

CÁC YẾU TỐ ẢNH HƯỞNG ĐẾN THÁI ĐỘ MUA SẮM TRỰC TUYẾN: TRƯỜNG HỢP NGHIÊN CỨU TẠI VIỆT NAM

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THÔNG TIN BÀI BÁO	TÓM TẮT
Ngày nhận: 12/08/2024	<p>Đại dịch Covid-19 đã thay đổi mô hình kinh doanh và hành vi mua sắm của người tiêu dùng trên toàn thế giới nói chung và Việt Nam nói riêng. Bên cạnh đó, dịch vụ mua sắm trực tuyến đã phát triển mạnh mẽ trong những năm gần đây, một phần do tính dễ lây lan cao của Virus Corona, cũng như sự tiện lợi của việc mua sắm trực tuyến. Với lý do đó, bài nghiên cứu nhằm mục tiêu để khám phá các yếu tố ảnh hưởng đến ý định mua sắm trực tuyến và từ đó đề xuất các hàm ý quản trị nhằm giúp doanh nghiệp phát triển chiến lược kinh doanh phù hợp. Phương pháp nghiên cứu được sử dụng trong bài nghiên cứu gồm cả định tính và định lượng, dữ liệu sơ cấp được thu thập từ 700 người tiêu dùng mua sắm trực tuyến tại 5 tỉnh thành phố của Việt Nam. Kết quả kiểm định thống kê cho thấy năm yếu tố ảnh hưởng đến thái độ mua sắm trực tuyến, bao gồm nhân thức tính hữu ích, dễ sử dụng, niềm tin, mức độ an toàn, và dịch vụ khách hàng. Điểm mới của nghiên cứu này đã áp dụng mô hình cấu trúc tuyến tính để nghiên cứu thái độ mua sắm trực tuyến của khách hàng bằng cách bổ sung yếu tố dịch vụ khách hàng vào mô hình nghiên cứu. Cuối cùng, nhóm tác giả đã đề xuất được năm hàm ý quản trị liên quan đến thái độ mua sắm trực tuyến giúp khách hàng tiết kiệm thời gian và giúp nhà cung cấp dịch vụ tiết kiệm chi phí.</p>
Ngày hoàn thiện: 10/04/2025	
Ngày chấp nhận: 23/04/2025	
Ngày đăng: 31/03/2026	
TỪ KHÓA	
Mua sắm trực tuyến;	
Nhân thức tính hữu ích;	
Dễ sử dụng;	
Niềm tin;	
Mức độ an toàn.	

FACTORS AFFECTING ONLINE SHOPPING ATTITUDE: A CASE STUDY IN VIETNAM

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ARTICLE INFO	ABSTRACT
Received: Aug 12 th , 2024	<p>The Covid-19 pandemic has changed consumers' business model and shopping behavior worldwide, particularly in Vietnam. In addition, online shopping services have grown enormously in recent years, partly due to the highly contagious nature of the coronavirus, as well as the convenience of online shopping. Therefore, the research aims to explore the factors influencing online shopping attitudes and propose management implications to help businesses develop appropriate business strategies. The research methods used in the study include both qualitative and quantitative data, and primary data was collected from 700 online shopping consumers in 5 provinces and cities of Vietnam. Statistical testing results show that five factors influence online shopping intention: perceived usefulness, ease of use, trust, safety level, and customer service. The new point of this research is to apply the linear structural model to study customers' online shopping attitudes by adding customer service elements to the research model. Finally, the authors have proposed five management implications related to online shopping intention to help customers save time and help service providers save costs.</p>
Revised: Apr 10 th , 2025	
Accepted: Apr 23 rd , 2025	
Published: Mar 31 st , 2026	
KEYWORDS	
Online shopping;	
Perceived usefulness;	
Ease of use;	
Trust;	
Safety level.	

