

# What Determines the Online Shopping Intention of Vietnamese Consumers?

# Cuong Quoc NGUYEN<sup>1</sup>, Linh Phan CHUNG<sup>2</sup>

<sup>1 First Author & Corresponding Author</sup> Lecturer, Faculty of Business Administration, Industrial University, Ho Chi Minh City, Viet Nam.

E-mail: nguyenquoccuong@iuh.edu.vn

<sup>2 Co-Author</sup> Student, Business School, University of Greenwich, London, UK. E-mail: linhphaans74@gmail.com

Received: October 18, 2021. Revised: February 20, 2022. Accepted: March 01, 2022.

## **Abstract**

**Purpose** – The research aims to explore the ability of the combination of the Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA) to predict and explain the online shopping intention of Vietnamese consumers. The findings of this study provide empirical results to assess the factors influencing behavioural intention in the E-commerce field.

**Research design, data, and methodology** – The research approach of this study is quantitative. The data was collected from 214 respondents on e-commerce platforms. The collected data will then be analyzed to test the proposed hypothesis in this study. Multiple Regression Analysis and Simple Linear Regression are employed to test the hypothesis.

**Result** – Perceived benefits, Perceived risk reduction, and trust positively influence Attitude toward using E-commerce. There is a positive relationship between Subjective norms and Behavioural intention to shop online. There is a positive relationship between Attitude toward using E-commerce and Behavioural intention to shop online.

**Conclusion** – This study is based on the Theory of Reasoned Action (TRA) model and the Technology Acceptance Model (TAM) to explore the factors influencing the online shopping intention of Vietnamese consumers. Besides, this paper contributes to the managerial implications for E-commerce managers and policymakers to promote E-commerce among Vietnamese consumers.

**Keywords:** Behavioural Intention; Attitude towards online shopping e-commerce; Perceived Benefits; Perceived Risks Reduction; Trust; Subjective Norms.

JEL Classification Code: M31, C12, L81

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## 1. Introduction

In the first half of 2020, Asia-Pacific and North America ranked in the top 2 regions in total for both retail and ecommerce retail, accounting for 42.3% and 22.9%, respectively (Cramer-Flood, 2020). Across Asian countries, the market of e-commerce is predicted to be double-digit growth in the next five to ten years. India, Indonesia, Malaysia were among the fastest-growing e-commerce retail markets globally at a rate of over 20% annually (Cramer-Flood, 2020). China was no exception, increasing on an annual average of about 17% (Cramer-Flood, 2020). This area has recorded history with outstanding achievements in Southeast Asia: reaching \$5.5B in 2015 and hitting \$23.2B (Do, Nguyen, & Nguyen, 2019). It is forecast that it will reach about \$102B by 2025. In Vietnam, e-commerce started at \$4B in 2015; but the e-commerce market scale in 2018 reached about \$7.8B for three consecutive years, with a growth rate of 30% (Do et al., 2019). That was a positive signal for the Vietnam e-commerce market. Nguyen and Do (2019) confirmed that Vietnamese e-commerce platforms have enormous potential for development; meanwhile, the ecommerce industry in Vietnam is becoming more competitive. Moreover, in 2019, the market's growth increased rapidly with 35.4 million users and generated more than \$2.7B in revenue. The most successful companies in Vietnam are Shopee, Lazada, Tiki, and Sendo. Governments also propose the Vietnam e-commerce development plan from 2021 to 2025 to move towards the digital economy where e-commerce is essential. The benefits that the digital economy was bringing to Vietnam are divided into three groups: for companies, it can save costs and facilitate transactions; for customers, e-commerce expands choices in various suppliers; and for society. It also creates a new playground for everyone, forcing them to innovate and work following modern technological life. The research aims to explore the ability of the combination of the technology acceptance model (TAM) and theory of reasoned action (TRA) to predict and explain the online shopping intention of Vietnamese consumers. Although extensively used in previous studies, a few types of research combine the TRA and TAM to predict and explain the factors influencing online shopping intention in the Vietnamese context. By combining the constructs of the TRA and TAM, the research questions for this study include: (1) What are the critical factors that intend to shop online among Vietnamese consumers? Moreover, (2) How do E-commerce companies encourage Vietnamese consumers to shop online more frequently and spend more on online purchased items?

