



Original Article

Customer purchase intention towards agricultural products on Vietnam online retail platforms

Hoang Dam Luong Thuy*, Dinh Tra Giang, Hoang Minh Anh, Vu Thanh Tu

*VNU University of Economics and Business
No. 144 Xuan Thuy Street, Cau Giay District, Hanoi, Vietnam*

Received: May 3, 2024

Revised: August 15, 2024; Accepted: August 25, 2024

Abstract: This study aims to investigate significant factors affecting customers' online purchase intentions towards agricultural products in Vietnam. A questionnaire survey was conducted to collect data from 250 customers who have experience in the online shopping sector. The collected data were analyzed by SPSS 26 software. The results reveal that perceived usefulness, perceived ease of use, brand reputation, subjective norm, and perceived risk are direct predictors of customers' online purchase intention for agricultural products on Vietnam retailing platforms. Particularly, perceived usefulness is found to have the greatest impact on customers' online purchase intention, followed by perceived risk and then brand reputation. Meanwhile, perceived risk has negative impacts, perceived usefulness and brand reputation pose positive impacts for online purchase intention towards retailing platforms. Meaningfully, this study provides significant contributions about online customer behaviour in both theoretical and practical aspects, especially in a developing area of agricultural products such as that found in Vietnam.

Keywords: Customers, purchase intention, online retailing, agricultural products, Vietnam.

1. Introduction

In today's economy, the growth of online retailing (e-retail) has opened up new paradigms, structures, and strategies for business-to-consumer (B2C) e-commerce. Online retailers around the world are confronting new opportunities and challenges. The internet has widely adopted online shopping, along with new methods of communication and business transactions. Both the establishment of retail

websites and the development of a series of e-commerce websites reflect the expansion and development of the online retail model. This phenomenon is quickly entering the commercial market for Vietnamese consumers (Trinh, 2021). A number of online retail platforms, including Shopee, Lazada, Tiki, etc., are active in the Vietnamese market. These sites are constantly offering impressive promotions and daily discounts (VETICA, 2018). The range of products offered is rich, diverse, and easy for

* Corresponding author

E-mail address: luongthuyhd@vnu.edu.vn

<https://doi.org/10.57110/vnu-jeb.v4i4.294>

Copyright © 2024 The author(s)

Licensing: This article is published under a CC BY-NC 4.0 license.

shoppers to choose from. In addition to these shopping channels, consumers can also choose shopping channels on social networks such as Facebook, Instagram and Zalo, etc.

Despite the widespread use of the internet and its convenience, online shopping for agricultural products has not gained much popularity worldwide (Zia et al., 2022). Online purchases have increasingly become a very important vehicle for customers to obtain agricultural products due to the rapid rise of the internet and e-commerce over the past two decades. However, online agricultural product purchases do not account for a significant portion of overall agricultural product sales worldwide (Barska & Solis, 2020). It is believed that consumers exhibit inconsistency in their online purchases of agricultural products.

Vietnam's plant-based agriculture is experiencing rapid growth, and it is becoming a key player in global agriculture (Pham, 2023). However, despite the significant rise in e-commerce in Vietnam, the agricultural product buying system is still in its early stages, as mentioned above. The main activity is just to introduce general information to small businesses (Wu & Liu, 2016). Consumers in the provinces mainly research products on the website, then go directly to the store to buy according to the value of the goods. Online shopping is extremely low. The agricultural industry and agricultural market databases are still limited, especially due to the lack of information channels from producers and distributors to consumers, especially from producers. Some businesses and units have not proactively approached and applied modern technology, so building information technology infrastructure in remote areas remains difficult. While the e-commerce sector in Vietnam is rapidly growing, understanding consumer behavior specifically for agricultural products is lacking. Key gaps may include limited knowledge about consumer preferences for specific products, the impact of trust and safety concerns, the role of platform design, and the effectiveness of emerging technologies like blockchain and virtual reality in influencing purchase decisions. Therefore, research on customer purchase intention towards agricultural products in Vietnam's online retail platforms

plays an important role because it can bring a significant contribution to the research context.

