

The Mediating Role of Customer Experience on the Relationship between Online Shopping Determinants and Customer Satisfaction in Vietnam

Anh Tuan Pham and Khashayar Yazdani

Abstract—The negative impacts of COVID-19 to every aspects of social-economic structure lead to the retail industry's changes by shifting from traditional way to online shopping. Although Vietnam is potential market of e-commerce, there are still lots of barriers of online shopping to customer behaviour, especially how to improve the customer experience in purchasing process. Therefore, this paper analyses the mediating role of customer experience on the relationship between online shopping determinants such as: payment barrier, bad complaint resolve, slow delivery process, poor product quality, technical problem, and customer satisfaction in Vietnam. The online survey is conducted according to the related theories, relevant empirical evidence, and pilot study to collect reliable data from 360-400 respondents in Ho Chi Minh city and Ha Noi city. Some quantitative data analysis techniques are proposed and used in this study, including descriptive statistics, reliability, explanatory factor analysis, variance analysis, Pearson correlation analysis, confirmatory factor analysis, and structural equation modeling. For using them, the researcher expects that all factors have significant and negative effect on customer satisfaction through customer experience. By developing one of the first research attempt on pre-normal phase of COVID-19 pandemic, the researchers believes the marketers and top managers at e-commerce companies in Vietnam to have sufficient information about how their customers' experience with online shopping platforms and related services.

Index Terms—Online shopping, barrier, customer experience, customer satisfaction, Vietnam, COVID-19.

I. INTRODUCTION

Before the year of 2020, the overall economy of Vietnam is expected growing at higher 7% [1] but the COVID-19 pandemic has swiped and impacted negatively to every aspects of socio-economic structure. COVID-19 pandemic is not only creating dangerous situation to human health but also global economy. For example, Maliszewska et al. [2] in which global GDP would be decreased by 2% in which the economy in developing and emerging countries more severe. Abiad et al. [3] estimated that COVID-19 outbreak would reduce global GDP from US\$ 77 billion to US\$ 347 billion and it would create sharp decline in global consumption. Although COVID-19 pandemic has been creating a lot of stresses to global economy, it is considered as a good change for the moving towards a resilient retail sector [4]. Common solution for retail industry in post-COVID19 is to shift sales

to online platform [5].

For that precisely reasons, the topic of Vietnamese customer experience and their satisfaction regarding online shopping activities has gained the attention of researchers. However, most of them did not study the importance of customer experience. This context, the researcher is promoted by the development of a research in which online customer experience and their satisfaction are both captured. Moreover, when developing the study, the researcher is in the position of witnessing how online customers react with online shopping mechanism. A pilot research is conducted with the participation of 4 volunteers who purchased products online through different online shopping platforms such as Lazada, Shopee, Tiki in Vietnam. The findings are extracted, and they briefly stated some problems experienced by Vietnamese online shopping customers, including payment barrier, customer service, late delivery, low product quality, and some technical problems. The researcher believes that understanding these problems with the input from larger number of respondents will bring clearer picture of customer experience, customer satisfaction and barriers with online shopping in Vietnam pre-normal phase of COVID-19 pandemic.

II. LITERATURE REVIEW

A. Payment Barrier

Payment is a terminology that addresses the process of transferring assets from one party to another party [6]. Payment is important in e-commerce business model since it brings convenience to the customers as well as its promotion of cross-border online selling [7]. Previous researchers have developed different studies in what extend payment system in online shopping affected online customer behaviours in general and online customer experience and online customer satisfaction in specific. Oney *et al.* [8] addressed that electronic payment system significantly improved life quality of an individual although the users still worried about security and lack of trust.

Al-Jahwari *et al.* [9] conducted a research about factors influencing customer satisfaction in online shopping. They identified that application safety which was measured by safe payment method and personal information protection had significant and positive effect on online customer satisfaction. Purthi and Gupta [10] studied 200 online Indian customers and they identified that online customers demanded for secure payment system as influential factor towards their online shopping satisfaction. Lestari and Ellyawati [11]

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recommended that online companies must continuously improve security method in their payment system due to rapid increase in financial crimes. Thus, the first hypothesis is proposed as below:

H1: There is mediating relationship between payment barrier, customer experience with online shopping and customer satisfaction with online shopping.

