

## **Factors Influencing on Consumers' Online Shopping Behaviors in Vietnam and Taiwan**

**Yi Hsu**

Associate Professor  
Department of Business Administration  
National Formosa University, Huwei, Yunlin, Taiwan

**HuuKhanh Le**

Graduate Student,  
Department of Business Administration  
National Formosa University, Huwei, Yunlin, Taiwan

### **Abstract**

*This study aims on analyzing which factors influencing on consumers' online shopping behaviors in Vietnam and Taiwan. This study will delve into factors influencing consumers' online shopping behaviors in Vietnam and Taiwan, containing Financial Risk, Product Risk, Convenience Risk, Delivery Risk, Return Policy, Telecommunication Infrastructure, Consumers' Attitude, and Consumers' Purchasing Intention. The study surveyed 436 consumers in two countries, Taiwan and Vietnam, with detailed questionnaires in three languages: English, Chinese, and Vietnamese. In addition, statistic software such as STASTISTICA 10 and LISREL8.8 were used to support the research to test hypotheses and establish the structural model. The results showed that the negative factors affecting shopping intent were no longer critical and gradually improved by online shopping companies. The great elements have maintained by online shopping website, influence positively on purchasing intention. Based on the data analyzed, this paper showed Telecommunication Infrastructure and Attitude positively influence on consumers' online shopping behaviors in Vietnam and Taiwan while Financial Risk, Product Risk, Convenience Risk, Non – Delivery Risk and Return Policy have insignificant influence on online shopping behaviors of customers.*

**Keywords:** Financial Risk, Product Risk, Convenience Risk, Delivery Risk, Return Policy, Telecommunication Infrastructure, Consumers' Attitude, Consumers' Purchasing Intention

### **1. Introduction**

#### **1.1 Research background**

Online shopping helps buyers to have more opportunities to check the items carefully. Moreover, the buyers also can receive online consultations, easily order the goods at websites of suppliers or manufacturers in Vietnam and Taiwan. The online sellers also receive many opportunities to attract consumers, promote, and sell their products on many websites and the costs of paying system are much cheaper than physical stores. Products transaction monitored by the website, online selling products will be wider without hindering by geography. With E-commerce websites, sellers are not restricted potential customers because customers can see the websites at any time of the day. However, sellers must face up with highly competitions from many other stores, requiring sellers to make efforts to attract customers.

Businesses are not only actively introducing products and promoting brands on the mobile shopping environment, but also designing apps for their brands, which contains information, transaction, distribution, and communication functions. These are new and complex models need the mechanism and management tools and the coordination of functional agencies, creating a healthy and fair business environment, and protecting the rights of businesses and consumers. Vietnamese E-commerce is entering a new development stage with many well-invested online selling websites and leading websites in Vietnam such as Lazada, Sendo, and Tiki. There are many products have been selling at lower prices with convenient delivery service with promotions and efficient logistic system, use vouchers and discount coupons to minimize purchasing costs, which are appreciated by customers. Taiwanese market is a mature and global market. Many global and local firms compete in this market with fancy product, promotion, pricing, and marketing strategies.

Online shopping has appeared more and more and growth strongly in Vietnam currently. Online shopping service websites geared towards investing more capital in improving quality.

Vietnamese online businesses are also starting to focus on upgrading the quality of their website interface, moreover, they also provide better services such as quick site accessibility, eye-catching interface, easy to use for everyone, providing a lot of information for each items about prices, origin, and usage. The potential of online shopping is significantly undeniable, especially in Vietnam - the market where young consumers are the majority and are increasing with fast pace. In the near future, the automated sales technology will have significant improvements, and more programs to support E-commerce sales will continue to be developed. Based on the development situation in Vietnam, online shopping is gradually rising to become a main trend and will contribute a significant section to develop and change the E-commerce business activities in Vietnam. This improvement makes it possible for online businesses in Vietnam to attract many buyers through their website.

In Taiwan, online shopping is not too novel for Taiwanese people. Many E-commerce websites exclusively for Taiwan residents use densely websites that can overwhelm shoppers in other countries, but effectively serve Taiwanese people. Following a report from Taiwan Network Information Center (2014), the most popular activity on social network belonged to smartphones (64%). Also in 2014, Taiwan reached the highest rate of social media penetration in the region (69%), before Brunei (67%), Hong Kong (61%) and Singapore (59%), higher than the rate Asia's average socialmedia penetration (35%). Moreover, the highest Facebook penetration rate globally also belongs to Taiwan (65%). Taiwan E-commerce market is growing at a dizzying pace, driven mainly by high internet penetration and widespread smartphones. In 2014, Nielsen reported that cash was the top method payment among Taiwanese online shoppers (58%), followed by credit cards (36%). With significant adoption of mobile devices of Taiwan, 25% of Taiwanese shopper sonlineutilized payment. Telecommunication is going to 5G era in Taiwan; e-commerce will be more popular and convenient to users, no matter buyers or sellers. More and more new e-business models are coming soon in Taiwan and create more profits for e-commerce companies.

