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NGHIÊN CỨU VỀ ẢNH HƯỞNG CỦA LIVE-STREAM ĐẾN Ý ĐỊNH MUA SẴM CỦA KHÁCH HÀNG ĐỐI VỚI SẢN PHẨM THỜI TRANG LOCAL BRANDS VIỆT NAM

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Tóm tắt

Trong bối cảnh thương mại điện tử ngày càng phổ biến đối với mua sắm trực tuyến, tính năng live-stream (“phát trực tiếp”) xuất hiện trên các nền tảng mạng xã hội đã trở thành một công cụ hợp thời và hữu ích dành cho các nhà bán hàng, qua đó nỗ lực đưa việc chuyển đổi số góp phần vào sự thành công của doanh nghiệp. Trong nghiên cứu này, phương pháp định lượng PLS-SEM được tác giả sử dụng để kiểm tra mức độ ảnh hưởng của các yếu tố trong live-stream lên ý định mua sắm của khách hàng đối với các sản phẩm thời trang “local brands” mang thương hiệu Việt Nam. Theo đó, các yếu tố mà tác giả muốn đề xuất trong nghiên cứu được rút ra từ các lý thuyết trước đây, đó là: “Cảm nhận hữu ích” và “Cảm nhận dễ sử dụng” từ mô hình TAM, giá trị “Ưu việt” và “Khoái cảm” từ các nghiên cứu về live-stream trên phạm vi toàn cầu, và cuối cùng là yếu tố “Động lực xã hội” dựa trên Thuyết UGT (Thuyết Sử dụng và hài lòng). Trên cỡ mẫu 285, kết quả nghiên cứu cho thấy rằng tất cả các biến theo thống kê đều có tác động tích cực lên ý định mua sản phẩm quần áo mang thương hiệu local brands của khách hàng thông qua việc xem phát trực tiếp.

Từ khóa: Hành vi, PLS-SEM, Thương mại điện tử, Live-stream, Phát trực tiếp, Thời trang, Sản phẩm nội địa, Local brands.

A STUDY ON THE INFLUENCE OF LIVE STREAMING ON CUSTOMER’S PURCHASE INTENTIONS OF LOCAL BRANDS IN VIETNAMESE FASHION INDUSTRY

Abstract

In the light of E-commerce’s proliferation in online shopping, live streaming emerged on social platforms as a trendy and useful tool for sellers to apply digitalization contributing into the success of businesses. In this study, PLS-SEM is the utilized method to examine the influence of factors in live streaming on customer’s purchase intentions towards local fashion products in Vietnam. Accordingly, the author would like to propose the following factors extracted from the previous

theories such as “Perceived Usefulness” and “Perceived Ease of Use” of TAM, “Utilitarian” and “Hedonic” values gained from the global studies of Live-streaming and the final factor - “Social motivators” in Vietnam. On a sample size of 285, the research results show that all variables statistically have positive impacts on customer’ intentions to buy local clothing products via live streaming.

Keywords: Behavior, PLS-SEM, E-commerce, Live-streaming, Local products.

1. Introduction

The practice of live streaming has proliferated over time in line with the gradual development of E-commerce in the world, especially in the Southeast Asia regions. Along with the digitalization, which is becoming an inevitable trend which has brought about drastic changes to myriads of sectors, social media emergence has influenced the relationships between customers and business, customers and services and also businesses and their products. The year of 2020 witnessed a strong digital transformation wave in which more and more businesses have utilized the digital integration of channel and internet networks, which can be considered as an important strategic choice and path for many brands after the explosion of Covid-19 pandemic.

In Vietnam, live streaming has become a pervasive element of social media platforms. In live streaming, seller’s expressions and interactions with a product can be transmitted to customers in real time although they are spatially separated from each other. Live video shopping (live streaming) with the development of the 5G network is considered to allow faster downloads which would facilitate the proliferation of online shopping on social media by 2020. Accordingly, live streaming is currently a general trend for tons of Vietnamese businesses to sell their products on social media and E-commerce websites.

Local brands in Vietnam are increasingly gaining trust from Vietnamese because of their efforts in both international quality of production that make product high-qualified and traditional characteristics which is suitably modified for the majority of Vietnamese usage. Among domestic goods, clothing products are still the essentials for most of Vietnamese consumers and gain a substantial market share. This mixture of internationally digital transformation and localization attempts of fashion businesses to raise revenues as well as promote the national economy.

