

TÁC ĐỘNG CỦA TRẢI NGHIỆM KHÁCH HÀNG LÊN TRUNG THÀNH SỬ DỤNG FINTECH TRONG BỐI CẢNH DỊCH COVID-19 TẠI VIỆT NAM

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Tóm tắt

Thế giới hiện đang suy thoái vì đại dịch Covid-19. Mục đích của nghiên cứu này là nhằm đưa ra các đề xuất để thúc đẩy sự phát triển của Fintech như một giải pháp phục hồi kinh tế trong và sau Covid-19. Nghiên cứu sử dụng phương pháp định lượng để phân tích dữ liệu thu thập được từ 168 đáp viên bằng phần mềm SPSS 26 và AMOS Graphics 24. Kết quả nghiên cứu xác định 6 yếu tố ảnh hưởng đến trải nghiệm của khách hàng trong ngành Fintech: Mức độ đáp ứng, giao diện người dùng, bảo mật, cảm nhận tính dễ sử dụng, cảm nhận tính đổi mới của công ty và cảm nhận giá trị. Do đó, trên cơ sở kết quả thu được, tác giả đề xuất một số khuyến nghị và hàm ý đối với các nhà cung cấp dịch vụ Fintech nhằm phát triển lĩnh vực Fintech tại Việt Nam, góp phần vào sự thịnh vượng chung của cả nền kinh tế.

Từ khóa: Trải nghiệm khách hàng, lòng trung thành của khách hàng, Fintech, công nghệ tài chính, covid-19

THE IMPACT OF CUSTOMER EXPERIENCE ON LOYALTY TO USING FINTECH IN THE CONTEXT OF COVID-19 PANDEMIC IN VIETNAM

Abstract

The world is currently in a recession because of the Covid-19 pandemic. The purpose of this research is to give the recommendations and implications to promote the development of Fintech as the economic recovery solution during and after Covid-19. The study uses the quantitative method to analyze the data collected from 168 respondents with software SPSS 26 as well as AMOS Graphics 24. The results of the research determine 6 factors affecting the customer experience in the Fintech industry: Responsiveness, user interface, security, perceived ease of use, perceived firm innovativeness, and perceived value. Consequently, based on the obtained results, the authors propose some recommendations and implications for Fintech

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service providers in order to develop the Fintech sector in Vietnam contributing to the prosperity of the whole economic system.

Keywords: Customer experience, customer loyalty, Fintech, financial technology, covid-19.

1. Introduction

In recent years, the whole world has faced one of the biggest pandemics, Covid-19. It has made the global economy be in the worst recession ever since the Second World War (Felsenthal, 2020). Following this situation, obviously, Vietnam is also affected. After two years of the COVID-19 crisis, the global recovery is still underway, but momentum has weakened as resurgence of the outbreak and uncertainty about the direction of the pandemic increase with the emergence of variants of the coronavirus - like the Omicron variant. The global economy is estimated to grow 5.5% in 2021 and is forecast to grow 4.2% in 2022 (The World Bank, 2022). Most countries which have entered a new phase, have learned to live with and adapt to the crisis. Recovery in each country depends heavily on vaccination rates and the government's ability to support the economy to weather a protracted crisis, especially as many countries are going through a re-infection phase. Countries that have vaccinated a large proportion of the population recover more strongly in 2021, before new waves of COVID-19 infections and the challenges associated with restarting the economy cause weak growth. This group includes most of the developed economies and many countries in the group of emerging markets and developing economies including Vietnam (The World Bank, 2022).

Nikkei, the most influential financial newspaper in the world, has said that Vietnam belongs to the group of the most competitive Fintech markets in Asia, especially for domestic Fintechs. The amount of startups in the Fintech field in Vietnam is always growing every year, from 39 companies (in 2015) to 44 companies (in 2017) and 124 companies (in 2019) (Vietnam Fintech Report 2020). In the period 2017 - 2020, the number of startups in the Fintech field in Vietnam boosted by more than 179%. In which, payment services remain the most popular segment, accounting for 31% of all the Fintech startups; followed by P2P lending (17%), blockchain (13%), POS (7.5%), asset management (7.5%) (Fintech News Singapore, 2020). While Vietnam's payments startups continue to grow and gain investor interest, peer-to-peer lending and the crypto/blockchain space are the two segments with the strongest growth. These two services saw the number of startups increase from less than 5 in 2017 to more than 15 startups in 2020. Vietnam now has more than 39 licensed non-banking service providers, with 5 The biggest e-wallets are MoMo, Payoo, Moca, Zalo Pay, and ViettelPay.

At the ASEAN Business and Investment Online Forum 2021, Deputy Governor of the State Bank of Vietnam (SBV) Nguyen affirmed the importance of Fintech in economic recovery and development in Vietnam (Duc, 2021). Fintech is a solution that helps users pay or access financial services through the internet. It has the capability of changing consumer trends, habits, psychology, and behavior to increase the number of transactions in the economy. It can be said that Fintech has a great potential in solving challenges and obstacles caused by the pandemic, is an opportunity to help the banking industry speed up digital transformation, help Vietnam quickly recover its economy and shorten the time to become a developed country in the future.

