DETERMINANTS INFLUENCING THE INTENTION TO SWITCH INTERNET SERVICE PROVIDERS OF CONSUMERS: APPLICATION OF TRANSACTION COSTS THEORY

Luc Manh Hien *, Pham Thi Thuy Van **, Nguyen Thi Anh Tram *, Le Thi Hai Ha *, Mai Thi Anh Dao *

* University of Labour and Social Affairs, Hanoi, Vietnam
** Corresponding author, University of Labour and Social Affairs, Hanoi, Vietnam
Contact details: University of Labour and Social Affairs, 43 Tran Duy Hung Road, Hanoi, Vietnam

How to cite this paper: Hien, L. M., Van, P. T. T., Tram, N. T. A., Ha, L. T. H., & Dao, M. T. A. (2022). Determinants influencing the intention to switch internet service providers of consumers: Application of transaction costs theory. Corporate Governance and Organizational Behavior Review, 6(3), 56–66. https://doi.org/10.22495/cgobrv6i3p5

Abstract

Customer loyalty, retention, and repurchase intentions give favorable outcomes for providers, and service switching and switching intentions imply unfavorable outcomes (Bansal & Taylor, 1999). The aim of this study is to investigate the determinants influencing the intention to switch internet service providers of Vietnamese consumers. Data for this study were collected from a survey of 564 Vietnamese consumers in Hanoi who have bought internet service. Through quantitative research methods with some techniques, such as Cronbach's alpha and exploratory factor analysis, the research shows that 9 factors influence the intention to switch internet service providers of Vietnamese consumers. Therefore, the empirical findings show that the intention to switch internet service providers of Vietnamese consumers has a mediating role in the relationship between service providers. The findings of this study suggest that managers need to focus on investing and researching to understand customers' attitudes towards competitors' products better, thereby they can proactively develop marketing programs to negatively influence the intention to switch. This article makes a new discovery about the intention to switch internet service providers for Vietnamese consumers.

Keywords: Intention to Switch, Internet Service, Marketing, Consumers

Authors' individual contribution: Conceptualization — P.T.T.V.; Methodology — L.M.H. and L.T.H.H.; Resources — N.T.A.T.; Writing — Original Draft — L.M.H. and L.T.H.H.; Writing — Review & Editing — L.M.H. and P.T.T.V.; Visualization — L.T.H.H.; Funding Acquisition — M.T.A.D.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

There are some studies to mention the intention to switch service providers, and the behavior of using services in different fields, such as in the banking sector (Ho & Dien, 2021; Cuc, 2021), the mobile payment sector (Vinh, Anh, & Luong, 2021), electronic products (Hung, Dan, Hai, & Tuan, 2020), intention to use 4G mobile telecommunications service (Hien, Thuy, & Kien, 2018), etc.
Intention to switch includes both conversion and non-conversion intent (Keaveney, 1995). Switching intent indicates positive effects for a service company, referring to the intention not to reject the current service provider (Ho & Dien, 2021).

After purchasing a product or a service and making a post-purchase evaluation, the consumer will decide whether to repurchase from the current provider in the future or not. The intention to repeat purchase is considered in two aspects: with positive post-purchase evaluation, customers will repeat the purchase (loyalty) whereas, with unfavorable post-purchase evaluation, customers will tend to buy service from a new provider (switch). Many studies have shown that maintaining a large number of loyal customers over time will bring more profits to enterprises.

Rebranding intentions are tendencies to want to end the primary supplier relationship between a buyer and a seller, meaning that the customer is switching to another brand and stopping purchasing from the current brand (Anh, Linh, & Tri, 2018).

Traditional transaction costs theory has neglected a transaction that the risk of opportunism is high in the "governance" of relations. However, as many have recognized, trust is an element of every transaction that can be accounted for either by previous experience or by lack of contrary evidence (Costa, 2004). The transaction cost concept was formally proposed by Ronald Coase in 1937 to explain the existence of firms. He theorised that transactions via market mechanisms incur a cost, particularly the costs of searching for exchange partners and making and enforcing contracts (as cited in Chen & Webster, 2012).

The internet is an accessible global information system consisting of interconnected computer networks. This system transmits information in a packet-switching way based on a standardized internetworking protocol. The Internet has many benefits for daily life such as reading newspapers, watching online news, surfing Facebook, watching movies, listening to music online, sending and receiving emails, searching for information online, buying and selling, studying, and even providing online medical treatment. Internet services include connection services and internet access services. Internet service providers (ISPs) specialize in providing internet connectivity solutions for organizations or individuals. ISPs have business rights through contracts to provide Internet services to organizations and individuals.

In Vietnam, after nearly 20 years of breaking the monopoly, the number of telecommunications service providers, in general, and internet services, in particular, has continuously increased, so the level of competition in the industry is increasing. The internet service market in Vietnam has been on a strong growth trend in recent years, the number of Internet users has grown steadily, and the technical resources for connecting to the Internet are also constantly expanding. This is a very attractive market for ISPs. In an article about the internet market in Vietnam in 2016, Rajan Anandan, Vice President and CEO of Google in Southeast Asia and India commented: "The market for internet services is becoming more and more competitive. Major ISPs with high market shares including VDC-VNPT, FPT, Viettel, and EVN Telecom have continuously launched promotional programs with attractive service packages or invested in bandwidth, content, or added values to encourage customers to choose suitable services as well as occupy market share" (Phat, 2016). Besides, ISPs have been promoting market expansion activities to fulfill the Government’s internet development targets.

In Vietnam, it is estimated that there are about 136 million mobile subscribers with 37 million 3G subscribers; 48.2 million people use the internet and it tends to increase (Ministry of Information & Communications, 2017).

It can be seen that the market for internet access services in the coming time tends to grow strongly and the level of competition is increasing. In order to increase profits and improve the efficiency of production and business activities, ISPs need to care for and maintain customer development. To solve this problem, in-depth research into internet service provider switching intentions is needed. It will shed light on the issues that lead to customers leaving one ISP to buy another ISP's services, thereby suggesting ISPs how to develop and maintain successful customer relationships.