With the goal of identifying the determinants of customer purchase intention towards online retailing in Vietnam, especially for agricultural products, the research "Customer purchase intention towards agricultural products in Vietnam online retail platforms" is implemented. Through this study, it can be found what makes customers in Vietnam have intentions to buy agricultural products online.

2. Literature review

2.1. Technology acceptance model

The Technology Acceptance Model (TAM) is based on Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB). TAM intends to interpret and predict potential users' acceptance of a new technology. TAM addresses two important factors: perceived ease of use and perceived usefulness (Davis, 1989). These two factors will directly influence a consumer's attitude. Furthermore, the two factors will also indirectly influence the consumer's intention. Davis (1989) defines perceived ease of use as the degree to which a person believes that adopting a particular system would be free of effort. Perceived usefulness has been described as the degree to which a consumer thinks that adopting an information system would improve his or her shopping performance (Davis, 1989). Researchers examined these two factors as the main factors that influence potential customers to shop online in Vietnam (Hoang et al., 2024; Nguyen et al., 2021).

2.2. Online retailing

Online retailing is a business innovation involving electronic and non-physical interactions that helps maintain business relationships by sharing information and knowledge. Online shopping for customers refers to several types of consumption activities in which customers can electronically request information about products and services, as well as conduct transaction activities, wherever the internet is available (Ratchford et al., 2022; Chuang & Fan, 2011).

Online transactions include services provided by the retailer and several other trusted third parties, such as banks, credit card companies, shipping companies, and companies that provide online privacy security for consumers. Customers can transfer their trust to the endorsing third party if they have a strong relationship with the web site they are shopping at (Indiani & Fahik, 2020). Therefore, online shops need to ensure that they provide good customer service in different aspects. A retailer's web site serves a proxy role by supporting all transaction activities and connecting customers' perceptions of trustworthiness.

2.3. Customer purchase intention

According to Ajzen (1991), intentions arrest the motivational factors that impact the behavior and indicate an effort that people plan to exert and then perform the behavior. Purchase intention reflects consumers' willingness or possibility to buy a product (Sharma & Kumar, 2019; Irawan et al., 2020). In addition, purchase intention is also described as how consumers engage with a specific brand after evaluating it, which depends on several external factors such as customer demand, financial status, and brand awareness (Madahi & Sukati, 2012). In the context of online retailing, customers are often unlikely to evaluate each step during a single visit to an online store, but perceive the service as an overall process and outcome (Luu et al., 2023). Thus, purchase intentions are conditions where customers are willing and intend to engage in online transactions for e-retailers.

2.4. Agricultural products

Agricultural products are the fresh vegetables, fruits, aquatic products, poultry and meat products, which is consumed every day and closely related to our living (Wu & Liu, 2016). The logistics time constraints imposed on agricultural products due to their perishable nature render the sale of such products logistically challenging and prohibitively expensive, significantly surpassing the average cost of agricultural products. Specialized facilities and logistics are also required. Fresh agricultural products are characterized by being seasonal, regional, cyclical, and hazardous. High demand, low unit value, price volatility, market risk, and a brief on-shelf life are all

characteristics of production sales (Liu & Ke, 2012). The experience of shopping online for agricultural products and groceries is fundamentally different from other forms of online shopping, due to the perishability and variability of the product, and frequency of shopping (Mortimer et al., 2016).

2.5. Proposed framework and hypothesis

Many researchers around the world have studied the online shopping behavior of consumers. In recent years, specialized studies on the purchase intention of agricultural products towards online retailers are gradually attracting scholars' attention, but most of them focus on discussing the influencing factors from the perspectives of external factors such as product characteristics (e.g., product safety, quality expectation, and freshness), website characteristics (e.g., website quality, website information abundance, website reputation, and information protection), logistics services, reference groups (Zia et al., 2022; Zhao et al., 2016) or brand awareness (Madahi & Sukati, 2012). Seldom have scholars exclusively carried out in-depth studies on influencing factors from consumers' individual perceptions, such as perceived risks, trust, perceived value, etc. (Roh et al., 2022; Asti et al., 2021). However, the complexity and frequent changes in consumer behavior or purchase intention necessitate a diverse evaluation of this issue.