## **1.2 Research purpose**

The purpose of the study based on the previous researches analyzes factors influencing on consumers' online shopping behaviors in Vietnam and Taiwan. This study will contribute to accelerating the process of online purchasing intention, and enhancing profits for businesses as well as benefits for shoppers based on the impacted factors. To achieve these goals, the paper collected data and analyzed based on the following factors: Financial Risk, Product Risk, Convenience Risk, Delivery Risk, Return Policy, Telecommunication Infrastructure, Consumers' Attitude, and Consumers' Purchasing Intention. In addition, with the purpose of increasing the specificity and accuracy of data in this study, demographic elements (Gender, Age, Marital status, Education level, Occupation, Monthly income, Favorite online shopping apps, Frequency of going online, Nationality) are also collected for analysis.

Samples collected from online shoppers in Taiwan and Vietnam; and the results not only evaluate and analyze factors have influences on the intention to buy online, but also contribute to theoretical and practical implications.

## **1.2 Research structure**

Chapter 1 outlines the general situation of E-commerce in Vietnam and Taiwan, highlighting the development of online shopping trend. This chapter also discusses concisely the research purpose and research structure.

Chapter 2 defines the factors affecting on the intention to shopping online as indicated by previous studies includes: Financial Risk, Product Risk, Convenience Risk, Delivery Risk, Return Policy, Telecommunication Infrastructure, Consumers' Attitude, and Consumers' Purchasing Intention. This chapter shows the model that include sevenhypotheses that influence on online shopping intent.

In Chapter 3, we will show the sample design and methodology of the study. Methods for developing the system of questions, selection of respondents participated in the questionnaire, and data analysis tools applied to explain the influence of factors given in the conceptual model.

Chapter 4 shows the results analyzed through data collected in Taiwan and Vietnam, hypotheses testing results and restructure model.

Chapter 5finalizes factors influencing the intention to buy online in Vietnam and Taiwan. In addition, chapter 5 discusses about non-influential factors shown in the results of the analysis. Some limitations and further potential research mentioned in this chapter.Chapter 5 also contains the contributions to theoretical and practical implications, limitations, and directions for further studies.

## **2. Literature Review**

### **2.1 Online Shopping**

Online shopping is defined when consumer purchases through online stores or online shopping websites (Haubl and Trifts, 2000). Online purchases are the processes that include ordering goods or services through websites, online shopping can be considered as an electronic type of commercial service used in B to B, B to C, or C to C transactions (Haubl and Trifts, 2000). Online shopping occurs when both buyers and sellers use electronic devices to deal sell and place the order processes (Haubl and Trifts, 2000).

### **2.2 Financial Risk**

According to the process that leads to the purchase decision making of the customer, during the interpretation stage, it is usually in the search mode of products or services with a low level of target orientation (Miyazaki and Fernandez, 2001). Financial risks occur when making financial transactions through the internet. Financial risks arise when online purchases exist in financial transactions through the internet, which include the costs of returning products, shipping products, warranty costs, and high products pricing. Security issues such as disclosing personal information, stealing credit card information, or losing other confidential financial records are significant risks for consumers and limiting people's online shopping needs (Miyazaki and Fernandez, 2001).

**H<sub>1</sub>**: Financial risks have negative impacts on consumers' online shopping attitude.

### **2.3 Product Risk**

Product risk defined as the consumers receive products that are different from the design, origin, color, and quality compared to the descriptions of the products provided by the sellers on the website (Forsythe, Liu, Shannon, and Gardner, 2006). In the buying process, consumers are limited in perceiving and evaluating products because they primarily rely on photos, videos, and product information provided by the seller on the website to make purchasing decision. However, with the explosion of photo and video editing software used by sellers, it falsifies information compared to actual products and affects consumers' ability to capture product information.

**H<sub>2</sub>**: Product risks have negative influences on the attitude of consumers in online shopping.

### **2.4 Convenience Risk**

The perceived convenience risk is the consumers' dissatisfaction when they shopping on the internet, this risk reflected in the disadvantage of slow order processing time, contact method, delivery method, or product return method. Online shoppers feel inconvenient when they have to wait for goods to arrive, especially when their goods delayed for unjustified reasons. Online shopping websites have different buying steps, policies, and interfaces will be obstacle for customers, causing inconvenience (Forsythe, Liu, Shannon, and Gardner, 2006).

**H<sub>3</sub>**: Convenience risks have negative influences on consumers' online shopping attitude.

### **2.5 Non - Delivery Risk**

Non - Delivery risk occurs when the transaction errors in the order recognition process, the seller delivers the wrong address. There are also other concerns in the distribution of goods such as shipping costs and slow delivery (Forsythe, Liu, Shannon, and Gardner, 2006). When buying online, many people experience it for the first time, buyers will be skeptical of the item they are considering to buy. To minimize risks during the delivery process, especially for high value items with long distance, the sellers often require customers to prepay part or the whole of the invoice to ensure the buyers receive the items they ordered online. Because it causes anxiety for buyers, when they had paid money but do not receive the products or services.