# 2. Literature Review

## 2.1. E-commerce

The growth of e-commerce depended on communication systems, financial systems, and distribution and delivery systems most dependably and safely (Mann, Knight, & Eckert, 2000). Kauffman and Walden (2001) emphasized the big advantage of the Internet as a tool for finishing end-to-end business transactions. E-commerce was the online business activity for all retailers' products, goods, and services over the Internet (Rosen, 2002). The activities of products and goods could be buying, selling, transferring or exchanging products or providing consumers with commercial services through a tool of all time - a computer network. While the activities of services could be negotiation, messaging, delivery, or settlement. Common types of e-commerce were business-to-customers (B2C); business-to-business (B2B); and consumer-to-consumer (C2C) (Andam, 2003; Turban, Sharda, Aronson, & King, 2008). Hence, e-commerce soon was realized its potential to be explored as the mean of purchasing and sales and customer support post-selling, based on the global use of the Internet (Treese & Stewart, 2003). The explanation of Treese and Stewart was supportable for the research, so was Kauffman and Walden. They defined the use of the Internet, bringing a big revolution in selling globally, as "bricks-and-clicks" settings, where businesses could sell their products or services, and customers receive information and make online transactions.

## 2.2. E-commerce in Vietnam

In the context of global commerce, e-commerce is growing thanks to the application of the Internet rapidly. In Vietnam, Amazon, eBay, and Alibaba are most popular in the e-commerce industry among especially young teenagers who adapt quickly to new technology. However, in 2020, a crisis called Covid-19 has changed the whole game in e-commerce worldwide. Due to the outbreak of the Covid pandemic, Vietnamese consumers have gradually changed their behaviour from traditional shopping to online shopping, according to Nikkei Asian Review (Chan, 2020). A Nielsen survey suggests that around 93% of consumers worldwide will consider shopping online after the pandemic (Pham, Do Thi, & Ha Le, 2020). The covid-19 pandemic promoted digital transformation, online payments, and online consumption. Dung and Vinh (2019) reports that the proportion of businesses in the B2C model of website

construction was still completely limited in 2019 (44% in 2018, 1% higher than in 2017 and 1% lower than in 2016). Meanwhile, 70% of Internet users are reported to shop online at least once a year, and they spend about 3-5 hours a day surfing the Internet (Mai & Tick, 2021). Therefore, the adaptation of customers to technology 4.0 makes the competition between businesses much more competitive. Specifically, some domestic and foreign investors failed in this area, such as Lotte.vn of Lotte Group, Adayroi.com of Vingroup, and Robins.vn of Central Group. It is noteworthy that, with an increasing number of people using e-commerce, the Vietnamese legal documents system has not kept up with the development of technology, models and new business methods are not deterrent enough; the competence, expertise, and equipment for the functional management in e-commerce are still limited (Le-Hoang, 2020). These restrictions significantly affect consumers' trust when the laws do not protect them.

# 2.3. Theory of Reasoned Action

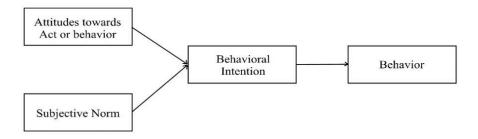


Figure 1: Theory of Reasoned Action (Fishbein & Ajzen, 1975)