Regarding aforementioned reasons, the author proposed the research topic is “The influence of live streaming on customer purchase intentions of local brands in Vietnamese fashion industry” in order to survey the demands for using live streaming in local clothing purchase in Vietnam and also determine the factors with their impacts on customer behaviors. Based on such findings, relevant domestic businesses and organizations can possibly come up with strategies to promote their sales activities.

2. Theoretical framework

2.1. Theories in relation to customer’s purchase intention

Theory of Reasoned Action (TRA)

Theory of Reasoned Action (TRA) was introduced in the early 1975s by Ajzen and Fisbein. TRA is used to explain or predict consumer behavior based on intended behavioral trends, attitudes, and individual subjective norms. The TRA model is known to be one of the pioneering

theories in the field of psychosocial research (Armitage & Conner, 2001). The TRA model and other advanced versions are widely used by many researchers around the world to assess customers' intention of buying products or services. Overall, the TRA model is the origin of the later developed customer behavior assessment models such as the Theory of Planned Behavior - TPB (Ajzen, 1991), Technology Acceptance Model – TAM (Davis, 1989; Davis *et al.*, 1993), Technology Use and Acceptance Model – UTAUT (Venkatesh *et al.*, 2000, 2003).

The Theory of Planned Behavior (TPB) has been widely used in researches and successful applications as a theoretical framework for predicting online buying behavior (Thang & Do, 2016). Ajzen (1991) developed TPB based on the Theory of Reasoned Action (TRA) of Fishbein and Ajzen (1975) by adding the factor “perceived behavioral control” in TRA. Hansen (2004) tested both models TRA and TPB and the results showed that the TPB model explained customer behavior better than model TRA did. Importantly, in the context of Vietnam, some studies demonstrated that TPB is more suitable in predicting customer's online shopping intention (Thang, 2016).

The Technology Acceptance Model (TAM)

For technology-related motivations, the Technology Acceptance Model (TAM) regarding information technology (IT) is widely adapted and used for research related to understanding why people adapt and use technology. The authors like Fishbein & Ajzen (1975) proposing Theory of Reasoned Action (TRA); Ajzen (1985) proposing the Theory of Planned Behavior (TPB), and Davis (1986) introducing the Technology Acceptance Model (TAM) aimed at explaining the behavior of individuals in using technology services in the field of IT based on the theory of rational action (TRA) by Ajzen & Fishbein.

In the technology acceptance model (TAM), Davis replaced two variables of attitude and subjective norm with two new variables, Perceived Usefulness and Perceived Ease of Use. Perceived ease of use was defined as “the degree to which a person believes that using a particular system would be free of efforts” and perceived usefulness as the extent that people believe using a particular system would enhance their job performance (Davis, 1989). As a result, TAM has been applied in the e-commerce context. Childers *et al.* applied TAM in online retail shopping and postulated that the usefulness referred to the outcomes of shopping experiences and ease of use referring to the process which results in the outcomes of shopping activities (Carson, 2001). They also proposed that usefulness could reflect utilitarian motivation and enjoyment embodied in hedonic aspects. Moreover, TAM is also applied in online shopping because it conveys intrinsic motivations which is one of the major reasons for customer to shop online.

The Uses and Gratification Theory (UGT)

This theory is primarily used on the conventional media as an endeavor to analyze consumers' behavior. The application of the UGT has been considered by various social media studies primarily for exploring the uses and motives behind social network platform usage (Dunne & Lawlor, 2010). The model can be utilized in identifying how to improve consumers' engagement on social media, developing models and hypotheses to examine the effects of a marketing strategy consisting of social media content and advertising through the stimulation of strong intensity of users, brand awareness, brand loyalty (Zhao *et al.*, 2017).

2.2. Studies in relation to factors in Live streaming

The Utilitarian and Hedonic motivations

For consumers' shopping motivations, utilitarian and hedonic motivations are the prevalent factors explored by most prior studies about live streaming, which were followed by many others. A utilitarian category is defined as a category dominant on attributes such as functionality, practicality, cognition, and instrumental orientation (Markus and Robey, 1988). Additionally, one of the main contributions to customer purchase intention that was added by Venkatesh *et al.* (2012) in UTAUT2, which concerns the roles of the hedonic motivation. A hedonic category was also known as an intrinsic motivation but categorized into the other concepts like experiential benefits, enjoyment, enduring involvement, and aesthetic perception (McCracken, 1989). In other words, the utilitarian value means functional, instrumental, and practical and hedonic means multisensory and emotive (Chin *et al.*, 2003).