Doi: <https://doi.org/10.61591/jslhu.25.516>

Available online at: <https://lhj.vn>

1. INTRODUCTION

E-commerce in Vietnam has experienced significant growth in recent years, particularly following the Covid-19 pandemic. This substantial increase highlights the rapid shift in consumer shopping habits. The projected average annual growth rate of Vietnam's e-commerce sector from 2020 to 2025 is 29%, underscoring the market's potential and attractiveness. E-commerce not only enables domestic businesses to compete on a global scale but also expands their customer reach, especially in the context of advancing technology.

E-commerce platforms such as Lazada, Shopee, Tiki, and Sendo have grown remarkably, becoming familiar shopping channels for Vietnamese consumers. Notably, Shopee stood out with approximately 63.7 million visits in the first quarter of 2021 and continued to lead in website traffic in the fourth quarter of 2022 [19]. This demonstrates Shopee's strong position among consumers, particularly in the fiercely competitive market post-pandemic. This growth reflects global trends and demonstrates the significant transformation of Vietnam's market towards a digital economy, where e-commerce plays an increasingly vital role. With the numerous benefits and disadvantages that online shopping offers, such as:

Convenience and time-saving: One of the most practical advantages of online shopping is managing time effectively. Consumers can place an order anytime and from anywhere, with the only requirement being a smartphone, tablet, or computer with an internet connection. When shopping online, consumers can avoid spending hours browsing through physical stores without necessarily finding what they want. The desired product can be added to the shopping cart with just a click, awaiting confirmation and delivery to the consumer's doorstep [1].

Comfort in product selection: In physical stores, many consumers may feel uncomfortable contemplating their choices in front of salespeople. Additionally, comparing prices across different stores can be time-consuming due to the need to move between locations. Online shopping allows consumers to easily compare products with clearly listed prices and read reviews from previous buyers. Moreover, many websites now offer high-quality product reviews that consumers can consult to make better-informed purchasing decisions [2].

Many customers are disappointed when they receive low-quality products and defective items that are not as requested, but most consumers cannot exchange or receive a return after purchasing online.

The benefits and disadvantages of online shopping should be noted above. Understanding these advantages and disadvantages will help sellers manage and operate well, assisting buyers to be more meticulous in choosing products and suppliers.

These benefits demonstrate why online shopping has become an increasingly popular choice among consumers. Therefore, the research aims to explore the factors influencing online shopping attitudes and propose

management implications to help businesses develop appropriate business strategies [3].

2. LITERATURE REVIEW AND RESEARCH MODEL

2.1 Literature review

Online shopping concept: Different viewpoints exist on internet purchasing. Research shows that internet shopping is buying products or services online. Other studies define internet shopping as purchasing online rather than at a store. Some studies define internet shopping as buying products or services online. These concepts share the idea of internet buying. So, internet purchasing is network shopping. This is e-commerce. The authors will define online shopping as buying products or services online in this study [1-4], [5-6].

The Theory of Reasoned Action (TRA) assumes that human behavior is under volitional control, meaning that people believe they can perform a behavior whenever they are willing to buy products. The TRA is complemented by a component known as perceived behavioral control [7]. This concept reflects how people believe they can perform a behavior because they have the necessary capability. Attitude can be defined as a favorable or unfavorable feeling toward an object that influences a person to act or behave predictably toward a product or service. Consumer purchase attitude is understood and described as a positive or negative evaluation based on an individual's perceptions, emotions, and behavioral tendencies toward an object or idea [9].

Technology development has created many advantages for social networks, such as informativeness, entertainment value, reliability, interactivity, personalization, and user stimulation. Previous studies have shown that informativeness, entertainment value, reliability, and interactivity positively influence consumer attitudes, while irritation negatively impacts consumer attitudes. Furthermore, sociality, expressed through comments or reviews, often does not affect consumer attitudes or may have a negative impact [10].

Although this study is initially grounded in the Theory of Reasoned Action (TRA) – which posits that behavior is driven by intentions formed through attitudes and subjective norms – this model assumes that individuals have full control over their actions. However, such an assumption may not hold in complex digital environments like online shopping, where external stimuli such as advertisements, website design, or promotional offers significantly influence behavior.