Customer loyalty to the brand plays an important role in the success of the brand. Many studies have shown that companies often have the illusion of looking for new markets but forget to nurture existing markets. Meanwhile, the profit for the brand of the existing market is often

much higher than that of the new market. The reason is that marketing costs for existing brands are less expensive (Mittal et al., 1998). Consumer loyalty to a brand in general or a service brand like fintech in particular, expresses the tendency of customers who use that brand and repeat this behavior (Chaudhuri, 1999). Therefore, the brand that creates high consumer loyalty, the higher the profit for the company. Therefore, this research was conducted to analyze the factors that can affect customer experience which helps retain customers in order to make recommendations to improve service quality to help promote the development of Fintech services in Vietnam.

2. Literature review and hypothesis development

2.1. Customer experience

Customer experience was defined by Carbone and Haeckel (1994) as “aggregate and cumulative customer perception created during learning about, acquiring, using, maintaining and disposing of a product or service”. Jain, Aagja, and Bagdare (2017) propose a more recent definition of customer experience: “the aggregate of feelings, perceptions, and attitudes formed during the entire process of decision making and consumption chain involving an integrated series of interactions with people, objects, processes, and environment, leading to cognitive, emotional, sensorial, and behavioral responses”. The preceding discussions and definitions lead us to the conclusion that (1) customer experience is a new perspective on customer-brand relationships, (2) it encapsulates all customer behaviors with all customer value chain partners and items offered by a company, and (3) it will leave an impression on customers' minds.

Customer experience is listed among the success elements which explain the current Fintech industry expansion in press reports from financial and public organizations (KPMG, 2020). However, there is a scarcity of academic literature on this subject. In a few research that the author will analyze next, customer experience within Fintech is referenced only obliquely. Customer experience is linked to consumer happiness and has a favorable influence on customer loyalty, according to the research of e-banking in the UK. The Fintech sector offers innovative technologies to improve customer experience, rendering the traditional financial-banking paradigm, which is centered on closeness to consumers (Palomo et al., 2018).

Customer experience has also been linked with “service quality” in service research, which evaluates the final result of the service process as viewed by customers. Parsuraman et al. (1988) introduced SERVQUAL, a generally accepted measuring instrument, to quantify service quality. However, this scale is insufficient to assess consumers' experiences at all points of contact with the company. The fundamental reason for this is that customers are viewed as passive observers in service quality studies, processing information and then evaluating service interactions as a result. However, on the other hand, neither the ties with the company (in a social setting) nor the entire customer process have been explicitly explored or scientifically investigated (Walter et al., 2010). Furthermore, customer perception factors are important to measure customer experience, and explain the relationship between customer experience and customer loyalty.

2.2. Customer loyalty

Customer loyalty relates to how long they stick with a specific brand, product, or service (Sriram, 2014). It demonstrates the level of satisfaction that a customer feels about the services they are served by a service supplier. According to Zeithaml et al. (1990), customer loyalty is

defined as the willingness of customers to speak positively about the services they receive to others who may become customers. Customers that are loyal to their service providers also want to urge their relatives and friends to do business with them.

Customer loyalty motivates them to prioritize their brands in all they do in the Fintech industry. Consumer loyalty behavior, according to Zeithaml et al. (1990), encourages customers to interact more with the services company within the next five years. Sriram (2014) claims that loyalty behavior is overly broad and multi-dimensional because it includes four dimensions: buy intentions, word of mouth, price sensitivity, and complaining behavior. Customer loyalty is linked to customer happiness and loyalty behavior, according to Zhong and Moon (2020). They discovered that while a pleasurable shopping experience can lead to pleasure, and loyalty, these are reply effects, whereas happiness occurs before consumption.

2.3. Impact of customer experience on loyalty using S-O-R model

The S-O-R-model, which is practical, was first introduced by James A. Russel Albert Mehrabian in 1974. By using the S-O-R model, the customer experience can be assessed in a variety of different conditions (Waqas et al., 2021). An external stimulus leads to a person's internal reaction, which defines a specific response, according to the S-O-R framework. The offerings of Fintech companies influence customer experience, which leads to specific outcomes. The impact that stirs up the individual is referred to as "stimulus." Fintech businesses provide technology-based financial services, and they create and design their services as well as use marketing-related stimuli to surprise or attract customers. Fintech companies use a variety of platforms to promote key features of the product. The "organism" is related to the cognitive and affective states of customers, which are made up of internal systems triggered by stimuli (Kamboj et al., 2018). Within the "organism" these processes create the client experience. It's based on a customer's evaluation of multiple brands, companies, or products (Rose et al., 2017). Customer experience is a subjective behavior driven by sociocultural factors, expectations, customer training, and Fintech application capabilities, and is the result of a unique setting for each person. The "response" was prompted by customer experience in Fintech companies. A relevant customer experience can result in positive outcomes such as positive word-of-mouth, repurchase intention, customer trust, and customer loyalty, but a less relevant experience can also result in negative outcomes such as abandoning Fintech services, and negative word-of-mouth (Rose et al., 2017). In this research, the author looks at customer loyalty as a result of their experience. Previous research has found a link between customer experience and customer loyalty (Lemon & Verhoef, 2016).

