Mediating Effect of Social Commerce Continuance Use Intention on the Relationship Between Perceived Values and Brand Loyalty

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Abstract

The purpose of this paper is to examine the mediating effect of social commerce continuance use intention on the relationship between perceived values and brand loyalty in the social commerce context. The data was collected from 176 members of the Apple Watch Social Commerce site in Vietnam via an online questionnaire. Applying the structural equation modelling method, we found that social commerce continuance use intention has mediating effects on the relationship between perceived values and brand loyalty.

Keywords: Perceived values, continuance use intention, brand loyalty, social commerce, Vietnam **DOI:** 10.7176/EJBM/12-11-07

Publication date: April 30th 2020

1. Introduction

In recent years, social networks have become popular, which is a premise to form a new form of e-commerce called "social commerce". Global social commerce revenue forecasted to increase about 20 times in 5 years, from \$ 22 billion in 2019 to \$ 84.2 billion in 2024 (Business Insider, 2019).

With a population of approximately 96.2 million (General Statistics Office, 2019), along with the rapid development of the internet and the explosion of e-commerce, Vietnam is becoming the potential market for online trading, especially IT and electronic consumer products. Specifically, according to a Nielsen report (2017), among 98% of consumers accessing the internet have purchased online, 40% of them have purchased online for IT products and mobile phones. While, in the field of e-commerce, brand loyalty significantly influences market share. According to Danaher et al. (2003), in the online environment, the greater the brand loyalty is, the greater the market share that brand gains and vice versa.

Therefore, identifying the factors affecting brand loyalty is very important to generate sales through social commerce sites. Social commerce is defined as an oral form of electronic commerce (Dennison et al., 2009). Many different studies suggested that perceived values can affect brand loyalty. Cronin Jr, Brady, & Hult (2000) suggest that perceived values have a great influence on customer loyalty. Besides, several other studies argued that perceived values also affect social commerce continuance use intention. The research conducted by Gan & Wang (2017) suggested that perceived values have a significant and positive effect on consumer satisfaction and purchase intention. A high level of perceived values increases customer satisfaction with social commerce sites and enhances their shopping intention. Several other studies showed that social commerce continuance use intention positively influence brand loyalty. Moreover, China's social commerce continuance use intention on the phone platform has positive effects on brand loyalty (Jun-Jie Hew et al., 2016).

However, the majority of previous studies were conducted in developed countries. There are no similar studies conducted in Vietnam, especially in the social commerce context. Meanwhile, according to Nguyen & Nguyen (2019), contextual factors such as cultural characteristics, product complexity, product innovation rate and social setting of using products probably affect causal relationships between consumer behaviours.

Therefore, this study aims at addressing the following research questions:

(i) To what extent do perceived values affect brand loyalty in Vietnam social commerce?

(ii) To what extent does social commerce continuance use intention affect the relationship between perceived value and brand loyalty toward social commerce?

Among the popular and widely used social commerce sites such as Instagram, QQ, etc. Facebook always leads this field with the proportion of purchases through Facebook accounting for 70% in 2018, a slight increase compared to 2017 (Brand Vietnam, 2018). Meanwhile, the Apple Watch is a very successful smartwatch brand, dominating the global market for 5 years with 6.8 million units sold, accounting for 48% market share in 2019 (Strategy Analytics, 2019). Therefore, we conducted a survey and collected data from members of social commerce APPLE WATCH VIETNAM on FACEBOOK to answer the above research questions.

In the rest of this paper, we will present an overview of the theoretical basis and research model, research methods, research results, and finally, conclusions and implications of the research results.

2. Literature reviews

2.1 Perceived Value

According to Zeithaml (1988), perceived values are consumers' overall assessment of the utility of a product or service based on their perceptions of what they receive and what they give. Zeithaml considered perceived value as a result of the comparison between the two components "received" and "given" from the usage of products and services. Zeithaml (1988) argues that some consumers perceive value when they buy goods/services at low prices, others find product and service value when there is a balance of quality and price. In terms of composition, previous studies have shown that perceived values are made up of three factors: social value, utilitarian value and hedonic value.

