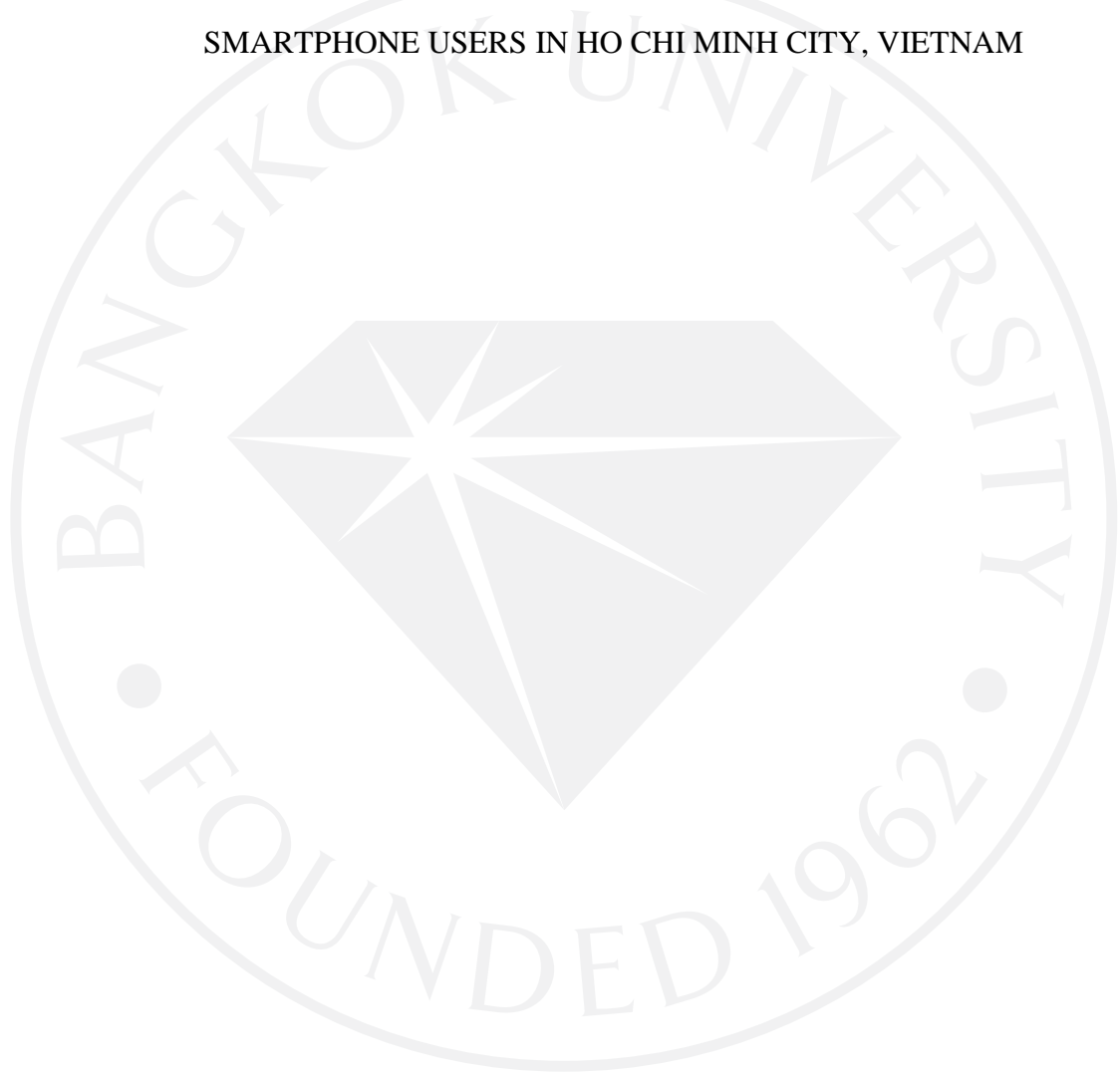ONLINE COMMUNITIES, CONSUMER INVOLVEMENT, INNOVATION, AND

SATISFACTION AFFECTING BRAND LOYALTY OF ANDROID

SMARTPHONE USERS IN HO CHI MINH CITY, VIETNAM

ONLINE COMMUNITIES, CONSUMER INVOLVEMENT, INNOVATION, AND

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Brand Loyalty of Android Smartphone Users in Ho Chi Minh City, Vietnam (57 pp.)

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ABSTRACT

This independent study was aimed at exploring online communities in terms of online word of mouth and forum, consumer involvement, innovation, and satisfaction affecting brand loyalty of Android smartphone users in Ho Chi Minh City (HCMC), Vietnam. The survey questionnaire was used as an instrument for collecting the primary data. The sample size was 135 Vietnamese people using Android smartphones and living in HCMC. The statistics of data analysis were reliability analysis, descriptive statistical analysis, and multiple regression analysis. The results were found that the majority of respondents were female with 23-39 years of age. They were self-employed and earned an average monthly income $505 to $700. Most of them used Samsung smartphones for over 4 hours per day and changed a new Android smartphone after using the old one over 1 year. Based on the findings, the forum and innovation had negative influence while the customer involvement and satisfaction had positive influence on brand loyalty of Android smartphone users in HCMC, Vietnam. On the other hand, the online word of mouth did not have influence on brand loyalty of Android smartphone users in HCMC, Vietnam.

Keywords: Online Word of Mouth, Forum, Consumer Involvement, Innovation, Satisfaction, Brand Loyalty

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CHAPTER 1

INTRODUCTION

1.1 Rationale and Problem Statement

Taking advantages of reasonable and affordable price of smartphone nowadays along with the desire to connect Internet anytime and anywhere, Vietnamese people prefer to own it more and more (Nielsen, 2017). Smartphone has become very personalized. People use it to connect Internet easily and flexibly around 2 to 3 hours per day. Moreover, smartphone penetrates every corner of Vietnamese people life as well as education, entertainment, e-commerce, game, online banking, and economics (Luu, 2017). Hence, it is inevitably that smartphone plays an important role in Vietnamese everyday life.

In Vietnam, Ho Chi Minh City contributes one-third of the national budget, has 7.5% GDP growth rate and a total FDI (Foreign Direct Investment) of US$2.8 billion in the first half of 2017, and also it is the largest city with over 10 million people. In other words, this city is the dynamic center of economics and finance in Vietnam, especially one of fastest take-up markets in technology and manufacturing ("Ho Chi Minh City," n.d.). Hence, this study will be conducted in Ho Chi Minh City, a promient martket.

In 2014, there were 1.57 billion people using smartphone around the world. This number continued to rise to 1.86 billion people in 2015 (eMarketer, 2016). This phenomenon was spurred by the emergence of low-priced smartphones in developing countries such as South Africa, Philippines, Brazil, and Vietnam. Additionally, there was a positive estimation that a number of smartphone users would climb to 2.10

billion, 2.32 billion, and 2.53 billion in 2016, 2017, and 2018, respectively

(eMarketer, 2016). In comparison to that phenomenon, Vietnam market experienced

the indifference. Based on the below figure 1.1 surveyed by Statista DMO (2017), the

number of smartphone users in Vietnam from 2015 to 2022 was increasing gradually,

from 20.69 million in 2015; it reached 24.8 million in 2016 and for the 2017, the

number was estimated at 28.77 million. Interestingly, in the second quarter of 2017,

the number of people using smartphone was definitely higher than that estimation,

which was 48 million (Appota, 2017).
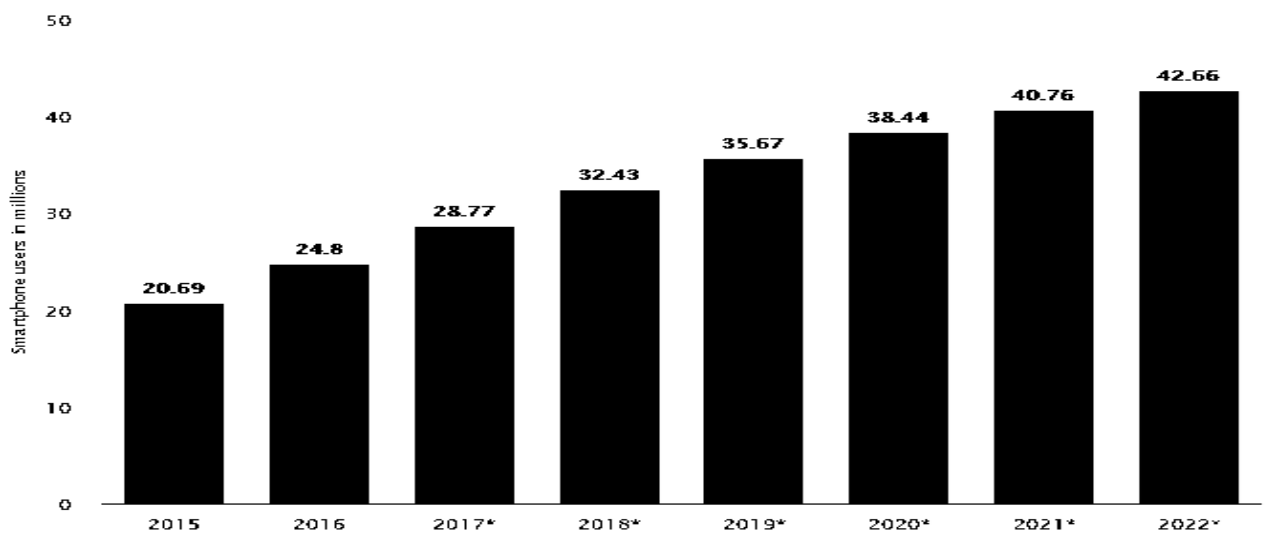
Figure 1.1: Number of Smartphone Users in Vietnam (2015-2022) (in millions)

Source: Statista, D. (2017, July). *Number of smartphone users in Vietnam from 2015*

    to 2022 (in millions). Retrieved from https://www.statista.com/statistics/467

    739/forecast-of smartphone-users-in-vietnam/

       According to Rouse (n.d.), a smartphone cannot have its full operational

without an operating system (OS). OS helps electronic devices such as smartphones

and tablets run programs and applications. Operating system starts up at the same time

when device powers on, displaying a screen with icons or operating system's name. It also manages cellular, wireless network connectivity, and phone access. There are some popular mobile operating systems, such as IOS, Android, Symbian, and Motion's BlackBerry OS.

