

RESEARCH ON CUSTOMER EXPERIENCE AND CUSTOMER LOYALTY IN E-RETAILING

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(Received: February 18, 2023; Revised: July 12, 2023; Accepted: July 14, 2023)

Abstract - The customer experience has an impact on the business's revenue and profit, especially during the COVID-19 pandemic and the growth of the e-retail industry in Vietnam. Therefore, retailing businesses need to know how to manage a positive customer experience. The research objectives are to systematize the rationale related to customer experience, customer experience prefixes and suffixes, and their relationship in the Vietnamese e-retailing context. The quantitative research surveyed over 300 customers and analyzed data with the PLS-SEM method. The research findings show that customer experience affects customer satisfaction and loyalty, and the factors affecting customer experience include web usability, flow state, customer services, products, and customization. However, factors such as security, e-word-of-mouth, and economic value do not affect the customer experience in the context of Vietnam. The research proposes that technology companies, retailers, and managers focus on creating positive customer experiences through customer service, flow state, web usability, customization, and product.

Key words - Customer experience; customer loyalty; customer satisfaction; and e-retailing

1. Introduction

The COVID pandemic has caused e-retail to grow rapidly [1]. Offline retailing is still an important channel because many consumers prefer to go to a store and see a product before buying it. [2] Kengo shows the trends that retail businesses need to adapt to in the post-COVID Pandemic. Customers are more and more familiar with online purchases and e-commerce platforms, websites, etc. 49.3 million Viet Nam people are used to buying online in 2021. Thanks to e-retail, consumers can now buy retail products quickly and easily on the Internet [1, 3], and e-retail platforms are currently the smart choices of consumers. [4]

According to Godovykh & Tasci [5], creating a positive customer experience is the key to success in the e-retail highly competitive industry. With the development of the online environment, e-commerce, e-retail, and digital devices, customers can have numerous opportunities to interact with brands and businesses anytime and anywhere. This shows the significant role of customer experience in the information era due to an increasing number of customer-to-business touchpoints. According to Lin and Bennett [6], creating a superior customer experience is a key point in retail management, and most managers recognize that improving customer experience leads to improved customer satisfaction, loyalty, and customer satisfaction, as well as the company's profits. It is necessary to study more factors affecting customer experience in this market so that businesses can focus on those factors to create their competitive advantages [7]. The study has clarified the role and relationship between customer experience and customer

loyalty in the e-retailing context. In the age of e-retailing, the customer experience is becoming more and more important so it is essential to understand the determinants that influence the extent of the customer experience online [1, 2]. Previous studies in Vietnam have mostly only focused on the context of offline retail, when there was no COVID epidemic, and the e-retail industry had not blossomed as vigorously as it is now. The domestic studies mostly revolved around pre-COVID contexts and combined the traditional retail channels with e-retailing channels in which the role of e-retailing was still modest during its early stages of penetration, which contrasts with the current robust development of e-retailing these days.

Therefore, this study will find out the prefixes affecting customer experience, the relationship between CX, and customer satisfaction, customer loyalty in the context of Vietnamese E-retailing.

2. Literature review and hypothesis development

2.1. Previous research

The previous study by Zaid et al. [1] clarifies the role and relationship between customer experience, customer satisfaction, and customer loyalty. Customer experience affects both customer satisfaction and customer loyalty. However, this study found that customer experience has a direct impact on customer loyalty without customer satisfaction. Jaiswal et al. [6] research the factors that influence customer experience, and then customer experience affects customer satisfaction in the context of e-retail. However, they don't consider the impact of customer experience on customer loyalty. So, in the context of Vietnam, this study will test the relationship between customer experience, customer satisfaction, and customer loyalty in the Vietnamese e-retail market. In 2014, Luu Tien Thuan and Tran Thu Van [7] researched the quality of customer experience at supermarkets in Can Tho City. This study pointed out that the customer experience quality scale consists of 6 components in which 3 important components are the surrounding environment, impact from other customers, and product characteristics. Research results also showed that the quality of customer experience directly affects customer satisfaction and then affects customer loyalty and information sharing with others. However, domestic studies on customer experience have been conducted before the COVID-19 pandemic when E-retailing has not been as explosively as it is now. Based on previous studies, the research examines the factors affecting customer experience, customer

experience, customer satisfaction, and customer loyalty in the post-COVID era in Vietnam's e-retail market.