As such, this study proposes a model of customer purchase intention in Vietnam's online retailing of agricultural products by evaluating two aspects simultaneously: (i) internal factors and (ii) external factors. Figure 1 specifically presents the proposed framework.

Perceived usefulness (PU): Most studies show that convenience and time-saving are the main reasons why consumers shop online (Tunsakul, 2020). It has been demonstrated that searching for products and services on the internet in general, particularly on e-commerce sites, is faster, more convenient, and saves time and money (Hsu et al., 2013). At the same time, customers can find many different types of goods and brands. This is also a difference compared to traditional shopping. Therefore, the author proposes Hypothesis 1 as follows:

H1: Perceived usefulness has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms.

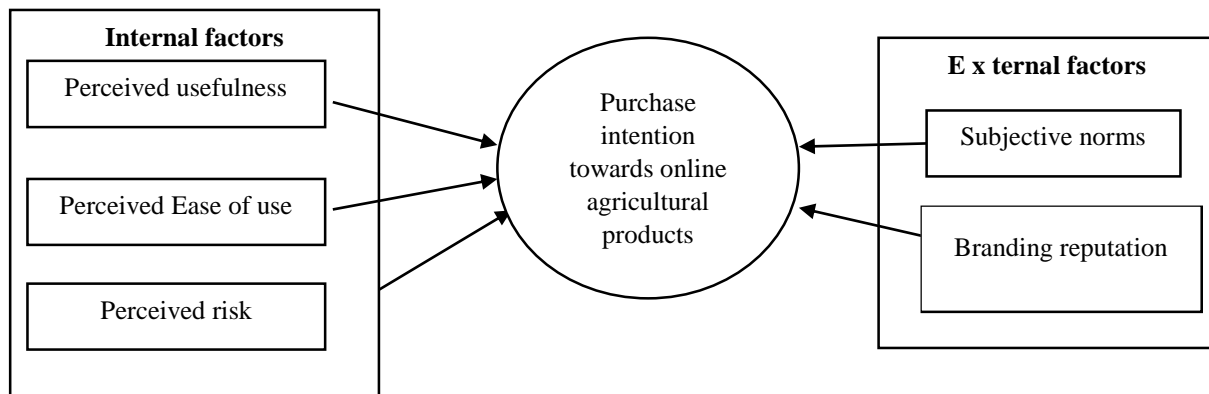


Figure 1: Propose analytical framework
Source: The authors.

Perceived ease of use (PEOU): PEOU is the degree to which a person believes that using a specific system will not require effort (Ansari et al., 2011). In fact, some limitations of mobile devices, such as small screens and difficulties in data entry, can lead to dissatisfaction and disagreement among consumers about mobile applications, especially among inexperienced people. Therefore, being easy to understand and easy to use is important for mobile applications, regardless of whether consumers are knowledgeable about technology (Lin et al., 2010). If an application on mobile devices is easy to use, people will readily accept online purchases and intend to buy goods on a regular basis. From there, Hypothesis 2 should be:

H2: Perceived ease of use has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms.

Perceived risk (PR): The risk that consumers may encounter when shopping online is a measure of dissatisfaction, which creates anxiety and affects consumer decisions (Yuniarti et al., 2022). Product risks in online shopping are high, especially for beginners or newcomers, because buyers cannot check and test product quality before making a decision. Especially, this aligns well with the characteristics of agricultural products, as it can be challenging to maintain their quality (Mortimer et al., 2016). In addition, Mwencha and Muathe (2019) stated that the risk of losing money, being unable to deliver, or making the wrong delivery has a negative impact on online shopping intention.

H3: Perceived risk has a negative relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms.

Brand reputation (BR): The reputation of online retailers includes names, logos, designs, and signs to identify products among different suppliers. An online retailer's reputation is not solely based on their business image, but also hinges on the reviews and sentiments of their customers. The results of studies by Lin et al. (2010) and Ansari et al. (2011) show that consumers trust these online sellers if they perceive that the business has a good reputation with the public and customers.

H4: Brand reputation has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms.