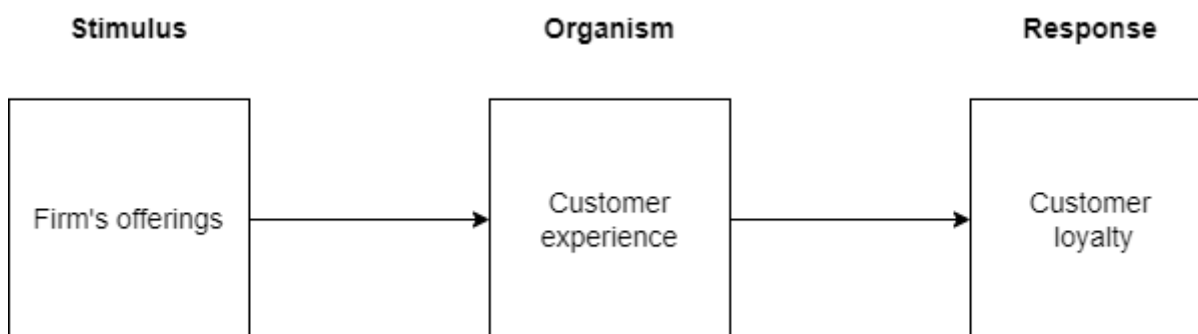


Figure 1. S-O-R model applied to analyzing customer experience in Fintech

Source: Adapted from Becker and Jaakkola (2020)

2.4. Hypotheses development

Responsiveness

Responsiveness which is related to the quick response time when the technical issue occurred or when the customers have questions to be answered as well as the opportunity to obtain the technical support (Alshamayleh et al., 2015). In reality, when customers are using mobile applications or websites, they usually face several troubles regarding system errors, response time and so on. However, most of these applications and websites have not adopted the new system instantly or fixed the problems so the customers always need the technical support from the service providers. Responsiveness for customers was considered necessary and this led to e-service quality. Ali (2019) stated that customers viewed responsiveness as an important element for e-service quality and reported responsiveness had a positive and significant impact on e-service quality. Moreover, Sahadev (2008) mentioned that e-service quality has a positive impact on customer experience. Hence, the author wants to propose the hypothesis:

H1: Responsiveness has a positive impact on customer experience in using Fintech service.

User interface

Van Riel et al. (2003) mentioned in their research that user interface design is the best presentation for the quality of e-service. In traditional services, the location where the service is consumed represents the tangible dimension; whereas, in online service delivery, the design of the user interface is the most visible contact point between the firm and the client. It includes the entire design, overall ease of use and aesthetics. For all the reasons above, the following hypothesis is proposed:

H2: User interface has a positive impact on customer experience in using Fintech service.

Security

Finally, the third dimension of e-service quality mentioned in the literature review section above is the security of an e-service, which relates to customers' concerns about possible security issues. Customers commonly skip financial service if they have the impression that the card payment is not safe, and that their information is not kept secret during or after the transaction (Holloway and Beatty, 2008). Customers may be concerned that their personal information, such as name and address, will be shared with all credit card companies (Holloway and Beatty, 2008). After making an online purchase, customers expect internet retailers to safeguard them from theft, fraud, and "junk" emails. In light of this, it is thought that the security and privacy of an e-service are key for the service qualities, and as such the security dimension influences consumers' overall evaluation of an online store. Accordingly, the author proposes the following hypothesis:

H3: Security has a positive impact on customer experience in using Fintech service.

Perceived ease of use

The perceived ease of use rating indicates how straightforward and easy it is to utilize Fintech apps. Ease of use provides a sense of control, which enhances the affective factors of

the customer experience positively (Waqas et al., 2021). Customers do not really want to spend time on learning how to use a Fintech application. Customers' financial environments are influenced by perceived control and ease of use, with the latter being more relevant for those with low technology preparedness (Parasuraman, 2000). Learning or implementing technology is a source of stress for them, thus the time with modern technology may not be pleasant, at least in the beginning. Even though ease of use isn't an issue for tech-dependent clients like Generation Z or Millennials, it still helps to create meaningful customer experiences. Customer loyalty intentions are also influenced by ease of use. The ease of use of a Fintech service helps to lessen the predicted stress of using it (Chuang, 2016). Through a multi-stage system of conscientization, enrichment, capacitation, and cultivation, Fintech companies promote simplicity of use. From the above analysis, following research hypotheses are proposed:

H4: Perceived ease of use has a positive impact on customer experience in using Fintech service.

Perceived firm innovativeness

Customers' perceptions of a company's potential to create innovative products and experiences are captured by perceived business innovativeness (Kunz et al., 2011). Fintech is frequently regarded as a significant component of innovation. Customer perceptions of a company's innovation contribute to higher product ratings, increased consumer involvement, and increased customer loyalty. Customer experience is stimulated by the development of novel products. Consumers' affective and cognitive responses are influenced by innovation. An innovative corporation is thought to be technologically advanced while also generating positivity among customers. A significant source for perceived innovation is market impact, which is demonstrated by goods and services that combine better answers to consumer concerns (Kunz et al., 2011). Fintech companies are known for their ability to innovate, using technology to create personalized services that improve the consumer experience. Product, process and technology innovations are all examples of Fintech innovation that have an impact on improving customer experience (Nicoletti, 2017). As a result, we argue that:

H5: Perceived firm innovativeness has a positive impact on customer experience in using Fintech service.