For the above reasons, studying the factors affecting the intention to switch internet service providers of Vietnamese consumers is necessary and meaningful.

The structure of this paper is as follows. Section 1 introduced the formulation of the problem. Section 2 reviews the relevant literature. Section 3 analyses the methodology that has been used to conduct empirical research. In Section 4, the analysis of the results is presented. Section 5 discusses the findings and Section 6 concludes the paper.

2. LITERATURE REVIEW

2.1. Satisfaction and intention to switch Internet service providers

Researchers on customer switching behavior have found that consumer satisfaction has a negative effect on the intention to switch service providers (Bansal, Taylor, & St. James, 2005). During the process of experiencing a service, customers with a low level of satisfaction will have a high tendency to switch to using service from another service provider.

The consumer service provider transition is described in terms of a transition from switching intent to switching behavior. In the migration model of push-pull-mooring (PPM) switching, satisfaction is one of the factors that push and influence the intention to switch and thereby lead to the behavior of switching service providers. Besides, service provider switching model (SPSM), satisfaction is a factor that directly affects the intention to switch, thereby leading to switching behavior, service quality is an indicator to measure customer satisfaction. Low service quality will lead to low customer satisfaction which can lead to customer switching intention and service provider switching behaviour.

In the studies on factors affecting the customer’s behavior of switching service providers, satisfaction is identified as one of the factors that are commonly studied with many different types of services (Chuang & Tai, 2016).
Anjaliika and Priyanath (2018) studied the banking industry in Pakistan and Sri Lanka, and the results showed that service quality satisfaction affects the intention to switch banks. Consumers always switch brands because they are not satisfied with the products (Anh et al., 2018). Customers may not be satisfied with the current service, but they can still consider switching services and expect a better service (Hien et al., 2018).

Therefore, in this study, we hypothesize the first hypothesis (H1) to support the above results.

**H1:** Satisfaction negatively affects the intention to switch internet service providers of consumers.

### 2.2. Trust and intention to switch internet service providers

Several studies on ISPs have identified trust as one of the important factors in maintaining relationships with customers. Magin, Algesheimer, Huber, and Herrmann (2012) show that there are different segments in the Internet service provider market, and relationship quality based on commitment theory — belief can explain and predict the success of a relationship between an ISP and its customers. In the context of continuous buying and selling, Ranaweera and Prabhu (2003) also assert that trust is an important factor in customer retention. Besides, in the studies on consumers' switching behavior of service providers, trust has also been identified as a factor affecting the intention to switch service providers. Trust is considered a push factor, low customer trust will be one of the factors that push customers to switch to another service provider (Bansal et al., 2005; Lui, 2005; Ye, 2009; Zhang, Cheung, & Lee, 2012).

Zhang et al. (2012) showed that attitude towards behavior can be seen as a disposition or emotion towards a service, based on many perceived product attributes. High perceived perception values have a positive influence on the intention to choose the service; easy-to-use perception plays an indirect and direct impact role in the intention to change the service (Hien, Thuy, Anh, & Bach, 2017).

So, we hypothesize that:

**H2:** Trust has a negative influence on consumers’ intention to switch internet service providers.

### 2.3. Perception of the service price and intention to switch internet service providers

According to previous studies on switching behavior, price is an important factor in the research model of customer switching behavior (Keaveney, 1995; Bansal et al., 2005; Zhang et al., 2012; Ye, 2009; Lui, 2005; Chuang & Tai, 2016).

Most of the studies on the behavior of switching service providers suggest that the customer service price perception is the customer's assessment of the service price of their current provider and making a comparison of price for that service from a competitive supplier. Lui (2005) said that price is one of the factors affecting the intention to switch internet service providers and is considered from the customer's point of view, customers evaluate the fairness of the service price through a comparison between the price and value of that service; current and competitive supplier rates; price level and the customer's ability to pay.

Some other studies also found the interaction between perceived price, perceived value, and intention to use the service (Yu, Lee, Ha, & Zo, 2015). On that basis, the authors develop the third hypothesis:

**H3:** Perceived service price has a negative influence on consumers' intention to switch internet service providers.

### 2.4. Perception of technological change and intention to switch internet service providers

Internet service is one of the types of technology services, the quality of service is mainly determined by the provider using which technology to provide the service. According to Siddhu (2005), with the rapid development of technology, telecommunications service providers do need to change to keep up with customer needs and try to differentiate themselves from their competitors. Applying advanced technology allows providers to improve service quality, offer new services, and make a difference in services. As a result, companies not only retain and attract customers but also get greater revenue from a single customer. By contrast, companies that do not provide services in line with technological trends will be able to lose customers and they will switch to buying services of competitors (Suleiman Awwad & Awad Neimat, 2010).

Consumers switched to other companies because of quality, advertising and promotional activities, and commitment periods ending (Mie-Kyung & Hyang-Ran, 2010).

Therefore, we hypothesize that:

**H4:** Perception of technological change has a negative effect on consumers’ intention to switch internet service providers.

### 2.5. Subjective norms of service prices and intention to switch internet service providers

According to Ajzen and Fishbein (1975), subjective norms are formed by two factors: 1) beliefs about the fact that influencers think that this individual should perform the behavior (feel good or bad about whether the people around us agree or disagree with our behavior) and 2) motivation to conform to these influencers (whether the individual's intentions or behavior are influenced by the thoughts of those around them). Subjective norms have been shown to influence the intention to act, thereby influencing behavior (Ajzen, 1991). Subjective norms are pressures that society puts on an individual when considering whether or not to perform a behavior. Individuals' subjective norms reflect their beliefs that their acquaintances and close friends or others who have a significant influence on them can observe and evaluate their behaviors (O'Neal, 2007).