2.2. E-retailing

According to Kotler and Keller [8], retailing is an activity chain aiming to sell goods or services directly to end consumers for their personal, non-commercial use. According to Lisa Harris, and Charles Dennis [9], e-retail is the sale activities of goods and services via the Internet or other electronic channels, for personal and household consumers. E-retail has to focus on the factors making it easy for consumers to buy, provide good service, make e-shopping an enjoyable experience, and customer interaction. In the study by Walsh & Godfrey [10], e-commerce is a collection of transactions through the Internet. The definition of e-commerce is broader and more inclusive than e-retailing because it includes marketing activities, warehouse management, and banking transactions [10]. This study will focus on e-retailing or e-retailing activities in e-commerce, which means centralizing the purchase and sale of goods between businesses and end-users on the Internet.

2.3. Customer experience

From the perspective of experience, Pine and Gilmore [11] argued that customer experience is the total experience of customers when they interact with suppliers in the process of buying and selling goods with each other. Pine et al [11] defined customer experience as the emotional states through the interactions measured continuously throughout the duration of the interaction. According to Millar [12], customer experience is the expected gap between the level of "experience" that customers think they have and the level of "experience" that they suppose they can achieve. The mission of enterprises is to narrow this gap to increase positive responses and connect with customers. Customer experience is understood as the positive or negative emotional state that the customer achieves when the customer interacts with the product, service, or person of the supplier [12]. This study defines the customer experience in e-retailing as the experience of customers when they interact with all touchpoints with entrepreneurs and includes cognitive customer experience and affective customer experience. The study uses the customer experience scale of Gao et al [13] developed specifically for the new context of e-retailing and Omnichannels. In addition, many researchers in the context of e-retailing also use this scale in their study. In this way, customer experience has two factors: cognitive customer experience and affective customer experience.

2.4. Customer satisfaction and customer loyalty

According to Pandey et al [3], in experience economics, customer satisfaction is defined as the customer's cumulative experience and evaluation based on all their previous purchase of goods or services. The research of Vasić, Kilibarda, & Kaurin [14] defined customer satisfaction as the feeling of purchase evaluation, which is the comparison between actual perception and expectation that leads to satisfaction or dissatisfaction. Pandey [15] states that customer satisfaction in e-retail is the feeling when making purchasing decisions on shopping websites, products, and services. In e-retailing, customer loyalty is

the first choice of a product or service to purchase when customers have a need, and then the consumer either repeats or continues to purchase at home through e-retailing with long-term commitment [1]. According to Kumar and Shah [16], loyalty can be divided into two types: behavioral loyalty and attitude loyalty. People can further satisfy unexplored customer needs as it can lead to customer satisfaction and loyalty to the company [17]. E-retail loyalty can be measured using items: seeing positive things, getting recommendations, encouraging, posting positive messages, intending to continue, and intending to do more business [1]. However, in summary, customer loyalty is measured through two angles: behavioral loyalty and attitudinal loyalty [4]. From that basic scale, the scale developed for the e-retailing context by Pandey et al [3] in more detail includes actual repeat buying a positive word of mouth, and continuing to give preference to the same service. This scale is also used and modified to match the context of the research. The study will refer to the customer loyalty scales of Pandey et al, and Zaid & et al [1] including actual repeat buying, positive word of mouth, continuing to give preference to the same service, and attitude loyalty. These include intent to repurchase, willingness to recommend the service to others, and objection to switching to a competitor.

2.5. Hypothesis development

2.5.1. Customer experience, customer loyalty

In the e-retail business, customer experience influences customer loyalty. Consumers with a highly positive customer experience will have an impact on increasing customer satisfaction [17]. According to Zaid & et al [1], online customer experience is a very strong influence on customer loyalty. The better the customer experience is, the higher the customer loyalty is. Customers are more likely to return to buy from your business and tell other potential customers positive messages.