Subjective norms (SN): It can be said that subjective norms are considered the influence of the social environment on the individual's behavior (Datta & Acharjee, 2018). When witnessing a successful online shopping experience without any obstacles or reputable sales websites receiving positive feedback, buyers will want to try online shopping. Subjective norms exist because people believe that other people have a significant impact on them (Trinh, 2021).

H5: Subjective norms has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms.

3. Research methodology

With a view to finding out the real situation of customer purchase intention towards agricultural products in Vietnam online retailing, a questionnaire is proposed in order to collect the opinions of online customers. The data collection process is carried out by launching both online and offline surveys from March 2024 to April 2024. The number of research samples is 250, which meets the quantitative analysis

requirement. The theoretical framework is adapted from the TAM model (Davis, 1989), combining with several related factors from external and internal environment. The detailed sources of measurement are presented in Table 1. Moreover, all of the measures in the study employ a 5-point Likert scale. The following steps analyze the valid data: (i) demographic analysis; (ii) reliability and validity tests; (iii) exploratory factor analysis; and (iv) multiple regression analysis.

Table 1: The detailed sources of research measurement

	Variables	Sources of measurement
Perceived usefulness (PU)	PU1 - Shopping on online retailing platforms helps me save time	Tunsakul (2020), Lin et al. (2010)
	PU2 - I can buy most types of agricultural products through online retailing platforms	
	PU3 - I can see many different items on online retailing platforms at the same time	
	PU4 - Shopping for agricultural products on online retailing platforms helps me save money	
Perceived ease of use (PEU)	PEU1 - I can easily order agricultural products through online retailing platforms	Davis et al. (1989), Venkatesh and Davis (2000)
	PEU2 - Online payment method is very simple for me	
	PEU3 - I can easily contact the seller when buying agricultural products through online retailing platforms	
	PEU4 - I can easily choose the right product for my preferences when buying through online retailing platforms	
Perceived risk (PR)	PR1 - I am worried that my personal information will be stolen when shopping online	Kim (2020)
	PR2 - I am worried about financial risks when paying online	
	PR3 - I may not receive the right product in term of shape, style, color, ...that I have ordered online	
	PR4 - Agricultural products that are delivered online may not be fresh or have low quality	
Brand reputation (BR)	BR1 - I trust the information and products that the online retailing platforms provides	Lin et al. (2010), Ansari et al. (2011)
	BR2 - Highly rated online retail platforms are perceived as more reputable by customers	
	BR3 - I trust when shopping at one of the major online retailing platforms with foreign elements such as Lazada, Shopee, Amazon...	
	BR4 - Customers tend to transact more with well-known online retailing platforms	
Subjective norms (SN)	SN1 - Family, friends and people around me affect my online shopping intention	Trinh (2021), Datta and Acharjee (2018)
	SN2 - I often read a lot of information and reviews on retailing platforms or social networks before participating in online shopping	
	SN3 - People who influence in society have influenced my online shopping intention	
	SN4 - A variety of communication strategies affect my online shopping intention	

Purchase intention (PI)	PI1 - I have intention to shop for agricultural products on online retailing platforms when I have the need	Sharma and Kumar (2019), Irawan et al. (2020)
	PI2 - I have intention to regularly shop for agricultural products on online retailing platforms	
	PI3 - I will have a plan to shop for agricultural products on online retailing platforms in the future	

Source: The authors.

Table 2: Overall view of the research's demographic analysis

Demographic aspects	Variables	Number	Percentage
Gender	Male	85	34%
	Female	165	66%
Age group	Below 18 years old	15	6%
	18-29	59	23.6%
	30-40	136	54.4%
	41-50	27	10.8%
	Above 50 years old	13	5.2%
Average spending per transaction	Below 200,000 VND	102	40.8%
	200,000 -500,000 VND	97	38.8%
	501,000-1,000,000 VND	22	8.8%
	1,001,000-5,000,000 VND	26	10.4%
	Above 5,000,000 VND	3	1.2%

Sources: Research's data collection.