Therefore, to better reflect the realities of consumer behavior in the online context, this research also integrates concepts from the Theory of Planned Behavior (TPB). TPB extends TRA by incorporating perceived behavioral control, a factor particularly relevant in e-commerce where consumers may face uncertainties about product quality, delivery, or privacy concerns [20]. The inclusion of TPB provides a more comprehensive understanding of how attitudes, perceived control, and social influence shape online shopping behavior in Vietnam.

Online shopping attitude (ATT): Marketers, psychologists, and economists have researched internet purchasing and its impacts. Thus, consumer attitudes research is varied and vast. However, the Internet and e-commerce have changed how transactions are made and customers' judgments [11]. Increasingly, customers are choosing to shop from e-commerce websites rather than visiting traditional stores. In the online environment, customers use computers or handheld devices connected to the Internet to receive information from the virtual world, which means that information technology profoundly impacts consumer behavior and shopping motivation in the online context [12-14]. Therefore, online shopping attitudes can be influenced by many factors, as analyzed above. However, in this study, there are 5 factors below.

2.2 Research model and hypothesis development

Using the information provided in the abovementioned studies, the authors compiled a list of the elements that appeared most frequently. These factors, which are the five components of the suggested research model, are as follows:

Perceived usefulness (USE): Perceived ease of use when shopping online can be essential to the customer experience. Some perceived emotional benefits of online shopping include: (1) Shopping convenience is the ability to shop from anywhere and at any time, which saves time and energy. (2) Product Choice is an e-commerce website that offers a wide range of products and services, allowing customers to easily search and compare. (3) Promotions are deals, discounts, and giveaways often offered online, creating excitement for shopping. (4) Enjoy shopping is the online shopping experience that can be fun and stimulating, especially when discovering new products. (5) Rich information helps customers learn about products through reviews, comments, and detailed information on the website [9-13], [14-18]. Therefore, H1 is proposed by the authors.

H1: Perceived usefulness has a positive (+) impact on the online shopping attitude of consumers in Vietnam.

Perceived ease of use (EAS): Perceived usefulness when shopping online is often evaluated based on many different factors that consumers experience during the shopping process. Here are some detailed factors about perceived usefulness: (1) Online shopping allows consumers to shop anytime, anywhere, without going to a physical store. This is especially useful for people who have busy schedules or don't have much time. (2) Online, consumers can easily compare prices, quality, and product features between many different suppliers without traveling. Websites also often provide reviews and feedback from previous customers, giving buyers information to make informed decisions. (3) Consumers can access more information about products, including detailed descriptions, images, instructional videos, and sometimes expert reviews [9-13], [14-18]. This helps them have a more comprehensive view of the product than when shopping directly. Online shopping opens the door to products that may not be available locally or even imported products that are not readily available to

consumers and are easily found in traditional stores. Therefore, H2 is proposed by the authors.

H2: Perceived ease of use has a positive (+) impact on the online shopping attitude of consumers in Vietnam.

Confidence (CON): Perceived confidence when shopping online is essential to whether consumers continue shopping on that platform. Trustworthiness is assessed based on many aspects of buyers' experience throughout the shopping process. Below are detailed factors related to perceived trustworthiness: (1) Product quality matches the description; one of the most important factors is that the product received must match the description on the website, from quality, size, and color to other features. When products meet or exceed consumers' expectations, they feel secure and trust the shopping platform. (2) Customer review and feedback systems based on the websites that provide product review systems and feedback from previous customers help consumers have factual information about products and services. Positive reviews from buyers will strengthen the consumer's trust in the product and supplier. (3) Clear return and warranty policies are the reliability of an online shopping platform, which is also demonstrated through transparent and fair return and warranty policies [9-13], [14-18]. Consumers need to feel they can quickly return or exchange a product without difficulty or undue cost if unsatisfied. Therefore, H3 is proposed by the authors.

H3: Confidence has a positive (+) impact on the online shopping attitude of consumers in Vietnam.