Subjective norms have a relationship with consumers' intention to switch service providers (Bansal, Irving, & Taylor, 2004; Ye, 2009). Subjective norms tend to be favorable, and with stronger switching, the intention to switch internet service providers can increase.

Mie-Kyung and Hyang-Ran (2010) examined the variables that affect whether consumers change broadband internet services, the authors concluded 1) consumers switched to other companies because of unsatisfactory fee services; 2) when consumers...
were less satisfied with the fees and services, there was a greater chance of switching to another company.

Perceived price is the perception of the cost to use or experience the service (Hien et al., 2018). If the price makes customers feel inadequate, they will be disappointed or frustrated with their spending (Al-Debei & Al-Lozi, 2014). Perceived cost-effectiveness can positively influence service expectations when benefits outweigh costs (Oliveira, Thomas, Baptista, & Campos, 2016).

Therefore, we make the following hypothesis:

**H3:** Subjective norms have a positive influence on consumers’ intention to switch internet service providers.

### 2.6. Perception of switching costs and intention to switch internet service providers

In previous studies on consumer switching behavior of service providers, many studies have identified switching costs as an important variable that affects the intention to switch providers (Lui, 2005; Antón, Camarero, & Carrero, 2007; Kim, Shin, & Lee, 2006). In addition, a number of studies on the process of switching service providers have determined that switching costs have a direct impact on both changing customers switching intentions and changing provider switching actions (Bansal & Taylor, 1999). In the PPM model, where switching costs are considered as a holding factor, the perception of high switching costs keeps customers with the service provider. High switching costs lead to customers not intending to switch and thereby limit provider switching behavior and vice versa (Bansal et al., 2005; Lui, 2005; Ye, 2009; Zhang et al., 2012).

According to Anh et al. (2018), risk awareness consists of two components: the subjective feeling of the individual about the consequences after purchase and the amount lost after buying. Consequences related to financial losses, wasting time, social damage, and other damage will occur if the buying results are not favorable.

Switching costs are the customer’s perception of potential loss (Shin & Kim, 2008), related to service or provider switching (Kim, Chan, & Gupta, 2007). High switching costs create barriers to service selection and conversion (Shi, Zhou, & Liu, 2010).

Despite long-standing market liberalisation and efforts to reduce switching costs, many consumers have never switched telecoms provider (Lunn & Lyons, 2018).

Therefore, we hypothesize that:

**H6:** Perception of switching costs has a negative effect on consumers’ intention to switch internet service providers.

### 2.7. Perception of alternative attractiveness and intention to switch internet service providers

The high attractiveness of the alternative can directly affect the switching behavior (Kim, Park, & Jeong, 2004). In the service industry, the attractiveness of competitors has been identified as the key driver of customers switching to a better service provider (Keaveney, 1995). Perception of alternative attractiveness is the pull factor in the PPM model (Bansal et al., 2005; Lui, 2005; Ye, 2009; Zhang et al., 2012). Consumers always compare values between service providers based on available information, they are motivated by the perception of the benefits, value, and quality of service that a provider promises to provide for them (Bansal et al., 2005; Keaveney, 1995). As a result, consumers may be willing not to switch service providers if they find that conditions such as benefits, value, and service quality at the current service provider have improved significantly and will become their advantage. In other words, if a provider offers alternatives that are more attractive than those of a competitor, they have already kept the consumers stay in with them.

The consumers switched to other companies because of fees, quality, and service; and for other companies, the consumers switched to other services because of unsatisfactory quality (Mie-Kyung & Hyang-Ran, 2010).

Therefore, we hypothesize that:

**H7:** Perceived alternative attractiveness has a negative effect on consumers’ intention to switch internet service providers.

### 3. RESEARCH METHODOLOGY

#### 3.1. Research context

The internet service market in Vietnam is unevenly distributed. In urban areas, the number of internet users accounts for more than 50%, especially in Hanoi, this percentage is even higher. Internet users often have the habit of accessing the internet at home (78%) and people consider the internet to bring a lot of benefits to them (Cimigo, 2011). Moreover, Hanoi is the capital with a high population density, high people's income, and evident demand and buying behavior for internet services. Therefore, we choose Hanoi as the location to conduct the study.

#### 3.2. Research sample

In this article, we randomly selected Vietnamese consumers in Hanoi city and Ho Chi Minh city. These sample sources are the most reliable because they include different numbers of Vietnamese consumers.

Survey subjects are consumers in Hanoi and Ho Chi Minh City within 5 months and collected 525 survey forms. After removing unqualified survey forms, the remaining 406 questionnaires were included in the analysis.

#### 3.3. Research model

Based on the results of previous studies, expert interviews and transaction cost theory, we build a research model (Figure 1).
Independent variables include nine (9) factors: Satisfaction ($HL$) is measured on 4 attributes; Trust ($NT$) is measured on 6 attributes; Perception of service prices ($GC$) is measured on 4 attributes; Perception of technological change ($CN$) is measured on 3 attributes; Subjective norms ($CM$) is measured on 3 attributes; Cost of risk perception ($CP$-1) is measured on 5 attributes; Perception of moving costs ($CP$-2) is measured on 3 attributes; Perception of financial costs ($CP$-3) is measured on 3 attributes; Perception of alternative attractiveness ($HD$) is measured on 4 attributes.

Dependent variable: The intention to switch internet service providers of Vietnamese consumers is measured by five aspects (Van, 2019).

3.4. Analysis approach

We use SPSS Statistics version 22 software to perform the following analysis: descriptive statistics; reliability test of scale by Cronbach’s alpha scale and total correlation of variables; evaluation of the measurement model by aggregate reliability, convergence value, and discriminant value; hypothesis test by path coefficient via regression model.