4. Research results

4.1. Demographic analysis

Customers participating in the survey in this study include all customers of many different ages. The study had a sample size of 250, in which men accounted for 34% with 85 responses and women accounted for 66% with 165 responses. Statistical results show that the main subjects participating in online shopping for agricultural products are middle-aged customers (30-40 years old) and young customers (18-29 years old), accounting for 54.4% and 23.6%, respectively. The group of customers over 50 years old has the lowest rate of participation at 5.2%. In addition, most of the respondents spent under 200,000 VND on an order (accounting for 40.8%) and from 200,000 VND to 500,000 VND (accounting for 38.8%). This data supports the notion that young Vietnamese individuals derive great pleasure from online shopping, while middle-aged individuals find it too time-consuming to visit physical stores, regardless of the products they purchase. On the other hand,

older groups (40-50 and above 50 years old) tend to be afraid of online purchasing, especially in the case of agricultural products, because they cannot verify their quality and originality.

4.2. Reliability analysis and exploratory factor analysis

In order to test the reliability of the research model, the author considers Cronbach's Alpha coefficient for official research data. The results show that the coefficients of Cronbach's Alpha of the research variables are all above 0.7; so, the scale is acceptable, ensuring consistency (Hair et al., 1998).

The KMO coefficient ($= 0.822 > 0.5$) is extremely high, and the Sig. value equals 0.000, indicating that this study should use EFA analysis. This result indicated that the dataset is appropriate for factor analysis. After running factor analysis using varimax rotation in the rotated solution, 23 items were loaded on certain factors, meeting the requirements of convergent and discriminant validity (Cohen et al., 1996).

Table 3: Summary of the reliability of scales

Items	Corrected item-total correlation	Cronbach's Alpha if item deleted	Cronbach's Alpha
PU1	0.469	0.720	0.742
PU 2	0.533	0.685	
PU 3	0.565	0.667	
PU 4	0.580	0.658	
PEOU1	0.724	0.739	0.820
PEOU 2	0.671	0.762	
PEOU 3	0.636	0.777	
PEOU 4	0.553	0.814	
PR1	0.679	0.797	0.841
PR2	0.658	0.806	
PR3	0.659	0.806	
PR4	0.707	0.784	
BR1	0.628	0.720	0.790
BR2	0.600	0.739	
BR3	0.601	0.738	
BR4	0.571	0.755	
SN1	0.616	0.733	0.792
SN2	0.600	0.741	
SN3	0.612	0.735	
SN4	0.575	0.753	
IT1	0.646	0.804	0.830
IT2	0.662	0.790	
IT3	0.762	0.687	

Sources: Research's data collection.

Table 4: KMO and Barlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.822	
Bartlett's Test of Sphericity	Approx. Chi-Square	1828.803
	df	190
	Sig.	0.000

Source: The authors.

Table 5: Regression analysis result

R	0.751		
R2	0.603		
Adjusted R2	0.589		
Item	Beta	Sig.	VIF
H1 PU	.544	.000	1.013
H2 PEU	.175	.007	1.464
H3 PR	-.457	.009	1.439
H4 BR	.329	.008	1.374
H5 SN	.276	.047	1.361

Source: The authors.

4.4. Regression analysis

The regression model has $R^2 = 0.603$ and adjusted $R^2 = 0.589$ (Table 5), meaning that

58.9% of the customer's purchase intention towards agricultural products in Vietnam online retailing is explained by 5 independent variables;

namely, perceived usefulness, perceived ease of use, brand reputation, subjective norm, and perceived risks. At the same time, the level of statistical significance is very small (Sig. = 0.000), which proves that the proposed analytical framework is significant.

The beta coefficient is used to determine the importance of independent variables. The larger the variable Beta, the more important it is to customers' online shopping intention (Hair et al., 1998). Table 5 reveals a high beta value of 0.544 for "Perceived usefulness" and -0.457 for "perceived risk", indicating their significant

influence on customers' purchase intentions in online retailing. However, while perceived usefulness positively influences customers' intention to make online purchases (beta = 0.554), perceived risk clearly has a negative impact on their intention to purchase agricultural products online in Vietnam (beta = -0.457). The other remaining factors, "Brand reputation," "Subjective norms," and "Perceived ease of use," are listed in order of importance, with beta equal to 0.329, 0.276 and 0.175 respectively. The result of hypothesis testing is presented in Table 6.