Accordingly, the utilitarian value highlights the results achieved after a process of pursuing a clear beginning objective consciously while hedonic value could aim at experiences during the proceeding of actions, namely the feelings of relief and enjoyment while shopping after a busy week of working hard, for instance. In other words, utilitarian benefits could be considered satisfactory outcomes while hedonic benefits could provide people with pleasure and relaxation of the shopping experience (Bart, 2014).

In other side, the purchase's motive for hedonic values discussed about in the previous research by Dhar and Wertenbroch (2000) relates to emotional catalysts, which may occur while purchasing is being carried out. In other words, hedonic purchase happens when customers are engaging in shopping activities and experience services (Dick and, 1994). Hedonic values are subjective and can be generated from playfulness and fun (Chin, 2003). Because of those values, hedonic motivations are illustrated by Hirschman and Holbrook as "problem solvers" or "fun, fantasy, arousal, and enjoyment" seekers for shoppers.

Social Motivators

Social motivators, which has been reported in the prior literature as an important factor, attributing a high degree of interactivity (Alalwan *et al.*, 2017; Sundar *et al.*, 2014). The theoretical foundation of this factor is based on the Uses and Gratification Theory (UGT) developed by Katz and Blumler (1974). In particular, customers are more attracted to social media ads due to their level of creativity and attractiveness (Dwivedi *et al.*, 2017; Hsu & Lin, 2008; Jung *et al.*, 2016; Lee and Hong 2016; Wamba *et al.*, 2017). Furthermore, according to Jung *et al.* (2016), Lee and Hong (2016), customers were influenced by the extent to which social media advertising can provide adequate and useful information about their products they are interested in. Cai & Wohn (2019) also carried out a research with the aims of evaluating the streamers' motivations on social live streaming services across different platforms and countries.

This topic "The influence of live streaming on customer purchase intentions of local brands in Vietnamese fashion industry" would provide the information about live streaming, factors and the degrees of their impacts on the intention to buy local fashion products in Vietnam. Live streaming is a new form of clothing sales in Vietnam, emerging as a phenomenon with the development of e-commerce platforms. Currently, there have been no official announcements or researches by domestic authors on the influence of live streaming on Vietnamese fashion consumers' purchase intention.

In the topic "The role of live streaming in building consumer trust and engagement with social commerce sellers" from author Chauhan (2015), three factors utilitarian, hedonic, and symbolic values were combined with the third variable "Customer Trust" with the aim of examining potentially and importantly whereby the three perceived values may mechanisms influence customer engagement through the other.

Moreover, Wang, Lee & Lee (2018) in the topic "Factors Influencing Product Purchase Intention in Taobao Live Streaming Shopping" also conducted a survey on 300 potential customers in China to justify factors influencing product purchase intention in Taobao live streaming shopping. The study adopted the Elaboration Likelihood Model (ELM), performing a test of the factors affecting user intention and giving the results that source attractiveness has stronger effect on attitude towards product in the condition of hedonic product than in the condition of utilitarian product.

In another study conducted by Cai, Wohn, Mittal, Sureshababu with the topic "Utilitarian and Hedonic Motivations for Live Streaming Shopping", the authors investigated into utilitarian and hedonic motivations as a theoretical framework and also incorporated the technology acceptance model (TAM) to examine how these two types of motivations are related to intention to engage in live streaming shopping. The final results showed that hedonic motivation is positively related to celebrity-based intention and utilitarian motivation is positively related to product-based intention.

Based on such findings, this study continues to use two factors of utilitarian and hedonic values along with two factors affecting the intention to use technology products and services namely Perceived Usefulness and Perceived Ease Of Use from "TAM" (Technology Acceptance Model) of Davis (1989). Being separated from above studies, the "Social Motivators" factor which originates from Uses and Gratification Theory (UGT) (Katz *et al.*, 1973) is added under analysis as well. It is clearly evident that five factors proposed in this study have never appeared simultaneously in any other publications on the influences of live streaming in the world, as well as in studies on customer purchase intentions of local fashion in Vietnam.

3. Theoretical model and hypothesis

3.1. Research model and hypothesis

The author proposes the following research model:

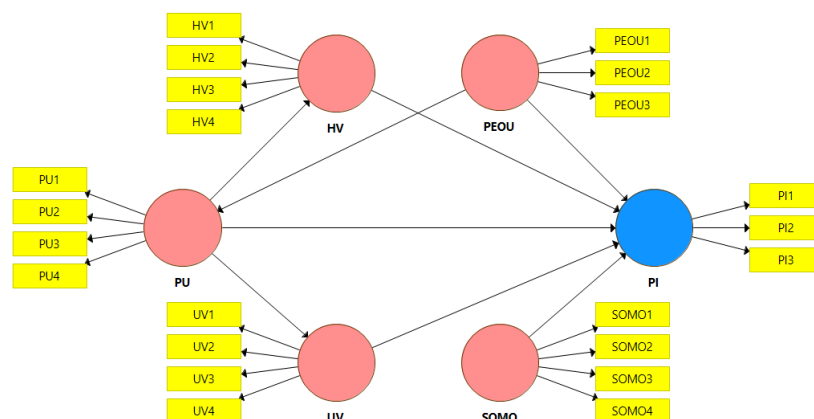


Figure 1. Proposed theoretical framework

Source: Compiled by the author from Smart-PLS output

Based on the analysis of previous models and theories of customer behavior using new technology and live streaming, the author proposes the factors under study as follow.

Perceived Usefulness: Lopez-Nicolas, Molina-Castillo & Bouwman (2008) argued that technology must help users perform tasks easier, faster in a better quality. In other words, the effectiveness of technology is the capabilities of enhancing task performance. The more users find a system efficient, the more likely they are to use the technology. Thus, the below hypothesis is proposed.

H1: The perceived usefulness has a positive relationship with customer purchase intention.

Perceived Ease of Use: Some extensive studies have documented the evidences of a significant effect of PEOU on behavior intentions (Adam, Nelson, & Todd, 1992; Davis, 1989; Carter & Belanger, 2004). Also, in a study conducted by Ngo and Ginn, besides perceived of economic benefits (PEB), perceived of merchandise (PM), perceived ease of use (PEOU) has significant direct effects on consumers' behavior adopting online shopping. Therefore, the below hypothesis is put forward:

H2: The perceived ease of use has a positive relationship with customer purchase intention.

Venkatesh and Morris (2000) argued that perceived ease of use (PEOU) has some effectiveness on purchase behavior, for example, in the information technology. This result is expressed in a two-causal factor model which composes of (1) a direct effect on behavior and (2) an indirect effect on behavior via perceived usefulness (PU). Many authors have also drawn conclusions about the positive impacts of perceived ease of use (PEOU) on perceived usefulness (PU) (Davis, 1989; Schierz, 2010; Lee and Kim, 2009; Yang and Yoo, 2004).

H3: The perceived ease of use has a positive relationship with the perceived usefulness.

Utilitarian value: According to Cai, Wohn, Mittal & Sureshbabu (2018), there is a significant indirect effect of utilitarian value on customer engagement through both trust in products and in sellers. The authors also added some explanations in their study that if the users were goal-oriented and looking for a specific item, the more useful they thought the product information was. This implies that the more they care about the products, the more likely they would go watch the live stream for more product details. It can be understood that entertainment and information seeking motives are the two key reasons for live-stream engagement (Bruce, 2018). Sharing the same opinions, in a study conducted in Malaysia, Cai and Wohn (2019) assumed that amusement and informativeness gratification were positively related to attitudes towards online shopping (Lim & Ting, 2012). Meanwhile, another study found out that the intention to engage in social commerce activities was positively influenced by information quality, new trends, and perceived enjoyment (Crossler, 2014). In China, consumers' social commerce intentions were predicted by perceived gratification from entertainment seeking, information exchange and social interaction (Yang & Li, 2014). Thus, the below hypothesis is proposed.

H4: The utilitarian value of live streaming has a positive relationship with customer purchase intention.

Hedonic value: In a study conducted by Fiore, Jin and Kim (2005), the hedonic value could boost the consumer's shopping experience and makes it more pleasant and enjoyable after they observed the seller and customers' activities via live streaming. The authors also found out an

effect of image interactivity features (e.g., mix and match, virtual model) of online apparel retailers in e-commerce sites on emotional pleasure and arousal that, in turn, led to a willingness to patronize the online store. Physical attractiveness of the streamer was significant to live streaming in terms of hedonic motivations. It means that the more pleasant feelings streamer could bring about, the more likely customers would watch a live stream. Five factors including performance expectancy, hedonic motivation, interactivity, informativeness, and perceived relevance, were noticed to have a significant impact on the customer's purchase intention (Alalwan, 2018). Enjoyment gained through live streaming has positive effects on purchase intentions. During that process, interactions bring about significant motivations, suggesting that if consumers could have an enjoyable interaction with the celebrity and other viewers, they preferred to watch live streams before purchasing. Enjoyment of interaction and trend setting could predict the intention that involved in internet celebrities (Cai, & Wohn, 2019). Thus, the next hypothesis is proposed as follow.

H5: The hedonic value of live streaming has a positive relationship with customer purchase intention.