4. RESULTS

4.1. Descriptive statistics

Information on data collected is shown in Table 1. It shows that among the 564 respondents, about 65.4% were male while the remaining 195 (34.6%) were female. Of these, 85 of them (or 15.1%) were from 18 to 25 years old, 282 of them (or 50.0%) were from 26 to 35 years old, 179 of them (or 31.7%) were from 36 to 54 years old, and 3.2% of the participants were over 54 years old.

| Frequency | Percent | Cumulative percent |
|-----------|---------|--------------------|
| Male      | 369     | 65.4               | 65.4                     |
| Female    | 195     | 34.6               | 100.0                    |

Table 1. Respondents by gender and age

4.2. Cronbach’s alpha

By using scale analysis, we can eliminate inconsonant variables and reduce errors in the research model. Therefore, only variables that have total correlation coefficients (Corrected item–Total correlation) greater than 0.3 and Cronbach’s alpha coefficients equal to or greater than 0.6 are accepted (Hair, Black, Babin, & Anderson, 2009; Hoang & Chu, 2008). Analyzing Cronbach’s alpha of determinants has shown their influence on the intention to switch internet service providers of Vietnamese consumers (9 determinants with 35 observed variables) and the result is presented in Table 2.
Table 2 shows that all Cronbach’s alpha coefficients of the population are above 0.6; all Corrected item–Total correlation of observed variables are above 0.3. So, all variables of the research model are suitable for the next analyses (Hair, Anderson, Tatham, & Black, 2006).

Table 2. Results of analysis of determinants confidence of scales in the model

| Determinants                          | N  | Cronbach’s alpha | Corrected item – total correlation |
|---------------------------------------|----|------------------|------------------------------------|
| Satisfaction (HL)                     | 4  | 0.736            | 0.467                              |
| Trust (NT)                            | 6  | 0.912            | 0.739                              |
| Perception of service prices (GC)     | 4  | 0.771            | 0.599                              |
| Perception of technological change (CN)| 3 | 0.831            | 0.658                              |
| Subjective norms (CM)                 | 3  | 0.762            | 0.531                              |
| Cost of risk perception (CP-1)        | 5  | 0.828            | 0.508                              |
| Perception of moving costs (CP-2)     | 3  | 0.822            | 0.661                              |
| Perception of financial costs (CP-3)  | 3  | 0.889            | 0.753                              |
| Perception of alternative attractiveness (HD) | 4 | 0.751            | 0.454                              |

4.3. Exploratory factor analysis (EFA)

EFA was conducted and we used the method of extracting coefficients. The results of component analysis and varimax analyzes yield 35 attributes for the independent variables.

Table 3 shows that $0.5 < \text{KMO} = 0.754 < 1$. Bartlett’s testimony shows $\text{Sig.} = 0.000 < 0.05$. It means variables, on the whole, are interrelated. After implementing the rotation matrix, 9 determinants with factor load factor are greater than 0.5; Eigenvalues are greater than 1; the variance explained is 68.403%, which demonstrates that research data analyzing factor discovery is appropriate. Through the quality assurance of the scale and the test of the EFA model, we have identified 9 determinants influencing the intention to switch internet service providers of Vietnamese consumers (Hair et al., 2009).

Table 3. KMO and Bartlett’s test

| Kaiser-Meyer-Olkin measure of sampling adequacy | Approx. Chi-square | Bartlett’s test of sphericity |
|-----------------------------------------------|-------------------|-----------------------------|
|                                               | 0.754             | 9,511.231                   |
|                                               |                   | DE                          |
|                                               |                   | 595                         |
|                                               |                   | Sig.                        |
|                                               |                   | 0.000                       |

4.4. Correlation analysis

We use the Pearson coefficient to test the correlation between quantitative variables. The correlation coefficients show that the relationship between the dependent variable (the intention to switch internet service providers of Vietnamese consumers) and the independent variables are statistically significant ($\text{Sig.} < 0.05$). Accordingly, the magnitude of the correlation coefficients ensures that there is no multicollinearity. Thus, other statistics can be used to test the relationship between variables (Hair et al., 2009; Hoang & Chu, 2008).

4.5. Regression model analysis result

Determinants influencing the intention to switch internet service providers of consumers: Application of transaction costs theory are presented in the following regression model:

$$ Y = \beta_0 + \beta_1 \cdot GC + \beta_2 \cdot CP + \beta_3 \cdot HD + \beta_4 \cdot CN + \beta_5 \cdot CM + \beta_6 \cdot NT + \beta_7 \cdot HL + \epsilon $$

(1)

Results of Tables 4, 5, and 6 show that: Level of significance ($\text{Sig.}$) = 0.000 implies that the multiple regression model is suitable for data. Coefficient of $R^2$ (R-squared) = 0.628, which means 62.8% of the total variation in the intention to switch internet service providers of Vietnamese consumers will be explained by the regression model (the ANOVA testing result). The research model result indicates that all independent variables, namely 1) Satisfaction (HL), 2) Trust (NT), 3) Perception of service prices (GC), 4) Perception of technological change (CN), 5) Subjective norms (CM), 6) Cost of risk perception (CP-1), 7) Perception of moving costs (CP-2), 8) Perception of financial costs (CP-3), and 9) Perception of alternative attractiveness (HD) are significant (because $\text{Sig.} < 0.05$) to the intention to switch internet service providers of Vietnamese consumers. Determinants that influence the intention to switch internet service providers of Vietnamese consumers are presented in the following standardized regression model:

$$ YD = -0.187HL - 0.329NT - 0.272GC + 0.050CM - 0.016CN - 0.129(CP - 1) - 0.063(CP - 2) - 0.131(CP - 3) + 0.159HD $$

(2)
5. DISCUSSION

5.1. Satisfaction

Hypothesis H1 is accepted because the results of Table 6 show that Satisfaction has the value Sig. = 0.000 < 0.05 and β1 = -0.187 < 0. Therefore, it can be affirmed that the lower the satisfaction level of consumers with the current provider, the more likely they are to switch to buying internet services from another provider. This result is consistent with the research results of Lui (2005), Bansal et al. (2005), Burnham, Frels, and Mahajan (2003), Ye (2009), Kaur, Sharma, and Mahajan (2012), D’Alessandro, Johnson, Gray, and Carter (2014).