H1: Customer experience has a positive impact on customer loyalty.

2.5.2. Customer experience, customer satisfaction

According to Vasić et al [14], customer satisfaction is defined as the feeling that appears as the result of the purchase evaluation, which is the comparison between actual perception and expectation. According to Pandey et al [3], in the context of experience, customer satisfaction is considered as the customer's cumulative experience based on all their previous experience with goods or services arising from post-assessment of the consumer experience. According to Zaid et al [1], customer satisfaction also plays an extremely important role in businesses. Online customer experience impacts customer satisfaction. Therefore, the study put forward the following hypothesis.

H2: Customer experience has a positive impact on customer satisfaction.

2.5.3. Customer satisfaction and customer loyalty

According to research by Lin & Wang [18], the relationship between customer satisfaction and customer loyalty is an intuitive and often associated relationship in research on consumer behavior. A high degree of

satisfaction, as an emotional response derived from a favorable experience with a product/service provider, can create or increase trust and thus increase customer loyalty with suppliers. The previous research also found that customer satisfaction directly and positively affects customer satisfaction and customer loyalty in the e-retailing, hospitality, and tourism context [1].

H3: Customer satisfaction has a positive impact on customer loyalty.

2.5.4. *The customer experience prefixed*

According to research by Jaiswal et al [6], the factors such as web usability, economic value, customization, security, post-purchase experience, customer services, and customer awareness influence customer experience, and then customer experience affects the customer satisfaction and customer loyalty in the context of e-retail. Mustikasari, Krisnawati & Sutrisno [19] studied both offline and online contexts but these variables are based on a more offline bias and are not customized to accommodate the differences between the 2 channels. This research considers the elements that are suitable for a diversity of business channels to pay attention to the products, customer services, staff services, shopping process, and shopping environment.

According to Jaiswal et al [6], web usability is the customer's perception of friendliness and convenience for users on online shopping sites. Web usability is playing an increasingly important role in shaping positive customer experiences. According to research by Chen, Tran, & Florence [21], web usability has a direct impact on customer experience.

H4: Web usability has a positive effect on customer experience

Economic value is the customer's perception of tangible or intangible benefits through purchasing or seeking some benefits [20]. E-retail provides customers with perceived economic value through tangible benefits, such as low search costs and maximum convenience, while shaping positive customer experiences across stores and online sites. As the experience economy develops, the economic value comes not only from the product, value, and way of getting the item but also through the customer experience [22]. According to Jaiswal et al [6], the better the customer perceives economic value, the more positive the customer experience will be.

H5: Economic value has a positive effect on customer experience.

In electronic retail, customization is defined as the ability of an e-retailer to tailor products, services, and transactional to individual customers [22]. E-commerce sites, even retail sites, use advertising technology or services that can track user behaviors, and research interests to recommend products and ads that are suitable for them. According to Jaiswal et al [6], customization directly affects customer experience and becomes one of the strategic and difficult factors to implement; however, it brings great value to customers and businesses [23].

H6: Customization has a positive effect on customer experience.

Accompanying the use of shopping sites is a concern about information security, especially when recently there have been controversies between users and technology giants in selling users' information to third parties. Users are becoming warier and warier in trading and disclosing information on the internet, so security is a factor that needs special attention when trading on digital channels [23]. Security is one of the most important criteria impacting and evaluating the customer experience [24].

H7: Security has a positive effect on customer experience.

Customer service includes support services to manage the customer experience in the online environment. The customer complaint handling mechanism, good return policy, and compensation for customers in case they incur losses are some of the strategies adopted by e-retailers to increase customer loyalty and positive customer experience [25]. Customer service plays an extremely important role in building customer experience for e-retailing [6, 26].

H8: Customer service has a positive effect on customer experience.

Products are an important factor affecting customer experience [27]. As online retailers enable customers to choose from a wide variety of products at different price levels, accompanied by the development of alternatives to meet demand and fierce competition in this environment. Moreover, users increasingly demand product experience, comfort, and convenience. Product is the factor that has the strongest impact on the online customer experience. Products have a direct impact on customer experience [26].

H9: Product has a positive effect on customer experience.