**H<sub>4</sub>**: The risk of not shipping has a negative impact on consumers' online shopping Attitude.

### **2.6 Return Policy**

The return and exchange policy contain shipping risks, long processing times, and shipping costs for sellers and buyers (Paswan and Yan, 2014). If this policy is clear, convenient, and free or low return cost, the buyers will trust and tend to buy the product. The policy of exchanging goods, if properly applied, will bring businesses online businesses with great benefits. Customers will feel more secure when buying goods if they know that goods return policy is convenient. This will reduce the rate of abandoned shopping carts, build customer loyalty, and show a true understanding of customer needs. In the traditional way of doing business, retailers often do the opposite by applying strict and restrictive rules to minimize short-term refund rates.

However, this approach creates so many difficulties for customers that they will never come back to buy online. Today, the trend has changed and many E-commerce traders have done their best to make repayments as simple as possible.

**H<sub>5</sub>**: Return policy positively influences on the attitude of consumers in online shopping.

**2.7 Telecommunication Infrastructure**

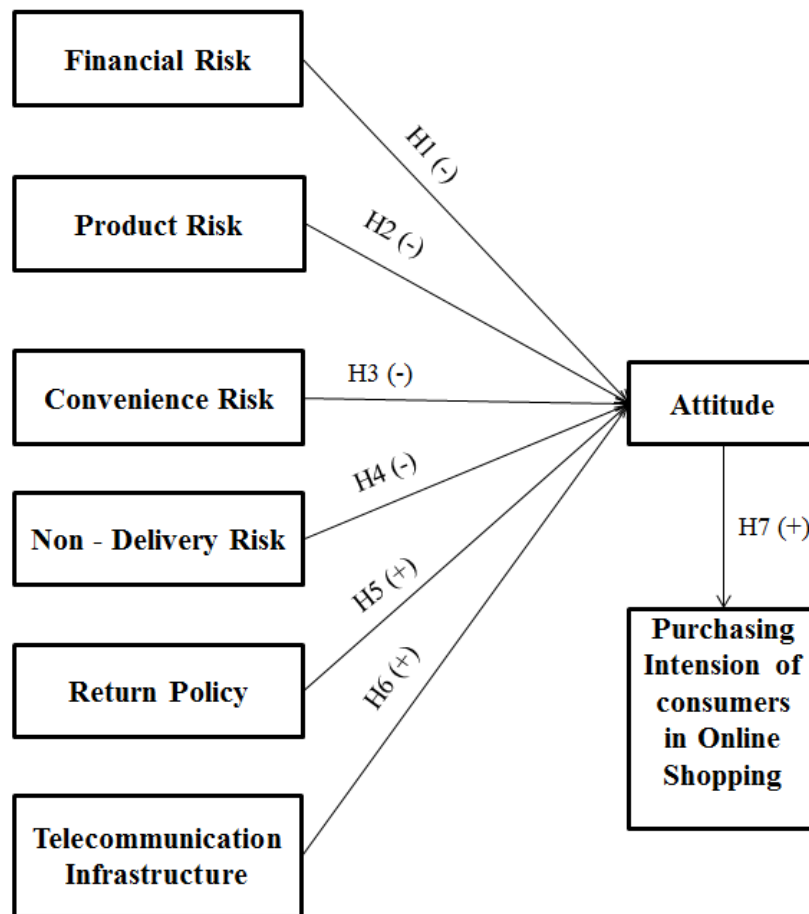
Telecommunication Infrastructure is high-speed Internet access, server configuration, marketing software, information display devices, and network of protected websites (Sharma and Bingi, 2000). The safety infrastructure of E-commerce strengthened with the establishment of management systems to monitor e-commerce transactions, evaluate the credibility of online shopping websites, and certify electronic documents.

**H<sub>6</sub>**: Telecommunication Infrastructure has positive influences on consumers’ online shopping attitude.

**2.8 The relationship between Attitude on Purchase intention in shopping online**

Attitudes about online shopping by customers related to the psychological state of customers about buying products or services over the internet (Kalsher, Phoenix, Wogalter, and Braun, 1998). The attitude of deciding online shopping is influenced in a deeply way by positive and negative factors. The risk factors when buying online negatively affect the buying intention; the preferential policies for customers, the telecommunication infrastructure of the website positively influence the purchasing intention in shopping online. When sellers satisfy the requirements of online consumers, customers will tend to buy more if they have affection and trust with the seller.