Satisfaction is a consumer’s response to the fulfillment of desires, which has been shown to have a negative relationship with the intention to switch service providers. In other words, when consumers in the process of experiencing a service have a low level of satisfaction, they will tend to switch to using another service from another provider, and vice versa. In many areas, customer satisfaction is a predictor of intention to switch service providers. However, this relationship is influenced by many other factors, such as price perception, switching costs, trust, commitment, etc. This study confirms that satisfaction is one of the important factors determining consumers' intention to switch internet service providers.

5.2. Trust

Hypothesis H2 is accepted because the results of Table 6 show that consumers’ Trust has Sig. = 0.000 < 0.05 and β2 = -0.329 < 0. Thus, the lower the consumers’ trust in current service providers is, the more likely they are to switch internet service providers. This result is consistent with the study of Bansal et al. (2005), Lui (2005), Ye (2009), and Zhang et al. (2012). Because the characteristics of internet services are highly technical, understanding the service thoroughly will be difficult for many people, so the consumer’s decision to buy or switch is often based on the general assessment of the provider.

Trust is the faith of one object in another, many previous studies have shown that when the customer’s trust in the service provider is high, the customer’s intention to switch service provider is low, and vice versa.

5.3. Perception of service prices

Hypothesis H3 is accepted because the results of Table 6 show that the Perception of service prices has the value Sig. = 0.023 < 0.05 and β3 = -0.272 < 0; the perceived service price factor has a strong influence on the intention to switch internet service providers. Thus, the lower the consumer’s perception of service prices with the current service provider, the more likely they are to switch internet service

| Table 4. Regression analysis results |
|-------------------------------------|
| **Independent variables** | Beta |
| Satisfaction (HL) | -0.187*** |
| Trust (ND) | -0.129*** |
| Perception of service prices (GC) | -0.272* |
| Perception of technological change (CN) | 0.050* |
| Subjective norms (CM) | 0.016** |
| Cost of risk perception (CP-1) | -0.129 |
| Perception of moving costs (CP-2) | -0.263*** |
| Perception of financial costs (CP-3) | -0.131*** |
| Perception of alternative attractiveness (HD) | 0.159* |
| R² (R-squared) | 0.628 |
| Adjusted R² | 0.618 |
| F | 66.200*** |

Note: N = 564; * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001.

| Table 5. ANOVA |
|----------------|
| Model | Sum of squares | Df | Mean square | F | Sig. |
| Regression | 155,043 | 14 | 11,073 | 66,200 | 0.000* |
| Residual | 91,841 | 549 | 0.167 | | |
| Total | 246,884 | 563 | | | |

Note: Dependent variable: YD. * Predictors (Constant): GC, CN, NT, CP-2, HD, CP-1, CM, CP-3, HL.

| Table 6. Coefficients |
|------------------------|
| **Model** | Unstandardized coefficients | Standardized coefficients |
| | B | Std. error | Beta | T | Sig. |
| Constant | 0.016 | 0.256 | | | |
| HL | -0.242 | 0.026 | -0.187 | -9.420 | 0.000 |
| NT | -0.347 | 0.017 | -0.329 | -20.291 | 0.000 |
| CM | -0.017 | 0.021 | -0.016 | -0.813 | 0.016 |
| GC | -0.266 | 0.019 | -0.272 | -14.337 | 0.023 |
| CP-1 | -0.166 | 0.021 | -0.129 | -7.724 | 0.038 |
| CP-2 | -0.068 | 0.019 | -0.063 | -3.028 | 0.000 |
| CP-3 | -0.109 | 0.015 | -0.131 | -7.182 | 0.000 |
| HD | 0.204 | 0.012 | 0.159 | 9.373 | 0.001 |
| CN | 0.042 | 0.014 | 0.050 | 2.922 | 0.005 |
| | | | | | |
| Note: Dependent variable: YD. |
providers. This result is consistent with the study of Keaveney (1995), Bansal et al. (2005), Zhang et al. (2012), Ye (2009), Lui (2005), and Chuang and Tai (2016).

Most of the research on service provider switching behavior assumes that customer service price perception is the customer's assessment of the service price of their current provider and makes a comparison with that of a competing provider. Customers often make judgments about service rates, and they always compare the internet service rates of current service providers with those of competing service providers.

5.4. Perception of technological change

Hypothesis H4 is accepted because the results of Table 6 show that Perceived technological change has the value \( \text{Sig.} = 0.004 < 0.05 \) and \( \beta = 0.050 > 0 \). Thus, the perceived technological change has a positive influence on the intention to switch internet service providers.

Applying advanced technology allows providers to improve service quality, offer new services, and make a difference in services. As a result, companies not only retain and attract customers but also get greater revenue from a single customer. By contrast, enterprises that do not provide services in line with technological trends will be able to lose customers and will switch to buying services of competitors. Therefore, as customers become more aware of technological changes, they will be more inclined to switch internet service providers.

Internet service is one of the types of technology services, the quality of service is mainly determined by the provider using which technology to provide the service. In Vietnam, the development of the internet service market in general and the internet access market, in particular, is always associated with technological changes. According to Sidhu (2005), with the rapid development of technology, telecommunications service providers do need to change to keep up with customer needs and try to differentiate themselves from their competitors.

5.5. Subjective norms

Hypothesis H5 is accepted because the results of Table 6 show that the Subjective norm has the value \( \text{Sig.} = 0.016 < 0.05 \) and \( \beta = -0.016 < 0; \beta = 0 < 0 \), so the subjective norm has a significant and negative relationship with the intention to switch internet service providers. Subjective norm is an individual's beliefs about how others will think about his or her actions, many previous studies have shown that subjective norm has a negative relationship with the intention to switch service providers. In other words, the disagreement of the people around about the strong transition will probably make the intention to switch internet service providers increase, and vice versa.