In social commerce context, social value is defined as the concept of self-awareness in society stemming from the use of social commerce sites (Sweeney & Soutar, 2001). Social values are realized through empowerment and self-esteem (Rintamaki et al., 2006). Utilitarian value refers to the "physical benefits", functional benefits that a product or service offers to its customers, provided by using social commerce sites, such as convenience and cost reduction; and it focuses on user perceptions of utilities and performance (Hsu & Lin, 2016; Xu et al., 2015). Hedonic value relates to the physical benefits that result from the use of social commerce sites, such as pleasure and happiness; and hedonic value pays more attention to emotional benefits (Heijden, 2004).

2.2 The effect of perceived value on brand loyalty

Brand loyalty refers to the priority given to a specific brand even though the behavior may be changed by the influence of situations or advertising efforts of other brands. Oliver (1999) defined brand loyalty as a commitment to undoubtedly buy or favor some products / services, by continuing to buy products from the same brand or a brand group, despite being influenced by circumstances and advertising efforts of other products that have the potential to make a change in behavior. Similarly, according to Liu et al. (2012), brand loyalty refers to the level of customer loyalty to a specific brand.

Various studies have indicated that perceived values are an important factor influencing different customer behaviors. Gan & Wang (2017) suggested that perceived values have a significant and positive effect on consumer satisfaction and purchase intention. A higher level of perceived values will likely improve customer satisfaction and increase shopping intention. Empirically, recent studies suggest that, in the context of social commerce, perceived value can influence customer loyalty toward brands. Utilitarian value and hedonic value significantly influence the satisfaction of mobile app users (Xu et al. , 2015; Hsu & Lin, 2016). Hu et al. (2015) also showed that online social value has positive effects on user satisfaction with the media. Meanwhile, in a study of tablets, Huang et al. (2011) argued that customer satisfaction has positive effects on brand loyalty. Specifically, when customers are more satisfied, there will be a higher level of loyalty towards the brand.

Based on the above research results, we propose a hypothesis:

H1: Perceived values from using social commerce has positive effects on brand loyalty.

2.3 The effect of perceived value on social commerce continuance use intention

Social commerce continuance use intention refers to the consumers' intention to use social commerce sites to purchase or refer to information to make purchasing decisions. According to Babajide Osatuyi & Ofir Turel (2018), social commerce continuance use intention is influenced by two main factors: collective standards and individual standards. Several recent studies showed that continuance use intention is influenced by factors such as customer satisfaction (Kim et al., 2013), trust (Ng, 2013; Wu et al., 2010).), familiarity (Lin et al., 2014) and cost savings (Chiu et al., 2014). Meanwhile, another research by Gan & Wang (2017) showed that perceived values have a significant and positive effect on consumer satisfaction and purchase intention. Nick Hajli et al. (2015) suggested that perceived value has positive effects on social commerce continuance use intention. According to a report by Analysis (2016), social commerce users don't just concentrate on the characteristics and quality of merchandise, but they also pay attention to the shopping experience. When consumers enjoy the experience and feel the exhilaration and ease of the shopping process, their satisfaction will be improved and thereby increasing social commerce continuance use intention.

Therefore, based on above arguments and findings, we hypothesize that:

H2: Perceived values from using social commerce has positive effects on social commerce continuance use intention.

2.4 The effect of social commerce continuance use intention on brand loyalty

Many previous studies support the argument that social commerce continuance use intention is an important factor affecting brand loyalty. According to research by Laroche et al. (2013): a person's participation in social networking communities has positive effects on brand loyalty. Social commerce sites are a useful platform for brands to gain more loyal customers. Research by Georgescu & Popescul (2015) confirmed that users will be willing to introduce to others about a business if the business promotes the brand on social commerce sites.