**H<sub>7</sub>**: Attitude has a positive impact on purchasing intention of customer in online shopping.



**Figure 1** Structural model of online shopping purchasing intension of consumers

### **3. Methodology**

#### **3.1 Data collection and questionnaire**

Each question in the questionnaire related to the hypotheses in the model in order to obtain the most accurate data. The questionnaires will be distributed to highly reliable people in Taiwan and Vietnam, minimize the inaccurate data collection that affect the analysis results. In order for the respondent to understand the questionnaire thoroughly, avoid misunderstandings during the answering process, in addition to the English version, the questionnaire also translated into Vietnamese and Chinese. In addition, this study needs the multi-dimensional analysis results, hence, questionnaire also collects demographic data (gender, age, marital status, education level, occupation, monthly income, favorite online shopping apps, frequency of going online, nationality).

#### **3.2 Data analysis**

##### **3.2.1 Regression analysis**

Regression analysis is an analytical method to find out the relationship of a variable dependent on other variables in order to estimate and predict the expected value of the dependent variable in the conceptual model. According to the results obtained after running regression, we can evaluate which hypothesis supported and rejected based on coefficients, p-value, and t-value.

##### **3.2.3 Structure equation model LISREL (Linear structural relations)**

With the aim to test the support of the hypotheses in the proposed model, this study applied LISREL software to test the structural model. Moreover, linear structure relation model is one of the research techniques applied in many fields thanks to the flexibility in modeling the relationships between independent and dependent variables. LISREL results report indicates the important indicators such as Chi-square/df, RMR, CFI, GFI and AGFI were to identify the good of fit test results for the structural model and root mean square to estimate the residual of the model. The LISREL results report also indicate and structural validity of the model and t-test to identify the significant relation of two variables.

#### **3.3 Demographic Statistic**

This study calculated the demographic frequency and percentage by utilizing STATISTICA 10. This prescription statistics method will help this study delve more about different consumer groups of online shopping in Vietnam and Taiwan.

### **4. Result**

#### **4.1 Demographic Statistic**

The demographic profile of the Factors influencing on online shopping behaviors of consumers in Vietnam and Taiwan received total 436 responses: 324 from Vietnamese (74.3%) and 112 from Taiwanese (25.7%). The number of female sexes is 56.9%, while the proportion of female sexes is 43.1%. About the age of the respondents, mainly samples received from group of age 19-25 years old with the percentage is 40.8% and had nobody is over 55 years old. The marital status of the participants who filled out the questionnaires was mostly single (59.6%). The majority of the acquired education level belongs to Bachelor with the percentage reached 44.0%. The occupation of respondents, the number of people who currently are Company-employee took the largest percentage (45.0%). Through the data collected, the main monthly income that the respondents earn was NTD \$25001 - \$50000 (45.6%). The most favorite software from the respondents is Shopee with a quantity of 116 responses (26.6%). Most respondents responded 2 to 4 hours per day to go online (58.3%), and people who go online more than 5 hours in a day (13.3%).

**Table 4.1 Description of Demographic Data (n=436)**

Characteristics	Categories	Frequency	Percentage
Gender	Male	188	(43.1%)
	Female	248	(56.9%)
Age	Under 19	32	(7.4%)
	19-25	178	(40.8%)
	26-35	142	(32.6%)
	36-45	62	(14.2%)
	46-55	22	(5.0%)
	Over 55	0	(0.0%)
Marital status	Single	260	(59.6%)
	Married	176	(40.4%)
Highest education level	Bachelor	192	(44.0%)
	Master	139	(31.9%)
	Doctor	42	(9.6%)
	Other	63	(14.5%)
Occupation	Student	129	(29.5%)
	Self- Business	50	(11.5%)
	Company-employee	196	(45.0%)
	Housewife	46	(10.6%)
	Other	15	(3.4%)
Monthly income	Less than NTD\$25000	146	(33.5%)
	NTD \$25001 - \$50000	199	(45.6%)
	More than NTD \$50001	91	(20.9%)
Favorite online shopping apps	Lazada	70	(16.1%)
	Sendo	39	(8.9%)
	Tiki	74	(17.0%)
	Shopee	116	(26.6%)
	PChrome 24h	66	(15.1%)
	MomoShop	35	(8.0%)
	Sheng Huo Shi Qing	28	(6.4%)
	Others	8	(1.8%)
How often do you go online?	Less than 1 hour per day	124	(28.4%)
	2-4 hours per day	254	(58.3%)
	More than 5 hours	58	(13.3%)
Nationality	Taiwanese	112	(25.7%)
	Vietnamese	324	(74.3%)

### 1.1. Regression analysis and LISREL

#### 4.2 Regression analysis

Regression analysis based on data gathered from 436 respondents in Taiwan and Vietnam. Based on the proposed model, there are six independent variables (Financial Risk, Product Risk, Convenience Risk, Non - Delivery Risk, Return Policy) and one dependent variable (Attitude). Table 4.2 is the results for regression model.