In studies conducted by Matthew (2015) and Lu (2009), authors recommended both ease of use and perceived usefulness in the TAM model are perceived as intrinsic motivations which consist of pleasure and satisfaction for users (Deci, 1975). Such intrinsic motivation in the TAM was intensively examined as an enjoyment factor in a research of Lu and Su (2009). It means that "hedonic" and "utilitarian" motivations are considered as deciding factors in systems and user experiences, in which those values may create satisfaction for users of technology (O'Brien, 2010). Similarly, technology must help users perform tasks easier, faster through "perceived usefulness" as aforementioned. Therefore, in this study, we would like to examine user experiences of technology through perceived usefulness in relations with customers' motivations namely utilitarian and hedonic when considering live streaming as a shopping tool. To investigate their impacts, two corresponding hypothesis are proposed as below.

H6: The perceived usefulness has a positive relationship with the utilitarian value.

H7: The perceived usefulness has a positive relationship with the hedonic value.

Social Motivators: For this factor, the importance degree an individual's friends/colleagues, family members and relatives perceive is considered as ascendants to the likelihood of that person when hitting the new technology (Venkateshet *et al.*, 2003). Social motivators (SOMO) represents the pressure formed in society's impacts on individuals' performance of a particular behavior. People's thoughts, feelings and behaviors are influenced not only by their individual personalities, but also by social influence, others' thought and actions in relation. Existing work has suggested that viewers watch live streaming videos for entertainment, knowledge, social interaction, social support, and a sense of community (Sjöblom and Hamari, 2017). Online social interactions can be particularly beneficial for the psychological well-being of participants who find it hard to socially engage with others (Bargh & McKenna, 2004, Valkenburg & Peter, 2009, Baumeister & Leary, 1995). Live-stream environments can provide alternatives to real life socialising by removing social barriers (Bruce, 2018). In a study conducted by Cai & Wohn (2019), interactive control and socialization were proved to predict online shopping intention. The need for community has a positive effect on the need for live streaming community. Besides, trend setting is a significant

factor of purchase intentions related to the general watching and product search scenarios. Thus, the last hypothesis in this study is conducted.

H8: The Social Motivators has a positive relationship with customer purchase intention.

3.2. Description of the measuring scales

The 5-point likert scale is utilized for measuring observed variables in the research model. This is a common scale in sociological behavioral research (Robson, 1993). Although the principles suggest that choosing a scale with more rating levels (likert scale 7 or 9 points) will make the measurements more accurate, in some languages such as Vietnamese, the use of the scale with too many ratings often confuses respondents. Therefore, in this study, the author chose a 5-point Likert scale. For other categorical variables such as: gender, age, income, type of service used etc are measured by nominal scales depending on the nature of the data type which has reflection characteristics.

Table 1. Measuring scales and references for the proposed constructs

No.	Code	Theoretical foundation
Perceived Usefulness		
1	PU1	I find that Live Streaming is an indeed useful form of shopping of fashion products.
2	PU2	I find that cloth shopping through live streaming is convenient, time-saving and effortless.
3	PU3	Live streaming is a useful way for me to get information about the product.
4	PU4	I find that live-streaming shopping brings about benefits and experiences that in-store shopping doesn't have.
Perceived Ease of Use		
5	PEOU1	Getting used to shopping via live streaming platform (will) not be difficult for me.
6	PEOU2	I can easily shop through live streaming in a short time.
7	PEOU3	I think the shopping steps are (will be) detailed and easy to understand.
Utilitarian Value		
8	UV1	The way a product is presented via Facebook Live (e.g., a seller's try-on) helps me to visualize the appearance of the product on a real figure.
9	UV2	The way a product is presented online gives me as much information about the product as I would experience in a store.

Davis (1989)

Venkatesh (2003), Davis (1993)

Cai, Wohn, Mittal & Sureshbabu (2018)

No.	Code	Theoretical foundation	
10	UV3	Via Facebook Live, my questions about products are immediately answered by sellers.	
11	UV4	It would allow me to judge a product's quality as accurately as an in-person appraisal of the product	
Hedonic value			
12	HV1	Shopping through Live streaming is entertaining.	
13	HV2	Shopping through live streaming is a way of relieving stress.	Cai, Wohn, Mittal & Sureshababu (2018)
14	HV3	I enjoy getting a great deal when I shop via Live Streaming.	
15	HV4	Activities (e.g., flash sales, freeship) on Live streaming get me excited.	
Social Motivators			
16	SOMO1	I like to experience new trends of shopping.	(McMillan & Chavis, 1986; Peterson, Speer & McMillan, 2008)
17	SOMO2	I like communicating with people on social media all the time.	
18	SOMO3	People around who shop via live stream will influence my purchase intentions.	Taylor ,Todd (1995)
19	SOMO4	The media that promote live-streaming will influence my purchase intentions.	Venkatesh (2000)
Purchase Intentions			
20	PI1	In the nearest future, I will definitely buy products from a seller that uses Live streaming.	Davis (1993), Venkatesh (2000)
21	PI2	I would be likely to try and keep track of the activities of a seller that uses the live-streaming function.	
22	PI3	I am likely to recommend sellers that use Live streaming to my relatives and friends.	