Safety level (SAF): Perception of safety when shopping online is a crucial factor influencing consumers' decisions when choosing a platform to conduct transactions. Safety in online shopping includes personal information security, payment security, and protection from online risks. Below are detailed factors related to perceived safety when shopping online: (1) Security of personal information based on the consumers' need to feel confident that their personal information, including name, address, phone number, and email, is well protected and not leaked or used for unjust purposes [9-13], [14-18]. Websites with clear privacy policies and information encryption technologies often create a greater sense of consumer security. (2) Payment security is an essential factor, as is the feeling of security when making payment transactions. Platforms that use secure payment methods, pay through trusted payment gateways, and offer two-factor authentication options will give consumers more confidence when entering credit card information or bank accounts. Therefore, H4 is proposed by the authors.

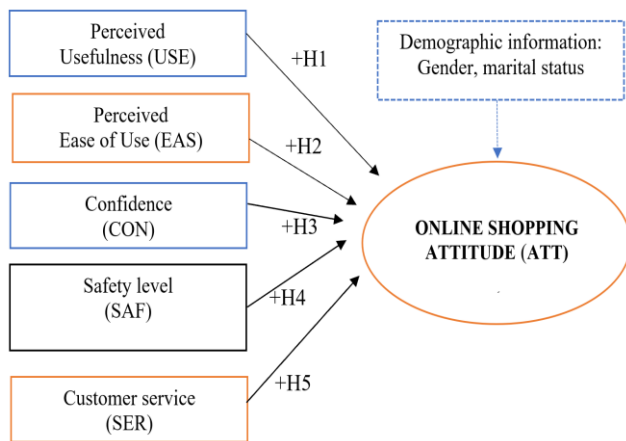
H4: Safety level has a positive (+) impact on the online shopping attitude of consumers in Vietnam.

Customer service (CUS): Perception of customer service when shopping online is an essential factor that directly affects consumer experience. Customer care service helps solve problems and creates peace of mind and trust in the shopping platform. Below are detailed factors related to customer service perception when shopping online: (1) Easy accessibility helps Consumers appreciate being able to quickly contact customer service through various channels such as phone, email, online chat, or social media platforms. Quick and convenient

accessibility helps consumers feel timely support. (2) Fast response time is one of the most critical factors, and it is also a critical factor in customer service response time. Consumers expect to receive quick responses, especially in urgent situations such as issues related to payment or delivery [9-13], [14-18]. Fast response times help create satisfaction and increase trust in the service. Therefore, H4 is proposed by the authors.

H5: Customer service has a positive (+) impact on the online shopping attitude of consumers in Vietnam.

The authors offered a study model that includes five factors: (1) perceived usefulness, (2) perceived ease of use, (3) confidence, (4) safety level, and (5) customer service.



(Source: compiled by the authors)

Figure 1. Research model for factors affecting the online shopping attitude of consumers in Vietnam

3. RESEARCH METHODS

3.1 Qualitative research

The study used the following main research methods to achieve the research objectives and content:

Qualitative research method: The primary aim of this method is to evaluate and validate a model that identifies the factors influencing online shopping intentions among consumers in the post-COVID-19 era. Additionally, the research seeks to assess the scales used to measure these factors. **Managers:** 11 individuals with significant experience and insight into online shopping behaviors and trends in Vietnam, particularly in the specified provinces and cities. **Consumers:** 11 regular online shoppers representing these regions' general consumer population. **Geographical Scope:** Can Tho City, Ho Chi Minh City, Dong Nai Ba Ria–Vung Tau, Binh Duong province.

Managers are selected based on their expertise in e-commerce, online retail, or related fields. Consumers are chosen based on their online shopping frequency and relevance to the study's objectives. The focus group discussions focus on identifying and discussing the factors influencing online shopping intentions. Based on the discussions, the authors are recorded to capture all insights and nuances. Verbatim transcription of the talks is carried out to ensure accurate data analysis. The data is analyzed

to identify recurring themes and factors influencing online shopping intentions.