The flow state is defined as the state of complete immersion that occurs when someone is completely engaged in an activity [1]. Experiencing flow is entirely possible in e-commerce, retail, and brick-and-mortar retail. As the flow experience occurs, consumers become fully focused on their shopping. Consumers who can focus their attention on an online shopping site will also be more likely to notice marketing promotions on the site [1, 29]. Agrebi & Chandon [30] suggest that, unlike other traditional channels, a brand's website can offer an immersive experience like the interactive, optimized, and exceptional flow experience that helps create a positive overall customer experience. In addition, the size of the remote presence of the online stream state implies an influence on brand experience behavior that cannot be ignored. Finally, automated experiences in the online state help build effective customer experiences.

H10: Flow state has a positive impact on customer experience.

In recent times, customers have had the opportunity to rate and comment on products and their experience when buying on social media channels, online sales websites, and especially e-commerce sites. The following customers read and consider when buying. This is the reason why electronic word of mouth has become the focus of marketers' attention to influence customer experience [31]. According to Hennig Thurau, Gwinner, Walsh, & Gremler [32], the e-word of mouth is defined as any positive or

negative statements made by customers about a product or company via the Internet. E-word of mouth will impact the decision-making process of customers by finding

H11: E-WOM has a positive impact on customer experience.

After building the theoretical foundation, definitions, research context, and relationships of the research variables, the authors propose a research model of the factors affecting customer experience, and the relationship between customer experience, customer satisfaction, and customer loyalty. The research proposed the following model:

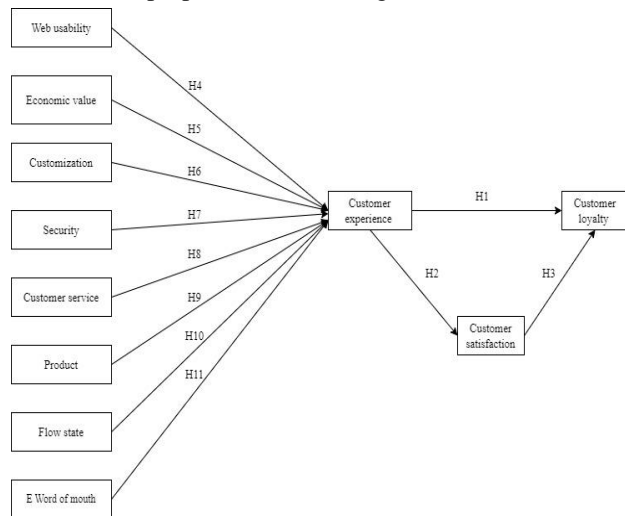


Figure 1. The proposed research model

3. Data and method

Quantitative research is used with the data collection method being online and offline questionnaire surveys. This study focuses on Vietnamese consumers who have purchased goods online on internet sales channels such as websites, e-commerce, and social networks. Data were collected from February to April 2022 by convenience and snowball methods. The authors took a convenient sample to ensure that the participants had made a purchase on an e-retail site within the past 1 year. Besides, with the snowball method, the authors survey acquaintances and then receive support from them to spread the surveys to acquaintances. Consumers who have never purchased online or have not purchased online in the past 1 year will stop responding to the survey. Because the purchase time is so long, it is difficult for consumers to recall, and the accuracy of the answer is very low. The questionnaire was adapted from a set of scales and translated into Vietnamese by the author and a support expert in English. Then, the author conducted a survey with 10 respondents to get reviews and comments on the questionnaire. The Likert 5-level scale is used, from "strongly disagree" to "strongly agree". The final questionnaire was formed with 4 parts: (1) The consumer's most recent online purchase experience, brand, shop, or channel; (2) What reminds them the most to prompt respondents to recall previous shopping experiences; (3) Factors affecting customer experience when customers shop online (4) The relationship between customer experience, satisfaction, and loyalty when shopping online.

The sample size should be at least 100 or 165 if the study uses Smart PLS data analysis, and the formula calculates a minimum sample of five observations for each item. The model has 58 observed variables, so the study needs a minimum of 290 samples. And 326 responses were collected. After removing unqualified, incomplete, and suspicious cases, 300 responses were valid for subsequent analyses. The sample was characterized by a male-to-female ratio (37% to 63%); adolescents (33%), young adults (47%), and middle-aged adults (20%), 76% being pupils and students.