**Table 4.2** Regression Model

Model Summary				
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	P value
1	0.627	0.393	0.385	0.000
Coefficients				
Model	Regression Summary for independent variable Attitude			
	Coefficient	T value	P value	
(Constant)	0.993	3.622	0.000	
Financial Risk	0.058	0.952	0.342	
Product Risk	0.320	5.748	0.000	
Convenience Risk	-0.017	-0.459	0.647	
Non - Delivery Risk	0.006	0.141	0.887	
Return Policy	-0.097	-2.295	0.022	
Telecommunication Infrastructure	0.479	11.713	0.000	
Model	Regression Summary for dependent variable Purchasing intention			
	Coefficient	T value	P value	
(Constant)	1.352	7.474	0.000	
Attitude	0.634	14.163	0.000	

Regression coefficients for the independent variables must be less than or equal to 0.05 to explain the dependent variable is supported or not. The regression equation is set based on the value of R<sup>2</sup>=0.393, Adjusted R<sup>2</sup> =0.385 and P value = 0.000:

$$\begin{aligned}
 \text{Attitude} = & 0.993 + 0.058 \text{Financial Risk} + 0.320 \text{Product Risk} \\
 & (-0.459) \quad (0.952) \quad (5.748) \\
 & (0.647) \quad (0.342) \quad (0.000) \\
 & 0.017 \text{Convenience Risk} + 0.006 \text{Non - Delivery Risk} + 0.097 \text{Return Policy} \\
 & (-0.459) \quad (0.141) \quad (-2.295) \\
 & (0.647) \quad (0.887) \quad (0.022) \\
 & + 0.479 \text{Telecommunication Infrastructure} + 1.352 \\
 & (11.713) \quad (7.474) \\
 & (0.000) \quad (0.000)
 \end{aligned}$$

Purchasing Intention = 1.352 + 0.634 Attitude

(14.163)

(0.000)

After analyzing and evaluating the regression results, Telecommunication Infrastructure (Coefficient =0.479, P=0.000) and the independent variable of second model is Attitude (Coefficient =0.634, P=0.000) are Supported. The remaining variables Financial Risk (Coefficient=0.058, P=0.342), Product Risk(Coefficient=0.320, P=0.000), Convenience Risk (Coefficient=-0.017, P=0.647) Non - Delivery Risk(Coefficient=0.006, P=0.887)and Return Policy(Coefficient=-0.097, P=0.022)are Rejected.

**Table 4.3**Hypotheses testing- Regression

Hypotheses	Coefficient	P- value	Supported (Yes/No)
Financial Risk	0.058	0.342	No
Product Risk	0.320	0.000	No
Convenience Risk	-0.017	0.647	No
Non - Delivery Risk	0.006	0.887	No
Return Policy	-0.097	0.022	No
Telecommunication Infrastructure	0.479	0.000	Yes
Attitude	0.634	0.000	Yes

1.1.1. LISREL analysis results

### 1.1.1.1. Covariance matrix

**Table 4.4** Covariance Matric of Measure Variables

	ATT	OPI	FR	PR	CR	NDR	RP	TI
ATT	0.471							
OPI	0.299	0.600						
FR	0.100	0.097	0.258					
PR	0.166	0.198	0.149	0.353				
CR	0.032	0.030	0.089	0.211	0.762			
NDR	-0.027	0.024	0.065	0.108	0.362	0.721		
RP	-0.029	0.043	-0.043	0.067	0.213	0.340	0.579	
TI	0.260	0.204	0.071	0.111	-0.020	-0.063	0.020	0.463

Covariance can be negative or positive, reflect the negative or positive relation between two variables. If the absolute value of the covariance is smaller, the strength of the relation between the two variables will be low. Covariance between the two variables is the deciding factor correlations torque keeping them integrated.

### 4.2.2 Goodness of fit testing

We started by testing the fitness of the model to measure the relationship between the variables we had anticipated. The Goodness of fit index (GFI) shows the consistency between the patterns of fixed and free parameters determined in a model of variances as well as covariates taken from an observable dataset.

The Chi square/df= 7.215 was significant due to the data collected from respondents of different ages, education levels, monthly incomes and jobs. However, it cannot be a basis for rejecting proposed models due to the wide coverage of collected samples. Moreover, Chi-square itself is a non-parametric statistic (Mary L.M., 2013), the ability to find differences is not as strong as the parameter tests (Elise and Johnathan, 2002). LISREL is evaluates goodness of fit for the structural model.

GFI index measures the relationship between variance and covariant matrix. CFI index assesses the fit in the model with the relationships given in SEM with a limited and nested model in which the covariance between input variables is brought close to 0. In particular, GFI and CFI should be greater than 0.90 (Hu and Bentler, 1999). However, in this model, GFI = 0.976, CFI = 0.965, higher than suggested standards, that is one of the key factors to consider is the fit model reached.

