

# The Impact of Social Presence in the Web Interface on Customer's Purchase Intention toward Online Stores: The Case of Vietnam

**Vo Thi Ngoc Thuy**

PhD. Management Sciences (Marketing)

Head of Marketing Department, Faculty of Business Administration

University of Economics and Law, Vietnam National University - HCM city

**Dang Thi Tuong Vi**

MBA. Business Management

International School of Business

University of Economics, HCM city

**Nguyen Hoang Phuong Linh**

MBA. Management Sciences

University of Languages and International Studies

Vietnam National University - Hanoi

## Abstract

---

*To date the expansion of information systems in the way friendlier and closer to human feeling, however, some elements of social cue are still not studies. For this reason, the authors decided to test further social cues in web interface, with the aim of evaluating the manipulation of these social elements to purchase intention. The proposed research model included social presence, perceived usefulness, enjoyment, trust, attitude, and purchase intention. EFA test, however, only build up five constructs because "Trust attitude" formed a concept. The statistic results showed the difference influences in manipulation of social cues such as social rich picture, text, customer rating and recommendation in turn of three levels web interface. Higher social present is higher purchase intention in result. These findings suggested an advice for business persons to have a better designed website in order to appeal for customer as well as increase their sales revenue.*

---

**Keywords:** social presence, internet social cues, purchase intention, online shopping

## 1. Introduction

E-commerce has been becoming an effective trading channel for many companies, beside traditional stores, to sell their products and services, and to interact with customers. That are stores open 24 hours a day, seven days a week, and 365 days a year, a sales person who doesn't need breaks or holidays. With low running cost, online stores create opportunity to reach the new markets because of unlimitedness for any customer who wants to find the products over the world.

Increasing of internet users, extend to over the world, has been predicted for a tremendous development of e-commerce. According to Tran (2014), head of VECITA (Vietnam E-commerce and Information Technology Agency), cites that Vietnam is one of the potential markets of growth e-commerce in South Eastern Asia. This is "a delicious pancake" for any companies who want to raise their revenue and expand their market.

E-commerce in Vietnam, however, is still earlier market, not reach its full potential yet. Some companies have been successful in building an online shopping channel or thriving in business by attracting more and more customers. While the other just pause at install and experiment a website, revenue from selling online is still low. Explain for this issue, Gefen and Straub (2003) believe that lack of human interaction or at least the belief that system has characteristics of social presence is the main reason. This is one of the major different between physical store and its electronic counterparty (Suki, 2007).

Going to the physical store, customer can touch the real product and communicate directly with the seller. Meanwhile, online shopping is impersonal, anonymous, and automated because computer controls it, in result consumer cannot feel human warmth, physical face-to-face contact and sociability (Gefen and Straub, 2003). In fact, most of e-commerce website space tends to display the product and exhibit little emotional or social appeal (Hassanein and Head, 2005). Hence, a challenge for businessperson is to indentify how to design and adopt online transaction to as close as traditional store and provides for a socially rich.

Therefore, this study investigates how social presence, which is one of factors enhance human warmth of e-commerce, through the web interface influence to consumer attitudes and purchase intention towards online shopping store. Numerous of prior researches (Gefen and Straub, 2003; Hassanein and Head, 2007, Shen, 2012) find out the impact of social presence on trust, perceived usefulness and enjoyment as “a catalyst” to increase the positive attitude of online shopping customer. These studies also show the different results by analysing the impact of each factor in various character product and diverse cultural country (Hassanein and Head, 2005; Hassanein et al., 2009). However, these researches still do not examine the potential impact of social presence on purchase intention, which implies promise to one’s self to buy the product again whenever one makes next trip to the market (Hassanein et al., 2009; Tarig et al., 2013). Besides that, in perspective of social cue design, little researches detect the influence of social media such as customer rating and customer recommendations. As such, this research explores these social elements in the website interface to investigate their impact to purchase intention of online customers.

## **2. Literature review and Methods**

### **2.1 Literature review**

#### **Social presence (SP)**

Social presence is considered as the degree to which users can feel others' presence in the result of interpersonal interactions during the communication process. In other words, it regards as the level of awareness of the co-presence of another human being or intelligence (Biocca and Nowak, 2011).

Many researchers explain social presence on its close relationship to information richness (Rice et al., 1989; Straub, 1994; Straub and Karahama, 1998), which centers on the interactivity of the media (Sproull and Kiesler, 1986). Gefen and Straub (2003), however, emphasize the psychological connection, where social presence is concerned about “human warmth”. Thus, the determinant of social presence relies on a medium convey sociable, warm, sensitive, personal or intimateis (Shen and Khalifa, 2009). Karimov et al. (2011) have a summary research which comprises thousands of the previous researches related to the website design dimension; indicate that the “social cue design” measured via human like, assistive interface and social media. In detail, human like cues is manipulated social presence by facial photo of shop representation, product worn by people in emotion setting and text evoke positive emotion. Assistive interface features transfer social presence via avatar, recommendation agent, and these elements are not much noticed in the research. Social media cues such as non-experimental information from others (including from the other website and site searchers), objective source rating, customer or viewer ratings, and social network (facebook, youtube, Twitter online blogs and forum etc), all are infusing components boost social presence as well

Social presence has significance in connecting user to online store. Rajasekhar and Vijayasree (2012) confirm the emotions and sociability plays vital role in psychological perspectives, they are a potential factor to influence the making decision process while in making and correcting the process effectively.

#### **Perceived usefulness (PU)**

Perceived usefulness is explained as the individual’s perception that using the new technology enhances or improves user performance which supports to increase the outcome of the online shopping experience (Davis, 1989). TAM predicts individual adoption and attitude willing use technology (Rauniar et al., 2014). Applying to online environment, high of perceived usefulness motivate users to visit or participant interaction in website. Developing from the theory of TAM (Chen et al., 2002; Davis, 1989), Zhou et al. (2007) building model of OSAM (Online Shopping Acceptance Model) which predicts and explains consumer acceptance of online shopping by extending the belief-attitude intention behavior relationship in TAM from the perspectives that are specific to online shopping.