The results provide insights into the most significant factors influencing online shopping intentions in the post-Covid-19 period. The validated model and scales can be used for further research or practical application in the e-commerce sector. This detailed approach ensures that the research captures a comprehensive understanding of the factors influencing online shopping intentions from a managerial and consumer perspective.

3.2 Quantitative research

The quantitative research method was conducted to evaluate the reliability and validity of the measurement scales for the research concepts, test the research model and hypotheses, and examine differences in the impact levels of factors based on demographic characteristics. The sample was selected using a convenience sampling method with a projected size of $n = 700$ consumers across the five provinces mentioned above and cities.

A total of 700 questionnaires were distributed across five provinces and cities: Ho Chi Minh City, Can Tho, Dong Nai, Binh Duong, and Ba Ria–Vung Tau. After the data screening process, 685 valid responses were retained for analysis. To ensure representativeness and avoid sampling bias, the authors aimed to maintain a relatively balanced distribution of respondents across locations, reflecting the actual e-commerce activity levels of each province. The final sample included:

- ✓ Ho Chi Minh City: 180 responses
- ✓ Can Tho City: 120 responses
- ✓ Dong Nai Province: 135 responses
- ✓ Binh Duong Province: 130 responses
- ✓ Ba Ria–Vung Tau Province: 120 responses

This proportional allocation strengthens the reliability of findings by reducing the potential for regional overrepresentation or underrepresentation. The absence of disproportionate sampling is essential in regional studies to avoid skewed interpretations. Therefore, this study ensured a balanced sample distribution across provinces, aligned with each area's population size and online shopping engagement level. By clearly reporting the number of responses per province, the study enhances transparency and reinforces the credibility of its empirical findings.

The model's fit to the market data provides a necessary and sufficient condition for the observed variables to achieve unidimensionality, except in cases where the error terms of the observed variables are correlated [8]. To measure the model's fit to market data, the following indices are commonly used: Chi-square (CMIN), Chi-square adjusted by degrees of freedom (CMIN/df), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Tucker & Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA) [8].

The model is considered to fit the market data if the Chi-square test has a P-value > 0.05 ; $CMIN/df \leq 5$, although in some cases, $CMIN/df$ may be ≤ 5 ; GFI, TLI,

and CFI ≥ 0.9; and RMSEA ≤ 0.08. However, according to recent research, GFI may still be acceptable within the range of 0.8 to 0.9 [8].

4. RESEARCH RESULTS

After conducting the survey, the authors received 700 valid ballots out of 685 sent, and the usage rate reached 97.85%, with 685 questionnaires left for processing and the results. Demographic results: (1) a higher proportion of female respondents is 58.1% compared to male respondents at 41.9%. This might suggest that females are either more prevalent in the studied population or more willing to participate in the survey. (2) The data indicates that most respondents, 62.0%, are married, while a smaller portion, 38.0%, are single. This suggests that married individuals comprise a significant portion of the studied population.

Table 1. Summary of Cronbach's Alpha results of factors

No.	Variables	Initial variable number	Number of remaining variables	Cronbach's Alpha
1	USE1, USE2, USE3, USE4	4	4	0.911
2	EAS1, EAS2, EAS3, EAS4	4	4	0.942
3	CON1, CON2, CON3, CON4	4	4	0.857
4	SAF1, SAF2, SAF3, SAF4	4	4	0.935
5	SER1, SER2, SER3	3	3	0.907
6	ATT1, ATT2, ATT3	3	3	0.921
7	KMO and Bartlett's Test			0.788
8	Eigenvalues			1.364
9	Extraction Sums of Squared			78.988

(Source: the authors processed from SPSS 20.0)

The KMO coefficient = 0.768 in Table 1 confirms the factor analysis technique. The observed variables correlate at 95% confidence level since the Barlett Sig test significance threshold is 0.000 (< 0.05). The data variation is explained by 80.605% of the total extracted variance, which is good > 50%. Thus, EFA results are valid. Promax rotation reveals all variables have transmission coefficients over 0.5. The findings indicated no factors were removed. The variables are grouped into 5 factors. The data set meets the set criterion with 685 observations, making it acceptable for exploratory factor analysis. In addition, the authors tested model fit summary: Chi-square test: P-value < 0.05; CMIN/df = 4.841; at times, GFI, TLI, and CFI > 0.85; RMSEA ≤ 0.08. However, a new study suggests that GFI may be appropriate for between 0.8 and 0.9.

