Determinant factors influencing smartphone customer's brand loyalty in Ho Chi Minh city

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Abstract:

This paper examines factors that impact customer's brand loyalty in the smartphone market in Ho Chi Minh city. The model consists of social influence, self-expressive value, perceived quality, perceived price, and their impact on brand loyalty. A sample of 325 smartphone consumers was analysed to evaluate the Cronbach's alpha reliability coefficient, and exploring factor analysis, and to conduct multiple linear regression (MLR) using SPSS software 22.0. The findings indicated that four independent variables impacted the one dependent variable - brand loyalty. The research results also showed that perceived quality and perceived price were the two main factors influencing brand loyalty for smartphone consumers. From this research, managers can conduct marketing programs that encompass oriented self-expressive values related to quality, and price, while creating activities that enhance social influence to enrich consumer's brand loyalty.

Keywords: brand loyalty, perceived price, perceived quality, self-expressive value, smartphone consumer, social influence.

Classification numbers: 2.3, 4.1

1. Introduction

The smartphone market is a strong growing market in Vietnam and is considered to have the highest growth rate in Southeast Asia [1]. This has attracted many international smartphone brands, such as Apple, Xiaomi, Samsung, Oppo, and Vivo, looking to enter the industry in the Vietnamese market. Smartphone volume sales in Vietnam reached 15.9 million units with a growth of 11.9% in 2021 (Table 1). The IDC forecasts that smartphone growth in 2022 will reach 22%, which is almost double from last year [2].

To survive in such a highly competitive and globalised market, businesses must find ways to maintain old customers and attract new customers with priority placed on long-term customer retention solutions. M. Mellens, et al. (1996) [3] argued that maintaining ongoing customers in the long term is a survival task for managers. D.A. Aaker (1996) [4] discussed that loyal consumers bring many benefits to enterprises, for example, by reducing costs, increasing sale volume (especially new products from the same brand), and by providing more time to respond to

Table 1. Smartphone market share in Ho Chi Minh city in 2021 [2].

Company	2021 shipments	2021 market share	2020 shipments	2020 market share	YoY growth
1. Samsung	5.3	33.3%	4.2	29.3%	27.1%
2. OPPO	2.8	17.5%	2.7	19.1%	2.3%
3. Xiaomi	2.0	12.7%	1.2	8.3%	70.9%
4. Vivo	1.9	11.7%	1.4	10.1%	29.4%
5. Apple	1.4	8.9%	0.9	6.0%	66.2%
Others	2.5	15.9%	3.9	27.1%	-34.5%
Total	15.9	100.0%	14.2	100.0%	11.9%

Vietnam smartphone market, Top 5 company shipments, market share, and YoY growth, 2021 (shipments in millions). Source: IDC quarterly mobile phone tracker, the 4th quarter 2021.

competitive threats. Prior study has confirmed that loyal customers not only readily spend significant amounts of money for brands they love, more so than non-loyal customers, but also, such customers introduce the brand through personal relationships such as friends, colleagues, and family members [5]. L.J. Rosenberg and J.A. Czepiel (1983) [6] indicated that expenditure to attract and win a new customer is six times higher than the expenditure of retaining an

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existing customer. Therefore, increasing customer's brand loyalty is the most important and necessary strategy of a successful business.

There have been a large number of brand loyalty studies conducted under different markets and market conditions. However, very few studies have investigated factors affecting the brand loyalty of smartphone consumers in the Ho Chi Minh city market in recent years. Moreover, there has not yet been study of factors like self-expressive value, perceived quality, perceived price, and social influence that affect smartphone brand loyalty in one model. Therefore, this study explores the self-expressive value, social influence, perceived quality, and perceived price impact on brand loyalty of smartphone consumers in the Ho Chi Minh city market in order to help marketing managers in the smartphone industry enhance their brand loyalty.

2. Literature review

Branding is a complex concept and there is no consensus on the definition. The popular brand concept, which is accepted by most researchers, is an integrated perspective. Brand is not only a name [7], but it also includes many different aspects to meet target customers' diverse requirements. From an integrated perspective, product, price, place, and promotion are a part of the brand only [8]; and a brand provides both functional and emotional benefits.