Moreover, another study by Hudson et al. (2015) revealed that when consumers interact with favorite brands through social commerce sites, they will improve their relationship with brands. Consumers can interact and explore a brand community on social commerce sites conveniently through commenting, sharing, asking questions or learning experiences. This makes it easier for businesses to reach customers and establish closer relationships between customers and their brands. Recently, Jun-Jie Hew et al. (2016) found that social commerce continuance use intention on mobile platforms has positive effects on brand loyalty. This research also shows that when a person participates in social commerce on the phone increases their loyalty to a certain brand, so so we hypothesize that:

H3: Social commerce continuance use intention has positive effects on brand loyalty. The above hypotheses are visually expressed in the research model in Figure 1.

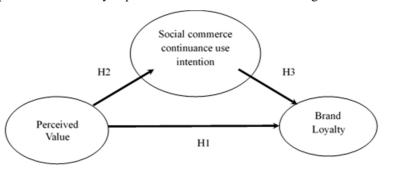


Figure 1. Research Model

3. Research Methodology

3.1Measurement of variables:

3.1.1 Brand Loyalty (BL).

The brand loyalty constructs (BL) was measured by using four items taken from Chaudhuri and Holbrook (2001); Delgado-Ballester et al (2003).

3.1.2 Perceived Values (PV)

The perceived value construct (PV) was adapted from extant research. Particularly, 4 items of utilitarian value were taken from Sweeney & Soutar (2001) and Chiu et al. (2014). 4 items of hedonic value and social value were adapted from Sweeney & Soutar (2001).

3.1.3 Social Commerce Continuance Intention (SCI)

The social commerce continuance use intention construct (SCI) was adapted from Bhattacherjee (2001).

All the items were measured on a five-point Likert-type scale, where 1 is "strongly disagree" and 5 is "strongly agree".

(The measurement scales of all constructs were presented in the appendix).

3.2 Sampling method, data collection, and sample characteristics

The general target of this research is people who have joined the "Apple Watch Vietnam Social Commerce site" on Facebook. Based on this target, the research information is collected by carrying out an online survey. The questionnaires are sent to the members of this social commerce site via Messenger (Facebook). The researchers also use the snowball technique to gather database: when we send the questionnaire to one respondent, that person introduces to other people and so on, from that we can increase the survey scale and access to many more users. After 21 days, the conductors have gathered 176 responses, more than the minimum amount of 150 for a model with 7 structures or fewer (Hair *et al.*, 2014). Sample characteristics are presented in Table 1, 84% male, 36% female classified by gender; 12.5% of users under the age of 20, 70.8% of users in their 30s - 40s and users above 40s account for 2.5%; by occupation: students account for 50.8% of the scale and the rest are working people.

Variables	Classification	Quantity	(%)
	Less than 20	19	10.8
1	20-30	123	69.9
Age	30-40	27	15.3
	More than 40	7	4
Condor	Male	127	72.2
Gender	Female	49	27.8
Occuration	Student	79	44.9
Occupation	Working people	97	55.1

4. Research findings

4.1 Measurement model testing

Based on the original scale, we conducted CFA. However, initial analyses do not guarantee the standards of model fit, construct reliability and discriminant validity. Therefore, based on the results of the analysis, we removed the inappropriate items.

As a result, the perceived value has 5 items, the social commerce continuance use intention has 2 items and the brand loyalty has 3 items as the original. The final measurement model is shown in Figure 2 and Table 2.

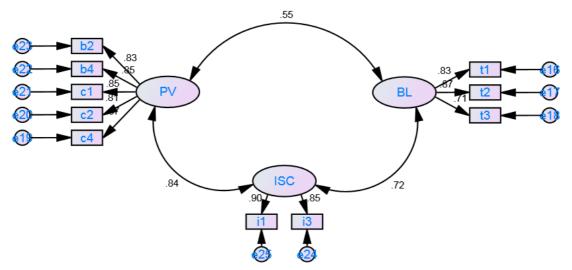


Figure 2: Results from CFA

All detailed results of CFA for all construct were presented in Table 2. These results showed that the measurement model was well fitted with 1 < CMIN/DF = 1.959 < 3; CFI = 0.976 (> 0.95); PClose = 0.073 (> 0.05), 0.06 < RMSEA < 0.08.