Perceived value

The quality and pricing of a service can be linked to understand perceived value (Fornell et al., 1996). Costs can be both money and time for customers who use Fintech. The customer's benefit is quantified in monetary terms by the perceived value. The more meaningful the client experience, the better the perceived value. Financial savings are one of the most frequently mentioned advantages of Fintech firms. Fintech companies are capable of offering services at affordable prices on account of an efficient cost structure, relying on technological and innovation progress (Agarwal & Zhang, 2020). The perceived value of Fintech services, particularly digital financial services, is a key factor of behavior intention to use them. Customers may do financial transactions anywhere and at any time, which is critical for Fintech. Fintechs provide nonstop financial e-services, saving customers time and money. Customers with technical skills will utilize the latest if they have a better perceived value. As a result, we propose that:

H6: Perceived value has a positive impact on customer experience in using Fintech service.

Customer experience and customer loyalty

Customer loyalty is one of the most desired results of any company–customer interaction. In the quest for customer loyalty, businesses attempt to find the greatest components that will persuade customers to return. The organization benefits in a variety of ways as a result of a pleasant customer experience, including enhanced trust, commitment, positive word-of-mouth, and customer loyalty (Lemon & Verhoef, 2016). Customer loyalty is defined as a stronger level of commitment to a firm as a result of a positive customer experience. Customer loyalty has been proven in previous studies to be positively influenced by customer experiences in online retail apps. As a result, the author proposes the following hypothesis:

H7: Customer experience has a positive impact on customer loyalty to using Fintech service.

The research model is developed based on the S-O-R model and other models used to measure e-service quality, customer experience and customer loyalty, details in the following figure:

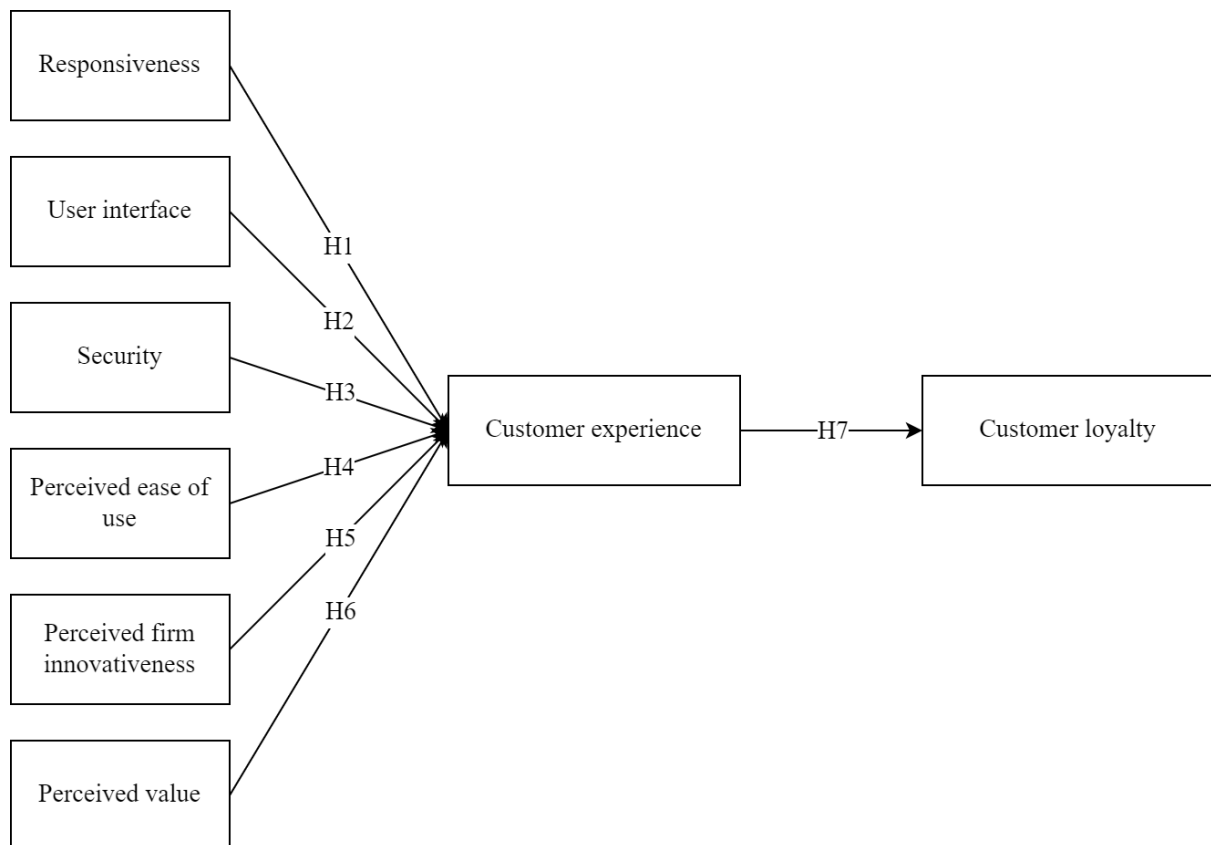


Figure 2. Research model

Source: Author (2022)