4. Result and discussion.

4.1. Testing the measurement model

The steps to test the scale model in this study follow the suggestions of Hair, Hult, Ringle and Sarstedt [32] including Outer Loading, testing of internal consistency, convergent validity, and discriminant validity.

Further research was done to check the Outer Loading coefficient of observed variables. Checking the quality of the indicator through the outer loading index. Outer loading ≥ 0.7 , the parent latent variable can explain at least 50% of the change of the observed variable, and the indicator is qualified and retained [32]. Observable variables with Outer Loading indexes below 0.7 are excluded: EC2, EC3, Security 3, C-Service 4, Product 1, Product 2, Product 6, Flow 1, 3, 8, CS4, and CL4.

Table 1. Construct Reliability and Validity - Smart PLS

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	VIF
CL	0.87	0.91	0.66	
CS	0.82	0.88	0.65	1.98
CSERVICE	0.81	0.89	0.72	1.48
CUST	0.84	0.89	0.67	1.53
CX	0.87	0.90	0.57	1.98
EC	0.64	0.85	0.74	1.88
EWOM	0.92	0.94	0.72	1.53
FLOW	0.84	0.88	0.60	1.24
PRODUCT	0.75	0.86	0.67	1.82
SECURITY	0.80	0.88	0.71	1.39
WU	0.86	0.91	0.71	2.22

After excluding the observed variables, the study conducted the checking of the reliability of scales to show that the scales have internal consistency with Cronbach Alpha index (CA) and Composite Reliability (CR). According to Hair et al [32], CA with a threshold of 0.7 or higher achieves good reliability. Chin suggested that CA which is between 0.6 and 0.7 can be accepted. However, many researchers consider the CR index because CR rates higher reliability than CA. For confirmatory studies, the threshold of 0.7 is the appropriate level of the CR index [33, 34]. According to Construct Reliability and Validity results table below, the multiplier load factors that are all greater than 0.7 – good reliability, with Cronbach Alpha index of EC being 0.64 higher than 0.6, can be accepted and the extracted variance AVE is both greater than 0.5. Therefore, the proposed scales achieve convergent validity.

Discriminate value shows the distinctiveness of a structure when compared with other structures in the model [32]. The discriminant value will be evaluated based on the HTMT index, the ratio of the correlation coefficient between the features to the correlation coefficient within the features. The scale achieves a discriminant value when the HTMT index is less than 1 and preferably less than 0.9 [32]. All of the concepts have an HTML index of less than 0.9, showing that these concepts have discriminatory value.

Table 2. Heterotrait-Monotrait Ratio (HTMT)– Smart PLS result

	CL	CS	CSERVICE	CUST	CX	EC	FLOW	PRODUCT	SECURITY	WU
CL	0.81									
CS	0.71	0.81								
CSERVICE	0.46	0.42	0.85							
CUST	0.55	0.47	0.18	0.82						
CX	0.74	0.70	0.51	0.52	0.75					
EC	0.46	0.45	0.29	0.35	0.42	0.86				
EWOM	0.54	0.44	0.13	0.43	0.43	0.44				
FLOW	0.46	0.40	0.26	0.37	0.48	0.23	0.78			
PRODUCT	0.55	0.50	0.38	0.37	0.56	0.56	0.27	0.82		
SECURITY	0.43	0.40	0.44	0.34	0.41	0.19	0.25	0.26	0.84	
WU	0.61	0.61	0.41	0.46	0.62	0.62	0.26	0.57	0.35	0.84

Hair et al [32] emphasized that PLS-SEM focuses on predictive ability instead of model confirmation, so the PLS-SEM algorithm is not suitable for assessing the overall fit of the model.