4. Methodology

In this study, the author determines the sample size is 285, which is quite good according to the rule of Comrey & Lee (1992) and at the same time ensures the rule of multiplying 5 ($22 \times 5 = 110 < 285$). After one month of investigation (from November to December 2020), the author obtained 285 valid questionnaires for analysis followed by the prior process of cleaning data to filter out the meaningful data statistics. With the help of excel and SPSS software, the study using

251 appropriate samples. In order to get the high response rate, the author pre-contacted the friends and colleagues through email, telephone, SMS etc.

After the process of collecting and filtering out data, the quantitative data analysis is conducted with the support of the Smart-PLS software. To test the relationships between variables, the measuring scale in this study which is established based on previous studies is examined by the method of Partial Least Square (PLS). A number of techniques for this method are applied in order as follow: Descriptive statistics, Quality testing of variables with the outer loading coefficient is more than 0.7 (Hair *et al.*, 2019), Reliability and validity analysis with Cronbach's alpha coefficient > 0.7 (Hair *et al.*, 2019); The composite reliability coefficient (CR) > 0.7 Hair *et al.* 2019) and the Average Variance Extracted (AVE) greater than 50% (Hair *et al.* 2019), Discriminant analysis with the Heterotrait - Monotrait Ratio (HTMT) < 0.9 (Henseler *et al.*, 2015), Hypothesis testing using The P-values and the VIF coefficient.

5. Analysis and findings

5.1. Demographic analysis

The questionnaire was uploaded on Google Forms and distributed via social media on May 21st, 2020. Within a week, the questionnaire received 285 responses. The demographic profile considers classifying respondents in the survey's characteristics according to the criteria of age, gender, income levels and experiences in purchasing clothing products online via live streaming. Out of 285 samples collected, the study kept 251 samples under analysis through cleaning and filtering out the data that meet the requirements,.

Specifically, most of the respondents engaging in the survey are female and belong to the young age group. As such, 68 percent of the respondents are female, which doubles the number of males participating in the survey. The age group of 18- 23 occupies the biggest proportion among all participants, which is 69%, followed by the group of less than 18 and 24-30, which are 15% and 13% respectively. Regarding income levels, respondents whose earnings are below 5 million per month account for the majority, more than a half. Furthermore, when being asked about the frequency of watching a live streaming, 78% of respondents have shopped products via live streaming, among whom nearly a half only watch live streaming when they want to know more about the products they would like to purchase. This means that live streaming has become a convenient tool for customer to purchase and providing sellers with favorable opportunities to enhance the likelihood of goods sales. To narrow down types of products in this survey, the survey designs one last question about local fashion brands in Vietnam to know the preference towards this segment. Vietnamese consumers are highly aware of Vietnamese domestic goods because there are only 3% respondents are not interested in local products. The rest of the reactors in this survey who belong from regular customers (27%) group to loyal customers (32%) group have positive perspectives towards this kind of products.

Among products purchased by customers via live streaming, evidently, clothing and footwear is the most popular choice, which substitutes for 51%. Groceries which account for 27.2% come second in term of the number of buyers via live streaming in this study. The less preferred type are consumer electronics and beauty and personal care with 6.9% and 6.4% in order. The above chart depicts the channels people mostly go shopping on. It is clear that E-commerce platforms such as Shopee, Lazada are becoming more and more viral today, replacing the traditional way of fashion

shopping with the most responses of 37.3% in total. The number of respondents reporting to purchase clothing via social media like Facebook, Instagram etc is equal to the number shopping in-store, which is about 30%.

5.2. PLS Algorithm results

The author conducts the preliminary testing of the proposed model to check which observed variables are suitable/unsuitable for analysis with the help of the PLS algorithm conducted on the Smart PLS. The results show that the outer loadings of all indicators are greater than 0.7. In essence, the outer loadings in Smart PLS is the square root of the absolute value in the linear regression (Hair *et al.*, 2016). According to Hair *et al.* (2016), outer loadings are above 0.7, all factors including indicators and latent variables are accepted to participate in the model.