Table 6: The result of hypothesis testing

	Hypothesis	Result
H1	Perceived usefulness has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms	Accepted
H2	Perceived ease of use has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms	Accepted
H3	Perceived risk has a negative relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms	Accepted
H4	Brand reputation has a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms	Accepted
H5	Subjective norms have a positive relationship with the customer purchase intention towards agricultural products in Vietnam online retail platforms	Accepted

Source: The authors.

4.3. Discussion

After analyzing empirical results and evaluating the quantitative model, the study achieved the initial objectives set. The results show that there are five factors that impact a customer's purchase intention to shop for agricultural products online, of which the most important variables are perceived usefulness and perceived risks.

The study initially determined that perceived usefulness was the most crucial factor in determining customer's purchase intention towards agricultural products in Vietnam's online platforms because this factor has the beta value of 0.544. This figure also means that perceived usefulness is positively related with customer online purchase intention for agricultural products. To be specific, several researches have demonstrated that locating goods and services via the Internet, and e-commerce websites in particular, is a remarkably quick and convenient process that significantly reduces expenses and effort (Tunsakul, 2020;

Datta & Acharjee, 2018). In fact, online shopping can simultaneously discover a vast array of products and brands, which is in contrast to the conventional purchasing experience. Therefore, customers believe that once they understand the advantages of online purchasing, they will be ready to make a purchase.

With a beta value of -0,457, the perceived risk factor ranks as the second most significant determinant in shaping customers' intentions to purchase agricultural products online. However, because of the minus value, perceived risk brings negative impact (-) on the customer purchase intention for agricultural products in Vietnam online retailing. This finding supports the notion that consumers consistently harbor concerns regarding risk when engaging in online purchasing (Kim & Lee, 2020). When using e-commerce sites, consumers worry about the compromise of their financial information or potential financial risks, such as payment errors. Furthermore, an ongoing issue that proves challenging to manage is the possibility that customers will receive an item that does not

correspond to their order in every way, including shape, design, quality, hue, and so forth. This negatively influences consumers' intentions to purchase online to a relatively limited extent.

Brand reputation, subjective norms, and perceived ease of use have notable impacts on customers' purchase intentions for agricultural products on Vietnam's online platforms, respectively. Firstly, the reputation of an online brand is not solely based on the business's image, but also hinges on past comments and customer evaluations. In the age of all mass media and fierce competition, online brands need to improve their reputation because customers always choose a trustworthy e-commerce site for purchasing. Secondly, online customers believe that surrounding people, such as family, friends, or others (celebrities, KOLs, etc.), can provide useful suggestions to buy not only online agricultural products but also other online products (Trinh, 2021). Finally, in the context of technology 4.0, when everything is linked and automated, online shopping sites must also be easy to use to attract customers. Customers think they can easily order and pay on online platforms without any problems. Understanding how to use it easily will help customers shop in the best way.

5. Implications and conclusions

5.1. Implications

This study provides valuable insights into the perceptions of customers when they shop for agricultural products online, particularly for small and medium businesses in developing areas like Vietnam. As a result, the research suggests three types of implications for the most important factors in the research context (including perceived usefulness, perceived risk, and brand reputation), because these factors have a high contribution to Vietnamese customer online purchase intention.

Implications for perceived usefulness of Vietnam online platforms - the most important factor impacting on customer's online purchase intention towards agriculture products

The main target customers buying agricultural products online are young and middle-aged people who also care about the perceived usefulness of this kind of shopping.

Meanwhile, one of the biggest advantages of online shopping is that it allows customers to save time and money. As such, fast delivery, same-day delivery, and discounts can be used to entice people to buy agricultural products online. In fact, when looking for product information, customers always compare prices to be able to choose the supplier with the lowest price. Therefore, business households can offer different incentives and discounts for customers participating in online retail sites to motivate them to make online transactions.