Apple Iphone: when Apple introduced the first iPhone in 2007, it opened a new era in the smartphone market (Eadicicco, 2017). In 2017 fiscal year, Apple (2017) sold total 216.76 million iPhones. The right business model and successful marketing were key factors contributing to the success of the iPhone. Having rich experience in mobile Internet browsing and variety of applications from App Store, iPhone clearly met the demands of their customers (Luagesen & Yuan, 2010).

Google Android: In 2005, Android platform was firstly developed by Google after they had purchased it. In 2007, the open handset alliance was set up by technology leaders such as Google, Motorola, Samsung, Sony Ericsson and Intel and Android platform was the their first achievement (Sreedhar, 2018). In same year, they released the first version of Android SDK (Sreedhar, 2018). The first Android phone was appeared in 2008, and now there are many types of Android mobile devices, including phones and tablets, provided by several vendors (Allen, Graupera, & Lundrigan, 2010). The Android mobile operating system supported several features including 2D and 3D graphics, common media formats, animated transitions, and multi-touch input. The Android's web browser are the WebKit base and Google Chrome's JavaScript runtime (Allen, Graupera, & Lundrigan, 2010).

BlackBerry: BlackBerry is a product of research in motion (RIM). The first BlackBerry phone was appeared in 2002 in Canada (Allen, Graupera, & Lundrigan, 2010). BlackBerry was aimed at the enterprise market and its application was

developed for that market (Allen, Graupera, & Lundrigan, 2010). However, in

2016, the global smartphone market share dropped dramatically to 0.0481% and

only 207,900 BlackBerry devices runed by their own operating system (Price,

2017).

Table 1.1: Operating System Market Share in Vietnam during Feb 2017- Feb 2018

Operating System	Percent (%)												
	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2017	February 2018
Window	47.73	60.46	65.3	64.00	65.04	68.47	72.25	68.28	71.36	72.06	66.99	63.77	58.32
Android	23.45	15.99	15.3	16.13	15.77	14.16	11.7	14.96	12.06	12.14	16.06	18.93	21.46
iOS	23.47	16.53	11.84	12.23	11.03	9.95	8.65	8.98	7.43	7.32	8.47	8.77	12.44
OS X	3.79	5.13	5.25	5.05	5.48	4.91	5.04	5.54	6.41	6.68	6.35	6.08	5.19
Linux	0.43	0.69	0.88	1.09	1.16	1.14	1.15	0.97	1.78	0.76	0.59	0.56	0.65
Unknown	0.64	0.68	0.82	0.87	0.95	0.84	0.74	0.81	0.59	0.62	1.02	1.38	1.35

Source: StatCounter. (2018). *Operating system market share in Vietnam Feb 2017-*

Feb 2018. Retrieved from http://gs.statcounter.com/os-market-share/all/

viet-nam.

Regarding to operating system market share in Vietnam, as shown in the table

1.1, the Windows' users take the highest value during February 2017- February 2018,

followed by Android. Android took about 23% at the beginning of the year 2017 as

the same as iOS. Android experienced the fluctuation in this market share but had

effort to recover by around 21% by February, 2018. In contrast, the market share of

iOS in Vietnam dropped in months and could not recover like they did at the beginning of January, 2017. In general, the market share of Android is still larger than iOS. In addition, as regards of mobile OS market share in Vietnam, Android OS dominates that market with 67%, followed by iOS with 29% and the other is 4% (Appota, 2017).

The previous research has revealed that brand loyalty is the one of the key factors underlining the consumer buying behavior. In addition, brand loyalty has been becoming a major topic in marketing and consumer research, and many researchers conducted research on it to find out the importance in measuring the business performance (Khan & Mahmood, 2012; Chen, Chang, Hsu, & Yang, 2011; Storbacka, Strandvik, & Grönroos, 1994; Hallowell, 1996).

Chandrashekaran, Rotte, Tax, and Grewal (2007) and Ganiyu (2017) concluded that consumer satisfaction was one of needed factors to build client's loyalty. Specht, Fichtel, and Meyer (2007) also indicated that estimating satisfaction of client would not show how to measure consumer loyalty. Tepeci (1999) concluded that the innovation had effects on brand loyalty. In addition, Eelen, Özturan, and Verlegh (2017) found that the relationship between brand loyalty and online word of mouth was less positive than the relationship between brand loyalty and offline word of mouth. However, because of the limitation in conducting researches, there were still some terms which had not revealed yet. This was also the concerns of Chang and Chieng (2006), they conducted their own research on loyalty.

In order to get deep down about the brand loyalty, this concept requires more academic researches. With a high speed of growing up, the smartphone market is strong influencing by the users; their involvements are the key points to define the

concept of brand loyalty, because their hobbies change, the trend will follow.

Therefore, this research is mainly investigated on the consequence of the brand

loyalty, and the key field is more specific – Android smartphone brands. The study

also take explore how the Android smartphone brand loyalty effects the improvement

of consumer loyalty in the context of Ho Chi Minh city, Vietnam.

1.2 Objectives of Study

The main purpose of the study was to explore the influence of online

communities including online word of mouth and forum, consumer involvement,

innovation, and satisfaction on brand loyalty of Android smartphone users in the

context of Ho Chi Minh City, Vietnam.

1.3 Contribution of Study

The study contributes to the field of marketing in several ways. Firstly, it is

designed to provide statistical evidence about the brand loyalty of consumer in using

Android smartphone market in Vietnam. Secondly, the study will raise the proper

awareness for the users and retailers about the brand loyalty affecting by four main

factors: online communities, consumer involvement, innovation, satisfaction, and then

the recommendation will provide them an appropriate tool to predict the brand loyalty

of Android smartphone users' trend. Finally, the manufacturers can come to

reasonable decisions about serving consumer, developing the device innovation,

enhancing the online communities, and building the consumer involvement in order to

keep pace with the growing high speed of market to raise the revenue.

CHAPTER 2

LITERATURE REVIEW

The researcher has conducted the documentary reviews from the related issues including the theories and previous researches in order to describe the characteristics of the research variables, and investigate the relationship among variables. Regarding these concerns, the contents of questionnaire, the research hypothesis and the conceptual framework were generated from this review.

2.1 Related Literature and Previous Studies

2.1.1 Smartphone Brand

A smartphone is an integrated device between basic computers with a mobile operating system. It also integrated mobile cellular network connection for the basic consumer needs. Not of all have Wi-Fi function to connect the Internet but most of people do like their own device has. A smartphone is produced with a pocket size, but some are larger in size. Because it is "smart" so a smartphone is fully able to operate multi-task at the same time, or components, like "apps". Users can download the popular available apps (e.g. event calendar, camera, web browser) from places like the Google Play Store or Apple App Store (Budmar, 2012). However, Google Play will mainly be focus on the study as well as the Android brand loyalty. Users easily receive an update version by the time it is available on Google Play Store to fix the issues of an application; similarly, consumer's devices are able to gain the new update.

There are some smartphone brands taking part in the Vietnam market but they did not have ability to stay for a long time. An example is Hkphone, they released an Android-based product in early 2014 but quickly left Vietnam market in the final half of 2015. Q-Mobile brand was also quite famous in 2013 with acceptable product, and they soon left the market in December 2015 (Chi, 2016). According to GfK Vietnam, a market analysis firm, only two Vietnamese brands stood firmly in the market – Mobiistar and Masscom together holding only 9% of total smartphone market share, (Chi, 2016). In other words, foreign brands such as Samsung and Oppo dominated Vietnam that market, account for 43% and 22% of total market share respectively (Pathak, 2017).

2.1.2 Online Communities

Reason making people got more successfully with social media. They connected people with their needs, pains, and what they were willing to gain and deeply understanding the trend growth of online communities (Glenn, 2013). People were "communal" naturally like they were able to show up their instincts. The original reason communities were being built was it connected people in direct or indirect way, it helped the relationship between people getting close over the days (Falk, 2008). Online community is defined as "a group of people who regularly interact with each other online, especially to share information and opinions on a common interest; (with the) users of the Internet (or in early use, a computer network) considered collectively." (Online community, n.d.). The study will explore two aspects of only community that are online word of mouth and forum.

2.1.3 Online Word of Mouth

People and their purchase behavior could be affected by word of mouth. In other words, it was one of major factors having effect on customers' buying decisions (Richins & Root-Shaffer, 1988). Online word of mouth is defined as something stated positive or negative by former, potential or actual consumers on the product or firm which is provided for many people and organization through the Internet (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). According to Cheung, Lee, and Rabjohn (2008), Web 2.0 tools, for examples, online forum, website of customer reviews, weblogs, and social network sites in order to discuss product information were used more frequently. Through online word of mouth, consumers could read comments of other consumers' consumption experiences and also contribute their own consumption experiences.

2.1.4 Forum

According to Pitta and Fowler (2005), forum could be regarded as online communities built for the specific interests and contained many small topic categories. The consumers can post their opinion positive or negative after purchasing the product. In each area, forum members can create forum threads related to different topics, and those threads remain year by year, allowing newcomers to read comments from previous communicators in that forum and gather information from wider knowledge base.

2.1.5 Consumer Involvement

The previous definition was found that consumer involvement is known as "a state of mind that encourage clients to dedicate with product/service offerings, their consumption either patterns or behaviors" (Sahney, n.d, p.3). As Schiffman and

Kanuk (2006) stated that "involvement is a heightened state of awareness that motivates consumers to seek out, attend to, and think about product information prior to purchase" (p.286).