The research captures the characteristics of the perceived usefulness, not just only perceived a generic information systems but also deep into the ultimate goal of an online shopping which show off the potential benefits such as term of convenience, search ability, and rich product information environment as concept of “perceived gain” (Bhatnagar and Ghose, 2004a, p.765), which underlies the importance of reducing online shopping uncertainty and risks.

### **Trust (TR) in an online environment**

Trust is a complex concept that has been widely studied (Hassanein and Head, 2007). However, it remains a difficult concept to describe due to its dynamic, evolving and multi-faceted nature (Ambrose and Johnson, 1998; Lewicki and Bunker, 1996). According to Rousseau et al. (1998), although there many ways to describe this concept, the most commonly cited definition of trust in various contexts is the “willingness of a party to be expectations that the other will perform a particular action important to the trustor” (p.394), as proposed by Mayer et al. (1995). It is also, “The more trusting we are, the more willing we may be to take the risk of engagement/interaction” (Hassanein and Head, 2007, p. 692). For instance, consumers are more willing to purchase products from a vendor if they can trust that the vendor’s word can be relied upon and the vendor will not take advantage of the consumer’s vulnerabilities (Geyskens et al., 1996). Trust is generally important in the adoption of new technologies (Fukuyama, 1995) and e-commerce (Gefen, 2000).

### **Enjoyment (EN)**

Enjoyment is results from the fun and playfulness of the online shopping experience, reflects consumers’ perceptions regarding the potential entertainment of Internet shopping. Participant online shopping, e-consumer expects to receive a satisfaction the human demand with the application of the advantage of high technology. “Online shopping is a voluntary and hedonic activity, and user participate because they are intrinsically motivated” (Shen, 2012, p. 201). Using system with fun is link to perceived entertainment value which reflects the website ability to enhance the experience of visitor to a website. Three latent dimensions of enjoyment concept are escapism, pleasure, and arousal (Mathwick, C., 2001; Monsuwe et al., 2004) and each of construct specifically impact to consumer attitude by offering an escape from the demand of the day to day world, feeling of happiness, satisfaction and stimulation of action. Monsuwe et al. (2004) states that:

“If consumers are exposed initially to pleasing and arousing stimuli during their Internet shopping experience, they are then more likely to engage in subsequent shopping behavior: they will browse more, engage in more unplanned purchasing, and seek out more stimulating products and categories” (p.109)

### **Attitude (AT) and its determinants**

Prominent psychologist Allport (1935) has been stated that attitudes is "the most distinctive and indispensable concept in contemporary social psychology"(p.798). It expresses the favorable or unfavorable toward a particular object. Thus, it is changeable and affect to the human emotion and behavior.

Theory of Reasoned Actions (TRA) mentions that there are relationship between individual’s performance and behavioral intention, which is actually determined by the individual’s attitude. Meanwhile, the Technology Acceptance Model (TAM) have proven that user’s attitude toward high technology is influenced by the perceived of usefulness and perceived ease of use. Studying psychology of consumer, Babin et al. (1994) suppose the motivation of shopping initiate of utilitarian and hedonic dimensions, Both of two respects are inside perceived person and “the basic determinants of attitude” toward shopping in the internet (Monsuwe et al., 2004).

### **Purchase intention (PI)**

Defining the online purchase intention, many authors agree that it attaches with the action willing to pay and user behavior in making decision process. Pavlou (2003) defines online purchase intention as a situation where a consumer does not object to pay and intends to make online transactions. This term also is used by George (2004) in online process when customers willingness to search, select and purchase products via the Internet. Similarly, Khalifa and Limayem (2003), interpret internet purchase behavior as a process of purchasing products, services and information via the Internet, base on earlier theories related to customer behavior and intention. George (2004) expresses that many customers do not accept online shopping due to psychology of customer care about personal information and privacy. This means that processing of customers making their decisions on what product or services to purchase online reveals the buying behavior of online customers.

The way of decision-making behavior interacting with online shopping is clarified in three stages of pre-purchase, purchase and post purchase (Sheth and Mittal, 2004). Therefore, customer online purchase intentions in the web-shopping environment particularly decide the power of a consumer's intention to do a purchasing behavior via the Internet (Salisbury et al., 2001).

### **Research Model and Hypotheses Development**

While attitude is bias human emotion which show the positive or negative feeling toward particular subject than customer action, purchase intention allow authors approach closely the step of making buying decision of online shopping user which directly effect to sales of business. Therefore, refer to the previous research of Hassenien and Head (2007) realized for Canadian market, authors develops the model research and hypotheses as figure 1:

- H1:** Social presences have positive impact to perceived usefulness in online stores
- H2:** Social presences have positive impact to trust in online stores
- H3:** Social presences have positive impact to enjoyment in online shopping websites
- H4:** Perceived usefulness have positive to attitude in online shopping websites
- H5:** Trust will result in a more positive attitude towards online shopping website
- H6:** Enjoyment will result in a more positive attitude towards online shopping website
- H7:** Perceived usefulness will result in a more positive attitude towards online shopping website
- H8:** Enjoyment will result in a more positive attitude towards online shopping website
- H9:** Positive attitude will enhance purchase intention towards online shopping website

### **2.2 Research method**

In order to comprehend conceptual and make sure the reliability in conduct the research, authors applied the items, which were adapted in previous studies. Hassanein and Head (2007) advise that all items should be come from the existing literature, and have been proved strong content validity repeatedly through different researches. Hence, the measurement scales were used popular in various studies related to attitudes, intention, and behavior in electronic commerce.