The NFI represents the standard distribution difference of Chi-square between the independent model and the variance and multi-factor model. According to Chin and Todd (1995), the proposed value needs to be greater than 0.9. The NFI in this model came out with a result of 0.960, showing that the model considered a good fitting model.

The remaining key criteria namely, AGFI= 0.854, RMR = 0.0216 all meet the suggested standards, indicated how well the model fits with the data. AGFI should be over than 0.80 (Bagozzi and Yi, 1988) and RMR should be smaller than 0.05 (Schumacker and Lomax, 2004).

**Table 4.5** Result Goodness of fit of Proposed Model

Chi-square/df	GFI	NFI	CFI	IFI	AGFI	RMR
7.215	0.976	0.960	0.965	0.965	0.854	0.0216

### 1.1.1.2. Hypothesis Testing

Figure 2 and Table 4 indicate the LISREL results. As the results, Financial Risk (estimates value = 0.06, t = 0.95), Product Risk (estimates value = 0.32, t-value = 5.79) are positive without significant influenced on attitude. Convenience Risk (estimates value = -0.02, t = -0.46) negative insignificant influenced on attitude. Non – Delivery Risk (estimates value = 0.00, t = 0.12) with insignificant positive influence on attitude. Return Policy (estimates value = -0.10, t-value = -2.28) have negative significant impact on consumers' online shopping attitude in Vietnam and Taiwan. Hence, H1, H2, H3, H4 and H5 are rejected in this model. Telecommunication Infrastructure (estimates value = 0.48, t-value = 11.74) with positive significant impact on attitude and Attitude (estimates value = 0.63, t-value = 14.09) demonstrated significant positive influences on customers' intention of shopping online in Vietnam and Taiwan. From those results, we can conclude that H6 and H7 supported this model.



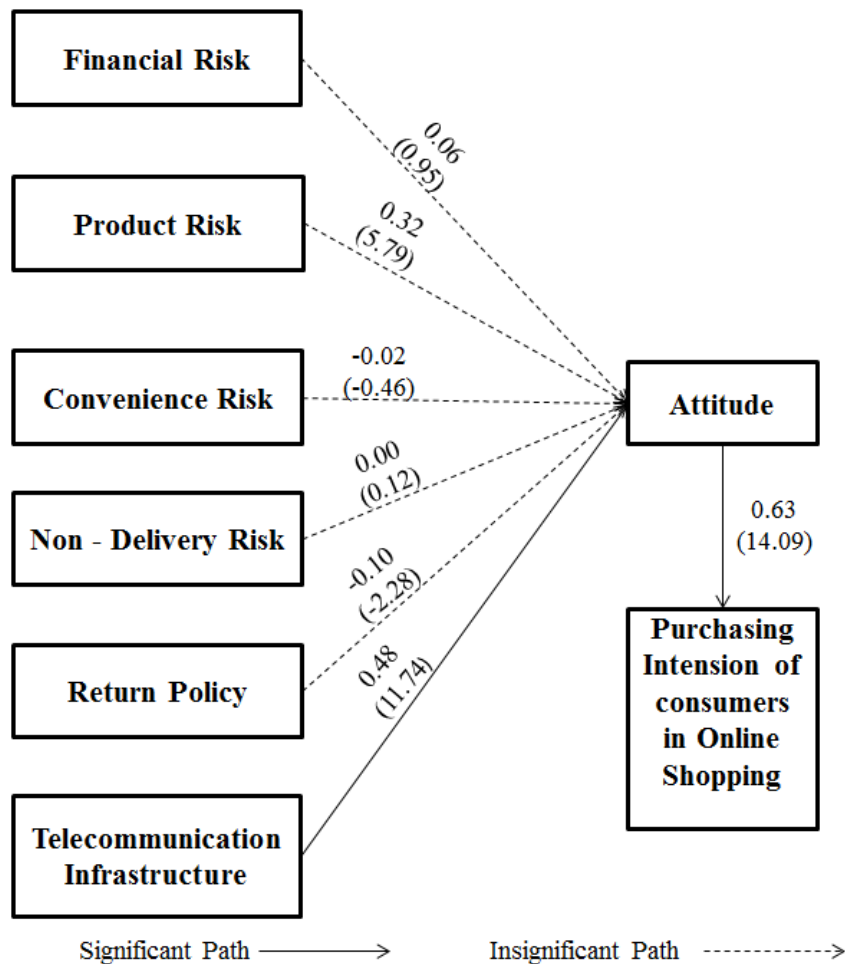


Figure 2: Result of LISREL

Table 4.6 Hypotheses testing

Hypothesis	Estimates	T-value	Supported (Yes/No)
H1 Financial Risk→Attitude	0.06	0.95	No
H2 Product Risk→Attitude	0.32	5.79	No
H3 Convenience Risk→Attitude	-0.02	-0.46	No
H4 Non – Delivery Risk→Attitude	0.00	0.12	No
H5 Return Policy→Attitude	-0.10	-2.28	No
H6 Telecommunication Infrastructure→Attitude	0.48	11.74	Yes
H7 Attitude→Online Shopping Purchasing Intension of Consumers	0.63	14.09	Yes

### 4.3 Comparison of the Regression analysis and LISREL model

Regression analysis is a methodology used to model systematically the relationship between independent variables and a dependent variable by using a linear model. However, estimating the coefficients is not effective due to the variance of large estimates. The values Adjusted  $R^2$  and  $R^2$  reflect the structural validity. In this study, both values were not high (Adjusted  $R^2 = 0.385$  and  $R^2 = 0.393$ ), could not fully asserted that the model reached the fit.