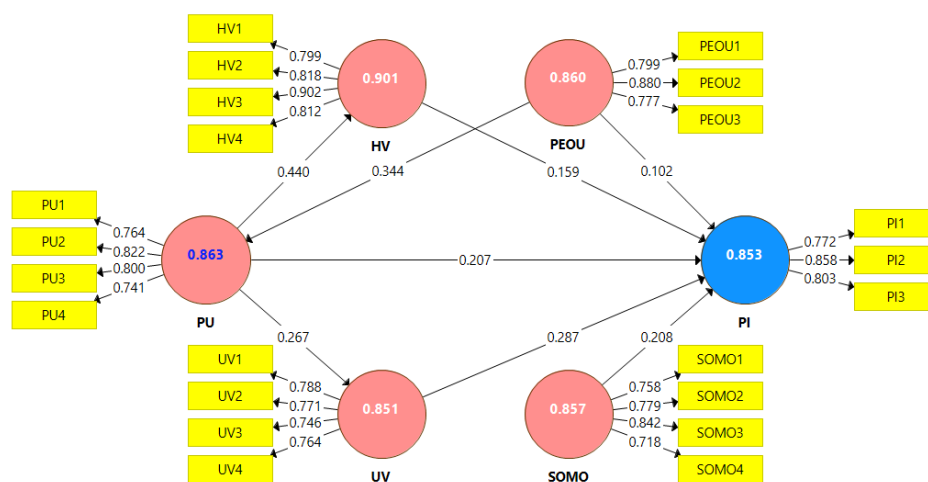


Figure 2. Result of PLS. Algorithm

Source: Compiled by the author from Smart-PLS output

5.3. Results of research model

The reliability and validity analysis

The reliability level represents the intrinsic sustainability of the model to ensure the model's function of output prediction. To guarantee the reliability and validity of the groups of variables, Chin (1998) suggested that in exploratory research, Cronbach's Alpha must be 0.6 or higher and the Composite Reliability must be 0.7 or higher.

Table 2. Results of testing the reliability and validity of groups of variables

	Cronbach's Alpha	rho_A	Composite Reliability	AVE
HV	0.853	0.863	0.901	0.695
PEOU	0.756	0.774	0.860	0.672
PI	0.742	0.756	0.853	0.659
PU	0.789	0.796	0.863	0.612
SOMO	0.779	0.799	0.857	0.601

	Cronbach's Alpha	rho_A	Composite Reliability	AVE
UV	0.768	0.770	0.851	0.589

Discriminant Validity Test

The discriminant value shows the extent to which the model's elements are not correlated with each other. The traditional approach to assess discrimination extent is to use the square root of AVE or Fornell-Larcker coefficient proposed by Fornell and Larcker (1981). However, Henseler *et al.* (2015) argue that these two methods have low sensitivity, in other words, it fails to detect a lack of discriminant validity.

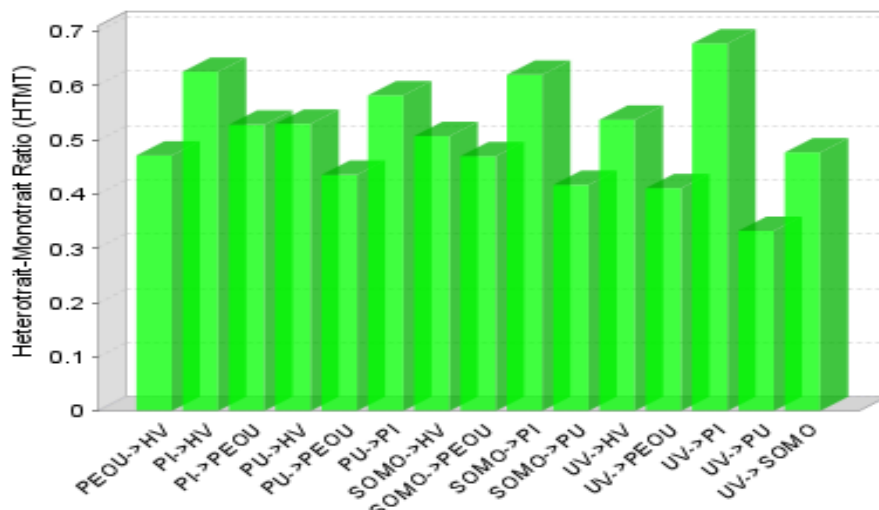


Figure 3. HTMT Graph

Source: Compiled by the author from Smart-PLS output

Henseler *et al.* (2015) demonstrated in their studies that Heterotrait Monotrait coefficient (HTMT) is better at evaluating the discriminant validity. Therefore, in this study, the author uses HTMT with a set of criteria to assess discriminant in SEM based on variance. Henseler *et al.* (2015) suggested that if the HTMT value is below 0.9, a discriminant validity is established between a given pair of mirror structures. Some other authors use a more stringent HTMT value that must be less than 0.85. In this study, to ensure that the latent variable is well explained by its own component indicators, the HTMT needs to be less than 0.9. Analysis results with the help of SmartPLS software are as follows.

