOY	0.189	0	Supported
H3	BLOY ➔ WOMO	0.695	0	Supported

Source: Result of SmartPLS analysis

P value is popularly used to evaluate the significant levels. According to the information in Table 6, it can be said that all three hypotheses are supported when all p values are zero, less than 5%. The results in Table 6 show that both two exogenous constructs "Customer values" and "Brand identification" have positive impacts on the endogenous latent variable "Brand loyalty" but "Customer values" has greater impacts than "Brand identification" when the coefficient value is greater (0.602 in compared with 0.189). Finally, the results determine that Electronic word of mouth is affected by Brand loyalty.

Table 7. R-square and Q-square values

Variables	R^2	Level of predictive accuracy	Q^2	Predictive relevance
C. Brand loyalty	0.570	Moderate	0.450	Significant
D. Electronic word of mouth	0.483	Moderate	0.374	Significant

Source: Result of SmartPLS analysis

Beside the path coefficient, researchers want to know how the exogenous constructs influence the endogenous. The R^2 value is a criterion to assess this idea. Numerous researchers agreed that the figures of 0.25, 0.50, or 0.75, respectively, express the weak, moderate, or substantial influences of exogenous constructs on an endogenous construct (Hair *et al.*, 2011;

Henseler *et al.*, 2009). Nevertheless, it is essential to understand that this rule is subjective. The information in Table 7 confirmed that the R^2 value is quite high. Only two exogenous constructs ("Customer value" and "Brand identification") can explain more than 50% (57%) of the movement of the endogenous latent variable "Brand loyalty". Moreover, nearly half of the movement of the endogenous construct "Electronic word of mouth" is explained by only one exogenous construct "Brand loyalty".

Geisser (1974) and Stone (1974) offer another criterion to evaluate the model's out-of-sample predictive accuracy. Q2 value expresses the appropriateness of the prediction of the research model. According to Table 7, it is clear that exogenous constructs have a predictive relevance with endogenous latent variables.

Table 8. The effect size of f^2 and q^2

Hypothesis	Content	f^2	Level of effects	q^2	Predictive relevance
H1	VALUES ➔ BLOY	0.361	Large	0.222	Medium
H2	BID ➔ BLOY	0.036	Small	0.020	Small
H3	BLOY ➔ WOMO	0.935	Large	0.597	Large

Source: Result of SmartPLS analysis

Among the exogenous constructs that influence simultaneously an endogenous, researchers intend to find which exogenous construct contributes more to the movement of an endogenous. The effect size of f^2 is the standard to evaluate this idea. Cohen (1988) suggested that the values of 0.02, 0.15 and 0.35 of f2, respectively, indicate small, medium, and large effects of the exogenous latent variable.

The effect size of q^2 is used to assess Q^2 values. The assessment of q^2 is similar to the assessment of f^2.

According to Table 8, the result of the survey proved that when people received more product/service value, they will have loyalty with the brand and as a consequence, they share positive electronic word of mouth with others. It could be said that the authors built a fairly good model of research when it has only exogenous constructs, but it explains well the movement of endogenous latent variables.

5. Conclusions and implications

5.1 Theoretical contributions

The authors aim to check the impacts of two variables: brand identification and customer values on brand loyalty and its consequence: electronic word of mouth. The results pointed out the fact that customer values and brand identification have positive influences on brand loyalty and brand loyalty has positive impacts on electronic word of mouth. Furthermore, the research offers another contribution when it applied the second order construct with the concept "Consumer value". With these supported hypotheses, the research has vital theoretical contributions.

5.2 Practical implications

The results show that both values buyers perceived and the identification between consumers and a brand increase the level of loyalty with that brand. Nevertheless, based on the information of the coefficient value in Table 6, it is clear that consumer value has stronger influences than brand identification. Therefore, to maximize brand loyalty, smartphones' producers should provide better values for consumers. Based on the value of outer weight (see Table 3), consumers highly appreciate the reliability in performance of a smartphone. So, companies should put more efforts to keep or to improve the efficiency of their products to engage consumers' loyalty. Smartphones users also agreed that their mobile gadget can improve the way they are perceived by others. Enterprises should build different and unique images for their products. Respondents of the survey prefer that smartphones can give fun to them. Therefore, smartphones' producers not only provide smartphones with good hardware but also funny accessories (such as cover) or funny software.

For brand identification, smartphones' owners think that their gadget has great personal meaning to them. Nonetheless, in-depth interviews should be held to find out the details.

5.3 Limitations and further research

Despite the valuable contributions, this research has some limitations that other researchers should consider for their research. Firstly, not only two factors: consumer value and brand identification but other factors also have impacts on brand loyalty. Secondly, the study did not analyze the influences of demographic elements on brand loyalty. Besides that, the survey used a convenient sample. Therefore, the result might not reflect exactly the image of Ho Chi Minh City smartphones market. Moreover, the authors collected information only in Ho Chi Minh City. Therefore, other studies in different provinces or cities should be realized to have a wide variety of findings.

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