LISREL in this study has shown flexibility in modeling the relationship between independent and dependent variables. This method is suitable for large samples (greater than 200) because this tool analyzes data based on sample distribution theory (Raykov and Widaman 1995).The results of running the data obtained with the GFI, NFI, CFI, IFI, AGFI, RMR indicators all meet the standards.

Based on the reliability and suitability of the model through the LISREL analysis results, we can accept the results of LISREL with two hypotheses that are supported and five hypotheses are rejected.

## **5. Conclusion**

### **5.1 Discussion**

This study aims to analyze these Factors influencing on consumers' online shopping behaviors in Vietnam and Taiwan. The results showed that the negative factors influencing on shopping intent were no longer critical and gradually improved by online shopping companies. The great elements have maintained by online shopping website, influence positively on purchasing intention.

### **5.2 Factors influencing on consumers' online shopping behaviors in Vietnam and Taiwan**

#### **5.2.1 Telecommunication Infrastructure**

LISREL analysis test the results which is displayed in Figure 2 and Table 4.6.. The results proofed that Telecommunication Infrastructure positively impact on consumers' online shopping Attitude. Nowadays, with the development of high-speed Internet access, server configuration, marketing software, information display devices, and network of protected websites, had created favorable conditions for both buyers and sellers, significantly positively impacted on online buying behaviors.

#### **5.2.2 Attitude**

The T-Value of the factor Attitude has surpassed 1.96, thereby confirming that a good buying Attitude will significantly positively affect purchasing intension. When shoppers have a positive attitude about online purchases, it will boost their buying intention. The results are also reasonable compared to the reality of developing E-commerce in a very developed country like Taiwan and a country that is making strong changes like Vietnam.

### **5.3 Factors go against hypotheses have been proposed**

#### **5.3.1 Financial Risk**

From the data shown on the LISREL results did not support Product Risks with negative influence on on-line consumers' attitude, which was supported by Miyazaki and Fernandez (2001). The data was collected in fast growth online shopping environment as Vietnam and Taiwan. Online payment transactions are indispensable in the current era. The foundation of reputable online shopping sites always has measures and tools to implement the security to protect the personal information and payment of customers in the most comprehensive way. Customer information during the transaction process should ensure maximum safety. All transaction information is confidential, but in case of legal requirements in writing and trading channels, they must provide this information to law enforcement agencies as prescribed. Therefore, the minimized financial risk brings peace to customers and the uncertainty avoidance.

#### **5.3.2 Product Risk**

LISREL results did not support the hypothesis 2: Product risks have negative influences on the attitude of consumers in online shopping. Product risks are not the obstacles for buyers with online sales channels. Sellers are aware of the need to create trust for customers, try to receive more the good reviews on the website from the customer. Based on the good satisfactions, consumers will be ready to buy for the next time on their websites. Although online products cannot touch, hear, taste, smell ... but the sellers' professionalism when describing the products with pictures, videos, and more, there is also the perception of the buyers with different product experience. Product risk does exist, but in two countries Taiwan and Vietnam, it did not negatively affect customers' intention to buy online but with significantly positive influence.

#### **5.3.3 Convenience Risk**

The negative effect of convenient risks is confirmed by Forsythe, Liu, Shannon, and Gardner(2006), but not supported by LISREL results in this study. Nowadays with the growing popularity of online shopping, shoppers are used to having to wait a few days for goods to reach them. Because of that habit, shoppers no longer feel uncomfortable waiting for goods. Moreover, the fact that users can place orders when they are anywhere, anytime minimizes the negative impact of convenient risks in online purchases.

#### **5.3.4 Non – Delivery Risk**

The results didnot support the hypothesis 4: the risk of not shipping has a negative impact on consumers' online shopping Attitude, as opposed to the previous study of Forsythe *et al.*(2006).

The reason that risk does not ship is not a major concern for buyers due to online sales companies have set the maximum number of days the seller is required to deliver to the buyer. If beyond that number of days, the buyer can choose the item from another seller without paying any costs. The buyer can leave a comment, and evaluate that the seller prepared the goods very slow, or did not deliver the goods, by this way, the others could know the information and will not choose to buy in that shops.