In marketing literature, loyalty is the retention of repeat purchases of a particular brand's products or services even though competitive brands offering attractive benefits [9]. Loyalty itself indicates both attitude and behaviour [10]. Brand loyalty attitude represents consumers' active support in purchasing intention, and brand loyalty behaviour implies priority in searching for a preferred brand, repurchasing a brand, and brand positive word-of-mouth. J. Jacoby and R.W. Chestnut (1978) [11] stated that brand loyalty comprises six dimensions, namely biased, behavioural response, expression during long periods, impacts of marketing strategies, related to choosing a brand or alternative brands, and to be a function of decision-making processes. Brand loyalty shows customer satisfaction and trust in the brand. When customers are satisfied and have trust in the brand, they make a commiment to engage with the brand for a long time. Therefore, brand loyalty is

an important factor to build up brand equity. In the other words, brand loyalty plays a crucial role in the existence of enterprise. Hence, research on brand loyalty as well as exploring the factors affecting brand loyalty is necessary.

3. Hypothesis development

3.1. Self-expressive value and brand loyalty

People always want to be identified as part of a specific group, i.e., as a member of a society [12]. In order to help themselves be accepted as a member of one group or another, they often tend to express themselves in the process of looking for similar groups to become a member. This requires the individual to expose some of his or her characteristics to the out-side. The simplest way to be easily identified in a crowded community is by using a brand because a particular brand often has distinct and specific personalities. In the other words, a brand can help people to express himself. A researcher confirmed that a brand is really attractive when it help people to express themselves. Managers are aware the important role of brand personality in an effective marketing campaign, so they add brand personality values, which are communicated to customers to become more and more popular [13-15]. Moreover, J.L. Aaker (1997) [15] pointed out that brand personality influence on consumers' attitude while C.K. Kim, et al. (2001) [12] indicated that the self-expressive value of brand personality has impacts on brand loyalty. These findings imply that customer tend to choose a brand that has a brand personality reflective of his or her own personality, and will thus be loyal to this brand. Furthermore, more and more people, especially youths like and consider self-expression as a new lifestyle trend, and they usually express themselves through familiar objects such as clothes, motorcycles, and smartphone. Based on these arguments, the self-expressive value of brands may influence a smartphone consumer's brand loyalty. Therefore, the author suggests the following hypothesis:

H1: Self-expressive value has a positive impact on brand loyalty.

3.2. Perceived quality and brand loyalty

Perceived quality is a customer's evaluation about the specific product or service [16]. V.A. Zeithaml (1988) [5] argued that product quality comprises

performance, features, reliability, durability, ser serviceability, conformance with specifications, and fit and finish. Meanwhile, service quality dimensions consist of tangibles, reliability, competence, responsiveness, and empathy. A successful brand can offer a good product quality as well as related services. As a consequence, when customers evaluate perceived quality of a brand, they have to consider to multiple dimensions. Because customers can be affected by differentiation in a demographic, the customer has their own perceived quality about a brand even though at different points in time one person could also have a different point of view about the same brand. The perceived quality of the brand is therefore a subjective customer' overview evaluation, and it has an effect to their purchasing behaviour. Previous researchers have show that perceived quality of a brand has impacts on brand loyalty [15, 17]. Moreover, smartphones are an essential tool that help people save personal information and conduct regular, efficient online transactions in modern life. Therefore, a customer's perceived quality about a smartphone brand is a main factor that influences on their purchase making decisions as well as loyalty with that brand. Thus, the authors propose the following second hypothesis:

H2: Perceived quality positvely impacts brand loyalty.

3.3. Perceived price and brand loyalty

Perceived price implies a customer's assesment about brand value and the product's ability to meet their needs and expectations. Perceived price depends on real price and consumer's reference price [18]. According to T.Z. Chang and A.R. Wildt (1994) [19], perceived price positively affects the real price of a brand and has a negative influence on the reference price. Expenditure and opportunity cost are antecedent variables that impact on perceived price, while perceived price influences perceived value and brand loyalty [20]. Moreover, B. Yoo, et al. (2000) [21] also confirmed that perceived price affects brand loyalty. In general, income earned by most Vietnamese is not high and price is a main factor that consumers consider when choosing a specific brand. Thus, Vietnamese consumers have a special interest in the price of the smartphone brand that they consume. Based on the above-mentioned arguments, third hypothesis is proposed.

H3: Perceived price has positive impacts on brand loyalty.