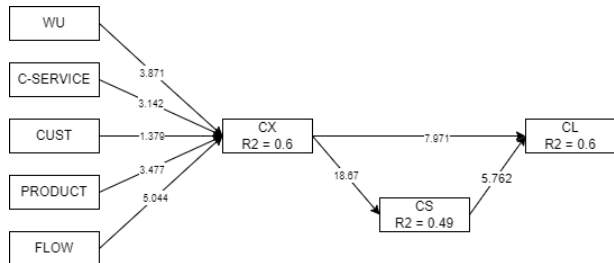


Figure 2. Final diagram – Smart PLS

4.2. Testing the structural model

After running bootstrapping 3000 samples, the research proceeds with structural model testing. According to Hair et al [32], in this step, the study examines the following indicators: VIF - metric for checking multi-collinearity, P-Value - Sig value, Original Sample - normalized impact factor, R² and F². If the VIF is 5 or more, the model has a very high probability of showing multi-collinearity [32]. Variables with VIF below 3 - no multi-collinearity occurs. Assessing the relevance of the relationships in the model is assessing whether the relationship between the concepts in the structural model is statistically significant or not in order to draw conclusions about the research hypotheses [32]. Relevancy will be assessed based on 2 indicators: Original Sample: normalized impact factor and P-Values: sig value compared with significance level 0.0. The bootstrapping test shows hypothesis testing results as follows:

Table 3. The bootstrapping results

	Hypothesis	Original Sample (O)	P Values	Result
H1	CX -CL	0.49	0.00	Accept
H2	CX – CS	0.70	0.00	Accept
H3	CS - CL	0.36	0.00	Accept
H4	WU – CX	0.27	0.00	Accept
H5	EC – CX	-0.08	0.20	Reject
H6	CUST – CX	0.19	0.00	Accept
H7	SECURITY - CX	0.05	0.18	Reject
H8	CSERVICE -CX	0.23	0.00	Accept
H9	PRODUCT -CX	0.19	0.00	Accept
H10	FLOW -> CX	0.21	0.00	Accept
H11	EWOM -CX	0.08	0.15	Reject

The coefficient of determination measures the degree of special R². The test results show that customer experience has a strong impact on customer satisfaction and customer loyalty. The coefficients R², and R² are adjusted evenly over 0.5.

Checking the impact model coefficient f^2 is to evaluate the importance of the independent variables affecting the dependent variable. The f^2 of customer experience, customer satisfaction, and customer loyalty are 0.97 and 0.32 alternatively, the f^2 of customer satisfaction and customer loyalty is 0.178.

5. Discussion

With the development of the e-retail industry, customer experience plays an increasingly important role. Customer experience has a direct impact on customer satisfaction and customer loyalty. This result is consistent with many previous studies such as [1, 34]. The results show that the factors: web-usability, customization, security, customer services, products, and flow state directly affect the customer experience. The results are consistent with previous studies specifically the research in two offline channels, online, or research exploring factors affecting customer experience in the E-retailing industry [6, 34].

Research shows that security, e-word-of-mouth, and economic value factors do not affect customer experience. These results are in contrast with the previous studies [6, 7, 19]. Research shows that security factors do not affect customer experience. This result is in contrast with the study by Jaiswal et al [6, 23]. To explain these results, shoppers' concerns about information security are lower than other factors, e-retail businesses have many convincing reasons and benefits that make customers ignore data privacy. According to research by Nguyen et al [36], awareness of information security in Vietnam is still very limited, propaganda and education activities are not properly or fully implemented and of high quality, making customers uncomfortable. Customers are not aware of and worried about information security when purchasing [37].

The results show that the e-word-of-mouth factor does not affect the customer experience, which is contrary to the results of the study [29, 30]. The explanation for this result is that customers still prefer to listen to word-of-mouth

communication from relatives and friends, especially young customers (greater than or equal to 25 years old) who have not had the habit of reading reviews on the internet. Currently, the number of virtual reviews on electronic retail channels is very high and is a painful problem for businesses that own that platform such as Shopee, and Lazada. Advertisers have abused e-word-of-mouth in their business, that is why this channel is not trustworthy [39, 40].

Research also shows that economic value has no impact on customer experience in contrast to the research of Jaiswal et al. [6], in which economic value is a very important factor. This explains that the economic value scale is acceptable, however, observed variables of this scale such as saving time and money, price, and product may be overlapped with observed variables in other dimensions such as product and customer service. So, the economic value scale can be identified as the limitation of this study and proposed for future research to form a new scale in the context of Vietnam.