3. Research methodology

3.1. Questionnaire design

The questionnaires focus on determining the factors that influence customer experience. It includes 22 closed-ended questions that clarify participants' feelings towards various areas of

customer experience. As previously stated, the rating system incorporates a five-point Likert scale. This easy-to-understand manner of response allows respondents to indicate their agreement or disagreement with several statements about current customer experience. In total, there are 30 questions in the questionnaire. The questionnaire in detail is presented below:

Table 1. Questionnaires

| Code | Questions | Sources |
|-----------------------|---|-------------------------|
| Security | | |
| SE1 | 1. My personal information does not leak outside. | |
| SE2 | 2. Information related to my finance activities is protected. | (Sohail et al., 2008) |
| SE3 | 3. Other sites or applications cannot access my bank information. | |
| SE4 | 4. There are simple ways for canceling transactions. | |
| User interface | | |
| UI1 | 1. User interface has a well-organized layout. | |
| UI2 | 2. I can easily go back to the previous page. | (Zeithaml et al., 2000) |
| UI3 | 3. I can easily use the navigation buttons. | |
| UI4 | 4. The text displayed in the interface is easy to read. | |
| Responsiveness | | |
| RE1 | 1. I can instantly get responses. | |
| RE2 | 2. I can timely get the customer service. | (Li and Suomi, 2009) |
| RE3 | 3. I can easily find the contact information to ask for support. | |
| RE4 | 4. My problems can be quickly solved. | |
| Perceived ease of use | | |
| PEU1 | 1. Using Fintech services is easy. | Rose et al. (2012) |
| PEU2 | 2. Learning how to use Fintech services is easy. | (David, 1989) |

| Code | Questions | Sources |
|--------------------------------------|--|--|
| PEU3 | 3. Interactions in Fintech services are easy to understand. | |
| PEU4 | 4. Fintech services suggest useful instructions to complete tasks. | |
| Perceived value | | |
| PV1 | 1. Using Fintech services helps me save money and time. | |
| PV2 | 2. Cost of using the Fintech service is worth it. | (Agarwal and Teas, 2001) |
| PV3 | 3. Regarding the price, using Fintech services turns out to be a good bargain. | |
| Perceived firm innovativeness | | |
| PFI1 | 1. Firm continuously improves service quality based on market volatility. | |
| PFI2 | 2. Firm continuously updates with new technological applications. | (Kunz et al., 2011) |
| PFI3 | 3. Firm always gives new, creative solutions. | |
| Customer experience | | |
| CE1 | 1. I can obtain much useful information from Fintech services. | (Bustamante and Rubio, 2017) |
| CE2 | 2. I feel satisfied when using Fintech services. | Rose et al. (2012) |
| CE3 | 3. I care about others' opinions about using Fintech services. | (Bustamante and Rubio, 2017) |
| CE4 | 4. I can use Fintech services at any time. | (Sanja Pekovic & Sylvie Rolland, 2020) |
| Customer loyalty | | |
| CL1 | 1. I introduce to others the Fintech services that I am using. | (David Gefen, |

| Code | Questions | Sources |
|------|--|----------------------------|
| CL2 | 2. I encourage others to use Fintech services that I am using. | 2002) |
| CL3 | 3. I always consider the Fintech services that I am using as the first choice. | |
| CL4 | 4. I will continue to use the Fintech services that I am using. | (Parasuraman et al., 2005) |

Source: Author, 2022

3.2. Sampling and data collection

To confirm this again, the population of this research is all people who are living and working in Vietnam as well as using Fintech services. Because of constraints about time and finance, defining exactly the amount of population and collecting all the data from the population of this research is impossible to the author. Therefore, in this research the author decided to use the random sampling method. Conducting this survey took place during two months from March to April in 2022. Almost all the people who are using Fintech are also using social media so the author considers social media platforms to be effective channels to convey the survey to the respondents. In short, the online survey is reasonable and effective in this research.

By using this method, this research would reach 168 answer sheets which is sufficient enough to ensure the reliability for the next step - data analysis.

3.3. Data analysis

First of all, data distribution will be evaluated to identify general demographic information, the characteristics of the survey sample groups, such as gender, age, education level, marital status, current job, income.

To analyze the results of observed variables collected from the survey, this research first uses SPSS 26 to assess the reliability of all variables then do the exploratory factor analysis to assess the convergent validity of the latent components and remove variables that can not ensure reliability, reducing the number of variables that are superfluous by using Square rotation (varimax) with Principal Component Analysis. All accepted variables will be put into Confirmatory Factors Analysis (CFA) to ensure that the dataset collected fits with the research model. CFAs models are often used to independently define, test, and tune measurement models. The aim is to establish well-suited measurement models that can be used to test structural models. If the hypothesized CFA model fits data, it can be said that the structure tested in the CFA model is suitable with the dataset of the research. Finally, the author transforms the CFA model into a Structural Equation Modeling (SEM) model to simultaneously estimate a succession of correlations between latent components. In fact, SEM is the most effective method for handling CFA for measurement models, analyzing the causal links among latent variables in the research model, estimating their covariance and variance, and testing hypotheses for moderators and mediators in a model (Awang, 2012).

4. Research results findings

4.1. Descriptive analysis

As previously stated, the questionnaire employs a 5-point Likert scale to represent respondents' levels of agreement, with 1 indicating strong disagreement and 5 indicating strong agreement. The mean value represents the level of agreement with each statement; if the mean value approaches 5, it suggests high levels of agreement; if the mean value returns to 1, it indicates the greatest level of disagreement with that statement.