### **5.3.5 Return Policy**

According to LISREL results, we can identify that Return Policy had a negative impact on your online purchase intention, disagreed with the previous point of view of Paswan and Yan(2014). Online shopping websites only inform sellers that they are responsible before the law if there is any dispute with the seller and the buyer. The risk of not returning is also the reason why sales channels encourage buyers and sellers to negotiate with each other when the product has problems. In case the buyer and the seller cannot negotiate with each other, the third party from the government will involve helping both sides deal the problem, the online shopping websites will not protect consumers. This is the reason why return policy will reduce customer trust and it will have the negative influence on purchase intention of consumers in Taiwan and Vietnam. Hence, businesses need to show their professionalism and reputation with customers by return policy. While the global competitive trend is growing, more and more customers are demanding that free return policy should be a standard service. Online business stores need a simple and effective return policy to impress customers and make it as a difference for their business brand.

### **5.4 Theoretical implication**

First, this is one of the few studies have analyzed in detail to find online customers in Vietnam and Taiwan in intent to purchase online. Second, the online buying behaviors in Taiwan and Vietnam are not entirely dependent on the factors pointed out in previous studies. Thirdly, online shopping websites have a lot of strict policy to improve safety and authentication, reducing risk awareness for consumers.

### **5.5 Practical implications**

Attitude greatly affects the online buying process. Therefore, online shopping sites need constantly focus on marketing to attract new customers and increase loyal customers. In addition, sellers need to sell the goods at reasonable price to stimulate purchase intent.

The return policy through the research results also shows that this is not a strong point of online shopping. Online shopping companies need to develop delivery policies to bring satisfaction to both buyers and sellers. Warranty policy should be in a complete and convenient way for customers.

### **5.6 Limitation and future research proposal**

Despite the effort in carrying out this study, however, there are also some drawbacks:

Firstly, factors influencing online shopping behaviors analyzed specifically in the current situation. Factors are constantly changing according to customers' diverse needs and desires, in today's market conditions. Future research may look for new factors that may also influence customers' intention in shopping online.

Secondly, these factors studied are the main factors influencing on consumers' decision to go shopping online at the current stage. Further studies may further investigate other theoretical contents to build a more accurate and complete model of consumers' online purchasing decisions. Besides, it is also practical to survey other items purchased online, such as air tickets, newspapers, entertain products.

### **Reference:**

- Bagozzi, R. P., and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74-94
- Bentler, P. M. (1983). Some contributions to efficient statistics for structural models: Specification and estimation of moment structures. *Psychometrika*, 48, 493-571
- Chin, W.C. and Todd, P.A. (1995). On the Use, Usefulness and Ease of Use of Structural Equation Modeling in MIS Research: A Note of Caution. *MIS Quarterly*, 19, 237-246
- Elise Whitley, Jonathan Ball (2002). Statistics review 6: Nonparametric methods. *Critical Care*, 6, 509
- Forsythe, S., Liu, C., Shannon, D., and Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risk of online shopping. *Journal of Interactive Marketing*, 20(2), 55-75

- Haubl, G. and Trifts, V. (2000). Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids. *Marketing Science*, 19, 4-21
- Kalsher, M.J., Phoenix, G.M., Wogalter, M.S., and Braun, C.C. (1998). How do people attribute blame for burns sustained from hot coffee? The role of causal attributions. *Proceedings of the Human Factors and Ergonomics Society*, 42, 651-655
- Mary L. McHugh (2013). The Chi-square test of independence. Department of Nursing, School of Health and Human Services, National University, Aero Court, San Diego, California, USA, 23(2), 143
- Miyazaki, Anthony D., and Fernandez, Ana (2001). Consumer Perceptions of Privacy and Security Risks for Online Shopping. *The Journal of Consumer Affairs*, 35(1), 27-44
- Pei, Z., Paswan, A. and Yan, R. (2014). E-tailer's return policy, consumer's perception of return policy fairness and purchase intention. *Journal of Retailing and Consumer Services*, 21, pp. 249-257
- Raykov, T., & Widaman, K. F. (1995). Issues in applied structural equation modeling research. *Structural Equation Modeling: A Multidisciplinary Journal*, 2(4), 289-318
- Schumacker, R. Lomax, R. (2004). *A Beginner's Guide to Structural Equation Modeling* 2nd Ed. New York: Lawrence Erlbaum Associates
- Segar, A. (1997). Assessing the unidimensionality of measurement: a paradigm and illustration within the context of information systems research. *Omega*, 25(1), 107-121
- Sharma, M.K. and K. Bingi. (2000). The growth of e-based investment. *Information system management*, 58-66. Taiwan Network Information Center (2014), Taiwan Network Information Center Annual Report, 20-27
- Kalsher, M.J., Phoenix, G.M., Wogalter, M.S., & Braun, C.C. (1998). How do people attribute blame for burns sustained from hot coffee? The role of causal attributions. *Proceedings of the Human Factors and Ergonomics Society*, 42, 651-655