There were many studies on this term before. In term of consumer involvement, for the buyer side, the purchasing indicated a level of situational involvement and information processing (Laurent & Kapferer, 1985, 1986; McQuarrie & Munson, 1987; Ober-Heilig, Bekmeier-Feuerhahn, & Sikkenga, 2014; Schneider & Rodgers, 1996; Zaichkowsky, 1985). Consumer involvement concepts have been developed. Originally, it was regarded as one-dimensional notion but later added many types of involvement such as risk-based involvement, importance-based involvement (Laurent & Kapferer, 1985). Since 1985, it was suggested six recognized components of consumer involvement for measurement, which were interest in the product, perceived pleasure with the product, symbolic or cultural value of the product, importance of the product, product risk importance, and perceived product performance risk probability (Laurent & Kapferer, 1985; Schneider & Rodgers, 1996). This paper also applied those components excluded product risk importance and perceived product performance risk probability for measurement of consumer involvement in questionnaire.

2.1.6 Innovation

Innovation is the process of turning ideas or invention at an economical cost into services or products that meet the demand of consumer and they will pay money for it (Innovation, n.d.). The study of Nowlis and Simonsen (1996) showed that innovation would allow the brand owners to catch up the trend and follow closely the change of consumer needs. Successful new brands are usually more novel and more

distinct in comparison with current brands in the market. However, consumers may not always accept innovation of a new product. This could result in the brand's negative attributes to that product. Hence, companies should take perceptions and attitudes of consumers into consideration before adding innovation to their new products (Aaker & Keller, 1990).

2.1.6 Satisfaction

Satisfaction can be defined as a pleasant feeling of someone when they have done something they wanted to do or they are received something they wanted (Satisfaction, n.d.). In 1992, Fornell did 27 examines to find that there was a significant relationship between satisfaction and brand loyalty. The more satisfied consumers were to one brand, the more loyalty they are to that brand (Tepeci, 1999). Beard (2014) listed some reasons to show the importance of consumer satisfaction to marketers and business runners. It could make consumer to repurchase and become loyalty. It also could decrease negative word of mouth. Importantly, the cost to approach consumers again is cheaper than obtain new ones because of consumer satisfaction.

2.1.8 Brand Loyalty

Brand loyalty was known as positive attitude of a consumer toward a brand that leads to purchase repeat and to suggest that brand to other consumers (Anderson & Srinivasan, 2003). This well-known term had been mentioned in many studies of several authors around the world. So the concept of loyalty was deemed to be considered as a complicated phenomenon, it has been proven in study of Aurier and Lanauze (2012), and also was the main factor for research purpose of Curran and Healy in 2014 or Oliver in 1999. But Oliver (1999) was not the only one who found

the type of brand loyalty. In 2001, Yu and Dean had developed a research in which they found two main and principal components affecting the loyalty. Cognitive is the first one, which is regarded as the performance evaluation perceived in terms of its adequacy as compared to expected standards. Emotional is another one, which is defined by feelings whose subjects of the brand. In 2004, Mattila has defined that the loyalty is the relation which was created between two main terms, they are relative attitudes and the pattern of repeated purchases. According to Rundle-Thiele and Mackay in 2001, loyalty can be observed through purchasing process of consumer in an identified period. People totally are able to measure it by real purchase and the consumer's attitude. It means the loyalty measurement is measured by preference, the commitment, and buying intention.

2.2 Conceptual Framework

The conceptual framework of online communities, consumer involvement, innovation, and satisfaction affecting brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam is illustrated in the figure 2.1.

```
┌─────────────────────────────┐
│ Online Communities          │
│ - Online Word of Mouth      │─────┐
│ - Forum                     │     │
└─────────────────────────────┘     │
                                    ▼
┌─────────────────────────────┐   ┌──────────────────┐
│ Consumer Involvement        │──▶│ Brand Loyalty    │
└─────────────────────────────┘   └──────────────────┘
                                    ▲
┌─────────────────────────────┐     │
│ Innovation                  │─────┤
└─────────────────────────────┘     │
                                     │
┌─────────────────────────────┐     │
│ Satisfaction                │─────┘
└─────────────────────────────┘
```
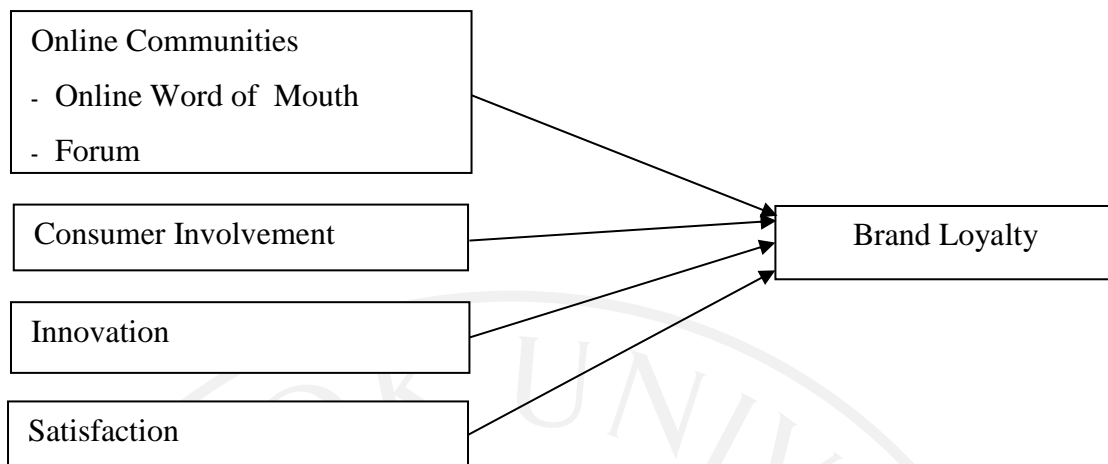
Figure 2.1: The Conceptual Framework

The conceptual framework (Figure 2.1) in this study illustrates the relationship between independent variables including online communities in terms of online word of mounth and forum (Balakrishnan et al., 2014), consumer involvement (Hu, 2011; Ismail et al., 2006), innovation (Nowlis & Simonsen, 1996), and satisfaction (Baumann et al., 2012; Espejel et al., 2008; Froehling, 2008; Qayyum et al., 2013) and dependent variable of brand loyalty (Khan & Mahmood, 2012).

2.3 Research Hypotheses

From the documentary reviews including the theories and previous researches, the research hypotheses are generated as follows:

H1.1: There is an influence of online word of mouth on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

H2.1: There is an influence of forum on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

H3.1: There is an influence of consumer involvement on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

H4.1: There is an influence of innovation on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

H5.1: There is an influence of satisfaction on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

CHAPTER 3

METHODOLOGY

3.1 Research Design

The research has applied the technique of quantitative approach to attain the purposes of the study. The questionnaire, which was used as the survey instrument, was constructed by applying the related theories and previous research and was approved by the expertise.

3.2 Population and Sample Selection

3.2.1 Population

According to the newest Vietnamese labor law in 2012 ("Determination of working age under new labor code," 2018), the legal emloyee must be at least 15 years old and an elderly employee is one over 60 years of age for men and over 55 years of age for women. The researcher would like to survey people belonging to working age and retirment age to explore whether there was a different behavior in using smartphone between them. Hence, the population in this research was Vietnamese people (18-59 and over 60 years old), lived in Ho Chi Minh City (HCMC), Vietnam and used Android smartphones.

3.2.2 Sampling Size

After conducting a pilot with 40 respondents and inputting the data to Statistical Package for the Social Sciences (SPSS), the partial R^2 was estimated. Then, G*Power version 3.1.9.2 was used to compute the sample size of the study (Cohen, 1977) by calculating 40 sets of pilot test data. With the power (1-β) of 0.95,

alpha (α) of 0.05, number of test predictor of 6, effect size of 0.1532167, and partial

R^2 of 0.13286025, the obtained results revealed 135 of the total sample size for the

field survey (Erdfelder, Faul & Buchner, 1996: Howell, 2010)

3.2.3 Sample Selection

The targeted sample was Vietnamese people who were 18-59 years of age and

over 60, lived in HCMC, and used Android smartphones. This target sample helped

to provide suitable data for researcher in data collection process. The simple random

and convenience sampling techniques were used for sample selection this research.

After calculating the sample size by using G*Power, the total sample size was 135.

The area of data collection was randomly selected from the two supermarkets and two

number of department stores located in HCMC and all of the samples who were asked

to answer the questionnaires were convince sampling as shown in the Table 3.1

below.

Table 3.1: The Locations of Data Collection

Locations	Number of Sample (n = 135)
Satra supermarket (District 8)	31
Satra supermarket (District 10)	35
SC Vivo department store (District 7)	37
Ideas store (District 5)	32
Total	**135**

3.3 Research Instrument

3.3.1 Contructs Measurement

In some official survey, measurement scale is applied to classify and quantify variables. Three measurement scales were applied in this paper that they deemed appropriate and effective for entire research about brand loyalty of Android smartphone users in HCMC.

In nominal and ordinal scale, the basic data is the key point to define the estimation data. Nominal scale commonly uses in the pre-qualify questions and opening questionnaire relating to individual data of Androids smartphone users in HCMC. Some of personal data are collected such as gender, income, and age.

In interval scale, there are 4 independent variables applied hierarchical scale by level from 1 to 5, in another word, people call it Likert scale. 1 stands for strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

3.3.2 Questionnaire Design

The questionnaires were designed regarding the research objective to be used as research instrument. It was composed of three parts: screening question, demographic questions, and main questions. The full format of questionnaires were illustrated in Appendix A for English version and Appendix B for Vietnamese Version.

3.4 Reliability and Content Validity

3.4.1 Reliability

The reliability test was conducted through the use of SPSS to assess the Cronbach's alpha coefficient, measurement of reliability of the questionnaire. The variables would be considered acceptable if Cronbach's alpha is 0.65 or higher

(Nannully, 1978). The table 3.2 illustrates each part of questionnaire has accepted the value of Cronbach's alpha coefficient.