Measure	Estimate	Threshold	Interpretation
CMIN	62.703		
DF	32.000		
CMIN/DF	1.959	Between 1 and 3	Excellent
CFI	0.976	>0.95	Excellent
RMSEA	0.074	<0.08	Acceptable
PClose	0.073	>0.05	Excellent

To evaluate the measurement model, convergent and discriminant validity tests were conducted. To meet the convergent validity criterion, values of composite reliability (CR) for each construct should be higher than 0.7 (Chin, 1998). In addition, values of the average variance extracted (AVE) should be greater than the recommended threshold of 0.5 (Hair et al., 2006). The results in Table 3 indicated that the measurement models of perceived value, social commerce continuance use intention and brand loyalty meet construct reliability and convergent validity criteria.

Table 3: Tests results of convergent validity and reliability	Table 3: Tests	results of	convergent	validity and	d reliability
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	CR	AVE	MSV	MaxR(H)	ISC	BL	PV
ISC	0.866	0.764	0.710	0.872	0.874		
BL	0.847	0.651	0.512	0.866	0.715***	0.807	
PV	0.926	0.714	0.710	0.927	0.842***	0.554***	0.845

To demonstrate discriminant validity, the square root of each construct's AVE should be higher than the correlation of the construct with other latent variables (Fornell and Larcker, 1981). The results are also presented in Table 3, verifying the good discriminant validity of the measurement model. Perceived value, social commerce continuance use intention and brand loyalty are three different constructs.

4.2 Hypothesis testing

In the first step, we examined the effect of perceived value on brand loyalty. The results were presented in Figure 3 and Table 4.



CMIN/DF = 2.194 CFI= 0.976 RMSEA= 0.083 PClose= 0.058

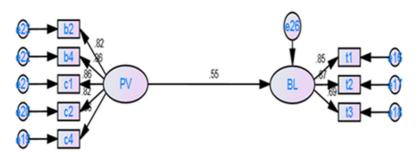


Figure 3: Findings from SEM, step 1

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Predictor	Outcome	Std Beta	Conclusion
PV	BL	.550 ***	H1 supported
	Note: **	* = p < 0.001	

We apply the SEM method to simultaneously test the proposed hypotheses. The results showed that the structural model was not well fitted with data because of RMSEA > 0.8 (CMIN/DF = 2.194; CFI = 0.976; RMSEA = 0.083; PClose = 0.058). However, perceived value positively affects brand loyalty (β =0.550, at α ≤0.001), thus H1 is supported.

In the second step, we add social commerce continuance use intention to the model. The results were presented in Figure 4 and Table 5.

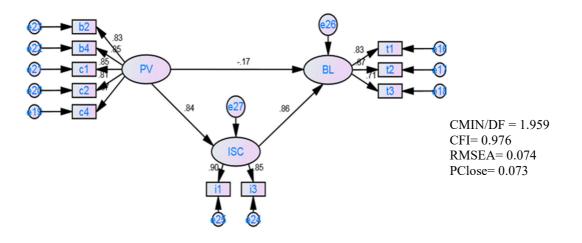


Figure 4: Findings from SEM, step 2

Table 5: Findings from SEM, step 2	Findings from SEM	I. step 2
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Predictor	Outcome	Std Beta	Conclusion	
PV	BL	167	H1 not supported	
PV	ISC	.842 ***	H2 supported	
ISC	BL	.856 ***	H3 supported	

Figure 4 and Table 5 showed the results of hypothesis testing using the SEM method. The results of SEM indicated that the model achieved an acceptable fit (CMIN/DF = 1.959; CFI = 0.976; RMSEA = 0.074; PClose = 0.073). Perceived value does not have an effect on brand loyalty (β = -0.167), thus H1 is not supported. Perceived value significantly and positively affects social commerce continuance use intention (β =0.842, at α <0.001), hence H2 is confirmed. Social commerce continuance use intention has a significant and positive effect on brand loyalty

(β =0.856, at α ≤0. 001), thus H3 is supported.