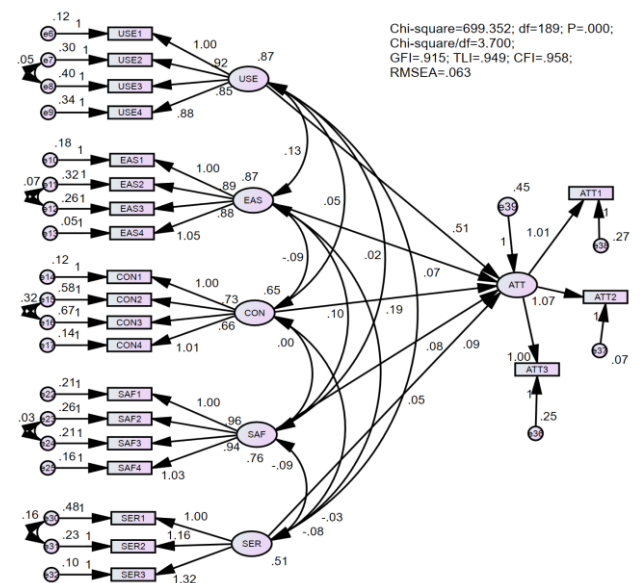
Table 2. Analysis of structure equation model results

Relationships	Unstandardized estimate	Standardized estimate	S.E	C.R	P
USE → ATT	0.509	0.555	0.034	14.920	***
EAS → ATT	0.072	0.078	0.031	2.310	0.021
CON → ATT	0.187	0.176	0.037	5.055	***
SAF → ATT	0.076	0.078	0.033	2.286	0.022
SER → ATT	0.085	0.071	0.041	2.055	0.040

Note: *** is significant with the level of 1%

(Source: Authors processed from SEM)

Table 2 shows that all five factors, perceived usefulness, ease of use, confidence, safety, and customer service, significantly influence online shopping attitude. Among them, perceived usefulness has the most potent and substantial effect (β = 0.555), highlighting its key role in shaping consumer attitudes. Confidence and ease of use positively affect shopping attitudes, followed by safety and customer service, though with more negligible impacts and all p-values are below 0.05, indicating statistical significance. The model fit indices (GFI = 0.915, CFI = 0.958, RMSEA = 0.063) confirm a good fit. Overall, the results support all five proposed hypotheses. In Table 2, quantitative research was used. The theoretical overview and research approach for this study are used to determine the 5 elements that affect online buying attitudes and accept all hypotheses H1, H2, H3, H4, and H5.



(Source: compiled by the authors)

Figure 2. Testing SEM for factors affecting the online shopping attitude

Figure 2 shows that the model results show five influencing factors; the model has fit summary following: Chi-square test has a P-value < 0.05; CMIN/df = 3.700, although in some cases, GFI, TLI, and CFI ≥ 0.9; and RMSEA ≤ 0.08. However, according to recent research,

GFI may still be acceptable within the range of 0.8 to 0.9 [8].

Table 3. Multi-group SEM Results for Gender and Marital Status

Multi-group SEM Results for Gender and Marital Status				
Multi-group SEM Results for Gender			Testing	
Model	$(\chi^2) = 953.03$	$(\chi^2) = 963.726$	10.696	p-value
	Df = 360	Df = 365	5	0.0578
T-test about marital status				
Multi-group SEM Results for Marital Status			Testing	
Model	$(\chi^2) = 968.389$	$(\chi^2) = 974.799$	6.410	p-value
	Df = 360	Df = 365	5	0.2683

(Source: the authors processed from SEM)

In Table 3, respondents' online buying sentiments toward Vietnamese customers are unaffected by the 95% confidence level based on demographic information. Thus, the content of the analysis of research results on characteristics impacting online buying attitudes with a 5% significant level does not need to record other recommended policies in the demographic information model. The current study did not find statistically significant effects of gender or marital status on online shopping attitudes. However, this does not necessarily imply that demographic variables are unimportant. Instead, it suggests further investigation into how these factors may moderate or interact with psychological drivers such as trust, safety perception, or perceived usefulness, particularly in a culturally specific context like Vietnam.