Table 3.2: Reliability Analysis of the Questionnaire

Variable	Cronbach's Alpha Coefficient			
	Item	Pilot test (n=40)	Item	Field survey (n=135)
1. Online Word of Mouth	4	0.802	4	0.796
2. Forum	4	0.873	4	0.880
3. Consumer Involvement	3	0.906	3	0.893
4. Innovation	4	0.878	4	0.871
5. Satisfaction	3	0.920	3	0.912
6. Brand Loyalty	5	0.929	5	0.926

3.4.2 Content Validity

The questionnaire in this paper has been reviewed and approved by three experts in field of Business Administration. The detailed information of them could be found in Appendix C, letters to experts for questionnaire reviews. The first expert was Dr. Pham Van Kien, lecturer at Ho Chi Minh City University of Economics and Finance (UEF). The second expert was Dr. Truong Quang Dung, Vice Dean of Faculty of Business Administration at Ho Chi Minh City University of Technology (HUTECH). The third expert was Assoc. Prof. Nguyen Phu Tu, Dean of Faculty of Business Administration at Ho Chi Minh City University of Technology (HUTECH).

3.5 Statistics for Data Analysis

The SPSS was implemented as a tool for data analysis.

Descriptive statistical analysis: it was to analyze demographic data such as gender, age, income, and occupation and to present those data in forms of frequency and percent (Hair et al., 2013).

Reliability test: By using SPSS, it provided the reality value for Cronbach's alpha coefficient. The variables will be considered acceptable if Cronbach's alpha is equal 0.65 or higher (Nannully, 1978).

Multiple Regression Analysis: it was deemed as the way to calculate a coefficient of multiple determination and regression using more than independent variables (Hair et al., 2013). This study aims to investigate five independent variables: online word of mouth, forum, consumer involvement, innovation, and satisfaction; the dependent variable is brand loyalty. This test analyzed how the five factors had the influence on brand loyalty of Android smartphone user in Ho Chi Minh City, Vietnam and figured out the linear regression equation:

Brand loyalty = α + B_1*online word of mouth+ B_2* forum+ B_3*innotion + B_4*consumer involvement+ B_5*satisfaction

Where α is the regression constant and B_1, B_2, B_3, B_4, and B_5 are beta of unstandardized coefficients. This equation illustrates "the degree to which the change in dependent variable is related to the change in the independent variable" (Saunders, et al., 2016). In this study, the equation would display the degree to which change in brand loyalty was related to the change in five factors.

CHAPTER 4

RESEARCH RESULTS

The research findings which derived from data analysis were presented in 4 parts as follows:

4.1 Summary of Demographic Data

The research findings of this part presented the respondents' personal data including gender, age, income, occupation, and Android Smartphone Brands. The statistical techniques used for data analysis were percentage ratio and frequency counting. The findings were presented in Table 4.1 as follows:

Table 4.1: Data Results of Gender

Gender	Frequency	Percent
Female	89	65.9%
Male	46	34.1%

From the collected data, there was a difference between gender ratios. 89 people were female accounting for 65.9 %. Male took the second portion with 46 people accounting for 34.1 of total.

Table 4.2: Data Results of Age

Age	Frequency	Percent
From 18 to 22	30	22.2%
From 23 to 39	50	37%
From 40 to 59	20	14.8%
Over 60	35	25.9%

Most respondents belonged to 23 to 39 years old group accounting for 37% (50 people). The group from 18 to 22 years old accounted for 22.2% (30 people). The group from 40-59 accounted for 14.8% (20 people). The last group accounted for 25.9% (35 people).

Table 4.3: Data Results of Occupation

Occupation	Frequency	Percent
Student	32	23.7%
Employed	29	21.5%
Self-employed	70	51.9%
Retired	4	3%

The highest ratio of this part was belong to the self-employed group taking 51.9% (70 people), the group of student took 23.7% (32 people) then employed took 21.5% (29 people). There were 4 people who was retired accounting for 3 %.

Table 4.4: Data Results of Income

Income ($)	Frequency	Percent
Less than $200	32	23.7%
From $200 to $500	29	21.5%
From $505 to $700	70	51.9%
Over $700	4	3%

The income group was divided into 4 groups. Interestingly, the highest income group account for 3% (4 people), the smallest percentage compared to other groups. The biggest group was the respondents having income monthly from $505 to $700 taking 51.9% (70 people) of total.

Table 4.5: Data Results of Android Smartphone Brands

Brand	Frequency	Percent
Sony	15/135	11.1%
Samsung	94/135	69.6%
Huawei	3/135	2.2%
Xiaomi	3/135	2.2%
Lenovo	0/135	0%
Asus	7/135	5.2%
Oppo	24/135	17.8%
Other	18/135	13.3%

Table 4.5 got the role in showing us which Android smartphone brand people prefer to use/using/ used. The highest percentage belonged to the Samsung with 69.9 percent (94 people), followed by Oppo accounting for 17.8% (24 people). The third and the fourth positions went to Oher and Sony with 13.3% (18 people) and 11.1% (15 people) respectively. Asus took 5.2% with 7 people prefer to use. Huawei and Xiaomi accounted for the same percentage which was 2.2% (3 people).

Table 4.6: Data Results of Hours per Day Using Smartphone

Hour	Frequency	Percent
Under 2 hours	12	8.9%
From 2 to 4 hours	35	25.9%
Over 4 hours	88	65.2%

According to the table 4.6, the majority of respondents used their smartphone over 4 hours per day, accounted for 65.2% (88 people). The second and the third position go to 35 respondents using their smartphone from 2 to 4 hours per day (accounted for 25.9%) and 12 respondents using their smartphone under 2 hours (accounted for 8.9%) respectively.

Table 4.7: Data Results of Time to Change a New Android Smartphone

Time	Frequency	Percent
From 3 to 6 months	0	0%
From 6 months to 1 year	29	21.5%
Over 1 year	60	44.4%
Over 2 years	23	17%
Over 3 years	23	17%

Interestingly, no respondent changed a new Android smartphone in a period of 3 to 6 months. The majority of respondents changed a new Android smartphone after using the old one over 1 year, accounted for 44% (60 people). The group of respondents changed a new Android smartphone from 6 months to 1 year accounting for the second highest percent with 21.5% (29 people). The group of respondents changed a new Android smartphone over 2 years and over 3 years accounting for the same percentage which was 17% (23 people).

4.2 Results of Hypothesis Testing

The following table presented the effect of online communities, consumer involvement, innovation, and satisfaction on brand loyalty of android smartphone users in Ho Chi Minh City, Vietnam. The multiple regression analysis (MRA) was implemented for analyzing the data.

Table 4.8: The Results of Multiple Regression Analysis

Variables	Brand Loyalty						
	S.E.	B	β	t	Sig.	Tolerance	VIF
Constant	.184	.020	-	.107	.915		-
Online Word of Mouth	.059	-.009	-.007	-.149	.882	.543	1.841
Forum	.041	-.125	-.140	-3.008	.003*	.620	1.612
Innovation	.062	-.256	-.254	-4.122	.000*	.354	2.826
Consumer Involvement	.081	.987	.854	12.149	.000*	.273	3.668
Satisfaction	.063	.382	.377	6.083	.000*	.351	2.848

$R^2 = .826$, F = 122.628, *p <.05

According to table 4.2, the consequence of multiple regression analysis found that forum, innovation, consumer involvement, and satisfaction affected brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam at .05 level of statistical significance. While it was found that online word of mouth (Sig < 0.05) did not affect brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

The findings also revealed that consumer involvement (B = .987) accounted for the strongest weighs of relative contribution toward brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam, followed by satisfaction (B = .382). In contrast, forum (B= -.125) and innovation (B= -.256) had negative influence on brand loyalty of Android smartphone users in HCMC, Vietnam. Then, the linear regression equation is offered as follows:

BL = 0.020 – 0.125*FO - 0.256*IN + 0.987*CI + 0.382*SA

According to recommendation of Hair, et al. (2013), a small tolerance value which is 0.10 or below or a large VIF value (Variance Inflation Factor) which is 10 or above means high collinearity (also multicollinearity). However, the results of the study found that all tolerance value and VIF value of independent variables including forum, innovation, consumer involvement, and satisfaction did not meet the recommendation. Hence, there was no multicollinearity problems among forum, innovation, consumer involvement, and satisfaction.

```
Online Communities
-  Online Word of Mouth
   (Sig =.882)
-  Forum
   (Sig =.003*)


Consumer Involvement
(Sig = 0.000*)                              Brand Loyalty


Innovation
(Sig = 0.000*)


Satisfaction
(Sig = 0.000*)
```
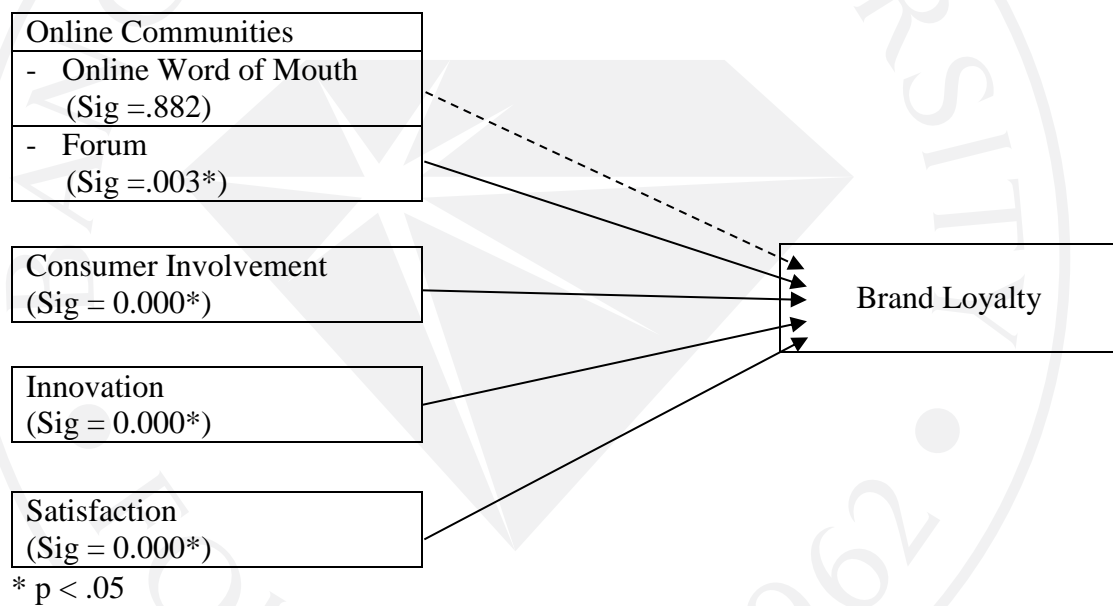* p < .05

Figure 4.1: Summary of Hypothesis Testing Results

Figure 4.1 illustrated that there was no influence of online word of mouth on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam. On the other hand, consumer involvement, innovation, and satisfaction had an influence on brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam.