The findings showed that perceived value has positive effects on brand loyalty. However, the results indicated that perceived value had no direct effect on brand loyalty in case social commerce continuance use intention was added into the research model. Particularly, perceived values indirectly affect brand loyalty through social commerce continuance use intention. All measure of model-fit indicated social commerce continuance use intention has mediating effects on the relationship between perceived value and brand loyalty. Perceived value has positive effects on social commerce continuance use intention. Particularly, users with higher levels of perceived value from using social commerce sites of a brand will be more likely to have a greater social commerce continuance use intention. Moreover, social commerce continuance use intention positively affects brand loyalty.

5. Conclusion

5.1 Conclusions

Based on the research model and proposed hypotheses, applying SEM method, the study tested the hypotheses on the effects of perceived values, social commerce continuance use intention on brand loyalty. Based on data collected from the "Apple Watch Vietnam Social Commerce" site, the results show that perceived value, social commerce continuance use intention are important factors that have positive effects on brand loyalty. The findings also indicate that social commerce continuance use intention has mediating effects on the relationship between perceived value and brand loyalty.

5.2 Theoretical and practical implications

Findings from this research confirmed the positive effects of perceived value on brand loyalty in the context of social commerce in Vietnam. This is an important contribution because the findings have shown some new uncovering compared to other studies. Specifically, the findings demonstrate that perceived values do not directly affect brand loyalty but indirectly affect them through social commerce continuance use intention.

Our research findings also have some managerial implications. Particularly, our findings suggest that developing social commerce site is a useful strategy that businesses can apply to strengthen brand loyalty. To accomplish this goal, businesses need to focus on improving all three factors of perceived values, namely, social value, hedonic value and utilitarian value of social commerce sites as well as enhance social commerce continuance use intention.

5.3 Limitations and further research

Despite having several important contributions to literature, the research has certain limitations. First, although our sample size is sufficient, the convenient sampling method is a limitation of the research. In addition, the gender gap between men and women in the sample is a limitation of the research. Second, the study focuses on clarifying the effects of perceived value on brand loyalty through social commerce continuance use intention, there may be many other mediating factors in this relationship, which have not been included in our research model. Finally, this research is only on Vietnam Apple Watch social commerce site that may limit the generalization ability of the findings. Therefore, future research should apply a more representative sampling method, add new constructs into the research model, or conduct comparative studies on different social commerce communities.

References

- Analysys (2016), *Report on mobile social commerce in China 2016*, Accessed 05 30, 2016, Available at: http://www.analysys.cn/view/report/detail.html?columnId=8&articleId=1000026
- Babajide Osatuyi, Ofir Turel. (2018). Social motivation for the use of social technologies: An empirical examination of social commerce site users. *Internet Research*. doi:10.1108/IntR-09-2017-0338.
- Bhattacherjee, A. (2001b). Understanding information systems continuance: an expectation-confirmation model. *MIS Quarterly*, 25 (3), 351-370.
- Brands Vietnam (2018), Tổng quan thị trường thương mại điện tử Việt Nam 2018, Accessed 11 28, 2018
- Business Insider (2019). Social Commerce Market Report: How social media is driving e-commerce sales in 2020, Accessed 12 18, 2019.
- Brodie, R.J., Ilić, A., Jurić, B. and Hollebeek, L. (2013). Consumer engagement in a virtual brand community: an exploratory analysis. *Journal of Business Research*, 66 (1), 105-114.
- Celeste See-Pui Ng. (2013). Intention to purchase on social commerce websites across cultures: a cross-regional study. *Information & Management*, 50 (8), 609-620.
- Chao-Min Chiu, Eric T. G. Wang, Yu-Hui Fang & Hsin-Yi Huang. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24 (1), 85-114.
- Chaudhuri, A. and Holbrook, M.B. (2001). The Chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of Marketing*, 65 (2), 81-93.

- Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), Methodology for business and management. *Modern methods for business research*, 295–336.
- Chin-Lung Hsu & Judy Chuan-Chuan Lin. (2016). Effect of perceived value and social influences on mobile app stickiness and in-app purchase intention. *Technological Forecasting and Social Change*, 108, 42-53.
- Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76 (2), 193-218.
- Danaher, P. J., Wilson, I. W., & Davis, R. A. (2003). A Comparison of Online and Offline Consumer Brand Loyalty. *Marketing Science*, 22 (4), 461–476.
- Delgado-Ballester, E., Munuera-Aleman, J. L., & Yague-Guillen, M. J. (2003). Development and validation of a brand trust scale. *International Journal of Market Research*, 45 (1), 35–54.
- Dennison, G., Bourdage-Braun, S. and Chetuparambil, M. (2009). In Social commerce defined, 23747. *IBM Corporation, Research Triangle Park.*
- Hsin Kuang Chi, Huery Ren Yeh & Ya Ting Yang. (2009). The Impact of Brand Awareness on Consumer Purchase Intention: The Mediating Effect of Perceived Quality and Brand Loyalty. *Journal of International Management Studies*, 4 (1), 135-144.
- Fornell, C., Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18 (1), 39-50.
- Gan, C. and Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. *Internet Research*, 27 (4), 772-785.
- General Statistics Office (2019), Thông cáo báo chí Kết quả Tổng điều tra Dân số và Nhà ở năm 2019, Accessed 12 19, 2019.
- Georgescu, M., & Popescul, D. (2015). Social Media e the new paradigm of collaboration and communication for business environment. *Procedia Economics and Finance*, 20 (2012), 277-282.
- Hair J.F., Black W.C., Babin B.J., Anderson R.E., and Tatham R.L. (2014). Multivariate data analysis. 7th Edition. Pearson Prentice Hall. New Jersey.
- Hajli, N., Shanmugam, M., Powell, P., & Love, P. E. D. (2015). A study on the continuance participation in online communities with social commerce perspective. *Technological Forecasting and Social Change*, 96, 232– 241.
- He, H., Li, Y., & Harris, L. (2012). Social identity perspective on brand loyalty. *Journal of Business Research*, 65 (5), 648–657.
- Heijden, H. (2004). User acceptance of hedonic information systems. MIS Quarterly, 28 (4), 695-704.
- Hew, J.-J., Lee, V.-H., Ooi, K.-B., & Lin, B. (2016). Mobile social commerce: The booster for brand loyalty? *Computers in Human Behavior*, 59, 142–154.
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, 28 (2), 149-165.
- Huang, Y.-T., Lee, K.-W., & Chan, W.-Y. (2011). An empirical study of consumer's repurchase intention of tablet PC. 2011 6th International Conference on Computer Science & Education (ICCSE). doi:10.1109/iccse.2011.6028609.
- Hudson, S., Huang, L., Roth, M. S., & Madden, T. J. (2015). The influence of social media interactions on consumer brand relationships: a three-country study of brand perceptions and marketing behaviors. *International Journal of Research in Marketing (in press)*.
- Hui Lin, Weiguo Fan & Patrick Y.K. Chau. (2014). Determinants of users' continuance of social networking sites: a self-regulation perspective. *Information & Management*, 51 (5), 595-603.
- Jyh-Jeng Wu, Ying-Hueih Chen & Yu-Shuo Chung. (2010). Trust factors influencing virtual community members: study of transaction communities. *Journal of Business Research*, 63 (9), 1025-1032.
- Kim, S.B., Sun, K.A. and Kim, D.Y. (2013). The Influence of Consumer Value-Based Factors on Attitude-Behavioral Intention in Social Commerce: The Differences between High- and Low-Technology Experience Groups. *Journal of Travel & Tourism Marketing*, 30 (1-2), 108-125.
- Laroche, M., Habibi, M. R., & Richard, M.-O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management*, 33 (1), 76–82.
- Liu, F., Li, J., Mizerski, D., & Soh, H. (2012). Self-congruity, brand attitude, and brand loyalty: A study on luxury brands. *European Journal of Marketing*, 46 (7-8), 922–937.
- Mawston, Neil. (2019). Global Smartwatch Shipments Leap to 14 Million Units in Q3 2019. *Strategy Analytics*. Accessed 11 06, 2019.
- Nguyen, N. M., & Nguyen, H. T. (2019). How do product involvement and prestige sensitivity affect price acceptance on the mobile phone market in Vietnam? *Journal of Asia Business Studies, ahead-of-print.* doi: 10.1108/jabs-07-2017-0096
- Nielsen. (2017). Innovation In Mobile Technology. *Payment Options & Retail Strategy Drive Borderless Shopping*, 2-5.