To assess whether demographic variables moderate the structural relationships in the model, a multi-group SEM analysis was conducted for gender and marital status. The chi-square difference test between unconstrained and fully constrained models showed that there is no statistically significant difference across gender ($\Delta\chi^2 = 10.696$, $df = 5$, $p = 0.0578$), though the result was close to the 0.05 threshold, suggesting a potential trend worth further exploration. For marital status, the model difference was not statistically significant ($\Delta\chi^2 = 6.410$, $df = 5$, $p = 0.2683$), indicating that the proposed structural relationships are invariant across single and married consumers. These findings confirm that the effects of ease of use, trust, safety, and convenience on online shopping attitudes are stable across demographic subgroups, thereby enhancing the model's generalizability.

5. CONCLUSIONS AND MANAGERIAL RECOMMENDATIONS

5.1 Conclusions

The study's research model is based on the theory of planned behavior, and many people believe that buying intention and actual buying behavior is influenced by many factors. However, according to research results, customers' actual behavior is influenced by their intentions and perceived behavioral control. Before making a purchasing decision, consumers must intend to take further actions toward a transaction. Intention is affected by the 5 factors presented above. The scientists also included customer care service in the model to analyze online purchase intentions. Research shows that perceived utility and simplicity of use impact online purchase intention and customers' behavioral control and attitudes regarding online purchasing. Customers trust internet retailers. Study results demonstrate parallels and contrasts with prior global studies on factors impacting consumers' online purchase intentions.

Results have improved management practice, including (1) the good scale utilized in this study. Study results suggest that the complete scale is trustworthy, has Cronbach's Alpha coefficient > 0.6 , and may be used in subsequent investigations. (2) The structural equation model found five variables affecting online buying attitude at 5% significance. H1, H2, H3, H4, and H5 are assumptions; this finding matches research [1-2], [5-6]. The study found five factors: perceived usefulness, confidence, simplicity of use, safety, and customer service. Policy changes must be made below to improve online buying attitudes.

5.2 Managerial recommendations

(1) Perceived usefulness has the highest standardized regression coefficient of 0.555 among the five factors affecting online shopping attitudes [14-18]. The authors propose specific policy implications as follows. Businesses must design websites with a user-friendly interface so that product searching, ordering, and payment are most straightforward. Research results have shown that customers' self-usability - part of the perceived behavioral control factor and usefulness - positively influences customers' online shopping attitudes. Therefore, a website with a friendly, helpful, and easy-to-use interface that helps customers perform the necessary operations when shopping without anyone's help will enhance customers' purchasing intentions from this website and give customers a more positive attitude toward online shopping. Sales websites need to be arranged reasonably and should integrate search and product comparison tools to help customers quickly find the options that best satisfy their needs. Furthermore, in today's globalization context, retailers' customers are not only domestic but can be global, so websites need to use multiple languages to suit many different customers.

(2) Confidence has the second-highest standardized regression coefficient of 0.176 among the five factors affecting online shopping attitude [14-18]. The authors propose specific policy implications as follows. Customer trust depends on their perception of the seller's reputation. Therefore, retailers need to build their reputation, thereby enhancing customer trust. Online retailers can make their stores' reputations by advertising them through different channels, primarily official and reputable electronic

channels. Electronic advertising channels can include forums and social networks because they are very effective reputation-building channels. Because the promotion cost on this channel is often lower, consumers trust other people's comments and reviews more than the information provided by the seller. However, customer reviews can be good or bad. Therefore, to build a business reputation, sellers must be consistent between words and actions, providing truthful, complete, and trustworthy information.