Implications for perceived risks of Vietnam online platforms - the second important factor impacting on customer's online purchase intention towards agriculture products

Consumers who shop online are often very concerned about security issues. If customers are concerned about the security of a certain sales page, they will most likely not buy from it. Therefore, businesses must implement a transaction security policy to enhance transparency, reliability, and privacy for customers and consistently enforce this policy. In addition, businesses need to commit to protecting customers' personal information, which will make customers feel safe and secure when shopping online.

Implications for brand reputation of Vietnam online platforms - the third important factor impacting on customer's online purchase intention towards agriculture products

Last but not least, it is the responsibility of online retailers to improve their brand reputation through product presentation and customer service quality. In order to ensure that customers purchase a product that precisely matches its description and is of the quality that the vendor claims it to be, suppliers must prioritize product quality and mitigate product risks. It is crucial to thoroughly inspect and package products prior to their delivery to consumers. In terms of customer service, online retailers should update their homepages with complete, timely, and accurate product information. Additionally, vendors can attract customers by notifying interested customers in the booth about new products and promotions through automated messages or emails. It is also essential for online retailers to resolve any issues that may arise in a timely manner.

5.2. Limitations and conclusions

Due to the project's wide range and complex content, the study still has inevitable limitations on the sample, how to take samples, the number of influencing factors, and the scope of research. Firstly, the study collecting data from samples mainly involves young people. The number of samples is not large enough, so it can only represent a small part of the customers in Vietnam. Secondly, the factors affecting online shopping behavior are constantly changing according to the needs and desires of customers in today's market conditions. Furthermore, there might be numerous other factors that remain unmentioned in this discussion.

Research results show that there are five factors affecting online shopping behavior for agricultural products in Vietnam. The five factors are arranged in descending order of impact: perceived usefulness, perceived risk, brand reputation, subjective norms, and perceived ease of use. Businesses, specifically business households in the area, can improve their attention to and understanding of customer needs when shopping online, according to this research. In order to cultivate online shopping habits, businesses should simultaneously acknowledge the significance of factors that influence customers' shopping behavior on online retail platforms. In addition, businesses must also develop their brands in parallel with the quality of their products and services, helping customers know and shop in the most convenient way.

References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ansari, S., Rehman, K. U., Rehman, I. U., & Ashfaq, M. (2011). Examining online purchasing behavior: A case of Pakistan. *International Proceedings of Economics Development & Research*, 5(2), 262-265.
- Asti, W. P., Handayani, P. W., & Azzahro, F. (2021). Influence of trust, perceived value, and attitude on customers' repurchase intention for e-grocery. *Journal of Food Products Marketing*, 27(3), 157-171.
- Barska, A., & Solis, J. (2020). E-consumers and local food products: A perspective for developing online shopping for local goods in Poland. *Sustainability*, 12(12), 4958.
- Chuang, H. M., & Fan, C. J. (2011). The mediating role of trust in the relationship between e-retailer quality and customer intention of online shopping. *African Journal of Business Management*, 5(22), 9522.
- Datta, A., & Acharjee, M. K. (2018). Consumers attitude towards online shopping: Factors influencing young consumers to shop online in Dhaka Bangladesh. *International Journal of Management Studies*, 3(4), 2231-2528.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 3(3), 319-340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 928-1003.
- Eriksson, N. & Stenius, M. (2022). Online grocery shoppers due to the COVID-19 pandemic - An analysis of demographic and household characteristics. *Procedia Computer Science* 196(3), 93-100.
- Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis*. Prentice Hall.
- Hoang, T. D. L., Nguyen, H. T., Vu, D. T., & Le, A. T. T. (2024). The role of mindfulness in promoting purchase intention. *Spanish Journal of Marketing-ESIC*, 28(2), 228-247.
- Hsu, C. L., Lin, J. C. C., & Chiang, H. S. (2013). The effects of blogger recommendations on customers online shopping intentions. *Internet Research*, 23(1), 69-88.
- Indiani, N. L. P., & Fahik, G. A. (2020). Conversion of online purchase intention into actual purchase: the moderating role of transaction security and convenience. *Business: Theory and Practice*, 21(1), 18-29.
- Khai, N. T., & Anh, N. T. L. (2016). Research on green consumption intention of consumers in Ho Chi Minh City. *Scientific Journal of the Open University of Ho Chi Minh City*, 11(1), 127-138.
- Kim, J., & Lee, J. C. (2020). Effects of COVID-19 on preferences for private dining facilities in restaurants. *Journal of Hospitality and Tourism Management*, 45, 67-70.
- Lee, S. H., Kwak, M. K., & Cha, S. S. (2020). Consumers' choice for fresh food at online shopping in the time of covid19. *The Journal of Distribution Science*, 18(9), 45-53.
- Lin, C. C., Chen, Y. H., & Hsu, I. (2010). Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of Business Research*, 63(9), 1007-1014.
- Liu, J., & Ke, X. (2012). Improvement in logistics of fresh agricultural products. *Journal of System and Management Sciences*, 2(2), 36-45.