As internet service is a type of infrastructure telecommunications service, the choice or decision to switch service providers is less dependent on the views of others. On the other hand, according to the results of expert interviews, 5 out of 10 customers who have switched internet service providers all claim that they switch due to many reasons and the views of others have little influence on them.

5.6. Perception of switching costs

Perceptions of switching costs include 1) Cost of risk perception; 2) Perception of moving costs, and 3) Perception of financial costs.

Table 6 says:

Cost of risk perception (CP-1) has a negative effect on the intention to switch internet service providers: \( \beta = -0.129 < 0 \) (Sig. = 0.018 < 0.05); the lower the perceived cost of risk, the more likely consumers are to switch internet service providers.

Perception of moving costs (CP-2) has a negative effect on the intention to switch internet service providers: \( \beta = -0.063 < 0 \) (Sig. = 0.000 < 0.05); the lower the perception of moving costs, the more likely consumers are to switch internet service providers.

Perception of financial costs (CP-3) has a negative effect on intention to switch internet service providers: \( \beta = -0.131 < 0 \) (Sig. = 0.000 < 0.05); the lower the perception of moving costs, the more likely consumers are to switch internet service providers.

Therefore, hypothesis H6 is accepted. The results of this study are similar to those of Bansal et al. (2005), Lui (2005), Ye (2009), and Zhang et al. (2012). However, the influence of the factors is different, the perception of moving costs has the lowest influence because customers find that the transition time and procedures do less to prevent them from switching than the costs of risk and financial problems do.

5.7. Perception of alternative attractiveness

Hypothesis H7 is accepted because the results of Table 6 show that the Perceived attractiveness has the value \( \text{Sig.} = 0.034 < 0.05 \) and \( \beta = 0.159 > 0; \beta > 0, so when consumers perceive high alternative attractiveness, they will have more intention to switch internet service providers.

The alternative attractiveness (benefits, value, and service quality) of another service provider will be a factor influencing customers' intention to switch current service provider. The results of this study are consistent with the results of many studies, such as Bansal et al. (2005), Lui (2005), Ye (2009), and Zhang et al. (2012).

5.8. Recommendations for internet service providers

Internet service providers need to pay attention to the factors affecting the intention to switch internet service providers, including satisfaction, trust, perception of service prices, perception of change technological change, subjective norms, perception of switching costs, and perceived alternative attractiveness. In which, there are 4 factors that have the most influence on the intention to switch service providers: trust, service price, satisfaction, and alternative attractiveness.

To build customer trust, a prerequisite is that service providers must provide good quality services. In addition, businesses providing internet services need to be honest and transparent with
customers. Honesty and transparency can be formed by keeping credibility in business, consistency in words and actions, listening, respecting customers' psychology, preferences, and interests. Besides, businesses need to have many communication channels about the service so that consumers have a thorough understanding of the service, thereby creating a trust for them.

To ensure customer satisfaction with your internet service, enterprises need to create a two-way information exchange channel, a convenient information exchange channel for customers before, during, and after the service purchase process. Enterprises can use social networking tools or create information exchange channels that have many similarities with customers, and often have a department to receive and respond to feedback. In addition, enterprises can periodically conduct surveys and research to discover issues that need to be improved, changed or new requirements arise from customers. Customer loyalty programs will increase customer engagement with the enterprise.

For the selling price of internet service packages, enterprises need to base on customers' feelings. Customer perception of service rates is one of the important factors in customers switching service providers. Therefore, pricing policies need to be very careful, all price needs to be adjusted so that the difference between new and old prices does not make customers uncomfortable, pricing for new service packages also needs to provide full information about the new service pack and compare the difference with similar old service packages so that customers can more easily accept the price.

The alternative attractiveness is derived from the business's competitors, customers always compare the service quality, and customer policies of their current provider with those of others. In order to reduce the attractiveness of alternatives, enterprises need to carefully study their competitors, then come up with customer policies, in order to create more attractiveness for customers than competitors, thereby preventing the customer service provider switch.

According to Hien et al. (2018), Vietnam is one of the middle-income countries, and having to spend money to change equipment to use the service is a big barrier for customers. Therefore, service providers need to reduce customers' switching costs: 1) provide service-compatible terminals to customers according to the commitment to pay for the service to reduce initial costs; 2) cooperate with terminal providers to implement installment purchase programs to commit to using services.

5.9. Recommendations for state management agencies

Over the past years, Vietnam's Internet has developed rapidly and has had a good impact on many areas of the country's economic and social life, really bringing great effects, creating favorable conditions and supporting effectively the implementation of the open-door policy and proactive international economic integration of our Party and State. Along with the general development of the Internet, Internet service providers have actively contributed to the universalization of Internet services to all classes of people. However, besides the positive aspects, many public Internet access points, which are doing Internet service business in the form of agents, did not comply with the provisions of the Law on Internet management, allowing users to freely access the Internet with unhealthy information sites that are harmful to political security, social order and safety and the cultural identity of the Vietnamese people. Therefore, the State needs to make a great impact to create a more favorable environment for the production, business, and consumption of internet services; such as strengthening the State management over Internet business activities, including people who want to provide public Internet services must register their businesses and sign agency contracts with Internet access ISPs.

Contents of an Internet agent contract, in addition to the general provisions of the Law on contracts, need to add a number of points related to the responsibilities of the agent owner, specifically:
- Must post up the rules for using Internet services at their establishments;
- Must instruct service users to comply with regulations on internet use. When detecting that service users intentionally violate regulations on Internet use, they must immediately stop them.
- The agent owner facilitates or intentionally covers for the acts of stealing passwords, accessing accounts, spreading viruses, accessing information pages, or propagating or distributing documents with content such as debauchery, obscenity, violation of fine customs, violation of national defense and security, etc., will be suspended from the agency contract and strictly handled according to the law.