B. Bad Complaint Resolve

Complaint resolve is part of customer service process established by the companies in term of providing supports to their customers [12]. In online shopping, customer complaint resolve is not only a knowing of customer behaviour but also the stimuli towards online customer satisfaction [13]. The importance of effective resolving customers' complaints is that it reduces the customers' angers created by product or service failure and therefore reducing customer dissatisfaction [14]. Trinh and Dao [15] highlighted the integration of customer complaint handling module into electronic customer relationship management system at e-commerce companies to effectively manage their customers and to leverage customer satisfaction and customer loyalty. Nagel and dos Santos [16] emphasized that good performance of customer handling system brought economic values and greater purchase intention from the customers. Kussusanti et al. [17] attained the importance of maintaining effect complaint handling system as a method to increase online customer satisfaction.

Amazhanova and Huseynov [18] collected the data from 210 online customers and obtained empirical evidence of which complaint resolve affected positively and significantly customer satisfaction and this factor also affected significantly perceived usefulness from the customers. Thus, the second hypothesis is proposed as below:

H2: There is mediating relationship between bad complaint resolve, customer experience with online shopping and customer satisfaction with online shopping.

C. Slow Delivery Process

Delivery process is perceived as part of distribution network of the companies and it represents for a process of transporting final products to the customers [19]. When the customers purchase products online, they demand for delivery services [20]. Delivery performance associated with online customer satisfaction if the customers perceived that the delivery met or exceeded customers' expectation [21]. The performance of delivery is guaranteed through product packaging as reliable method to protect final goods at a high-quality condition when it is shipped to the customers [19].

Kovač *et al.* [22] obtained empirical evidence related the importance of delivery in e-commerce business and they highlighted the importance of tracking, delivery cost, and delivery speed. Cao et al. [23] provided empirical evidence related post-purchase shipping and customer experience. They concluded that online shopping companies must deliver different delivery options with the ability of tracking and product return to support online customer satisfaction as well as their future purchase intention. A survey's result was reported by Ayegba et al. [24], however, affirmed that Nigerian customers were still satisfied with online shopping even though they faced a slightly delay in product delivery. A

contrast finding was highlighted by Hemalatha and Balakrishnan [25] that addressed the main concern of Indian customers towards online shopping the delay in delivery. Al-Jahwari et al. [9] confirmed the role of delivery guarantee in generating online customer satisfaction among young customers in Oman. Thus, the third hypothesis is proposed as below:

H3: There is mediating relationship between slow delivery process, customer experience with online shopping and customer satisfaction with online shopping.

D. Poor Product Quality

Product quality is simply defined as the abilities of a product to perform its functions correctly [26]. When the customers need to purchase a product, they develop some requirements related product quality and expect that purchased product can satisfy their given needs [27]. In online shopping, product quality is among top stimuli factors behind of product safety, guarantee of delivery [9]. Significant effect of product quality on customer preferences and behaviours is explained by the emotional value generated when the customers experienced actual quality performance of a product [28].

Empirical evidence from Djumarno et al. [29] confirmed that product quality had significant effect on customer satisfaction. These researchers provided quantitative effect of product quality in which if product quality was improved by 1 unit, customer satisfaction was improved by 0.219 unit. In addition, Momotaz and Hasan [30] collected the data from 329 online shoppers and they concluded that product quality was one of key determinants of online service quality. Thus, the fourth hypothesis is proposed as below:

H4: There is mediating relationship between poor product quality, customer experience with online shopping and customer satisfaction with online shopping.

E. Technical Problem

In online shopping, technical problem occurs from slow Internet connection that limits the successful purchase or search for relevant products [31]. The effect of payment as technical issues on online shopping experience and online shopping satisfaction was highlighted by previous researchers. For instance, Rajamma et al. [32] identified one the main reasons that led to the customers' abandon of online shopping cart was transaction inconvenience. Other technical problems during online shopping refer to inappropriate setup in website's navigation functions or the lack of computerize knowledge from online shoppers [33].