- Luu, T. M. N., Hoang, D. L. T., & Nguyen, P. M. (2023). The Influence of e-service quality on food online purchase intention in Vietnam. *Journal of Economic Development*, 48(3), 131-159.
- Madahi, A., & Sukati, I. (2012). The effect of external factors on purchase intention amongst young generation in Malaysia. *International Business Research*, 5(8), 153.
- Mortimer, G., Fazal e Hasan, S., Andrews, L., & Martin, J. (2016). Online grocery shopping: the impact of shopping frequency on perceived risk. *The International Review of Retail, Distribution and Consumer Research*, 26(2), 202-223.
- Mwencha, P. M., & Muathe, S. M. (2019). A principal component analysis of customers' perceived risks for online retailing services: Evidence from Kenya. *Journal of Customer Behaviour*, 18(3), 167-214.
- Pham, M. D. (2023). Export of some key agricultural products of Vietnam. *International Journal of Professional Business Review: International Journal of Professional*, 8(1), 2.
- Ratchford, B., Soysal, G., Zentner, A., & Gauri, D. K. (2022). Online and offline retailing: What we know and directions for future research. *Journal of Retailing*, 98(1), 152-177.
- Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing and Consumer Services*, 67, 102988.
- Shook, N. J., Sevi, B., Lee, J., Oosterhoff, B., & Fitzgerald, H. N. (2020). Disease avoidance in the time of COVID-19: The behavioral immune system is associated with concern and preventative health behaviors. *PloS One*, 15(8), e0238015.
- Taylor, C. R., Schmidt-Nielsen, K., & Raab, J. L. (1970). Scaling of energetic cost of running to body size in mammals. *American Journal of Physiology-Legacy Content*, 219(4), 1104-1107.
- Trinh, X. H. (2021). Research on online shopping behavior: Experience of students of Faculty of Finance - Accounting, Nguyen Tat Thanh University during the COVID-19 pandemic, *Industry and Trade Journal*, 22(9), 62-67
- Tunsakul, K. (2020). Gen Z consumers online shopping motives, attitude, and shopping intention. *Human Behavior, Development and Society*, 21(2), 7-16.
- Venkatesh, V., & Davis, F. D. (2000) A Theoretical Extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- VETICA (2018). *Vietnam E-commerce Index EBI 2018*. Vietnam E-commerce Association.
- Wu, C., & Liu, R. (2016). A study on consumers' intentions and attitudes to fresh agricultural products for online shopping in China. *International Journal of Simulation Systems, Science & Technology*, 17(45), 1-5.
- Yuniarti, F., R. Arief, H., Meydia, H., & Yevis, M. O. (2022). Online retailers' ethics and its effect on repurchase intention: The mediating role of perceived risk. *Cogent Business & Management*, 9(1), 2051691.
- Zhao, X., Deng, S., & Zhou, Y. (2017). The impact of reference effects on online purchase intention of agricultural products: The moderating role of consumers' food safety consciousness. *Internet Research*, 27(2), 233-255.
- Zia, A., Alzahrani, M., Alomari, A., & AlGhamdi, F. (2022). Investigating the drivers of sustainable consumption and their impact on online purchase intentions for agricultural products. *Sustainability*, 14(11), 6563.