6. CONCLUSION

The expanding demand for internet services across all firms and the quick rise of its professional organization demonstrates the importance of the internet. The purpose of this study is to ascertain the influence of factors on the intention to switch internet service providers of consumers in Vietnam.

This study contributes to the growing body of literature on internet service by examining the influence of factors on the intention to switch internet service providers of consumers in a specific Vietnamese environment.

This study has studied the influence of some factors on the intention to switch internet service providers, but in fact, there are many other factors that may also have an effect on this dependent variable.

Future research may add other factors to study the influence on intention to switch internet service providers and add control variables to the research model.
REFERENCES

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

2. Ajzen, I., & Fishbein, M. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

3. Al-Debei, M. M., & Al-Lozi, E. (2014). Explaining and predicting the adoption intention of mobile data services: A value-based approach. *Computers in Human Behavior, 35*, 326–338. https://doi.org/10.1016/j.chb.2014.03.011

4. Anh, N. P. T., Linh, H. T. C., & Tri, H. M. (2018). Factors affecting the brand switching intention of customers in Can Tho City. *Industry and Trade Magazine, 11*, 345–351.

5. Anjalika, W. P. W., & Priyanath, H. M. S. (2018). Effect of service quality on customer satisfaction: An empirical study of customers who have bank accounts in both public and private banks in Sri Lanka. *International Journal of Marketing and Technology, 8*(1), 11–36. Retrieved from https://www.academia.edu/35942251/Effect_of_Service_Quality_on_Customer_Satisfaction-An_Empirical_Study_of_Customers_who_have_Bank_Accouts_in_both_Public_and_Private_Banks_in_Sri_Lanka

6. Antón, C., Camarero, C., & Carrero, M. (2007). Analysing firms’ failures as determinants of consumer switching intentions: The effect of moderating factors. *European Journal of Marketing, 41*(1/2), 135–158. https://doi.org/10.1108/03090560710718157

7. Bansal, H. S., & Taylor, S. F. (1999). The service provider switching model (SPSM): A model of consumer switching behavior in the services industry. *Journal of Service Research, 2*(2), 200–218. https://doi.org/10.1177/109467059922007

8. Bansal, H. S., Irving, P. G., & Taylor, S. F. (2004). A three-component model of customer commitment to service providers. *Journal of the Academy of Marketing Science, 32*(3), 234. https://doi.org/10.1177/1092070034263332

9. Bansal, H. S., Taylor, S. F., & St. James, Y. (2005). Migrating to new service providers: Toward a unifying framework of consumers’ switching behaviors. *Journal of the Academy of Marketing Science, 33*(1), 96–115. https://doi.org/10.1177/1092070034267928

10. Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science, 31*(2), 109. https://doi.org/10.1177/0092070302250897

11. Chen, S. C. Y., & Webster, C. (2012). Institutional economics: New. In S. J. Smith (Ed.), *International encyclopedia of housing and home* (pp. 78–85). Elsevier. Retrieved from https://doi.org/10.1016/B978-0-08-047163-1.00640-8

12. Chuang, Y.-F., & Tai, Y.-F. (2016). Research on customer switching behavior in the service industry. *Management Research Review, 39*(8), 925–939. https://doi.org/10.1108/MRR-01-2015-0022

13. Cimigo. (2011). *Vietnam netcitizens report 2011*. Retrieved from https://www.cimigo.com/en/research-reports/vietnam-netcitizens-report-2011-english/

14. Costa, A. C. (2004). Trust. In C. D. Spielberger (Ed.), *Encyclopedia of applied psychology* (pp. 611–620). Elsevier.

15. Cuc, N. T. T. (2021). The impact of competitive advertising efficiency on the conversion behavior of individual customers in using services at commercial banks in Vietnam. *Journal of Economics and Development, 288*, 64–73. Retrieved from https://htpt.neu.edu.vn/tap-chi-so/288/muc-luc-253/tac-dong-qua-hieu-qua-quang-cao-canh-tranh-den-hanh-vi-chuyen-do-trong-su-dung-dich-vu-cua-khach-hang-ca-nhan-tai-cac-nhan-gang-thuong-mai-o-viet-nam.380492.aspx

16. D’Alessandro, S., Johnson, L., Gray, D. M., & Carter, L. (2015). The market performance indicator: A macro understanding of service provider switching. *Journal of Services Marketing, 29*(4), 302–313. https://doi.org/10.1108/JSM-05-2014-0172

17. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice-Hall International.

18. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice-Hall International.

19. Hien, N. T. T., Thuy, L. T. T., & Kien, D. T. (2018). Factors impacting on customers’ adoption intention toward 4G mobile telecommunication service in Vietnam. *Journal of Economics and Development, 249*, 38–49. Retrieved from https://htpt.neu.edu.vn/tap-chi-so/249/muc-luc-305/cac-nhan-tac-dong-den-y-dinh-su-dung-dich-vu-vien-thong-dong-4g-qua-khach-hang-tai-viet-nam.375840.aspx

20. Hien, N. T. T., Thuy, L. T. T., Anh, L. N., & Bach, N. V. (2017). Research intention to convert 4G services of customers in Hanoi. *Economic and Forecast Review, 27*, 43–46.

21. Ho, D. P., & Dien, P. H. (2021). The relationship among customer satisfaction, customer loyalty and customers’ switching intention in the banking sector: An approach of structural equation model. *Industry and Trade Magazine, 6*, 332–347.

22. Hoang, T., & Chu, A. N. M. N. (2008). *Analysis of research data with SPSS*. Hanoi, Vietnam: Hong Duc Publishing House.

23. Hung, P. D., Dan, N. T. T., Hai, D. H., & Tuan, P. V. (2020). Intention to convert from offline to online B2C integrates attitudes and the PPM framework for product electronics. *Economic and Forecast Review, 3*, 57–60.