3.4. Social influence and brand loyalty

Social influence imparts social pressure on peer groups [22], norms [23], cultural values [24], friends and family [25], persuasion conformity [26], friend on social media [27], and subjective norms. Subjective norms are manifestations of individual behaviours from social pressure [28]. Therefore, social influence can be measured through subjective norms. I. Ajzen and M. Fishbein (1980) [29] confirmed that subjective norms are an important factor determining the social influence on consumers' behaviour. Social influence is an important factor in helping people interact with each other with similar behaviours or it is a foundation of conditions for individuals to assert themselves. Thus, social influence can be the driving force influencing a change of customers' brand choice. Most of the research on purchase intention to date has focused on one certain motive: the tendency to align with valued reference groups [30]. Hat Nguyen Dang (2013) [27] argued that consumers make decisions depending on well-known people in society or by choosing a brand from social pressure. The social influence element has been investigated in different contexts and confirmed in various sectors [31]. J. Berger and C. Heath (2008) [32] indicated that social influence is an important factor that influence consumer's choice through buying or not buying a specific brand. Therefore, brand loyalty of smartphone consumers may be impacted by social influence.

H4. Social influence has significant positive influence on brand loyalty.

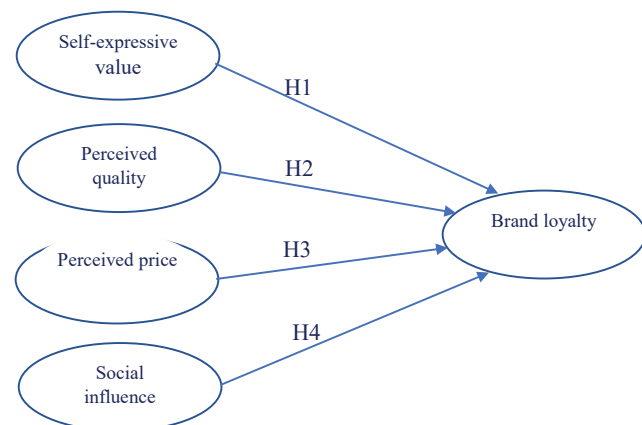The research model of this paper is presented in Fig. 1.

Fig. 1. Research model.

4. Methodology

This study applies mix methods concluding both qualitative and quantitative research. The quantitative research was the main study, which was conducted in Ho Chi Minh city with a convenience sample method. Although the convenience sampling method has many limitations in reliability, it is suitable in this study because of limited resources. The questionnaires were delivered to smartphone consumers by face-to-face interview and a Google doc form. The Cronbach's alpha, exploring factor analysis, and MLR analysis were applied to assess the measurements and testing model.

4.1. Sample size

Sample size is an important element in order to meet the requirements of research standards. Sample size must meet accuracy and representative results to ensure no systematic bias in variance and confirm an acceptable sampling error [33]. J.F. Hair, et al. (1998) [34] argued that a good sample size should be at least 15 observations per item. Additionally, S. Uma and B. Roger (2009) [35] recommended a sample size between 30 to 500 units. Therefore, the 327 valid questionnaires analysed in this study were appropriate.

4.2. Measurements

Self-expressive value of brand personality was adopted by C.K. Kim, et al. (2001) [12]. Measurement scales for perceived quality factor were developed by other researcher [21, 36]. Perceived price was adjusted by B. Yoo, et al. (2000) [21]. Social influence measurements were developed by J.R. Chevron (1998) [37]. Brand loyalty was measured by five observed variables, and the qualitative research results.

5. Analysis results

5.1. Charateristics

Description of data analysis: A total number of 384 questionnaires were delivered and there was a total of 352 respondents. There were 27 respondents that did not meet the requirements of the study because

of un-answered questions, missing information, similar answers, or dishonest answers. The rest of the 325 valid questionnaires were analysed, and the characteristics of the survey sample are presented in Table 2 below.

Table 2. Sample characteristics.

Sample characteristics		Frequencies	Count (%)
Brand name using	Samsung	124	38.15
	iPhone	94	28.92
	Oppo	48	14.77
	Readme	37	11.38
	Others	22	6.78
Age groups	Under 22 years old	159	48.92
	23 to 30 years old	83	25.54
	31 to 40 years old	72	22.15
	Over 40 years old	11	3.39
Income groups	Under 5 million VND	125	38.46
	5.1 to 10 million VND	114	35.08
	Over 10 million VND	86	26.46
Total		**325**	**100**

Source: Results of the survey for factors affecting the brand loyalty of customers in using smartphones in Ho Chi Minh city, 2022.