CHAPTER 5

CONCLUSION AND DISCUSSION

The purpose of this study was to explore the relationship in terms of the effect of the independent variable which were online word of mouth, forum, innovation, consumer involvement, and satisfaction on the dependent variable which was brand loyalty. As this study was a quantitative research, the close-ended questionnaire were designed to collect the data. The 135 respondents of sample size were randomly selected from Android smartphone users in Ho Chi Minh City, Vietnam. Regarding the purpose of the study, Multiple Regression Analysis technique was used to analyze the data. Moreover, percentage ration, frequency, mean, and standard deviation were also applied to analyze the demographic data, and the samples' altitudes toward the independent and dependent variables. The research finding of the study were concluded in this chapter. Moreover, the discussion of research findings, the recommendation for managerial implication and future research were also included.

5.1 Research Findings and Conclusion

5.1.1 Demographic Data

The results were found that the majority of respondents were female with 23-39 years of age. They were self-employed and earned an average monthly income $505 to $700. Most of them used Samsung smartphones for over 4 hours per day and changed a new Android smartphone after using the old one over 1 year.

5.1.2 Hypothesis Results Summary

The consequence of multiple regression analysis found that the online communities in terms of forum, innovation, consumer involvement, and satisfaction affected brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam at .05 level of statistical significance. While it was found that online communities in terms of word of mouth (Sig < 0.05) did not affect brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam. The findings also revealed that consumer involvement (B = .987) accounted for the strongest weighs of relative contribution toward brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam, followed by satisfaction (B = .382) respectively. In contrast, forum (B= -.125) and innovation (B= -.256) had negative influence on brand loyalty of Android smartphone users in HCMC, Vietnam.

5.2 Discussion

According to the results of the study, online word of mouth did not affect brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam. Hence, it did not confirm the previous study of Eelen, Özturan, and Verlegh (2017) that the relationship between brand loyalty and online word of mouth was less positive than the relationship between brand loyalty and offline word of mouth. This was because Android smartphone users did not take opinions, reviews, and comments of previous users or newspaper reviewers into consideration before buying the new Android smartphone.

Forum affected brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam. As Pitta and Fowler (2005) stated that the consumers can post their

opinion positive or negative after purchasing the product in forum. It partly explained

that users would like to have connection with the brand they were using and also

could get help when their phone had problem from forum members.

Consumer involvement affected brand loyalty of Android smartphone users in

Ho Chi Minh City, Vietnam. This was because those users were interested and

confident with their decision of purchasing their beloved smartphone and also

satisfied with it in term of reflecting who they were through buying it. The results

confirmed the previous studies of Laurent and Kapferer (1985) and Schneider and

Rodgers (1996) had mentioned in chapter 2, literature review.

Innovation affected brand loyalty of Android smartphone users in Ho Chi

Minh City, Vietnam. The results confirmed the previous study of Tepeci (1999) that

was innovation had effects on brand loyalty. As the study of Nowlis and Simonsen

(1996) showed that innovation would allow the brand owners to catch up the trend

and follow closely the change of consumer needs. It partly explain why those

respondents felt enjoyable and exited when products of their beloved smartphone

brand were more innovated in comparison with the other brands.

Satisfaction affected brand loyalty of Android smartphone users in Ho Chi

Minh City, Vietnam. The results confirmed the previous studies of Fornell (1992) that

was satisfaction and brand loyalty had significant relationship. This was because those

users were not regretful with their decision of purchasing their beloved smartphone

brand. They totally satisfy with the products of the smartphone brand they bought.

5.3 Recommendations for Managerial Implications

According to the results of the study, forum (B= -.125, Sig <.05) affected negatively brand loyalty of Android smartphone user in Ho Chi Minh City, Vietnam. It meant that forum could make consumers be less loyal to the brand. Smartphone brand owners should pay attention to create their own web boards or forum for maintaining the relationship of consumers and also attaining the feedback directly from their consumers. By that way, the owners could filter negative communications or sensitive topics created by forum members that may harm the image of the brand.

On the other hand, consumer involvement (B =.987, Sig <.05) was the strongest factor among five factors affecting brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam. In other words, consumer involvement could be regarded the most key factor affecting brand loyalty when they would like to buy or bought an Android smartphone. Consumers completely have ability to recognize which functions are the best option for them when buying a new smartphone. If consumers have the more understanding on a new smartphone about screen size, the battery, the storage, it inspires the Android smartphone manufacturers need to design a new smartphone with a high-class version. Obviously, a good quality component integrates into a high-class smartphone could inspire people buy products. Besides, they should provide a good consumer service to enhance consumer experience. Advertisement should be considered when the manufacturers intend to release a new product into the market.

In contrast, innovation (B = -.125, Sig <.05) affected negatively brand loyalty of Android smartphone user in Ho Chi Minh City, Vietnam. It meant that innovation could make consumers be less loyal to the brand. The Android smartphone

manufacturers want to make the people impressed about their product, based on

Android smartphone, they should take innovation into consideration before adding it

into a new one because consumer might not always accept that innovation. It might

cause the negative effect on the brand loyalty of consumer as well as cause the

negative effect on the brand image. The Android smartphone manufacturers should

analyze the smartphone trend in Vietnam market seriously to add appropriate

innovation matching that trend.

Finally, satisfaction (B = .382, Sig <.05) affected brand loyalty of Android

smartphone user in Ho Chi Minh City, Vietnam. It meant that the more satisfied with

the smartphone consumer bought, the more loyalty they become. Therefore,

smartphone business owners should put the emphasis on the function, the design, and

the attributes of smartphone that can respond to the needs of consumers. As a result,

consumers might become more loyalty to the brand they chose.

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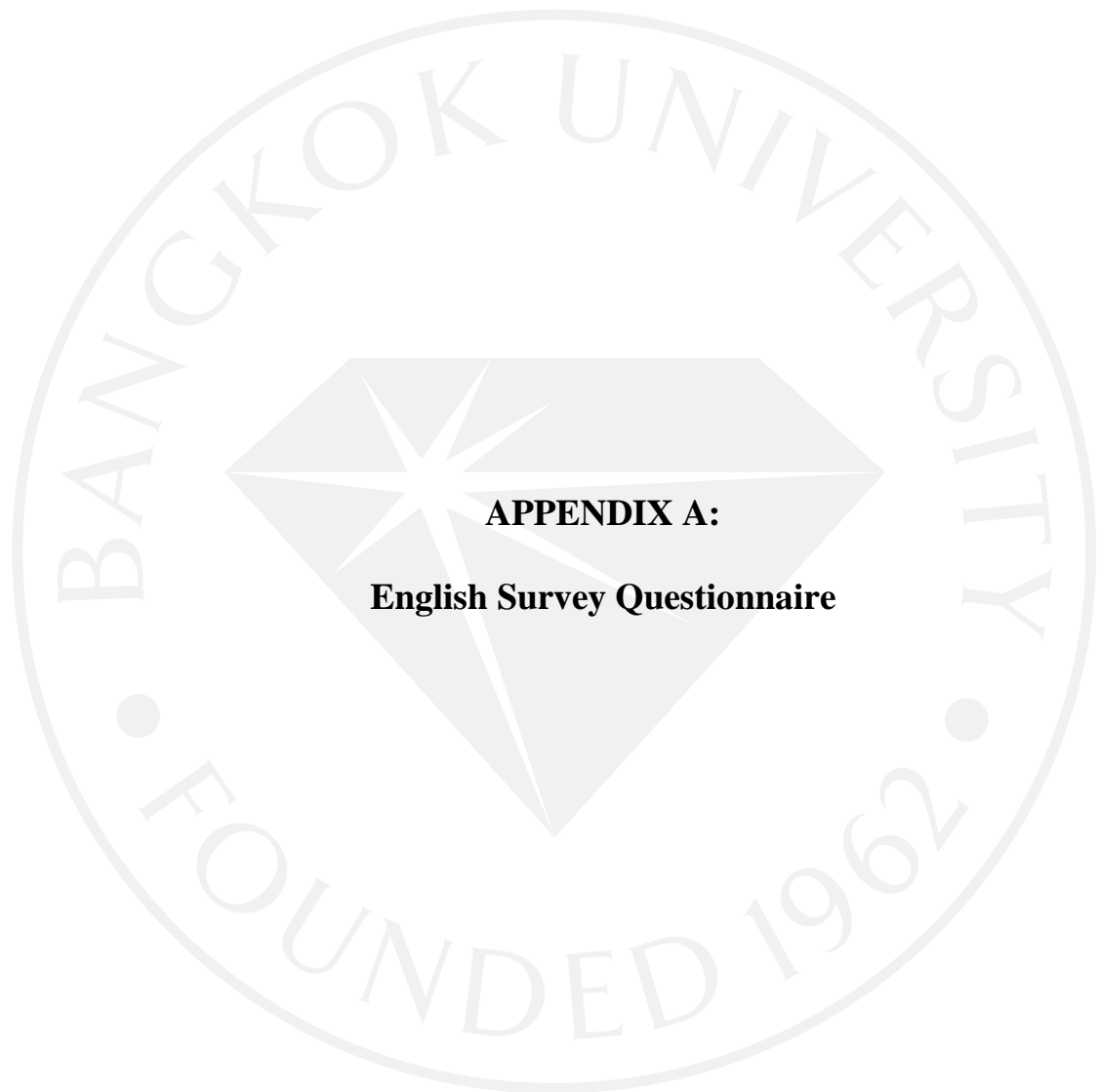
APPENDIX A:

English Survey Questionnaire

QUESTIONNAIRE:

Online Communities, Consumer Involvement, Innovation, and Satisfaction Affecting Brand Loyalty of Android Smartphone Users in Ho Chi Minh City, Vietnam

This survey research was aimed to comprehend the factors affecting brand loyalty of Android smartphone users in Ho Chi Minh City, Vietnam. This study is a part of BA :715Independent Study, Graduate School, Bangkok University. I would be appreciated if you could contribute any fact and useful information truthfully by filling out the questionnaire. The information provided will be treated highly confidential and will be used solely for the purpose of academic resources.