An empirical study was conducted to validate the proposed research model and test our proposed hypotheses. There were total 22 items, which measured six conceptual. Subject gave the task of purchasing a present for friend on jewelry online stores.

Survey questions were sent by email or the other social network such as facebook, skype, yahoo etc to people who had known or experience buying products in online stores in Ho Chi Minh City. Three websites were intentionally designed present three levels of social presence. The first one was simple interface with product and basic information of product such as price, code, material etc (figure 2). The second one added the social rich text and picture (figure 3). The last one display all contend of the second but plus with customer rating and recommendation (figure 4). Accordingly, participants were divided in three groups. There were 210 correspondents, who were in age from 23-35 as a specific segment customer in this online store. These users have advantage in using internet application and have high demand in buying online. All of these valid data were input in SPSS 20 and AMOSS 22 in order to process analysis statistics.

## **3. Results and Discussion**

### **3.1 Scale validation**

#### **3.1.1 Construct reliability**

As Nancy et al. (2005), Cronbach's alpha was the most commonly used type of internal consistency reliability for multi items scales. This measure was computed to assess whether the group items were summed to create the observed variables. As mentioned in Gefen research (2003), Rivard and Huff (1988) advised the reliability of this measure should be higher than .5 and ideally higher than .7. Nancy, Karen and Goerge (2005) also suggested that the Cronbach's alpha should be above .7 for items to be used together as a construct. The alpha value ranged from .853 (for social presence) to .891 (for perceived usefulness), which indicated the items formed the scales that has reasonable internal consistency reliability. Hence, the research constructs satisfied the test of construct reliability.

#### **3.1.2 Construct validity**

Exploratory factor analysis (EFA) was conducted to test all items in measurement scales. Firstly, Kaiser-Myer-Olkin (KMO) of this analysis was .929 greater than .7 indicating sufficient items for each factor.

Secondly, significant value of Bartlett's test was near to zero, less than .05, mean that the variables was correlated highly enough to provide a reasonable basis for factor analysis. The Total Variance Explained showed the variance was distributed among the 22 possible factors. There were 5 factors have Eigen value greater than 1, that mean information gained form such factors can be sufficient to justify.

To identify which construct satisfied the convergent and discriminant validity, authors checked the item loading. According to Hair et al. (1998) (as cited in Nguyen, 2009), observed variable with factor loading also should be more than .5 and eliminate the factor had loading lower should be eliminated (the convergent validity). Also, the cross-loading (the variable loads on multiple factors) should differ by more than .3 (the discriminant validity), the items could not meet this condition should be eliminated. After removed the unsatisfied items TR2, TR3, TR4, AT3, PU1, and EN1, EFA was run with output as table 1. All loadings achieved level of very good (more than .63) and excellent (more than .7), according to guidelines of Comrey and Lee (1992). Hence, five constructs included social presence, perceived usefulness, enjoyment, trust attitude (TAT) and purchase intention - had discriminant validity and convergent validity. It confirmed the items accepted in this step were essential and retains all important information from the original data.

### **3.1.3 Modified research hypotheses**

With this modification, TR1, AT1 and AT2 together became to a measurement of the new construct, trust attitude. This factor depended on two constructs: perceived usefulness and enjoyment. Research model was adjusted with follow hypotheses:

H1: Social presences have positive impact to perceived usefulness in online shopping website

H2: Social presences have positive impact to enjoyment in online shopping website

H3: Perceived usefulness will result in a more positive trust attitude toward online shopping website

H4: Enjoyment will result in a more positive trust attitude toward online shopping website

H5: Trust attitude has positive impact to purchase intention in online shopping website

H6: Perceived usefulness has positive impact to purchase intention in online shopping website

H7: Enjoyment has positive impact to purchase intention in online shopping website

### **3.2 Manipulating validity**

In this research, controlling the psychological customer by increasing social presence was considered a tool for marketing or online owner attract the user interact with their webs. Such that, the validity of manipulation of experimental treatment was identified by social presence scale. In Anova test (table 2), sig value was near to 0, less than .05, post hoc Turkey test with mean difference between pair of level at sig value near to 0 as well. This result confirmed statistically significant difference among three levels of social presence. It concluded that the differences between three experiment websites are not likely due to change and are probably due to the social presence manipulation.

### **3.3 Model fitness**

This section presents result of structural equation model by using AMOS 22 software package. Beside the fit model indices in SEM, model validity assessed by evaluating the structure path (test of mediating effects) and bootstrap (Oredein et al., 2011).

#### **3.3.1 Test of mediating effects**

Here authors further examined the mediation via the method which conducted in research of Afthanorhan et al. (2014). An analysis using Amoss was used for the single model, with direct path from social presence to trust attitude and purchase intention, and the model adding the mediating variables of perceived usefulness and enjoyment in turn, the result was released as table 3. Estimate value presented the path coefficient of each pair constructs. First, comparing the result between before and after entering the mediator variable, the effect of social presence to trust attitude and purchase intention decrease from .557 to .136 for trust attitude and from .604 to .111 for purchase intention and became insignificant ( $p$ -value=.118, and .244 more than .05). Moreover, the predictors of attitude and purchase intention also increased from .289; .331 to .537; .487. This result revealed that the mediator effect was supported to be occurred and perceived usefulness and enjoyment was indeed full mediators in model research.

### 3.3.2 Structural Equation Model

SEM is a powerful second-generation multivariate technique that facilitates the testing of psychometric properties of the scales used to measure unobservable variables (constructs) as well as to estimate the parameters of a structural model, i.e. the magnitude and direction of the relationships among the model variables (Gefen et al., 2000). Figure 5 showed the results of the structural model, including the path and their standardized regression estimates. The observed normalized Chi squared for measurement model was 1.849 (chi squares = 717.570, df = 388,  $p = .000$ ) which was smaller than 3. Other fit indices also showed good fit for the measurement model. The goodness-of-fit index was .836, which exceeded the recommended cut-off level of .8. The Tucker & Lewis index was .901 and the comparative fit index was .920, greater than .9. The root mean square error was .045, exceeding the recommended cut-off level of .1. The combination of these results suggests that the demonstrated measurement model fits the data to a reasonable degree.