Table 2. Descriptive statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|-----|-----|---------|---------|------|----------------|
| SE | 168 | 1 | 5 | 3.81 | 0.824 |
| UI | 168 | 1 | 5 | 3.84 | 0.846 |
| RE | 168 | 1 | 5 | 3.77 | 0.998 |
| PEU | 168 | 1 | 5 | 3.77 | 0.967 |
| PV | 168 | 1 | 5 | 3.74 | 1.066 |
| PFI | 168 | 1 | 5 | 3.81 | 1.083 |
| CE | 168 | 1 | 5 | 3.84 | 1.110 |
| CL | 168 | 1 | 5 | 3.81 | 1.128 |

Source: Author (2022)

In general, all observations have a minimum value of 1 and a maximum value of 5. Through the average value of observations, it can be seen that most of the observations have similar means or the differences among them are not significant. In which, we can see that 2 factors UI and CE have the highest mean value with 3.84. This can be explained by the fact that people concentrate a lot on user interface and customer experience. Meanwhile, the factor PV returned with the mean is the smallest with 3.74 but still high compared to the value mean of scale (3). It can be seen that despite receiving the lowest consensus in the survey, with the mean value is 3.74, it can be said that the perceived value of customers about Fintech services in Vietnam is generally still acceptable. With a margin of difference of only 0.1, the factors of the research model are quite uniform and are likely to have a good correlation with each other. Lastly, all the standard deviations are ranged from 0.824 to 1.128. With these measures, it can be explained that the volatility of all factors is quite the same around the mean value. In other words, the correlations between factors are comparatively stable.

4.2. Reliability and exploratory factor analysis

Preliminary evaluation of the scale was conducted by using Cronbach's alpha coefficients and Corrected item-total correlation to eliminate junk variables that worsen the reliability of the

scale and then the author does the factor analysis with the extraction method Principal Components Analysis together with the Varimax factor rotation using SPSS 26 software. The analysis results are shown below:

Table 3. Reliability and validity of variable measurements

| Observed variables | Cronbach's alpha | KMO | p-value | Average variance explained (%) | Minimum factor loadings |
|--------------------|------------------|-------|---------|--------------------------------|-------------------------|
| SE | 0.964 | 0.834 | 0.000 | 90.907% | 0.942 |
| UI | 0.970 | 0.817 | 0.000 | 91.780% | 0.948 |
| RE | 0.956 | 0.787 | 0.000 | 88.837% | 0.929 |
| PEU | 0.952 | 0.788 | 0.000 | 87.511% | 0.917 |
| PV | 0.924 | 0.737 | 0.000 | 87.168% | 0.901 |
| PFI | 0.949 | 0.735 | 0.000 | 90.938% | 0.926 |
| CE | 0.936 | 0.803 | 0.000 | 84.861% | 0.884 |
| CL | 0.944 | 0.769 | 0.000 | 86.202% | 0.915 |

Source: Author (2022)

Based on the table above, we can see that all the variables in the model have Cronbach's alpha larger than 0.9 (very reliable) and satisfy the condition that the Kaiser-Meyer-Olkin measure is greater than 0.5, all p-values give the value of 0.000, the coefficients of Average variance explained are all larger than 80% with the minimum value of 84.861% and the maximum value up to 91.780%. Regarding factor loadings, all variables are also greater than 0.5. This means that the correlation between the observed variables and the factors is being indicated very well and the convergent validity of each variable is assured.

4.3. Confirmatory factor analysis

The study evaluates the impact between the factors in the proposed relationship of the research model and tests the reliability and stability of the estimated model and uses the structural equation modeling. After adjusting for some possible relationships between the errors of the observed variables in factors, the analysis results are: Chi – square/df = 2.356 is less than 3; CFI = 0.928, TLI = 0.917 are all greater than 0.9; RMSEA = 0.067 is less than 0.08. From the results, it shows that the model is compatible with the collected data set. After the model fit, the author uses the Validity and Reliability test plugins of Amos Graphics software to perform the convergent and discriminant testing of the scale.

Table 4. Model validity measures

| | CR | AVE | MSV | RE | UI | SE | PEU | PFI | PV | CE | CL |
|-----|-------|-------|-------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| RE | 0.956 | 0.846 | 0.559 | 0.920 | | | | | | | |
| UI | 0.969 | 0.888 | 0.553 | 0.569 *** | 0.942 | | | | | | |
| SE | 0.966 | 0.875 | 0.571 | 0.628 *** | 0.704 *** | 0.936 | | | | | |
| PEU | 0.951 | 0.829 | 0.553 | 0.618 *** | 0.677 *** | 0.724 *** | 0.910 | | | | |
| PFI | 0.952 | 0.870 | 0.465 | 0.485 *** | 0.613 *** | 0.555 *** | 0.570* ** | 0.933 | | | |
| PV | 0.929 | 0.814 | 0.523 | 0.528 *** | 0.546 *** | 0.564 *** | 0.549* ** | 0.575 *** | 0.902 | | |
| CE | 0.942 | 0.802 | 0.636 | 0.736 *** | 0.728 *** | 0.755 *** | 0.743* ** | 0.677 *** | 0.723 *** | 0.896 | |
| CL | 0.947 | 0.817 | 0.669 | 0.748 *** | 0.744 *** | 0.732 *** | 0.739* ** | 0.682 *** | 0.658 *** | 0.932* ** | 0.904 |