Thank you very much for your kind cooperation.

MBA Student, Bangkok University

Screening Question: Are you an iPhone or Android user?

❑ 1) iPhone (please stop answering the questions)

❑ 2) Android (please continue answering the questions)

Part 1: General Information

Explanation: Please mark ✓ into ❑ that matches your information the most.

1. Gender

    ❑ 1) Male   ❑ 2) Female

2. Age

    ❑ 1) 18 – 22 years old   ❑ 2) 23 – 39 years old

    ❑ 3) 40 – 59 years old   ❑ 4) Over 60 years old

3. Monthly income (UDS/VND)

    ❑ 1) Under $200 (under 4,600,000 VND)

    ❑ 2) $200-$500 (4,600,000 VND – 11,500,000 VND)

    ❑ 3) $505-$700 (11,615,000 VND – 16,100,000 VND)

    ❑ 4) Over $700 (> 16,100,000 VND)

4. Occupation

    ❑ 1) Student   ❑ 2) Employed

    ❑ 3) Self-employed   ❑ 4) Retired

5. Which Android smartphone brand do you prefer to use/are you using/did you use?

  (Can tick multiply)

    ❑ 1) Sony   ❑ 2) Samsung

    ❑ 3) Huawei   ❑ 4) Xiaomi

    ❑ 5) Lenovo   ❑ 6) Asus

    ❑ 7) Oppo   ❑ 8) Other

Part 2: Android Smartphone Users' Behaviors

Explanation: Please mark ✓ into ❑ that matches your information the most.

1. How many hours per day do you use your smartphone?

    ❑ 1) Under 2 hours   ❑ 2) 2- 4 hours

    ❑ 3) Over 4 hours

2. How long do you change a new Android smartphone?

    ❑ 1) 3-6 months   ❑ 2) 6 months – 1 year

    ❑ 3) Over 1 year   ❑ 4) Over 2 years

    ❑ 5) Over 3 years

Part 3: Online communities have an impact on brand loyalty of Android users in
      Ho Chi Minh City, Vietnam

Explanation: Please mark ✓ the choices that correspond to your opinions. Indication
      of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree,
      and 1 = strongly disagree.

Note: S will be defined as the brand you prefer to use or are using.

Online communities have an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam	Level of opinions				
	Strongly agree ←→ **Strongly disagree**				
1. Online word of mouth: OW					
1.1 Before buying a new phone, you refer to comments, reviews of previous users/online newspapers of this phone.	(5)	(4)	(3)	(2)	(1)
1.2 You believe online reviews, comments, opinions of previous users/online newspapers.	(5)	(4)	(3)	(2)	(1)
1.3 The comments, reviews, opinions of previous users/ online newspapers have an effect on your decision of buying a new phone.	(5)	(4)	(3)	(2)	(1)
1.4 The comments, reviews, opinions of previous users/ online newspapers are one of the reasons you bought your smartphone.	(5)	(4)	(3)	(2)	(1)
2. Forum: FO					
2.1 You are willing to belong to forum of your smartphone brand you are using.	(5)	(4)	(3)	(2)	(1)
2.2 The forum is significant to connect you with your brand you are using.	(5)	(4)	(3)	(2)	(1)
2.3 The forum is helpful when you have problems with your phone.	(5)	(4)	(3)	(2)	(1)
2.4 The forum can maintain your relationship with smartphone brand you are using.	(5)	(4)	(3)	(2)	(1)

Part 4: Innovation has an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam

Explanation: Please mark ✓ the choices that correspond to your opinions. Indication of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

Note: S will be defined as the brand you prefer to use or are using.

Innovation (IN) has an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam	Level of opinions				
	Strongly agree $\longleftrightarrow$				Strongly disagree
1.1 I prefer to use S rather than other brands because of its up-to-date technology.	(5)	(4)	(3)	(2)	(1)
1.2 I prefer to use S rather than other brands because it has new features with the other brands cannot keep pace with.	(5)	(4)	(3)	(2)	(1)
1.3 I prefer to use S rather than other brands because its technology/feature is worth my money.	(5)	(4)	(3)	(2)	(1)

Part 5: Consumer involvement has an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam

Explanation: Please mark ✓ the choices that correspond to your opinions. Indication of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

Note: S will be defined as the brand you prefer to use or are using.

Consumer involvement (CI) has an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam	Level of opinions				
	Strongly agree $\longleftrightarrow$				Strongly disagree
1.1 I am very interested in this kind of S product.	(5)	(4)	(3)	(2)	(1)
1.2 Acquiring this type of S product is enjoyable.	(5)	(4)	(3)	(2)	(1)
1.3 Purchasing this S product reflects the kind of person I am.	(5)	(4)	(3)	(2)	(1)
1.4 Choosing this kind of S product is a relevant decision to me.	(5)	(4)	(3)	(2)	(1)

Part 6: Satisfaction has an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam

Explanation: Please mark ✓ the choices that correspond to your opinions. Indication of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

Note: S will be defined as the brand you prefer to use or are using.

Satisfaction (SA) has an impact on brand loyalty of Android users in Ho Chi Minh City, Vietnam	Level of opinions				
	Strongly agree ⟵⟶				Strongly disagree
1.1 I like what I had received from S.	(5)	(4)	(3)	(2)	(1)
1.2 What I got from S is absolutely what I expected.	(5)	(4)	(3)	(2)	(1)
1.3 What I received from S is totally my ideal product.	(5)	(4)	(3)	(2)	(1)

Part 7: Brand Loyalty of Android Users in Ho Chi Minh City, Vietnam

Explanation: Please mark ✓ the choices that correspond to your opinions. Indication

of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree,

and 1 = strongly disagree.

Note: S will be defined as the brand you prefer to use or are using.

Brand Loyalty (BL) of Android Users in Ho Chi Minh City, Vietnam	Level of opinions				
	Strongly agree ⟵⟶				Strongly disagree
1.1 Next time I am going to buy S again.	(5)	(4)	(3)	(2)	(1)
1.2 In previous occasions that I had bought this product I had chosen this brand.	(5)	(4)	(3)	(2)	(1)
1.3 I like S very much.	(5)	(4)	(3)	(2)	(1)
1.4 In my experience I know S works well.	(5)	(4)	(3)	(2)	(1)
1.5 I will be a loyal consumer to S.	(5)	(4)	(3)	(2)	(1)

** Thank you for your kind cooperation. **
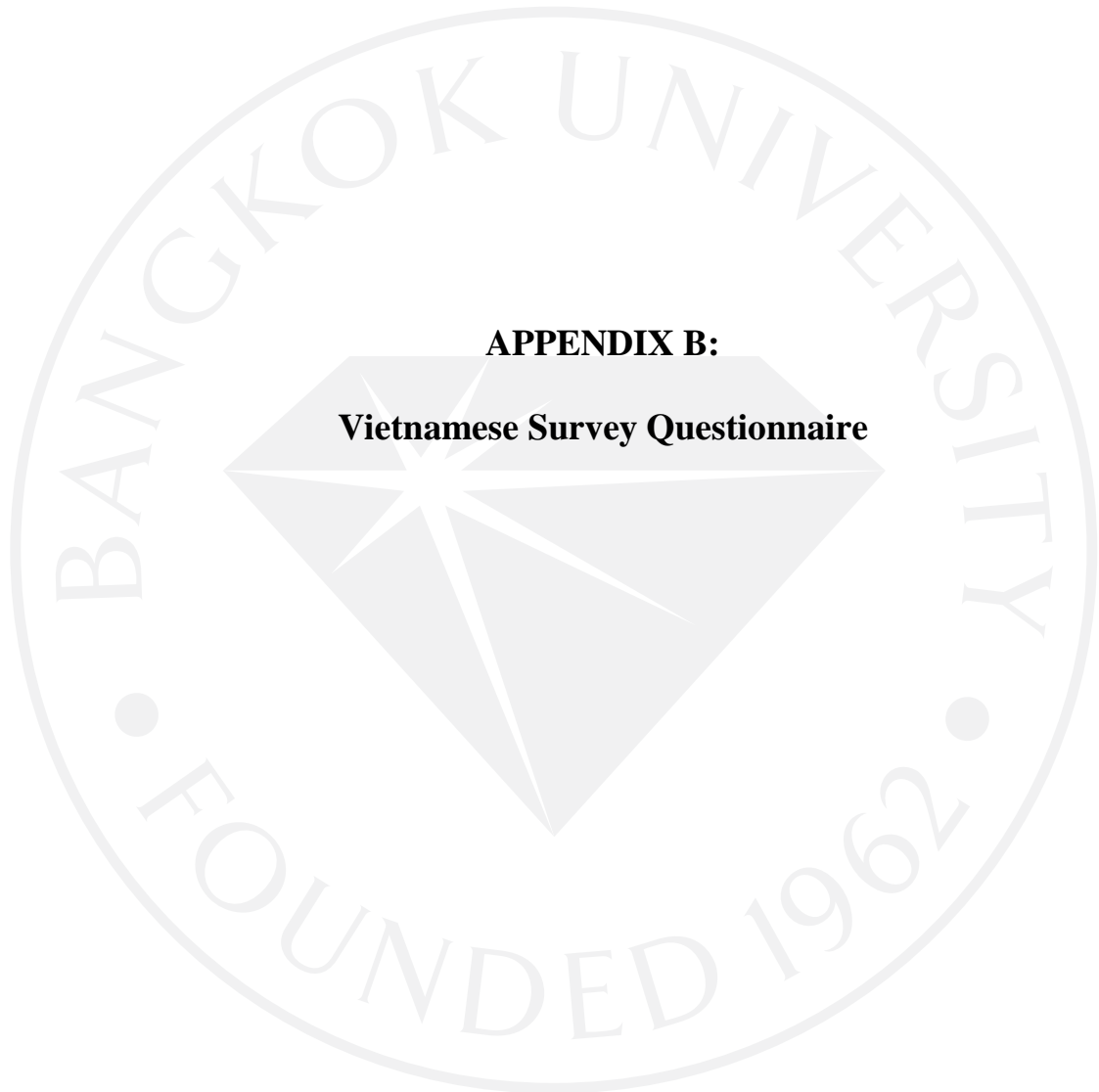
APPENDIX B:

Vietnamese Survey Questionnaire

QUESTIONNAIRE:

Cộng Đồng Mạng, Sự Để Tâm của Khách Hàng, Sự Cải Tiến, và Sự Hài Lòng Ảnh Hưởng Đến Lòng Trung Thành Thương Hiệu Của Người Dùng Điện Thoại Thông Minh Android ở Thành Phố Hồ Chí Minh, Việt Nam.

Nghiên cứu điều tra này nhằm mục đích hiểu rõ các yếu tố ảnh hưởng đến lòng trung thành của người dùng điện thoại thông minh Android ở thành phố Hồ Chí Minh, Việt Nam. Nghiên cứu này là một phần của BA715: Independent Study, Graduate School, Đại học Bangkok. Tôi sẽ được đánh giá cao nếu bạn có thể đóng góp bất kỳ thực tế và thông tin hữu ích một cách trung thực bằng cách điền vào bảng câu hỏi. Thông tin được cung cấp sẽ được bảo mật cao và sẽ được sử dụng chỉ nhằm mục đích tài nguyên học tập.

Cảm ơn vì sự hợp tác của bạn.

MBA Student, Bangkok University

Screening Question: Bạn là người sử dụng điện thoại iPhone hay Android?

❑ 1) iPhone (Bạn dừng bài khảo sát nếu xài iPhone)

❑ 2) Android (Vui lòng tiếp tục làm khảo sát)

Phần 1: Thông tin người khảo sát

Giải thích: Hãy đánh dấu ✓ với những lựa chọn phù hợp với bạn nhất

1. Giới tính

    ❑ 1) Nam   ❑ 2) Nữ

2. Tuổi

    ❑ 1) 18 – 22 tuổi   ❑ 2) 23 – 39 tuổi

    ❑ 3) 40 – 59 tuổi   ❑ 4) Trên 60 tuổi

3. Thu nhập hàng tháng

    ❑ 1) Dưới 4,600,000 VND

    ❑ 2) 4,600,000 VND – 11,500,000 VND

    ❑ 3) 11,615,000 VND – 16,100,000 VND

    ❑ 4) Trên 16,100,000 VND

4. Nghề nghiệp

    ❑ 1) Học sinh   ❑ 2) Đi làm công

    ❑ 3 (Tự làm chủ   ❑ 4) Nghỉ hưu

5. Nhãn hiệu điện thoại thông minh nào bạn yêu thích/đang sử dụng/đã từng dùng? (Có thể chọn nhiều đáp án)

    ❑ 1) Sony   ❑ 2) Samsung

    ❑ 3) Huawei   ❑ 4) Xiaomi

    ❑ 5) Lenovo   ❑ 6) Asus

    ❑ 7) Oppo   ❑ 8) Other

Phần 2: Hành vi người dùng Android

Giải thích: Hãy đánh dấu ✓ với những lựa chọn phù hợp với bạn nhất

1. Một ngày bạn sử dụng điện thoại thông minh bao nhiêu tiếng?

    ❑ 1) Dưới 2 tiếng   ❑ 2) Từ 2 – 4 tiếng

    ❑ 3) Hơn 4 tiếng

2. Bao lâu bạn đổi điện thoại Android mới?

    ❑ 1) 3-6 tháng   ❑ 2) 6 tháng-1 năm

    ❑ 3) Trên 1 năm   ❑ 4) Trên 2 năm

    ❑ 5) Trên 3 năm

Phần 3: Cộng đồng mạng có ảnh hưởng đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam

Giải thích: Hãy đánh dấu ✓ với những lựa chọn tương ứng với các ý kiến của bạn. Các mức độ tương ứng với ý kiến của bạn: 5= Hoàn toàn đồng ý, 4 = Đồng ý, 3= Trung lập, 2= Không đồng ý, 1= Hoàn toàn k đồng ý

Cộng đồng mạng (Online communities) có ảnh hưởng đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam	Mức độ ý kiến				
	Hoàn toàn đồng ý ⟶			Hoàn toàn không đồng ý	
1. Truyền miệng trên mạng: OW					
1.1 Trước khi mua 1 điện thoại mới, bạn thường kham khảo các bình luận, đánh giá của những người dùng trước trên mạng/của các trang báo online về điện thoại đó.	(5)	(4)	(3)	(2)	(1)
1.2 Bạn tin tưởng các đánh giá, bình luận, và ý kiến của những người dùng trước trên mạng/ các trang báo online.	(5)	(4)	(3)	(2)	(1)
1.3 Các đánh giá, bình luận, và ý kiến của những người dùng trước trên mạng/các trang báo online có ảnh hưởng đến quyết định mua điện thoại mới đó của bạn.	(5)	(4)	(3)	(2)	(1)
1.4 Các đánh giá, bình luận, và ý kiến của những người dùng trước trên mạng/các trang báo online là một trong những nguyên nhân khiến bạn đã mua điện thoại mới đó.	(5)	(4)	(3)	(2)	(1)
2. Diễn đàn: FO					
2.1 Bạn sẵn sàng tham gia diễn đàn của thương hiệu điện thoại bạn đang dùng.	(5)	(4)	(3)	(2)	(1)
2.2 Diễn đàn quan trọng trong việc kết nối bạn với thương hiệu điện thoại bạn đang dùng.	(5)	(4)	(3)	(2)	(1)
2.3 The forum is helpful when you have problems with your phone. Diễn đàn rất hữu ích khi bạn có vấn đề điện thoại bạn đang xài.	(5)	(4)	(3)	(2)	(1)
2.4 Diễn đàn có thể duy trì mối quan hệ của bạn với thương hiệu diện thoại bạn dang dùng.	(5)	(4)	(3)	(2)	(1)

Phần 4: Sự đổi mới (Innovation) có ảnh hưởng đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam.

Giải thích: Hãy đánh dấu ✓ với những lựa chọn tương ứng với các ý kiến của bạn. Các mức độ tương ứng với ý kiến của bạn: 5= Hoàn toàn đồng ý, 4 = Đồng ý, 3= Trung lập, 2= Không đồng ý, 1= Hoàn toàn k đồng ý.

Ghi chú: S sẽ được xem là thương hiệu điện thoại bạn yêu thích hoặc đang sử dụng.

Sự đổi mới (Innovation-IN)có ảnh hưởng đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam.	Mức độ ý kiến				
	Hoàn toàn đồng ý				Hoàn toàn không đồng ý
1.1 Tôi thích sử dụng thương hiệu điện thoại S hơn các thương hiệu khác vì các công nghệ mới nhất của nó.	(5)	(4)	(3)	(2)	(1)
1.2 Tôi thích sử dụng thương hiệu điện thoại S hơn các thương hiệu khác vì các tính năng mới của nó của nó vượt trội hơn các thương hiệu khác.	(5)	(4)	(3)	(2)	(1)
1.3 Tôi thích sử dụng thương hiệu điện thoại S hơn các thương hiệu khác vì công nghệ và tính năng của nó xứng đáng với tiền tôi bỏ ra.	(5)	(4)	(3)	(2)	(1)

Phần 5: Sự để tâm của khách hàng (Customer involvement) có ảnh hưởng đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam.

Giải thích: Hãy đánh dấu ✓ với những lựa chọn tương ứng với các ý kiến của bạn. Các mức độ tương ứng với ý kiến của bạn: 5= Hoàn toàn đồng ý, 4 = Đồng ý, 3= Trung lập, 2= Không đồng ý, 1= Hoàn toàn k đồng ý.

Ghi chú: S sẽ được xem là thương hiệu điện thoại bạn yêu thích hoặc đang sử dụng.

Sự để tâm của khách hàng (Customer involvement-CI) có ảnh hưởng đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam.	Mức độ ý kiến				
	Hoàn toàn đồng ý				Hoàn toàn không đồng ý
1.1 Tôi cảm thấy rất thích thú với thể loại sản phẩm của thương hiệu S.	(5)	(4)	(3)	(2)	(1)
1.2 Sở hữu sản phẩm của thương hiệu điện thoại S cảm thấy thích thú.	(5)	(4)	(3)	(2)	(1)
1.3 Việc mua sản phẩm của thương hiệu điện thoại S phản ảnh tính chất con người tôi.	(5)	(4)	(3)	(2)	(1)
1.4 Việc chọn một loại sản phẩm của thương hiệu S là một quyết định thích hợp đối với tôi.	(5)	(4)	(3)	(2)	(1)

Phần 6: Sự hài lòng có ảnh hưởng (Satisfaction) đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam.

Giải thích: Hãy đánh dấu ✓ với những lựa chọn tương ứng với các ý kiến của bạn. Các mức độ tương ứng với ý kiến của bạn: 5= Hoàn toàn đồng ý, 4 = Đồng ý, 3= Trung lập, 2= Không đồng ý, 1= Hoàn toàn k đồng ý.