Table 3. Testing results of HTMT

	HV	PEOU	PI	PU	SOMO	UV
HV	0.833					
PEOU	0.386	0.820				
PI	0.502	0.400	0.812			
PU	0.440	0.344	0.457	0.782		
SOMO	0.423	0.365	0.485	0.330	0.775	

	HV	PEOU	PI	PU	SOMO	UV
UV	0.435	0.313	0.519	0.267	0.365	0.767

Source: Compiled by the author from Smart-PLS output

It can be seen from the table that all HTMT values of five factors Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Utilitarian Value (UV), Hedonic Value (HV), Social Motivators (SOMO) range from 0.313 to 0.833 which are less than 0.9. This result meets the required threshold of the proposed criteria. Therefore, the factors of the model are qualified to continue participating in the analysis.

Collinearity Statistics (VIF)

Collinearity of the structural model is needed to check the relationship between the factors. Multi-collinearity at the structural level will increase the standard errors which is likely to make the test of independent variables become unreliable and prevent the study from assessing the relative importance of an independent variable compared with another variable. The VIF index is used to test for multi-collinearity. According to Hair *et al.* (2019), if the VIF is above 5, the model has a very high probability of multi-collinearity.

Table 4. Multi-collinearity test results

	HV	PEOU	PI	PU	SOMO	UV
HV			1.565			
PEOU			1.306	1.000		
PI						
PU	1.000		1.323			1.000
SOMO			1.361			
UV			1.320			

Source: Compiled by the author from Smart-PLS output

The given statistics show that all coefficients are within the acceptable range. VIF between Purchase Intentions (PI) with Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Utilitarian Value (UV), Hedonic Value (HV), Social Motivators (SOMO) is 1.323, respectively; 1.306; 1.320; 1.565 and 1.361 are all smaller than 2. Besides, the index between PEOU and PU; PU and HV as well as between PU and UV, does not show the multi-collinear possibility. Therefore, the relationship among factors does not violate the assumption of multi-collinearity.

The Bootstrap algorithm

The application of a non-parametric Bootstrap procedure (Hair *et al.*, 2016) is to check the significance level of the model. In this study, the author conducted Bootstrapping technique 500 times to ensure the requirements of testing the linear structural model. In this analysis, the structural model is applied to test the relationship between the factors or to test the research hypotheses. If the t value > 1.96, the test is statistically significant at the 5% level.

Table 5. The Bootstrap algorithm results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Results
HV -> PI	0.159	0.163	0.055	2.892	0.004	Accepting H5
PEOU -> PI	0.102	0.102	0.049	2.076	0.038	Accepting H1
PEOU -> PU	0.344	0.346	0.052	6.659	0.000	Accepting H3
PU -> HV	0.44	0.442	0.051	8.586	0.000	Accepting H7
PU -> PI	0.207	0.204	0.051	4.045	0.000	Accepting H2
PU -> UV	0.267	0.271	0.06	4.455	0.000	Accepting H6
SOMO -> PI	0.208	0.21	0.047	4.442	0.000	Accepting H8
UV -> PI	0.287	0.287	0.047	6.15	0.000	Accepting H4

Source: Compiled by the author from Smart-PLS output

Overall, the below results in the table indicate that 5 factors under study Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Utilitarian Value (UV), Hedonic Value (HV), Social Motivators (SOMO) all have positive influence on the Purchase Intentions (PI).

From the analysis results on the impact of five approaches on the purchase intentions and studying the practical implementation of live streaming in Vietnam, the author proposes the following solutions to help convince customers to use live streaming in clothing shopping in an easier and more feasible manner.

To sum up, it is clearly evident that this is the first formal five-factor-model study about live streaming's effects on local clothing industry of Vietnam. Further researchers can use the scale and model of this study to conduct researches in the field of technology application into sales and marketing, develop further analysis and confirm the author's conclusions. More practically, local fashion businesses can refer to the results from this study to come up with more appropriate solutions and likely predictions for the goals of implementing effective sales plans via live streaming in Vietnam for the near future.

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