### 3.3.4 Bootstrap

Analyzing with structural equation modeling usually request a large sample but it also cost much time and money (Anderson & Gerbing, as cited in Nguyen & Nguyen, 2008). Bootstrap is a suitable method to replace (Schumacker & Lomax, as cited in Nguyen & Nguyen, 2008). This study used bootstrap estimate with sample  $n = 1000$ . Results were presented in table 4. Bias of these results were very small, thus, estimates in this model had reliability validity.

### 3.3.5 Hypotheses testing

Testing the hypothesized model fit to the sample data was the primary test in model testing procedure (Barbara, 2009). According the original research model, there were 9 proposed hypotheses. However, the analytical results showed some measurement scales did not fit with data, so, in modified research, only 7 hypotheses were measured. The results of these hypotheses testing presented that all of them were supported (table 5).

## 3.4 Discussion

According to the liner researches of Hassanein and Head (2007), the authors show the perception of social presence has role as a positive explanation for perceived usefulness, enjoyment and trust which are the preceding of attitude. Expanding the website which only enriched social presence via imagines and context, the research websites are executed by adding other social cue design such as the mass media (linked to facebook, google, twister etc and review and customer rating. An interesting result reveals when trust and attitude combine into a construct and quietly modify the propose model. However, the relationship among the concepts of model still remains the impact tension.

Associated trust and attitude as a unique concept is interpreted in some researches. According Jones (1996), "trust is an affective of attitude" (title), one trusted is directly and favorably moved by the though and state by "attitude optimism" when seeing a positive expectation in the object. The trust manifests itself in the way display goodwill toward one person or the things they care about. In psychology perspective, trust is an attitude, excitement of emotion. Thus, trust attitude is a concept reflects both perspective of trust and attitude. Aghdaie et al. (2011) are used to mention trust attitude as an independent concept however, the definition was bias on explaining confidence, belief and reliance. In this research trust attitude is composed by AT1, AT2 and TR1. Meanwhile, AT1 and AT2 represent the positive feeling, the way a customer thinks about the website as attractive object, TR1 investigates how customer belief that supplier tells true information, this is a cue of positive attitude. Therefore, trust attitude is identified to be a favorable behavior of online user.

Result from SEM model shows the social presence level of commercial website have a positive significant effect on perceived usefulness ( $b = .58$ ) enjoyment ( $b = .57$ ). Although the research of Gefen and Straub (2003), is unacceptable the effect on perceived usefulness, it supports earlier work of Hassanein and Head (2007), Shen (2012) in e-service context. The conflict among these researches is explained by the different nature of the product being studied such as air ticket versus clothing and jewelry. Social presence almost has equally contribution to affect to perceived usefulness and enjoyment, as the path coefficients are quietly indifferent too much. However, the estimate of perceived usefulness and social presence for attitude and purchase intention was totally distinction.

The next connected path, the result analysis confirms the positive impact on attitude when perceived usefulness and enjoyment take part role as antecedent of trust attitude and the output of social presence as well ( $b=.38$ ,  $b=.49$ ). This result supports the prior research related to using the internet as shopping channel such as Jarhangir et al. (2007) in the context of E-banking and Renny et al. (2013), in buying air ticket when they both found out the perceived usefulness help to improve the attitude of customers. It also confirms the previous investigations about the relationship between enjoyment and attitude of online user for period longtime heritage from Childers et al. (2001); Gefen and Straub (2003); Hassanein and Head (2007) to Shen (2012). Moreover, the finding shows that in online shopping perceived usefulness and enjoyment have direct and indirect effects on purchase intention, through attitude as the partial mediator variable. This detect proves to the suitability of earlier research of Delafrooz1 et al. (2011), Davis (1989), related to perceived usefulness. The finding matched the result from Koufaris (2002), Moon and Kim (2001), Childers et al. (2001) support that enjoyment defined as consumers' hedonic orientation or playfulness enhance the purchase intention in internet. Attitude have the strongest impact to intention ( $b= .35$ ) explained the closely relationship in two psychology process of making decision. Although Donthu and Garcia (1999) online find the attitude only have impact to purchase intention online as a mediator through behavior, the direct relationship in this thesis continues to assist the studies of Davis (1989); Chang et al. (2005); Vijayasaraty and Jones (2000).

## **4. Conclusion and Implications**

### **4.1. Conclusion**

The research has shown the positive effect of social presence on purchase intention through perceived usefulness, enjoyment, and trust attitude. The social presence elements such as adding social rich picture, text, customer rating and review take role as manipulation to enhance the purchase intention of online customer

However, the research have some limitations. Firstly, this study cannot cover the nature of the problem purchasing goods through the online store. Secondly, research has not given discussion about the difference in the purchase intention between customer experienced and inexperienced in online buying yet. It is still not possible to identify specific differences between groups such as gender, education or income. Thirdly, the research just approach the psychology of internet user via displaying the images, content, and icons which symbolize social presence in website interface without setting up a real website in order users to interact with. Hence, the studies somewhat is undiscovered all gadgets that users can achieve in a proactive way. In general, the research can not reflect all respects of e-commerce, so that future research should check whether the influence of social presence is different between the product that is favorable in symbolic value (clothes, jewelry ...) and the functional goods that require more information on technical specifications (Karimove et al., 2011). The other social cues as well as B2B/C2C market should be considered as expand line for research.