Oliver, R. L. (1999). Whence consumer loyalty. Journal of Marketing, 63, 33-34.

- Sweeney, J.C. and Soutar, G.N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77 (2), 203-220.
- Tao Hu, William J. Kettinger and Robin S. Poston. (2015). The effect of online social value on satisfaction and continued use of social media. *European Journal of Information Systems*, 24 (4), 391-410.
- Timo Rintamaki, Antti Kanto, Hannu Kuusela, Mark T. Spence. (2006). Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland. *International Journal of Retail & Distribution Management*, 34 (1), 6-24.
- Wang, L., Sun, S., & Zha, J. (2009). An empirical research on the relationship between perceived customer value and eloyalty. 2009 IEEE International Conference on Industrial Engineering and Engineering Management. doi:10.1109/ieem.2009.5373070.
- Xu, C., Peak, D., & Prybutok, V. (2015). A customer value, satisfaction, and loyalty perspective of mobile application recommendations. *Decision Support Systems*, 79, 171–183.
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52 (3), 2.

Code	Variables/factors/items	
PV	PERCEIVED VALUES	
PV1	Social value	
a11	Using "Apple Watch Vietnam Community" for shopping would help me to feel acceptable.	
a12	Using "Apple Watch Vietnam Community" for shopping would make a good impression on others.	
a13	Using "Apple Watch Vietnam Community" for shopping would improve the way I am perceived.	
a13	Using "Apple Watch Vietnam Community" for shopping would give its owner social approval.	
PV2	Hedonic value	Sweeney and
b11	Using "Apple Watch Vietnam Community" for shopping is one that I would enjoy.	Soutar (2001); Chiu <i>et al.</i> (2014)
b12	Using "Apple Watch Vietnam Community" for shopping would make me feel good.	
b14	Using "Apple Watch Vietnam Community" for shopping is one that I would feel interesting.	
b14	Using "Apple Watch Vietnam Community" for shopping would give me pleasure.	
PV3	Utilitarian value	
c11	Quality of products from "Apple Watch Vietnam Community" is reliable.	
c12	Products from "Apple Watch Vietnam Community" offer good value for money.	
c13	Shopping on "Apple Watch Vietnam Community" would allow me to quickly find out the appropriate products.	
c14	Using "Apple Watch Vietnam Community" for shopping would be a convenient	
	way.	
BL	BRAND LOYALTY	Chaudhuri <i>et al</i> .
t1	If I experience a problem with Apple Watch, I will try to understand.	(2001); Ballester
t2	I intend to keep purchasing the products of Apple Watch.	<i>et al.</i> (2003)
t3	If Apple Watch is not available at the store, I would buy it in another store.	<i>ei ui.</i> (2005)
SCI	SOCIAL COMMERCE CONTINUANCE USE INTENTION	
i1	I intend to continue using social commerce sites for my purchases rather than	
	discontinue its use.	Dhattashariaa
i2	My intentions are to continue using social commerce sites for my purchases rather than use any other alternative means (e.g. regular electronic commerce sites).	Bhattacherjee (2001b)
i3	I would like to continue using social commerce sites for purchasing goods and services online.	

Appendix. Measurement items