Source: Author (2022)

The above table gives the indicators to help evaluate the convergence and discriminability of the scale, in which the symbols *, ** and *** are the regression coefficients with statistical significance at 10%, 5%, 1% respectively. Based on the results, we can see that all Composite Reliability (CR) indexes are greater than 0.9 and Average Variance Extracted (AVE) are greater than 0.8. According to Hair et al. (2010) CR indexes only need to be greater than 0.7 and AVE is greater than 0.5 so the scale has satisfied the required convergence. In terms of discriminant validity, all the Maximum Shared Variance (MSV) coefficients are less than AVE, and in the Fornell and Larcker table the square root of AVE (SQRTAVE) values are larger than inter-construct correlations. From all of the above, it can be said that the proposed scale has ensured the necessary convergent and discriminant validity.

4.4. Structural equation model

After adjusting some possible relationships between the errors of the observed variables in the factors, the obtained results are the coefficients representing the fit of the model that all show that the model is suitable for the collected dataset and the scales also achieve the necessary convergent and discriminant validity. The article continues to use model analysis by SEM linear structure to evaluate the relationships between factors.

The results of the research model using SEM include 8 variables: Responsiveness (RE), user interface (UI), security (SE), perceived ease of use (PEU), perceived firm innovativeness (PFI), perceived value (PV), customer experience (CE) and customer loyalty (CL). Indicators showing the fit of the model include: Chi-square/df = 1.904 (< 2); CFI = 0.925 (> 0.9), TLI = 0.943 (> 0.9) and RMSEA = 0.041 (< 0.06) all satisfy the conditions in evaluating the model fit (Hu & Bentler, 1999), thus keeping the fit of the model with the collected data set. Next, the

author conducts an evaluation of the unnormalized regression model to test the hypotheses and significance of the variables for the model.

Table 5. Regression weights

| | Standardized Estimate | S.E. | C.R. | P-value | Label |
|-----------------|------------------------------|-------------|-------------|----------------|--------------|
| CE ← RE | 0.273 | 0.043 | 5.209 | 0.000 | Accepted |
| CE ← UI | 0.163 | 0.044 | 2.730 | 0.006 | Accepted |
| CE ← SE | 0.147 | 0.059 | 2.314 | 0.021 | Accepted |
| CE ← PEU | 0.153 | 0.050 | 2.524 | 0.012 | Accepted |
| CE ← PFI | 0.164 | 0.044 | 3.096 | 0.002 | Accepted |
| CE ← PV | 0.229 | 0.045 | 4.302 | 0.000 | Accepted |
| CL ← CE | 0.943 | 0.056 | 18.924 | 0.000 | Accepted |

Source: Author (2022)

Looking at the unnormalized regression coefficients above, we can see that the unstandardized estimation parameters for the relationships between 8 variables are statistically significant ($p\text{-value} < 0.05$). Accordingly, 7 hypotheses proposed by the author are accepted. As for the estimate, it is easy to see that these values are all greater than 0 showing a positive correlation between the independent variables and the dependent variable. In short, according to the results of testing the research hypotheses, the initial hypotheses are accepted and these relationships are valid in theory. Most of the correlations between the independent variables and customer experience do not have a big difference, only the impact of CE on CL is quite high compared to the common ground and all estimates show that these are the positive correlations.