The intention was defined as something to keep in mind, like thoughts, purposes, plans (Morehead & Morehead, 1972). The intention was a core determinant of reasoned behaviour, and behavioural intention explained a subjective probability that he would perform some behaviours, not his performance in general (Fishbein & Ajzen, 1975). Thus, intention is a factor used to evaluate behaviour execution possibility in the future (Blackwell, Miniard, & Engel, 2001). The TRA was a psychological model used many years ago to predict behavioural intention accurately. It has been successfully applied to many types of research in predicting the outcome of behaviour and intentions, such as revenue prediction (Prestholdt, Lane, & Mathews, 1987) and education (Fredricks & Dossett, 1983). According to Fishbein and Ajzen (1975) framework, two factors affect behavioural intention: Attitude towards act/behaviour and subjective norms. Attitude towards act/behaviour was a personal factor, and subjective norms mentioned a perspective of an individual on social pressure. Subjective norm was a combination of beliefs called normative beliefs. At the same time, Attitude towards an act/behaviour was considered as a feeling or emotion of him on that act/behaviour favourably or unfavourably. The TRA hypothesized that a person tended to be rational and consider the effects of their actions before deciding whether to engage in a particular behaviour (Fishbein & Ajzen, 1980). According to Anderson (1983), behavioural intention could be people's expectations of their behaviours in a particular context. The predictive utility of TRA was robust across conditions (Sheppard, Hartwick, & Warshaw, 1988). Thus, it was imperative to identify the participant's common beliefs regarding the behaviour under study to predict behavioural intention. Furthermore, that was a feature of TRA: process predictions instead of the results of the behaviours (Foxall, 1997). To sum up, TRA showed a relationship between one's Attitude toward behaviour and his perceptions of that behaviour (Masrom, 2007).

## 2.4. Technology Acceptance Model

Fred Davis designed and developed the Technological Acceptance Model (TAM) in 1989, based on the TRA model. Davis explained the TAM as the explanation of the acceptance of new information technology by customers. In TAM, the intention is directly influenced by two factors, namely "perceived usefulness" and "perceived ease of use" (Davis, 1989). The model had beliefs influencing Attitude toward online shopping: perceived usefulness (PU) and perceived ease of use (PEOU). The PU and PEOU of technology could play an essential role in predicting customer satisfaction when using technology (David, 1989). He defined PU as a subjective probability of potential customers that using a particular application system would increase their work performance in the organizational context. In comparison, PEOU was a feeling of being easy to use and less effort to make a transaction (Taylor & Todd, 1995). As Jarvenpaa and Todd (1997) stated, the beliefs of PU and PEOU influenced positively Attitude toward online shopping and behavioural intention to shop online. The feature of PU was related to performance productivity depending on

experiences with technology, while effort involved in the feature of PEOU referring the process leading to the outcomes (Venkatesh, 1999). The TAM model has been applied in many previous pieces of research successfully, such as telemedicine (Hu & Bentler, 1998), websites (Koufaris, 2002), e-collaboration (Dasgupta, Granger, & Mcgarry, 2002).

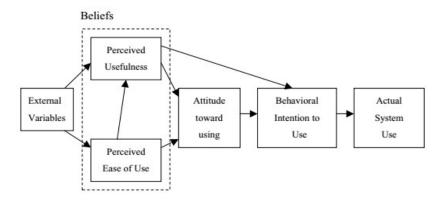


Figure 2: Technology Acceptance Model (Davis, 1989)

## 2.5. Hypothesis Development

Perceived benefits refer to the potential positive values that e-commerce brings to customers. If their perceived benefits were what they thought, they might make online transactions without considering them. Therefore, it was reasonable that perceived benefits described the beliefs of getting the positive outcomes exchanged from a real or perceived threat in response (Chandon, Wansink, & Laurent, 2000). Also, Ko, Jung, Kim, and Shim (2004) identified that customers believed they could go shopping online without any difficulties or interruptions than traditional shopping during the process. Additionally, people could have more benefits thanks to the level of satisfaction over the product of previous consumers on the Internet or the review of many Youtubers, Bloggers, or KOLs. The significant perceived benefits of e-commerce related to benefits of the Internet affecting customer's perception could be quick response, worldwide access, and global information (Gunasekaran & Ngai, 2005). Forsythe, Liu, Shannon, & Gardner (2006) emphasized four dimensions of customer's perceived benefits: shopping convenience, product selection, ease of use, and hedonism. These four factors were a result of cognitive and emotional processes. Emotions were the most vital factor that needed to be considered as it was a response of customers to the online context (Hansen, 2005). Do et al. (2019) also reported that perceived usefulness positively correlates with online purchase intention among Vietnamese consumers. Therefore, the business should investigate the customer's emotional psychology to choose that business instead of countless online alternatives.