24. Kaur, G., Sharma, R. D., & Mahajan, N. (2012). Exploring customer switching intentions through relationship marketing paradigm. *International Journal of Bank Marketing, 30*(4), 280–302. https://doi.org/10.1108/02652321211236914

25. Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *Journal of Marketing, 59*(2), 71–82. https://doi.org/10.2307/1252074

26. Kim, G., Shin, B., & Lee, H. G. (2006). A study of factors that affect user intentions toward email service switching. *Information & Management, 43*(7), 884–893. https://doi.org/10.1016/j.im.2006.08.004

27. Kim, H.-W., Chan, H. C., & Gupta, S. (2007). Value-based adoption of mobile internet: An empirical investigation. *Decision Support Systems, 43*(1), 111–126. https://doi.org/10.1016/j.dss.2005.05.009

28. Kim, M.-K., Park, M.-G., & Yong, D.-H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. *Telecommunications Policy, 28*(2), 145–159. https://doi.org/10.1016/j.telpol.2003.12.003
29. Lui, S. M. (2005). Impacts of information technology commoditization: Selected studies from ubiquitous information services (Ph.D. thesis, Hong Kong University of Science and Technology).
30. Lunn, P. D., & Lyons, S. (2018). Consumer switching intentions for telecoms services: Evidence from Ireland. *Heliyon*, 4(5), e00618. https://doi.org/10.1016/j.heliyon.2018.e00618
31. Magid, S., Algesheimer, R., Huber, F., & Herrmann, A. (2012). The impact of brand personality and customer satisfaction on customer's loyalty: Theoretical approach and findings of a causal analytical study in the sector of internet service providers. *Electronic Markets*, 1(34), 294–308. https://doi.org/10.1080/1019678032000135572
32. Mie-Kyung, J., & Hyang-Ran, J. (2010). The intention to switch broadband internet service providers. *Korean Journal of Human Ecology*, 195, 845–855. https://doi.org/10.5934/KJHE.2010.19.5.845
33. Ministry of Information & Communications. (2017). MobiFone, Gel officially licensed 4G. Retrieved from https://mic.gov.vn/Pages/TinFuc/TinHchitiet.aspx?tintucid=133098
34. Nikseresht, F., & Lajevardi, M. (2016). Why customers switch the service provider? A critical issue. *Journal of Marketing and Consumer Research*, 28, 26–36. Retrieved from https://www.iiste.org/Journals/index.php/JMCR/article/view/33750
35. O'Neal, P. W. (Ed.). (2007). *Motivation of health behavior*. New York, NY: Nova Publishers.
36. Oliveira, T., Thomas, M. A., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, 61, 404–414. https://doi.org/10.1016/j.chb.2016.03.030
37. Phat, L. (2016, May 19). Vietnam's Internet market is the most dynamic in the world. Retrieved from https://zingnews.vn/thi-truong-internet-viet-nam-nang-dong-nhat-the-gioi-post650720.html
38. Ranaweera, C., & Prabhu, J. (2003). The influence of satisfaction, trust and switching barriers on customer retention on a continuous purchasing setting. *International Journal of Service Industry Management*, 14(4), 374–395. https://doi.org/10.1108/09564230310489231
39. Shi, W.-H., Zhou, W., & Liu, J.-Y. (2010). Analysis of the influencing factors of users' switching intention in the context of one-way mobile number portability. *Journal of China Universities of Posts and Telecommunications*, 17(Supplement 1), 112–117. https://doi.org/10.1016/S1005-8885(09)60596-3
40. Shin, D.-H., & Kim, W.-Y. (2008). Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. *Technological Forecasting and Social Change*, 75(6), 854–874. https://doi.org/10.1016/j.techfore.2007.05.001
41. Sidhu, A. (2005). *Canadian cellular industry: Consumer switching behaviour* (Unpublished doctoral dissertation, Simon Fraser University).
42. Suleiman Awward, M., & Awd Neimat, B. (2010). Factors affecting switching behavior of mobile service user: The case of Jordan. *Journal of Economic & Administrative Sciences*, 26(1), 27–51. https://doi.org/10.1108/10264116201000002
43. Van, P. T. T. (2019). Factors affecting internet service provider switching intention of consumers — Research in Ha Noi area (PhD thesis, National Economics University). Retrieved from https://text.123docz.net/document/5780080-nhung-nhan-to-anh-huong-den-y-dinh-chuyen-doi-nha-chuc-cap-dich-vu-internet-cua-nguoi-tieu-dung-nghien-cuu-tren-dia-ban-va-noi.htm
44. Vinh, N. T. T., Anh, N. H., & Luong, N. T. H. (2021). Understanding mobile payment adoption in Vietnam: Using the meta-UTAUT model. *Journal of Economics and Development*, 292, 46–56. Retrieved from https://kptp.neu.edu.vn/lap-chi/so-292/muc-luc-632/nghien-cuu-hanh-vi-su-dung-dich-vu-thanh-toan-di-dong-o-viet-nam-su-dung-mo-linh-meta-utaut.380561.aspx
45. Ye, C. (2009). *Post-adoption switching of personal technologies: A push-pull-mooring-habit model* (Doctoral dissertation, University of Illinois at Chicago). Retrieved from https://www.proquest.com/openview/e0e385e2acbc5600765477bf07c0093/1?pq-origsite=gscholar&cbl=18750
46. Yu, J., Lee, H., Ha, I., & Zo, H. (2015). User acceptance of media tablets: An empirical examination of perceived value. *Telematics and Informatics*, 34(4), 206–223. https://doi.org/10.1016/j.tele.2015.11.004
47. Zhang, K. Z. K., Cheung, C. M. K., & Lee, M. K. O. (2012). Online service switching behavior: The case of blog service providers. *Journal of Electronic Commerce Research*, 13(3), 184–197. Retrieved from http://www.jecr.org/node/42