It also arises from misplacing information from the sellers [34], additional charges [35], pop-ups [36], or bad experience with website design [37]. Xia and Sudharshan [38] confirmed that the right configuration of pop-up might increase the online sales, but wrong setup might lead to the detrimental. This effect was explained by the fact that pop-up had both positive and negative effect to consumers and negative effect referred to the interruptions during their online shopping process. Thus, the fifth hypothesis is proposed as below:

H5: There is mediating relationship between technical problem, customer experience with online shopping and customer satisfaction with online shopping.

F. Relationship between Customer Experience and Customer Satisfaction

During the time, the relationship between customer experience and customer satisfaction has been analysed by different researchers regarding online shopping context. Nilsson and Wall [39] conducted a research about online customer experience and customer satisfaction in online purchasing clothes. They proposed measuring online customer experience through ease of use, customer interaction, store offerings, customer reviews, customization, security, fulfillment reliability, and customer service. Collecting the data from 218 online customers, they confirmed that most of the antecedents of customer experience affected positively and significantly customer satisfaction, except customer interaction.

Pham and Ahammad [40] studied the antecedents and the consequences of customer satisfaction in online environment. They confirmed the role of customer experience and recommended that online companies should maintain customer experience during online purchase process. Vakulenko et al. [41] developed a research about online retail experience and online customer satisfaction. They provided empirical evidence in which online customer experience had significant and direct linkage with customer satisfaction. Thus, the sixth hypothesis is developed as below:

H6: Customer experience with online shopping has positive impact on customer satisfaction.

III. CONCEPTUAL MODEL

A conceptual model was developed in which payment barrier, bad complaint resolve, slow delivery process, poor product quality, and technical problem are selected, and they affect directly online customer experience and affect indirectly online customer satisfaction. Herein, customer experience plays mediator role in the relationship between online customer satisfaction and other factors. Proposed conceptual model is illustrated in the figure below:

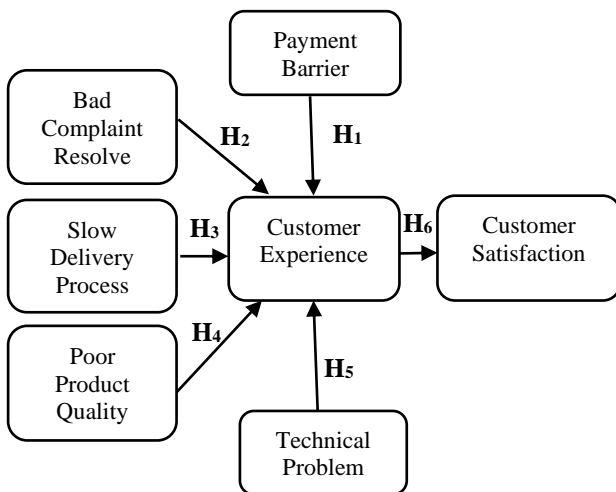


Fig. 1. Proposed conceptual model.

IV. CONCLUSION

With the research model and discussion above, expected outcome is that all factors have significant effect on customer satisfaction through mediate effect of customer experience.

Moreover, by developing this study, the researcher expects that it firstly contributes to the body of knowledge of customer behavior towards online shopping in Vietnam. This study is one of the first research attempt on pre-normal phase of COVID-19 pandemic and it helps pollical makers in Ministry of Planning and Investment to understand the role of e-commerce, especially when the pandemic requires social distancing and less personal interaction.

In addition, the researcher believes that the marketers or the top managers at e-commerce companies in Vietnam to have sufficient information about how their customers' experience with online shopping platforms and related services. They also understand how the customer satisfaction level. It is denoted that the questionnaire is developed upon on the pilot study with online customers. Thus, the study is practical to the marketers and other managers in e-commerce companies. Finally, other researchers can utilise this study's outputs as reference for their future works.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Anh Tuan Pham conducted the literature review and wrote the paper. Both Anh Tuan Pham and Dr. Khashayar jointly developed the proposed conceptual model and hypothesis for this study. All authors have approved the final version.

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