# Hypothesis 1: Perceived Benefits positively influenced the Attitude toward online shopping.

Perceived risks had been used to explain Attitude toward online shopping in many kinds of research before. Risks were unknown threats or a kind of subjective loss (Peter & Ryan, 1976). According to Bhatnagar, Misra, and Rao (2000), drawbacks of online shopping were financial risks and product risks. In addition, Miyazaki and Fernandez (2001) also pointed out that privacy risks and credit card security risks were worth considering. Chang, Cheung, and Lai (2005) concluded that perceived risks included four dimensions: (1) product risk, (2) credit card security risk, (3) uncertainty, and (4) security risk of the system. Perceived risks could be considered the main barrier to reducing consumers' ability to buy online (Bhatnagar et al., 2000; Forshyte et al., 2006). The higher the perceived risks were, the longer it took customers to decide. However, Ventre and Kolbe (2020) did not find perceived risk to influence directly online purchase intention. Besides, Kim and Kim (2016) argue that nonpurchasers perceived higher risk than online purchasers in performance, security, financial, psychological, and time risks. Almousa (2011) proved that perceived risk negatively affects purchasing online items. In the Vietnamese context, Nguyen and Do (2019) confirm that perceived risk is inversely associated with customers' online shopping decisions, so customers may shop online

more if perceived risks are reduced. Qalati, Vela, Dakhan, Hong Thuy, and Merani (2021) also proved that perceived risk affects purchase intention in online shopping.

## Hypothesis 2: Perceived Risks Reduction positively influences the Attitude toward online shopping.

Trust was the customer's shared perception of the ability to fulfil the duties of another party and the mutual integrity of the interests of each individual concerned (Mayer, Davis, & Schoorman, 1995). In e-commerce, the ability was the determinant factor that determined the supplier had sufficient legal basis to provide the right quality products. Mutual integrity was the customer's belief that the supplier respected and complied with rules or norms of buying and selling available. Trust was one of the essential factors in determining a customer's attitude towards online shopping. Specifically, it differed from traditional shopping in which it was uncertain, difficult to control, and potentially risky; and three main factors influenced online consumer's Trust: (1) reputation, (2) perceived size, and (3) trustworthiness (Jarvenpaa, Tractinsky, & Saarinen, 1999). Thus, suppliers needed to build relationships with customers and create cohesion between both parties to develop and maintain the business's commitment (Garbarino & Johnson, 1999). If customers had no trust in online shopping or the business's reputation, it was difficult for customers to accept online shopping (Tan & Thoen, 2000). Lack of Trust could be caused by a consumer's weak interaction with the online website (Jarvenpaa, Tractinsky, & Vitale, 2000), customers lacked authority to check the actual product or uncertainty about the security of personal and financial information (Lee & Turban, 2001). Conversely, if the level of customer security and privacy was guaranteed and a commitment to safety, the Trust of customers, in this case, would positively influence Attitude toward online shopping. The evidence was that many previous studies agreed with focusing on the relationship between online suppliers and online shoppers to build customer trust (Bart, Shankar, Sultan, & Urban, 2005).

## **Hypothesis 3:** Trust had a positive influence on the Attitude toward online shopping.

Fishbein and Ajzen (1975) stated that subjective norms reflected the outside impacts of society. Furthermore, they emphasized that "attitude and subjective norms were strongly linked because they were highly predictable about behavioural intention to use" (Fishbein & Ajzen, 1981). The TRA model explained that all actual behaviour was a personal result of behaving. However, the actual behaviour was more comprehensive than that. The actual behaviour could come from two basic approaches: social attitudes and personal attitudes. Social attitudes were defined as a person's belief in social aspects or predicting the possibility of a specific behavioural outcome (Park, 2000). Whereas the subjective norm was an individual's perception of something, they would perform, either from their perspective or another's. Specifically, in the context of B2C e-commerce, attitudes and intentions of customers about accepting online purchases were not only dependent on interpersonal interactions (such as family and friends), but were also influenced by information on social media, economic experts, and many other means (Bhattacherjee, 2000; Pavlou, 2003; Lin, 2007). As a result, many internal and external factors influence an individual's buying intention. Most apparent that the opinions or WOMs from social relationships were considered the basis for an individual to feel the perceived benefits of e-commerce, thereby forming a positive behavioural intention (Kim, Kim, & Shin, 2009).