Ghi chú: S sẽ được xem là thương hiệu điện thoại bạn yêu thích hoặc đang sử dụng.

| Sự hài lòng có ảnh hưởng (Satisfaction-SA) đến lòng trung thành thương hiệu của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam	Mức độ ý kiến				
	Hoàn toàn đồng ý				Hoàn toàn không đồng ý
1.1. Tôi thích những gì tôi nhận được ở thương hiệu điện thoại S.	(5)	(4)	(3)	(2)	(1)
1.2 Tôi đã nhận được từ S điều mà tôi đã mong chờ.	(5)	(4)	(3)	(2)	(1)
1.3 S chính là sản phẩm lý tưởng mà tôi đã nhận được.	(5)	(4)	(3)	(2)	(1)

Phần 7: Lòng trung thành thương hiệu (Brand Loyalty) của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam.

Giải thích: Hãy đánh dấu ✓ với những lựa chọn tương ứng với các ý kiến của bạn. Các mức độ tương ứng với ý kiến của bạn: 5= Hoàn toàn đồng ý, 4 = Đồng ý, 3= Trung lập, 2= Không đồng ý, 1= Hoàn toàn k đồng ý.

Ghi chú: S sẽ được xem là thương hiệu điện thoại bạn yêu thích hoặc đang sử dụng.

Lòng trung thành thương hiệu (Brand Loyalty-BL) của người dùng Android ở Thành Phố Hồ Chí Minh, Việt Nam	Mức độ ý kiến				
	Hoàn toàn đồng ý				Hoàn toàn không đồng ý
1.1 Tôi dự định sẽ mua sản phẩm của S lần kế tiếp.	(5)	(4)	(3)	(2)	(1)
1.2 Ở những lần trước tôi cũng đã mua sản phẩm của S.	(5)	(4)	(3)	(2)	(1)
1.3 Tôi thích S rất nhiều.	(5)	(4)	(3)	(2)	(1)
1.4 Theo trải nghiệm của tôi, tôi biết S hoạt động tốt	(5)	(4)	(3)	(2)	(1)
1.5 Tôi sẽ là khách hàng trung thành của S.	(5)	(4)	(3)	(2)	(1)

** Cảm ơn sự hợp tác của bạn **

APPENDIX C:

Letters to Experts
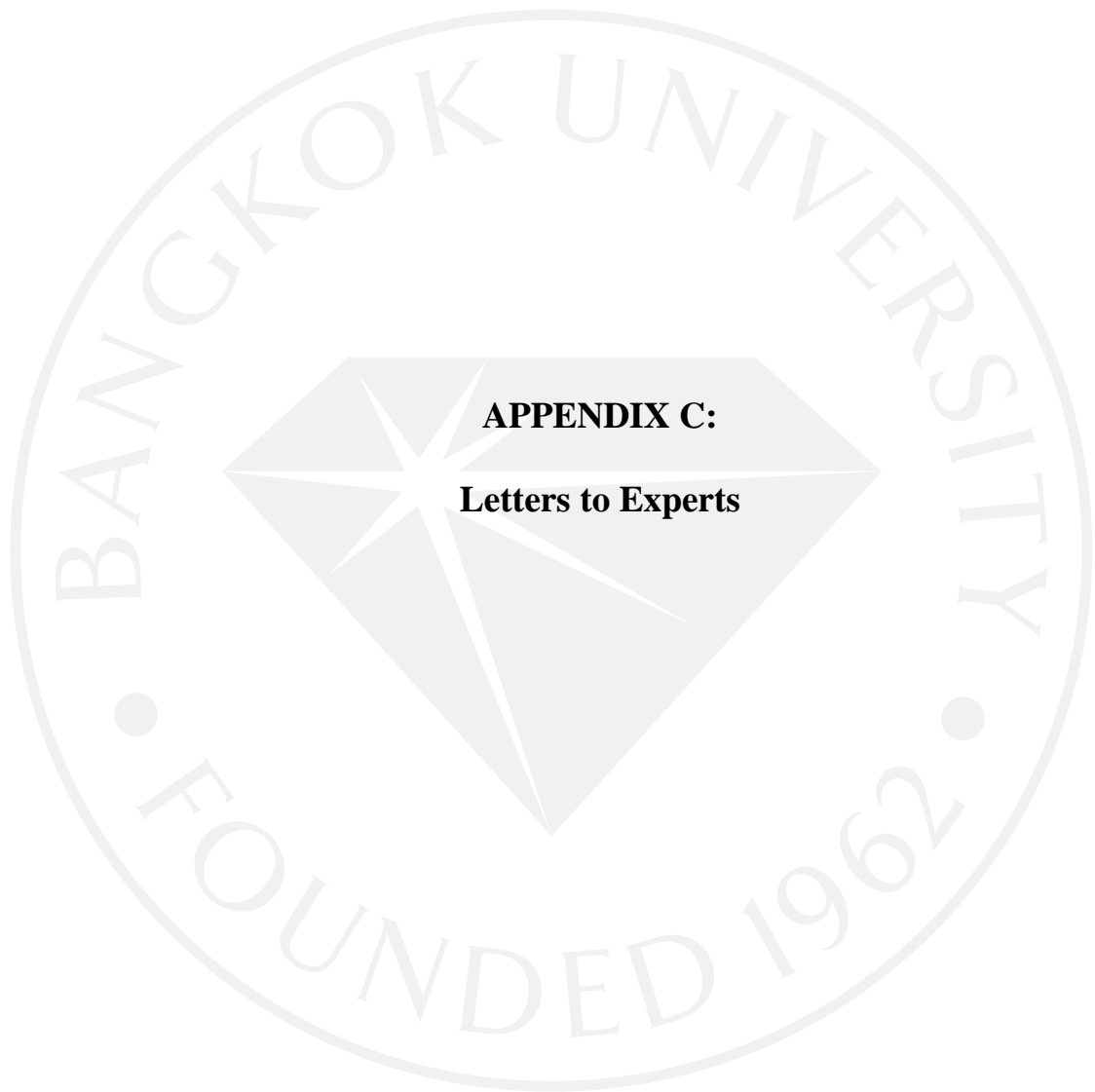
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The Graduate School

December 7, 2017

Dr. Pham Van Kien
Lecturers
Ho Chi Minh City University of Economics and Finance (UEF)
276 Dien Bien Phu, Ward 17,
Binh Thanh District, HCM City

Dear Dr. Kien

The Graduate School of Bangkok University would like to request your permission to allow one of our students in the Master of Business Administration Program (English Program), Miss Ngoc Thai Khanh Nguyen, Student Code 7590203753 to request for reviewing questionnaire (BA 715 Independent Study) entitle "Online Communities, Consumer Involvement, Innovation, and satisfaction Affecting Brand Loyalty of Android Smartphone Users in Vietnam".

The information gained will be solely used for academic purposes, and we are very certain that Miss Ngoc Thai Khanh Nguyen will benefit greatly from this practical and engaging activity. We, therefore, look forward to your positive response to our request.

Sincerely yours,

Asst. Prof.Dr.Kasemson Pipatsirisak
Director, MBA Program

The Graduate School

December 7, 2017

Dr.Truong Quang Dung
Vice Dean of Faculty of Business Administration
Ho Chi Minh City University of Technology (HUTECH)
475A Dien Bien Phu Street, Ward 25,
Binh Thanh District, Ho Chi Minh City

Dear Dr.Dung

The Graduate School of Bangkok University would like to request your permission to allow one of our students in the Master of Business Administration Program (English Program), Miss Ngoc Thai Khanh Nguyen, Student Code 7590203753 to request for reviewing questionnaire (BA 715 Independent Study) entitle "Online Communities, Consumer Involvement, Innovation, and satisfaction Affecting Brand Loyalty of Android Smartphone Users in Vietnam".

The information gained will be solely used for academic purposes, and we are very certain that Miss Ngoc Thai Khanh Nguyen will benefit greatly from this practical and engaging activity. We, therefore, look forward to your positive response to our request.

Sincerely yours,

Asst. Prof.Dr.Kasemson Pipatsirisak
Director, MBA Program

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The Graduate School

December 7, 2017

Assoc. Prof. Nguyen Phu Tu
Dean of Faculty of Business Administration
Ho Chi Minh City University of Technology (HUTECH)
475A Dien Bien Phu Street, Ward 25,
Binh Thanh District, Ho Chi Minh City

Dear Assoc. Prof. Tu

The Graduate School of Bangkok University would like to request your permission to allow one of our students in the Master of Business Administration Program (English Program), Miss Ngoc Thai Khanh Nguyen, Student Code 7590203753 to request for reviewing questionnaire (BA 715 Independent Study) entitle "Online Communities, Consumer Involvement, Innovation, and satisfaction Affecting Brand Loyalty of Android Smartphone Users in Vietnam".

The information gained will be solely used for academic purposes, and we are very certain that Miss Ngoc Thai Khanh Nguyen will benefit greatly from this practical and engaging activity. We, therefore, look forward to your positive response to our request.

Sincerely yours,

Asst. Prof.Dr.Kasemson Pipatsirisak
Director, MBA Program

Graduate School
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Address:	797 Ta Quang Buu Street, Ward 5, Distict 8, Ho Chi Minh City, Vietnam
Educational Background:	Joint Bachelor of Science in Business Administration between University of Science, Vietnam National University, Ho Chi Minh City, Vietnam and Keuka College, USA (October, 2012-2016)

Bangkok University

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Day _04_ Month _05_ Year _2018_

Mr./ Mrs./ (Ms) _Ngoc Thai Khanh Nguyen_ now living at _4180/8_
Soi _Chaim Sawat_ Street _Rama 4_
Sub-district_____ District _Klongtoei_
Province _Bangkok_ Postal Code _10110_ being a Bangkok
University student, student ID _7590203753_

Degree level ☐ Bachelor ☑ Master ☐ Doctorate

Program _M.B.A._ Department ___-___ School _Graduate School_

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