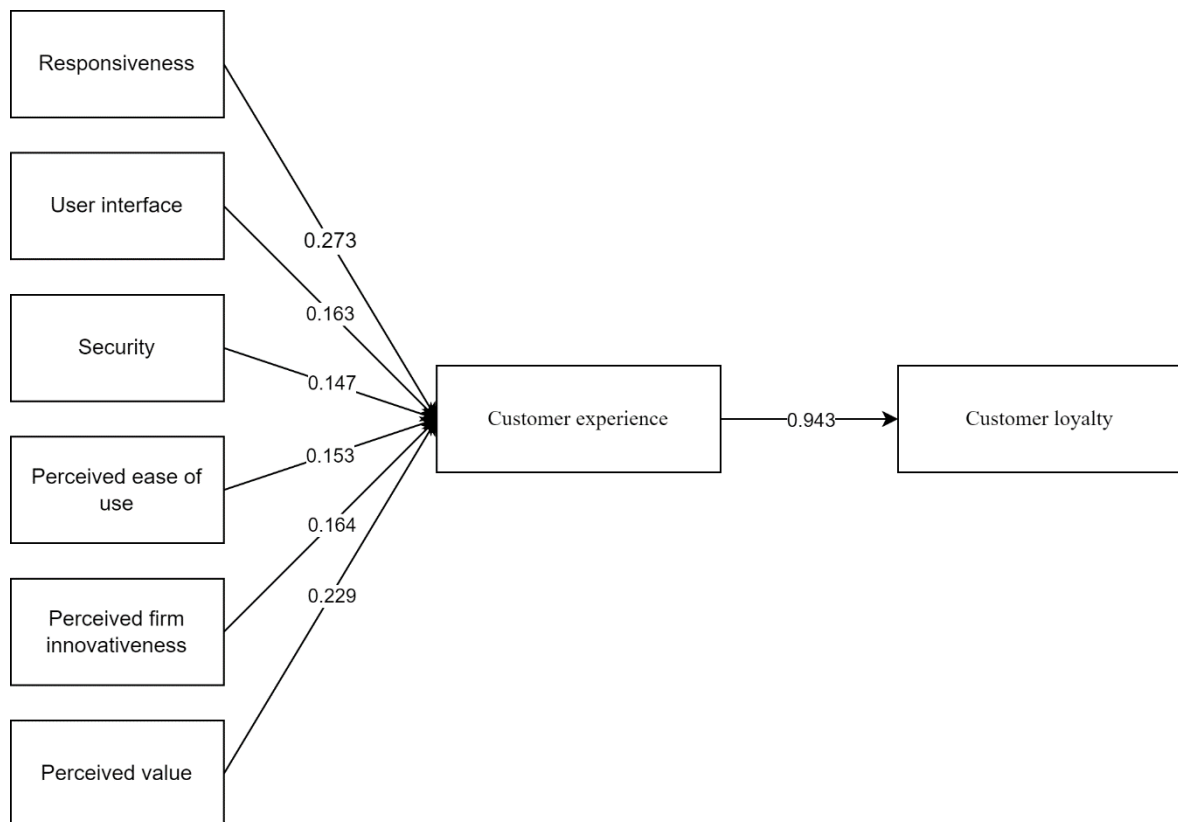


Figure 3. Findings of Research model

Source: Author (2022)

5. Discussion

It can be said that one of the limitations is also a strength of the research. This study only focuses on the customer experience of the Fintech industry with a view to supplying service providers with a general view of Fintech in Vietnam and what the current customers feel about the quality of service. By selecting this topic for the research, the author also wants to show readers the importance of Fintech in the economic system as today, especially in the context of Covid-19 pandemic.

Based on prior research and proven results in this study, customer experience has a great influence on customer loyalty and customer experience is influenced by 6 factors: Responsiveness, user interface, security, perceived ease of use, perceived firm innovativeness, and perceived value. All of these factors have high reliability as well as fully satisfy the requirements of convergent and discriminant validity, clearly showing that they are correlated with each other and also separate from each other. Research results show that customer experience has a positive effect on customer loyalty, in which there are two groups of factors that need attention: e-service quality and customer perception. For the e-service quality group, providers need to pay the most attention to quality in terms of responsiveness because in the process of using digital services, customers are likely to encounter system and handling problems. Especially when it comes to financial services, having 24/7 availability and instant transactions is very important. As for customer perception, perceived value is always an issue that service providers should consider first. Partly due to the general psychology of customers, they always tend to want to use good quality services that are commensurate with the money they spend. Four remaining factors: User interface, security, perceived ease of use, and

perceived firm innovativeness are also important to the customer experience that providers cannot ignore. To comprehensively enhance customer experience, developing all the factors is necessary.

6. 6. Implications and conclusion

6.1. Practical implications

According to the author's research results, customer experience has a very constructive correlation with customer loyalty, so Fintech service providers should consider customer experience as a decisive factor to help enhance customer loyalty. Therefore, in order to retain customers or in other words, to increase customer loyalty to Fintech services, providers need effective strategies to increase customer experience in the process of using the service. Based on economic theories, research models as well as results from data collected and analyzed, the author wants to advise Fintech service providers that they need to focus on developing 6 factors mentioned in the research: responsiveness, security, user interface, perceived ease of use, perceived value, and perceived firm innovativeness.

State agencies are an integral part of promoting the development of the Fintech industry. Especially in the current period of accelerating economic recovery from the current recession caused by the Covid-19 pandemic. Moreover, Fintech is believed to play an important role in economic recovery and development. Therefore, it is very necessary for the State to come up with policies to help promote the development of the Fintech industry. To begin, promoting the correlation between Fintech companies and commercial banks requires a commitment to build a secure financial environment and make sure that companies gain support from regulatory authorities. Second, the standard legal structure for Fintech enterprises must be completed. As a result, the government must have suitable management policies in place so that Fintechs may compete effectively while also promoting sustainable and inclusive finance as well as banking. Third, ensure good information security by investing in information technology infrastructures and connectivity networks. Fourth, establishing a link agreement between both the banking system and Fintech firms that standardizes legislation relating to client information protection, information sharing, and data network restrictions, among other things.

6.2. Conclusion

Service providers need to come up with appropriate strategies to help improve service quality and customer perception that contributes to customer loyalty. The promotion of Fintech industry development also needs help from state management agencies as well as industries closely related to transactions, cash flow management - banking. The development of Fintech is not only a development opportunity for Fintech-related businesses, but it also positively affects the entire economic system of a country and moreover the whole world. Especially in the period when the Covid-19 epidemic is still ongoing, reducing face-to-face transactions (contributing to preventing the spread of the disease) but at the same time increasing the number of transactions is extremely reasonable. This can ensure social distancing regulations while maintaining the operation of the economy thereby accelerating the economic recovery in the state of new normal. In conclusion, Fintech can be considered as an economic recovery solution and needs to be invested to develop in the future.

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