The frequency analysis results indicated that Samsung was the most used brand name with 38.15%. The next were iPhone, Oppo and Readmi (making up 28.92, 14.77, and 11.38%, respectively). Other smartphone brand names such as LG, and Motorola made up 6.78% of the research sample collectively. Demographical analysis illustrated that the age group under 22-year-old contributed 48.92%, while the second largest age group contributed 25.54% at 23 to 30 years old. In terms of income, the three income groups have nearly the same percentage.

5.2. Measurement validation

The Cronbach's alpha reliability analysis and results of exploring factor analysis are presented in Tables 3 and 4.

Table 3. Cronbach's alpha reliability analysis.

Items	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Alpha if item deleted
Self-expressive (SE) value (Alpha=0.8339)				
X helps me to express my style (SE1)	24.063	47.586	.617	.7319
X reflects my personality (SE2)	24.621	47.715	.591	.7242
X helps me remarkable (SE3)	24.342	45.656	.606	.6096
X confirms my position and class (SE4)	24.804	44.324	.712	.6187
X helps me to express my profession (SE5)	24.739	46.829	.593	.7442
Perceived quality (PQ) (Alpha=0.6392)				
X has many designs and colours to choose (PQ1)	14.978	10.273	.447	.696
X's colour and design are impressive (PQ2)	14.646	11.393	.402	.615
X has a strong configuration (PQ3)	14.368	11.749	.382	.649
X has good quality (PQ4)	14.597	11.532	.441	.652
Perceived price (PP) (Alpha=0.6824)				
X's price is reasonable (PP1)	10.480	6.409	.612	.641
X's price is high competition (PP2)	10.567	6.165	.609	.673
In generally, you satisfy with X's price (PP3)	10.832	6.724	.564	.757
Social influence (SN) (Alpha=0.742)				
My family has impacted on my decision to choose smartphone brand (SN1)	10.430	6.449	.652	.691
My relatives and colleges have impacted on my smartphone brand choice (SN2)	10.865	6.705	.607	.682
News on mass media has influenced on my smartphone brand choice (SN3)	10.567	6.723	.561	.723
Smartphone advertisements on social media have affected on my smartphone brand choice (SN4)	10.419	6.723	.561	.723
Brand loyalty (BL) (Alpha=0.7075)				
X always is my first choice (BL1)	22.867	51.306	.683	.714
I suppose that I am a loyal consumer (BL2)	22.342	51.332	.523	.753
I will continue to use X because I am satisfied and acquainted with X (BL3)	22.509	49.409	.564	.634
I will use X despite competitors' deals (BL4)	22.726	51.017	.648	.742
I usually recommend X to others (BL5)	22.193	49.269	.701	.702

Source: Results of the survey for factors affecting the brand loyalty of customers in using smartphones in Ho Chi Minh city, 2022.

Table 4. Exploring factor analysis results.

Observed variables	Loading factors				
	1	2	3	4	5
SE1	.806				
SE2	.819				
SE3	.762				
SE4	.704				
SE5	.826				
PQ1		.794			
PQ2		.802			
PQ3		.731			
PQ4		.863			
PP1		.796			
PP2			.816		
PP3			.754		
SN1			.831		
SN2			.749		
SN3				.871	
SN4				.852	
BL1				.764	
BL2				.703	
BL3					.782
BL4					.806
BL5					.794

Source: Results of the survey for factors affecting the brand loyalty of customers in using smartphones in Ho Chi Minh city, 2022.

5.3. Testing hypotheses

After refining the scales and testing all the assumptions, MRL was conducted, using SPSS software 22.0. The MRL analysis results indicated that the adjusted R^2 of the regression coefficient was 0.407 meaning this model could explain 40.7% of the fluctuation of the brand loyalty variable only. The ANOVA results showed that the F-value was 34.572 at Sig. 0.000. This means the null hypotheses were rejected, and the model fit with 95% of the data.

In summary, all hypotheses were significant. In other words, all four factors had affected to brand loyalty of smartphone users (i.e., the beta coefficients were positive), and their affected rate to brand loyalty

was represented by a simple formula following:

$$BL = 0.325PQ + 0.268PP + 0.201SE + 0.173SN$$

The detail results of the survey data processing are illustrated in Table 5.