6. Implications and limitations

6.1. Implications

6.1.1. Theoretical implication

This study identifies the prefixes affecting customer experience in the context of Vietnam E-retailing. The study confirms the research of Zaid et al [1] about the factors that can affect the customer experience in e-retailing and the relationship between customer experience, customer satisfaction, and customer loyalty. The study complements Pandey's study [15], which focuses on user behaviors when experiencing e-retail shopping platforms, but users do not appear to have shopping behaviors. The factors impacting customer experience such as product, flow state, and customization help guide specific actions to create a positive customer experience. Previous studies in Vietnam have mostly conducted research only in the context of offline retail when there was no COVID epidemic, and the e-retail industry had not jumped up like it is now. Related studies conducted in Vietnam were mostly in the pre-COVID context and combined the 2 traditional retail channels and e-retailing channels in which the role of e-retailer was lower due to the fact that e-retail in Vietnam at that time was just in the early stages of penetration, not as focused as now. The study builds a hypothetical model based on customer experience studies in e-retail and the Vietnam retail market, and the variables under research are not just the basic ones (such as products, and services) but specific variables related to users' experience on platforms, namely web usability, customization, etc. are also under investigation.

6.1.2. Managerial implications

The results of this study demonstrate that customer experience has a strong impact on customer satisfaction and customer loyalty. Therefore, the research proposes that technology companies, retailers, and managers operating the e-retailing channels focus on creating positive customer experiences through customer services, flow state, web usability, customization, and products. Regarding web usability, businesses that want to build a shopping platform, specifically a website, or teams that build and own an e-retail

platform need mainly specific web usability. To be more specific, they need to organize information logically with comments on user experience for the purpose of helping customers easily find the products they want, paying attention to the eye-catching user interface, trends, and needs functions to create convenience for customers. Regarding the flow state, it is one of the factors that make customers stay on the website for a long time with high customer retention as well as create a good customer experience. To create a flow state when a customer visits the platform, businesses' platforms need the combination of a lot of factors: web usability, content, layout, display of content, products, whether the content is highly entertaining and engaging, the discovery of many interesting things. The two factors that play an extremely important role in creating a positive customer experience are customer service and product. When retailing online, businesses have the opportunity to sell to a huge number of customers without many barriers like selling offline. However, it will also be a challenge because the more thoughtful or considerate customers are, the more difficult the business will create a good customer experience. Therefore, businesses need to pay great attention and prepare well to operate and provide good customer service. Regarding the services factor, it is necessary to pay attention to the support policies before, during, and after the purchase, arrange contact channels, take care of customers easily and conveniently, manage problems that customers will often encounter when buying online, and provide suitable solutions. Regarding products, it is necessary to pay attention to quality, and packaging, especially packaging to protect goods during transportation. Businesses can combine the product and the web usability factors to create customer attractiveness and flow state for customers. One interesting element that can create a good customer experience is customization. Businesses give customers the flexibility to tailor products to their needs and apply technology to make intelligent products that can recommend services, products, and content that are more relevant to them.

6.2. Limitations and future research

This study analyzes 300 data mainly focusing on young people who have purchased on e-retailing sites. The customer file in e-retailing is still very wide. Future studies need to expand the sample and sample segment more by geographical locations or kinds of products.

The research focused on the e-retailing industry and diversified purchasing platforms. However, at present, as online shopping platforms are very diverse and categorized into websites, social networks, and e-commerce, future studies may be conducted according to the kinds of platforms. Apart from the factor of online shopping platforms or types of industries, other determinants can be product category, fashion, technology, etc. Future research should deeply research a particular platform or product to find the differences between them and help businesses in particular majors understand the features of customer experience within their field.

Acknowledgments: This research was funded by Funds for Science and Technology Development of the University of Danang (Vietnam) under Project number B2021-DN07-01.