### **4.2. Implications**

This research shows that social presence can be infused into websites through socially rich descriptions, pictures and customer rating. This in turn can positively impact the perceived usefulness and enjoyment of a commercial website, which can result in more favorable attitudes and encourage purchase intention towards that online store.

From a practitioner's point of view, results from this study can have direct implications for designers of online shopping websites. We have shown that a perception of social presence is infused through these elements by including descriptions aimed at evoking positive emotions and pictures that depict products with people in emotional and dynamic settings. Text and pictures are standard elements in a webpage, not requiring advanced technologies from the designers' or users' points of view. Therefore, inducing a sense of social presence through these elements on a commercial website can be an immediate and attainable goal for e-vendors.

## References

- Afthanorhan, W.M.A.B.W., Ahmad, S., & Mamat, I. (2014). Testing the mediation effect using covariance based structural equation modeling with Amos. *American International Journal of Research Humanities, Arts and Social Sciences*, 6(2), 186-190.
- Aghdaie, S., Piraman, A. & Fathi, S. (2011). An Analysis of Factors Affecting the Consumer's Attitude of Trust and their Impact on Internet Purchasing Behavior. *International Journal of Business and Society*, 2 (23), 147-158.
- Allport, G. (1935). Attitudes. Murchinson, C.A. (Ed.), *A Handbook of Social Psychology*. (pp. 798–844). Worcester, MA: Clark University Press
- Ambrose, P.J., & Johnson, G.J. (1998). A Trust Based Model of Buying Behaviour in Electronic Retailing. *Proceedings of the Fourth Conference of the Association for Information Systems*, 263–265.
- Barbara M.B. (2009). Structure Equation Modeling with Amos. Basic concepts, Application, and Programing ( 2<sup>nd</sup> ed). *Barbara Byrne Publisher: Psychology Press*.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20 (4), 644-656.
- Biocca, F., Harms, C., Burgoon, J.K. (2011). Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. *Teleoperators and Virtual Environments*, 12, (5), 456-480.
- Bhatnagar, A. & Ghose, S. (2004a). A Latent Class Segmentation Analysis of E-Shoppers. *Journal of Business Research*, 57, 758-767.
- Campbell, D. T. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81–105.
- Chang, M. K., Cheung, W., & Lai, V. S. (2005). Literature derived reference models for the adoption of online shopping. *Information & Management*, 42(4), 543-559.
- Chen, L., Gillenson, M. L., & Sherrell, D. L. (2002). Enticing online consumers: an extended technology acceptance perspective. *Information & Management*, 39(8), 705-719.
- Childers, T.L., Carr, C.L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77 (4), 511-35.
- Corney, A.L., & Lee, H.B. (1992). *A first course in factor analysis*. Hillsdale, NJ: Lea. Do's, Don'ts, and How's To of Factor Analysis 26.
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* (13), 319–339.
- Delafrooz1, N., Laily H. Paim1, L.H., & Khatibi, A. (2011). Understanding consumer's internet purchase intention in Malaysia. *African Journal of Business Management* 5(3), 2837-2846.
- Donthu, N., & Garcia, A. (1999). The Internet shopper. *Journal of Advertising Research*, 39(3), 52-58.
- Fukuyama, H.I. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York, NY: The Free Press.
- Gefen, D., & Straub, D.W. (2000). The relative importance of perceived ease of-use in IS adoption: a study of e-commerce adoption. *Journal of the Association for Information Systems (JAIS)*, 1(8), 1–30.
- Gefen, D., & Straub, D.W. (2003). Managing user trust in B2C e-Services. *E-Service Journal*, 2(2), 7–24.
- George, J.F. (2004). The theory of planned behavior and Internet purchasing. *Internet Research*, 14(3), 198-212.
- Geyskens, I., Steenkamp, J., Scheer, L.K., & Kumar, N. (1996). The effects of trust and interdependence on relationship commitment: a transatlantic study. *International Journal of Research in Marketing*, (13), 303–317.
- Hassanein, K., & Head, M. (2005). The Impact of infusing social presence in the web interface: An investigation across different products. *International Journal of Electronic Commerce (IJEC)*, 10(2), 31-55.
- Hassanein, K., & Head, M. (2007). Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. *Int. J. Human-Computer Studies*, 65, 689–708.
- Hassanein, K., Head, M., & Ju., C. (2009). A cross-cultural comparison of the impact of Social Presence on website trust, usefulness and enjoyment, *Int. J. Electronic Business*, 7(6), 625-641.
- Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Model*, 6(1), 1–55
- Jahangir, N., & Begum, N. (2007). Effect of Perceived Usefulness, Ease of Use, Security and Privacy on Customer Attitude and Adaptation in the Context of E-Banking. *Journal of Management Research*, 7(3), 147-157.