# **Hypothesis 4:** Subjective Norms had a positive influence on Behavioral Intention.

Attitude towards online shopping was a significant antecedent in forming online purchases, and a desire was strongly motivated by the intention to own, thereby forming the behavioural intention to use (Salisbury, Pearson, Pearson, & Miller, 2001). As Barsky and Nash (2002) investigated, Attitude, including feelings, moods, and emotions, strongly influenced customer's loyalty perception. The relationship between Attitude and behaviour was adjusted by different situational factors like time pressure, geographical distance, customized services, or attractive alternatives (y Monsuwé, Dellaert, & De Ruyter, 2004). In addition, Chang et al. (2005) emphasized that Attitude towards online shopping had a significant positive effect on the behavioural intention to use, resulting from their previous six types of research about Attitude toward online shopping. However, Norman, Armitage, and Quigley (2007) support that the relationship between Attitude and behaviour could switch into a reverse situation, for the more the frequency of past behaviour rises, the less the Attitude towards online shopping reduces. Many studies demonstrated that favourable attitudes could not lead to actual performance if they encountered difficulties online shopping (Chen, 2007). The heterogeneity in the available studies prompted experts to investigate more profound and transparently to understand which factors were the main ones influencing this relationship.

**Hypothesis 5:** Attitude toward online shopping had a positive influence on Behavioral Intention.

# 3. Methodology

## 3.1. Research Model

TRA and TAM have been widely used to explain users' intention to use computer technology. One of the most famous scholars that used these two models was Davis (1989). He used TRA and TAM to study users' acceptance of computer technology. Some researchers tried to integrate the constructs of TRA and TAM in their studies (Buabeng-Andoh, 2018; Taherdoost, 2018; Ha & Nguyen, 2019). Although TRA and TAM have been extensively used in previous studies, a few types of research combine the TRA and TAM to predict and explain the factors influencing the online shopping intention of Vietnamese consumers. Therefore, the objective of this study is to explore the ability of the combination of TRA and TAM to predict and explain the factors influencing online purchase intention in the Vietnamese context. Besides, the empirical results could benefit other emerging markets in Asia, whereas E-commerce is booming.

# 3.2. Sampling Collection and Sample Description

The researcher applies a quantitative research method, uses a deductive approach, and adopts research subjects by online survey (held by Google Form). Due to Covid-19 in 2020, applying the quantitative method by the online survey is necessary. The pilot test is sent to 10 people who have used e-commerce to check for possible errors in the questionnaires or that the respondents may not understand the given ones. The result of the pilot test is acceptable, and no questionnaire needs to be changed or removed. However, some changes for specialized words into easier-to-understand phrases and correct some misspellings. The target respondents have experienced e-commerce in the past in HCM City. The survey collected 214 respondents in total (206 responses have used e-commerce while the other eight have not), and all responses are qualified, which qualify the sample size of the survey, at least 155 samples to be valid: n=m\*5=31\*5=155 (Comrey & Lee, 2013). Table I presents the demographic data of the respondents. The data consists of gender, age, occupation, income and the frequency of using e-commerce among the respondents.

Table 1: Demographic Information of the Respondents

Variables	Frequency	Percentage
Gender		
Male	102	47.7
Female	112	52.3
Age		
From 18 to 22	168	78.5
From 23 to 26	39	18.2
From 27 to 30	4	1.9
Above 30	3	1.4
Occupation		
Student	156	72.9
Employee	33	15.4
Self-business	21	9.8
Other	4	1.9
Income		

Under 5M VND	111	51.9
From 5M to 8M VND	58	27.1
From 8M to 10M VND	24	11.2
Over 10M VND	21	9.8
Frequency of using e-commerce		
Everyday	16	7.5
Once a week	23	10.7
Weekly	19	8.9
Monthly	42	19.6
Occasionally	106	49.5

# 3.3. Measurement of Constructs

All the measurement scales are adapted from previous empirical studies. The survey questionnaires are divided into two parts. The first part includes several questions on the demographics of the respondents. The second part comprises the five constructs of the proposed research model: perceived benefits, perceived risks, Trust, subjective norms, and Attitude toward online shopping. Table II lists the questionnaire items used to measure each construct. Five-point Likert scale anchors from 1 (strongly disagree) to 5 (strongly agree) are used to measure the model's variables.