Table 5. Hypothesis testing coefficients.

Model	Unstandardised coefficients		Standardised coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.536E-16	.039		.000	1.000
SE	.201	.039	.201	3.982	.004
PQ	.325	.039	.325	5.063	.000
PP	.268	.039	.268	7.414	.000
SN	.173	.039	.173	6.821	.000

Source: Results of the survey for factors affecting the brand loyalty of customers in using smartphones in Ho Chi Minh city, 2022.

6. Discussion

The beta value of the standardised coefficient of perceived quality was 0.325, perceived price: 0.268, self-expressive value: 0.201, and social influence: 0.173, which showed the influence level of these factors on brand loyalty. From the results, it was found that a combination of all these factors played an important role in explaining brand loyalty. These results are in line with those of B. Yoo, et al. (2000) [21], and N.D. Tho and N.T.M. Trang (2007) [17].

Among the independent factors, perceived quality had the highest impact on brand loyalty. This makes sense because, as explained in the literature review, perceived quality played an important role in purchase decisions. So, consumers seriously considered a smartphone brand based mainly on perceived quality.

7. Implications

7.1. Theoretical implications

Plenty of research on brand loyalty has been conducted through various products around the world and in Vietnam as well. However, there has not yet been a research model established for smartphone consumer' brand loyalty in the Ho Chi Minh city market. The most important contribution of this study is to determine the impact of self-expressive value, perceived quality, perceived price, and social influence on brand loyalty. Next, the key point of this research stresses that the strength of the relationship between the above-mentioned antecedents and brand loyalty in different categories will vary. Another theoretical implication is that different types of products have different combinations of antecedents. This research proves that a combination of many factors strongly affects on brand loyalty not one or two single constructs.

7.2. Managerial implications

The researcher proposes brand managers to consider the affecting factors and their levels on brand loyalty. It is very important for them to make an effective and suitable brand strategy to improve consumer' loyalty. Based on the research results, here are some recommendations to smartphone brand managers:

The research found that perceived quality is the main factor affecting consumer brand loyalty. Therefore, smartphone managers should focus most of their resources on improving product quality. Accordingly, the director can innovate production technology, produce new designs that are more convenient, supplement other necessary features, increase operational efficiency, and create other new values to enhance the customer experience. In addition, managers should also offer long-term warranties and excellent support services for customers to guarantee service and product quality.

Perceived price is the second most important factor influencing smartphone consumers' brand loyalty. Thus, managers should choose an appropriate pricing method based on customer benefits, competitiveness, and expected profits of the investors. Besides this, managers should pay attention to psychological pricing techniques by choosing odd numbers to encourage feelings of low price. Furthermore, managers should also consider implementing direct price reduction programs in promotion campaigns.

Self-expressive value is the third-most important factor affecting consumers' brand loyalty in the smartphone context. Hence, managers should build up expressive values during the brand personalization process for smartphone branding. Brand personality plays an important role in creating positive feelings in the consumer. There are five popular brand personalities including sincerity, excitement,

competence, sophistication, and ruggedness [15]. Therefore, managers can consider a suitable brand personality to attribute to their brand in order to attract consumers.

Social influence is the least important factor affecting brand loyalty of smartphone consumers in this study. However, successful managers should pay attention to culture, family, colleagues and close relatives during advertising on mass media because they do have impact on consumer decision making. Therefore, managers should offer services and product quality of a brand that are suitable not only for consumers' desires but also for stakeholders and their relationships.

8. Study limitations

This study has several limitations although this work has many contributions. First, most samples in this study are youth students in some universities in Ho Chi Minh city. Thus, further research should expand to smartphone users from different sectors. Second, target smartphone consumers in this paper are only currently using smartphone consumers. Hence, it is necessary to consider adding used smartphone consumer samples and even include non-users of smartphones who have purchasing intention in future. Finally, this paper has a limited research model. This research model only considered self-expressive value, perceived quality, perceived price, and social influence affecting brand loyalty. However, there are other factors that may impact brand loyalty of smartphone consumers. Therefore, in further studies, the author will investigate other antecedents of brand loyalty in the smartphone market such as prestige brand, brand awareness, brand trust, and so on.

COMPETING INTERESTS

The author declares that there is no conflict of interest regarding the publication of this article.

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