- Jones, K. (1996). Trust as an Affective Attitude. *Ethics*, 107 (1), 4-25.
- Karimov, P.F, Brengman.M, & B Hove.L.V. (2011). The Effect of Website Design Dimensions on Initial Trust. *Journal of Electronic Commerce Research*, 12(4), 272-301.
- Khalifa, M. & Limayem, M. (2003). Drivers of Internet Shopping. *Communications of the ACM*, 46 (12), 233-239.
- Kim, Y.K., 2001. Consumer value: an application to mall and Internet shopping. *International Journal of Retail & Distribution Management*, 30 (12), 595–602.
- Koufaris, M., & Hampton-Sosa, W. (2002). Customer trust online: examining the role of the experience with the Web-site. *CIS Working Paper Series, Zicklin School of Business, Baruch College, New York*.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*, 114-139. Thousand Oaks, CA: Sage.
- Mathwick, C. (2001) Understanding the Online Consumer: A Typology of Online Relational Norms and Behavior. *Journal of Interactive Marketing*, 16(1), 40-55.
- Mayer, R.C., Davis, J.H., & Schoorman, F.D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20(3), 709–734.
- Monsuwe, T.P., Dellaert B.G.C., & Ruyter, D. (2004). What drives consumers to shop online? A literature review. *International Journal of Service Industry Management*. 15(1), 102-121.
- Moon, J.W., Kim, Y.G., 2001. Extending the TAM for a World-Wide-Web context. *Information & Management*, 38 (4), 217–230.
- Nancy L.L, Karen C.B & Goerge A.G. (2005). *SPSS for Intermediate Statistics Use and Interpretation* . New Jersey , NJ: LEA Publishers.
- Nguyen, K.D. (2009). Practicing structural equation model SEM with AMOS software. *Lecture of University of Economics Ho Chi Minh City*
- Nguyen D.T., & Nguyen, T.M.T. (2008). Marketing research: Implication of structural equation model SEM. *Vietnam National University Publish*.
- Oredein, A.I., Olatayo, T.O., & Loinmi, A.C. (2011). On Validating Regression Models with Bootstraps and Data Splitting Techniques. *Global Journal of Science Frontier Research*, 11(6), 1-6.
- Pavlou, P.A., & Chai, L.(2002). What drives electronic commerce across cultures? A cross-cultural empirical investigation of the theory of planned behaviour. *Journal of Electronic commerce Research*, 3(4), 240–253.
- Pavlou, P.A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *Int.J. Elect.Commerce*, 7(3), 101-34.
- Rajasekhar, T., & Vijayasree, K. (2012). Effect of emotions and sociability on human decisions. *Indian Journal of Positive Psychology*, 3(4) , 418-421.
- Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6-30.
- Renny, Guritno, S., & Siringoringo, H. (2013). Perceived Usefulness, Ease of Use, and Attitude Towards Online Shopping Usefulness Towards Online Airlines Ticket Purchase. *Procedia - Social and Behavioral Sciences*, 81, 212–216.
- Rice, R., Hughes, G., & Love, G. (1989). Usage and outcomes of electronic messaging at an R and D organization: Situational constraints, job level, and media awareness. *Office, Technology and People*, 5(2), 141–161.
- Rousseau, D.M., Sitkin, S.B., Burt, R.S., & Camerer.C. (1998). Not so different after all: a cross-discipline view of trust. *The Academy of Management Review*, 23(3), 393–404.
- Salisbury, W.D., Pearson, R.A. Pearson, A.W., & Miller, D.W. (2001). Perceived Security and World Wide Web purchase intention. *Industrial Management & Data Systems*, 101, 165-176.
- Shen, J. (2012). Social Comparison, Social presence, and enjoyment in the acceptance of social shopping websites. *Journal of Electronic Commerce Research*, 13(3), 198-212.
- Shen, K. N., & Khalifa, M. (2009). Design for Social Presence in Online Communities: A Multidimensional Approach. *AIS Transactions on Human-Computer Interaction*, 1(2), 33-54.
- Sheth, J.N., & Mittal, B. (2004). *Customer behavior: A Managerial Perspective (2nd ed.)*. Mason, OH: Thomson South-Western.

- Sproull, L., & Kiesler, S. (1986). Reducing social context cues: the case of electronic mail. *Management Science*, (32), 1492–1512.
- Straub, D.W. (1994). The effect of culture on IT diffusion: e-mail and FAX in Japan and the US. *Information Systems Research*, 5(1), 23–47.
- Straub, D.W., & Karahanna, E. (1998). Knowledge worker communications and recipient availability: toward a task closure explanation of media choice. *Organization Science*, 9(2), 160–175.
- Suki, N. M. (2007). Online buying innovativeness: effects of perceived value perceived risk and perceived enjoyment. *International Journal of Business and Society*, 8 (2), 81-93.
- Tran, H.L. (2014). Vietnam e-commerce report 2013. Retrieved from <http://www.vecita.gov.vn/anpham/208/Vietnam-E-commerce-Report-2013/en>
- Vijayarathy, L.R., & Jones, J.M. (2000). Print and catalog shopping: Assessing attitudes and intentions. *Internet Research*, 10, 191-202.
- Yeh, N., Lin, J.C., & Hsi-Peng, L. (2011). The moderating effect of social roles on user behaviour in virtual worlds. *Online Information Review*, 35(5), 747-769.
- Zhou, L., Dai, L., & Zhang, D. (2007). Online shopping acceptance model – A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8 (1), 41-62