**Table 2:** The Measurement of the Research Constructs

Constructs	Item	Measurement Items			
SN1		My friends who influence my behaviour think that I should shop online.			
Subjective norms	SN2	Economic experts predict that e-commerce will quickly replace traditional shopping in the next few years.			
	SN3	The government encourages citizens to make use of e-commerce in recent years.			
	PB1	I think using e-commerce is valuable and time-saving.			
Perceived	PB2	I think e-commerce gives me a chance to access global information and purchase quickly.			
benefits	PB3	I have more choices among products in any brand on e-commerce platforms.			
	PB4	Engaging in online consumption takes me out of severe problems.			
	PR1	I feel safe when providing personal privacy information for online shopping is securely encrypted.			
Perceived Risks	PR2	I feel safe as I can track my order online to reduce the risk of loss.			
Control	PR3	If there is an effective control system, purchasing from e-commerce could involve fewer product risks (such as defective/unqualified products or inactive products).			
	PR4	There is less risk of buying fake or poor quality products if e-commerce companies ensure the product quality properly.			
	TR1	I believe e-commerce is trustworthy.			
Trust	TR2	I believe e-commerce considers customers' benefits (quality, high service) as the top priority.			

	TR3	I believe e-commerce suppliers keep promises and commitments.	
	TR4	E-suppliers are interested in meeting my needs and desires.	
	ATU1	E-commerce is an enjoyable experience.	
Attitude towards online shopping	ATU2	I think using e-commerce is a good idea.	
	ATU3	I think using e-commerce is convenient.	
	ATU4	I think e-commerce is attractive because of the many discounts and promotions.	
	BI1	I intend to shop on e-commerce next time.	
Behavioural intention	BI2	I will go shopping on e-commerce platforms regularly.	
	BI3	I will share my experiences with e-commerce with my family.	

# 3.4. Data Analysis

After collecting data from the online survey, 214 valid responses are ready for coding and input data. The research uses SPSS software version 25 to analyze data and to prove whether the proposed hypotheses are supported or not. The data analysis used two data analysis types: multiple regression analysis and simple linear regression analysis. The multiple regression analysis tests hypotheses H1, H2 and H3. The linear regression analysis is used to test hypotheses H4 and H5. There is a scale reliability analysis for the multiple regression analysis using Cronbach's alpha, KMO and Bartlett's Test, Correlation Analysis and Multiple Regression Analysis. Hence, the reliability, validity, and fitness of the research model are robust. In addition, the simple linear regression analysis between subjective norms and behavioural intention to shop online is conducted to test hypothesis H4 and between Attitude toward online shopping and Behavioral intention to shop online is to test hypothesis H5.

# 4. Results

## 4.1. Descriptive Statistic

Table III shows all variables' mean, standard deviations, and Pearson correlations. The means evaluate that the average of the mean ranges from 3.7 to 4.42, which indicates that most of the responses on the survey are on a scale of 3-5, "neutral" to "strongly agree". The highest standard deviation is 0.901, located in Perceived Risks and the lowest standard deviation is 0.722, located in the variable Attitude towards online shopping. The correlation results in the table show that the strongest correlation is between ATU and BI, at 0.629, which means when ATU and BI move in the same direction, BI will also increase if ATU increases.

Table 3: Mean, Standard Deviation, Pearson's Correlations

Constructs	Mean	SD	1	2	3	4	5	6
1. Subjective norms	4.040	.835	1					
2. Perceived benefits	4.255	.829		1				
3. Perceived risks control	3.910	.901		.297**	1			
4. Trust	3.775	.888		.364**	.313**	1		
5. Attitude towards online shopping	4.267	.722		.509**	.415**	.622**	1	
6. Behavioural intention	4.150	.823	.485				.629	1

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Subjective norms are independent factors, with no correlation between independent and dependent factors.