(3) The perceived ease of use has a standardized regression coefficient of 0.078, the third highest among the five factors affecting online shopping attitude [14-18]. The authors propose specific policy implications as follows. For customers to evaluate the product accurately, the seller must include accurate product images and complete information; the website should be easy to use and allow customers to write comments and reviews on the business's website. These comments will help other customers have a more comprehensive and objective view of the goods and seller, helping them be more confident when shopping. For tangible products, sellers can use modern technologies such as images and three-dimensional models to describe the product. Because three-dimensional images help customers reduce risk perception compared to two-dimensional images. When describing products with images, sellers should place the product next to everyday items to take photos, thereby helping customers visualize the actual size of the product quickly and accurately. For digital products, sellers should have trial versions for customers to try for a certain period so they can experience and evaluate before making a purchasing decision. Besides, the business constantly upgrades the user-friendly interface. The customer's desire when browsing the web is for a website to be user-friendly; this can include features such as menus, action buttons, and media that should be designed in a clear and easy-to-see manner, and the website layout is clear, logical, and easy to follow.

(4) The safety level has the fourth-highest standardized regression coefficient of 0.078 among the five factors affecting online shopping attitudes [14-18]. The authors propose specific policy implications as follows. Regarding product risks, because buyers do not have contact with the product before making a purchasing decision, the product risks that buyers often worry about are that the product's quality is not as promised by the seller or is not the same as their impressions from the images provided by the website. To minimize product risks, online retailers can apply for payment using the delivery method mentioned above so that customers can check the product before paying. In addition, retailers need to develop clear and easy-to-understand policies on warranty, compensation, and customer complaints. Compensation policies for goods need specific conditions for each case, and customers should be notified of non-compensation cases before conducting transactions. In cases of customer complaints or complaints, they must be resolved quickly and reasonably following published policies, ensuring customer satisfaction. Compensation and complaint resolution requires professionally trained resources and strict implementation according to company policies, avoiding situations that cause trouble and blame the buyer.

(5) customer service has the lowest standardized regression coefficient of 0.071 among the five factors affecting online shopping attitude [14-18]. The authors propose specific policy implications as follows. Online retailers must train customer service staff with adequate communication skills, but these staff must understand the retailer's policies. Helps businesses unify words and actions. Furthermore, this staff must be knowledgeable about the products they offer because customers' trust in the retailer will increase when customers feel the staff is knowledgeable about the products they offer. When staff understand their products, they can advise on options suitable to customers' needs and resources, helping customers have more confidence in online retailers.

In addition to enhancing website usability and building consumer trust, e-commerce platforms should pay closer attention to logistics and post-purchase services. Timely delivery, responsive customer service, and transparent return policies are critical to maintaining customer satisfaction. Furthermore, the rise of green consumption trends highlights the need for businesses to embrace sustainable practices, such as eco-friendly packaging and carbon-reducing logistics. Addressing these broader supply chain and sustainability factors can significantly improve consumer attitudes and foster long-term loyalty.

The results show that the SEM evaluates the impact of five factors on online shopping attitudes. Factors affecting the attitudes of individual customers and organizational customers have specific differences. However, the new research stopped studying the online purchasing intentions of particular customers and did not mention the attitudes of organizational customers. This research has limitations, such as small data processing methods compared to online shopping customers. This study tests scale reliability using Cronbach's Alpha, exploratory factor analysis, correlation analysis, and SEM. To test the theoretical model with excellent reliability, further research should increase the number of individual and organizational customers in many provinces and cities in Vietnam. In addition, further research can strengthen empirical studies to clarify the relationship between customers' attitudes, purchasing intentions, and actual purchasing behavior. From a customer's buying intention to actual buying behavior, it is influenced by many factors. Moreover, future studies should explore the moderating or mediating relationships between these variables to better understand how consumers respond when security enhancement efforts impact perceived usability.

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