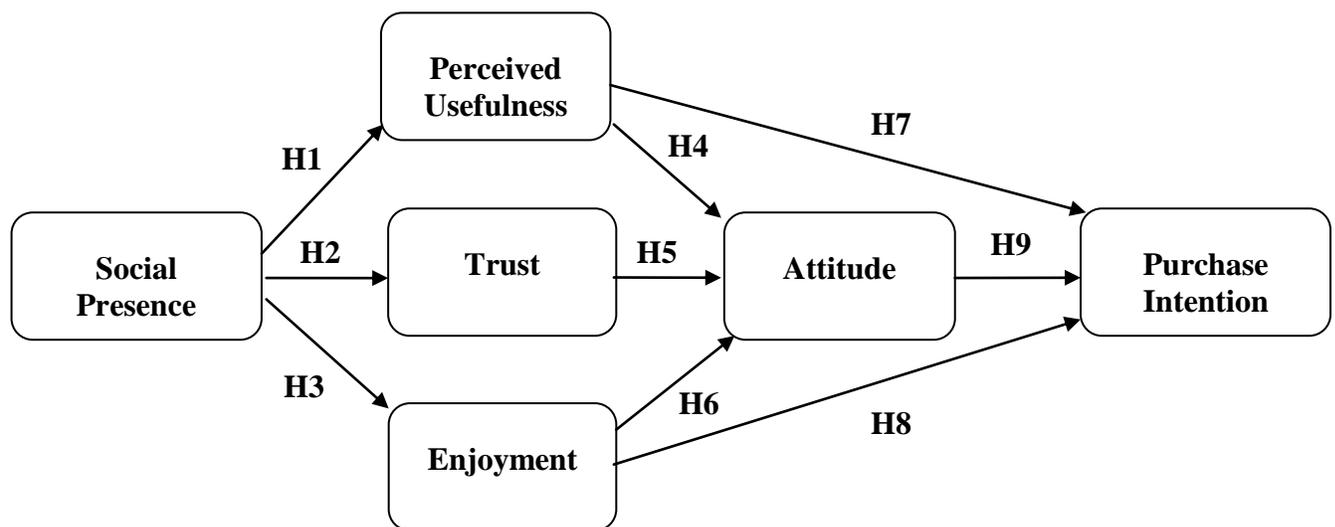


Figure 1: Conceptual model

WWW.DEMO.COM | Hotline:(08)12345678 BUY ONLINE FOR BEST PRICE - FREE \* SHIPPING Sign in|Sign up

Typing product name/ product code ALL SEARCH

DIAMOND HAPPINESS GOLD GOLD JEWELRY GEMSTONES JEMMA WATCHES NEW

Home > Premium alloy necklaces



### Premium alloy necklaces

Product code: YCZKKK00460.000

Discriptions: Necklace, premium alloy material, made with fashionale gemstones

Price: VND 259.000

Status: Available

Purchase quantity: 1

BUY NOW

Follow the order Typing invoice number Search

7:00 AM

Figure 2: Low social presence

Typing product name/ product code ALL SEARCH

- DIAMOND
- HAPPINESS GOLD
- GOLD JEWELRY
- GEMSTONES
- JEMMA
- WATCHES

Home > Premium alloy necklaces



Unique and liberal design, premium alloy material associate with gemstones create a new fashionable trend. Your style is expressed in charm but personality

### Premium alloy necklaces



Product code: YCZKKK00460.000

Discriptions: Necklace, premium alloy material, made with fashionale gemstones

Price: VND 259.000

Status: Available

Purchase quantity: 1

BUY NOW

Follow the order Typing invoice number Search

Figure 3: Medium social presence

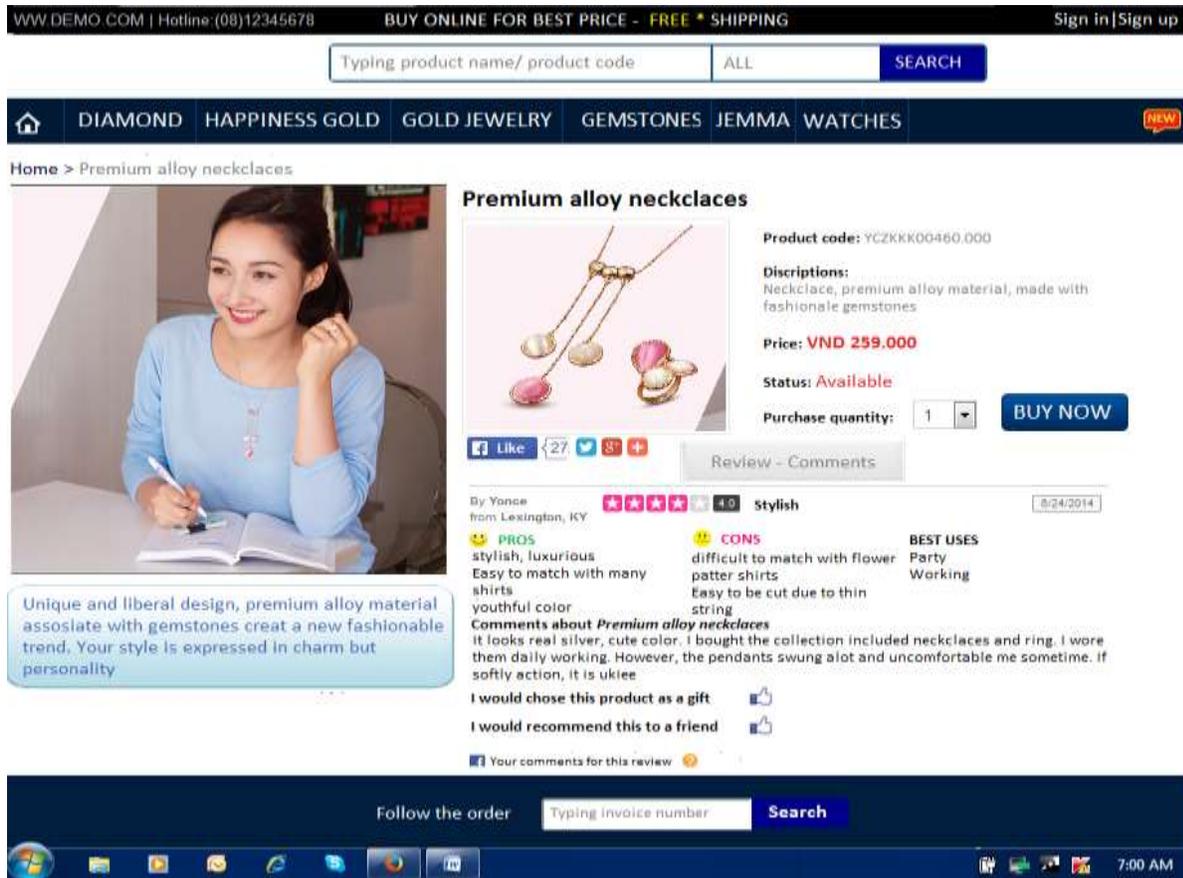


Figure 4: High social presence

Chi-square= 717.570; df= 388; p= .000  
 ;Chi-square/df= 1.849  
 ;GFI= .829; TLI= .901; CFI= .920  
 ;RMSEA= .045