# 4.2. Reliability

Internal consistency reliability was tested for each construct of the proposed model. Cronbach's α for subjective norms, perceived benefits, perceived risks control, Trust, Attitude towards online shopping, and behavioural intention is 0.740, 0.790, 0.767, 0.872, 0.860, and 0.809. These values are above the suggested criteria of 0.60 (Hair, Anderson, Babin, & Black, 2010; Hu & Bentler, 1998). Thus, the results indicate good reliability of the measurement scales.

## 4.3. Hypothesis Testing

A structural equation model was used to test the hypotheses of our research model. Table IV show that perceived benefits, perceived risks control, and Trust had positively influenced Attitude toward online shopping, with  $\beta$ =0.287>0,  $\beta$ =0.186>0, and  $\beta$ =0.459>0, respectively. Thus, H1, H2, and H3 are supported. Additionally, subjective norms and attitudes towards using also positively influenced behavioural intention, with  $\beta$ =0.485>0 and  $\beta$ =0.629>0. Thus, H4 and H5 are supported, too.

**Table 4:** Multiple Regression Results

Hypotheses	Unstandardized Coefficients	Standardized Coefficients (β)	Sig.	Adjust R Square		
Perceived benefits → Attitude toward online shopping	0.263	0.287	0.000			
Perceived risks reduction → Attitude toward online shopping	0.162	0.186	0.001	0.501		
Trust →Attitude toward online shopping	0.369	0.459	0.000			
Subjective norms -> Behavioral intention	0.504	0.485	0.000	0.231		
Attitude towards online shopping -> Behavioral intention	0.730	0.629	0.000	0.392		

## 5. Discussion and Conclusion

## 5.1. Discussion

The analysis results showed that Behavioral Intention to shop online is determined by Perceived Benefits, Perceived risk reduction, Trust, Subjective Norms and Attitude toward online shopping. All factors have a specific influence on Behavioral Intention to use e-commerce. Three independent factors, Perceived Benefits, Perceived Risk Reduction, Trust affect Attitude towards Online Shopping. Besides, Behavioral Intention to shop online will be mainly influenced by Subjective Norms and Attitude toward online shopping. The adjusted R square value of the Attitude toward online shopping is 0.501. It means that the research model can explain 50.1% of the variance of Attitude toward online shopping by Perceived Benefits and Perceived risks reduction. The behavioral intention to shop online is affected by two independent factors which are Attitude toward online shopping and Subjective Norms. The results show a substantial impact on the overall Behavioral Intention to shop online. The research model synthesizes the following main results: (1) factors including Perceived Benefits, Perceived risk reduction, Trust and Attitude toward online shopping have positive influences on Behavioral Intention to shop online, and (2) factor that has the most crucial influence is Attitude towards online shopping (as its  $\beta$  is the highest). All factors having a positive direct and indirect relationship with Behavioral Intention to shop online shows that suppliers on e-commerce need to seriously consider, evaluate and analyze them to improve customer behavioural intention to shop online.

## 5.2 Conclusion

By evaluating factors in the research model, the results show that Perceived benefits, Perceived risk reduction, and Trust positively influence Attitude toward using E-commerce. Besides, there is a positive relationship between Subjective norms and Behavioural intention to shop online. There is a positive relationship between Attitude toward using E-commerce and Behavioural intention to shop online. Vietnamese e-commerce companies should promote the perceived benefits of e-commerce shopping regarding price fairness, responsive transaction and ease of delivery. Besides, e-commerce companies should improve the Perceived risk reduction and trust among Vietnamese consumers by upgrading the online transaction security and implementing warranty policies for online shoppers. The findings provide empirical information on Vietnamese consumers' online shopping intention. However, the research findings have some limitations, such as the online survey with 214 respondents, lack of innovative research methodology, and lack of new factors that impact online shopping intention among Vietnamese consumers. It calls for further research in e-commerce in Vietnam to find out other factors influcing online shopping intention. Beside, Structural Equation Modeling (SEM) is a multivariate technique found increasingly in scientific investigations to test and evaluate multivariate causal relationships. Further studies should apply SEM to correctly evaluate multivariate causal relationships among factors influencing the behavioral intention to shop online.

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