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APPENDIXES

Dimension	Items	Ref
Customer experience	<ol style="list-style-type: none"> 1. When I am about to buy a product, this online selling service will help me make a better decision. 2. I feel that the online sales website provides useful information in purchasing products. 3. If I'm going to make a purchase, the sales sites will help me find what I'm looking for. 4. Use online sales sites that give me more information about products, prices and promotions. 5. I find the services on this online shopping site entertaining. 6. I find the services on this online store interesting. 7. I feel sympathetic to the services on this online sales site. 	[18]
Customer loyalty	<ol style="list-style-type: none"> 1. I say positive things about shopping sites to other people 2. I would recommend buying sites to people looking for my advice. 3. I will encourage friends and family to buy from this online store 4. I will post positive messages about sales sites on other online message boards 5. I plan to continue buying on sales sites 6. I plan to buy more with sales sites 	[28]
Customer satisfaction	<ol style="list-style-type: none"> 1. I am satisfied with my decision to purchase from the purchase site 2. I think I did the right thing when buying from shopping sites 3. Choosing to buy from my online shopping site is a smart choice 4. I feel unhappy because I bought from an online shopping site 5. Overall, I am satisfied with the products and services provided by the online shopping site 	[28]
Flow state	<ol style="list-style-type: none"> 1. I feel like I'm being controlled when using shopping websites 2. I feel like I focus on interacting when using shopping websites 3. When using an online shopping site, I'm so focused that I forget about other things 4. When using an online shopping site, I feel like time flies 5. When using an online shopping site, I am completely absorbed in what I am doing 6. The use of the online shopping site has stimulated my curiosity 7. Using an online shopping site sparked my imagination 8. Online shopping sites are fun to use 	[31], [32]
Website usability	<ol style="list-style-type: none"> 1. I can easily find products on shopping websites 2. I find the interface of shopping websites 	[6]

	<ol style="list-style-type: none"> visually beautiful 3. I find how to organize and arrange the information on good shopping websites 4. I feel convenient to use shopping websites 	
Economic value	<ol style="list-style-type: none"> 1. I feel like I save time and effort when I shop on websites 2. I often receive discounts and promotions when I shop on websites 3. Can I sign up for and enjoy loyalty programs on shopping sites 4. I care about the price when buying products on shopping sites 	[24]
Customization	<ol style="list-style-type: none"> 1. Shopping sites give me the option to share my experience with others 2. Shopping websites that store my preferences and offer products based on them 3. Shopping websites can customize shopping content according to customers' preferences 4. Shopping websites have the option of interactive features on the page 	[6]
Customer service	<ol style="list-style-type: none"> 1. Shopping sites have good return and exchange policies 2. Purchasing sites have effective ways to contact the company 3. Do online retailers solve unexpected problems for customers? 4. Do online retailers compensate customers if they incur any loss 	[6]
Product	<ol style="list-style-type: none"> 1. The product quality on this shopping site is trustworthy. 2. Product prices on online shopping websites are reasonable. 3. Product packaging on online shopping sites is good and rarely damaged on arrival. 4. Various products on the online shopping website are rich, meeting all needs. 5. Products sold on online shopping websites are attractive and relevant 6. I feel comfortable using products on online shopping sites 	[27]
Security	<ol style="list-style-type: none"> 1. I feel secure when providing personal information to shopping sites 2. I feel safe using my bank card on shopping sites 3. I feel the risk of trading on shopping sites is low 4. I believe the purchase site has good security features 	[24]
E-WOW	<ol style="list-style-type: none"> 1. I often read reviews to see if the product/brand is any good 2. To make sure I'm buying the right product/brand, I often read reviews on the web 3. I often refer to reviews so I can choose the right product/brand 4. I usually collect web reviews before buying a product/brand 5. Reading product reviews on the web makes me more confident in making purchasing decisions 	[38]

ABBREVIATED WORD LIST

No	Abbreviations	Explanation
1	E-retailing	Electronic retailing
2	CX	Customer experience
3	CL	Customer loyalty
4	CS	Customer satisfaction
5	CSERVICE	Customer service
6	FLOW	Flow state
7	WU	Web usability
8	CUST	Customization
9	EC	Economic value
10	E-WOW	Electronic word-of-mouth