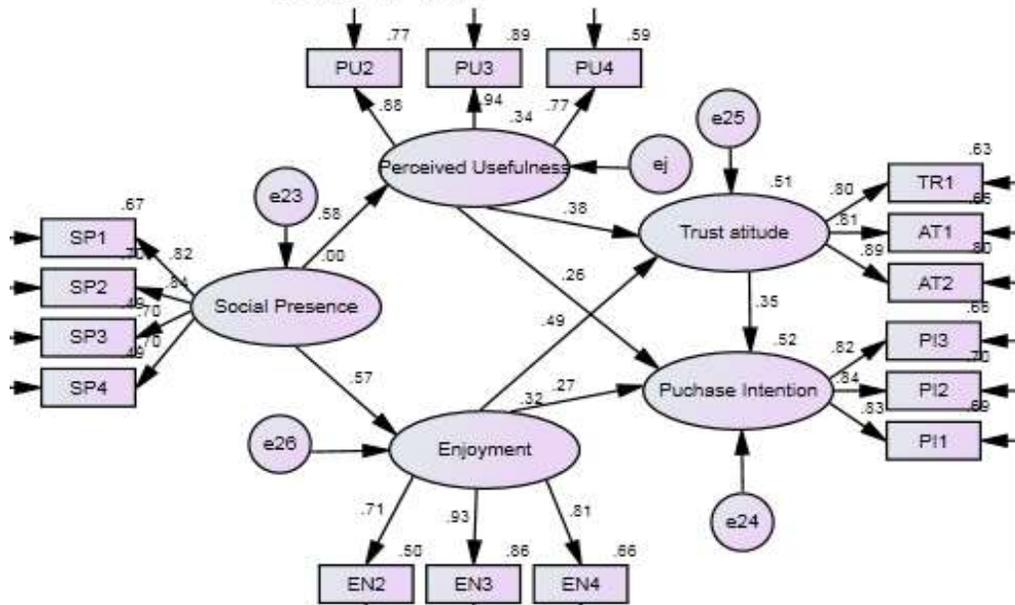


Figure 5: SEM result of research model (Standardized)

**Table 1: Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
SP4	.817				
SP2	.815				
SP1	.760				
SP3	.691				
PU3		.864			
PU2		.810			
PU4		.745			
PI3			.838		
PI2			.824		
PI1			.754		
AT1				.803	
AT2				.768	
TR1				.754	
EN2					.850
EN3					.776
EN4					.656

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

**Table 2: Multiple Comparisons**

	(I) Social presence level	(J) Social presence level	Mean Difference (I-J)	Std. Error	Sig.	95percent Confidence Interval	
						Lower Bound	Upper Bound
						Tukey HSD	SP Low
		SP High	-2.18056*	.18779	.000	-2.6239	-1.7373
	SP Medium	SP Low	<b>1.67204*</b>	<b>.19077</b>	<b>.000</b>	1.2217	2.1224
		SP High	-.50852*	.17129	.009	-.9129	-.1042
	SP High	SP Low	<b>2.18056*</b>	<b>.18779</b>	<b>.000</b>	1.7373	2.6239
		SP Medium	<b>.50852*</b>	<b>.17129</b>	<b>.009</b>	.1042	.9129

\*. The mean difference is significant at the 0.05 level.

**Table 3: The mediator test**

			Estimate	S.E.	C.R.	P		R <sup>2</sup>
<b>Before mediator variable (perceived usefulness and enjoyment) enter in the model</b>								
TAT	<---	SP	0.557	0.086	6.489	***	Significant	0.289
PI	<---	SP	0.604	0.087	6.957	***	Significant	0.331
<b>After mediator variable (perceived usefulness and enjoyment) enter in the model</b>								
PU	<---	SP	0.623	0.087	7.145	***	Significant	0.332
EN	<---	SP	0.558	0.084	6.654	***	Significant	0.311
TAT	<---	PU	0.283	0.067	4.206	***	Significant	0.537
TAT	<---	EN	0.427	0.076	5.599	***	Significant	
TAT	<---	SP	0.136	0.087	1.563	0.118	No significant	
PI	<---	EN	0.416	0.082	5.054	***	Significant	0.487
PI	<---	PU	0.319	0.074	4.302	***	Significant	
PI	<---	SP	0.111	0.095	1.166	0.244	No significant	

**Table 4: Bootstrap estimate result with n = 1000**

Path	ML Estimate		Bootstrap Estimate						
	Estimate	S.E.	SE	SE-SE	Mean	Bias	SE-Bias		
PU <--- SP	0.631	0.088	0.063	0.001	0.581	0.001	0.002		
EN <--- SP	0.569	0.085	0.064	0.001	0.566	0	0.002		
TAT <--- PU	0.334	0.059	0.071	0.002	0.375	-0.005	0.002		
TAT <--- EN	0.465	0.069	0.07	0.002	0.492	0.002	0.002		
PI <--- TAT	0.373	0.102	0.094	0.002	0.357	0.004	0.003		
PI <--- EN	0.272	0.083	0.09	0.002	0.267	-0.003	0.003		
PI <--- PU	0.237	0.069	0.082	0.002	0.254	-0.001	0.003		

**Table 5: Result of hypotheses testing**

Hypothesis	Path	Result	SE	<i>p</i>	Result
H1	SP → PU	0.58	.088	***	Supported
H2	SP → EN	0.566	.085	***	Supported
H3	PU → TAT	0.38	.059	***	Supported
H4	EN → TAT	0.49	.069	***	Supported
H5	ATA → PI	0.353	.102	***	Supported
H6	PU → PI	0.27	.069	***	Supported
H7	EN → PI	0.255	.083	.001	Supported