FACTORS INFLUENCING THE WILLINGNESS-TO-PAY OF INTERNET USERS IN VIETNAM FOR THE FEE-BASED ONLINE CONTENTS

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ABSTRACT

The aim of this study is to identify key factors that influence the willingness-to-pay (WTP) of the Internet users in Vietnam for the fee-based online contents. The study collects 309 suitable questionnaires filled by internet users over 18 years old and living in Vietnam, who frequently use online contents and have ideally made payment for online contents. The analysis results indicate that the willingness-to-pay for the fee-based online contents of Vietnamese users are influenced by their attitudes toward paying and ethical self-efficacy for online piracy. The study also identifies the antecedents of attitude, which include the perceived benefits of usefulness and enjoyment, the perceived sacrifice of the fee, social influences from other people, and especially the free mentality. The study then suggests managerial implications to online content providers in enhancing WTP for the fee-based online contents in Vietnam.

Keywords: Attitude toward paying; Determinants of attitude; Ethical self-efficacy for online content; Online content; Willingness to pay.

1. Introduction

The world has been going through the Internet and digital revolution in the recent decades and Vietnam with its fast-growing economy is not outside of this global phenomenon. The Internet penetration in Vietnam increased drastically from only 16 percent to become 51.5 percent in just ten years from 2006 to 2016 (Internet World Stats, 2016). A report from Nielsen (2016) showed that Vietnamese people spend a significant amount of time on Internet, only behind people from Singapore and the Philippines. An Internet user in Vietnam spends 24 hours online per week on average, a significant increase of nine hours or 60 percent from just two years previously. Online entertainment is a key staple of Internet usage in Vietnam, which includes but not limited to listening to music online, downloading music to listen offline, streaming and downloading movies, and playing online games directly on websites or via mobile applications. With the robust and habitual usage of the Internet, the online content industry is perceived to be a field with plentiful opportunities on which the businesses in Vietnam can capitalize to earn attractive revenues. These impressive results prove the tremendous potential of the online content industry. However, several reports and studies have shown that most of the Internet users do not want to pay for the online contents. In the context of Vietnam, the fact that Internet users are not willing to pay for the usage of online contents has also been reported. Almost 80 percent of Internet users
think the online contents should be free as they have always been previously. When being asked whether they would stop visiting a website if the website starts charging for the content, more than 70 percent of Vietnam users indicate strong and very strong agreement, and only a minimal 4 percent said they would pay and continue to use the website (Nielsen, 2017). Thus, the research question of this paper is what key factors influencing the willingness of Internet users in Vietnam to pay for the fee-based online contents are. The paper then suggests managerial implications to online content providers in enhancing WTP for the fee-based online contents in Vietnam.

2. Literature review and methodology
   2.1. Literature review
   Online content
   Online content is considered as either information or other intellectual property in the form of "intangible" digital products, i.e. without the physical form (Pew Research Center, 2010). In contrast to the traditional or paper-based contents, online content is created using distinct technologies which are relatively easy to use even by ordinary or non-professional people. After being created, online contents are shared, distributed, and accessed through online channels such as websites or more recently through the use of mobile devices (Li & Cheng, 2014). The most popular categories of online content are web services (e.g. email, storage, dating), news, magazines, articles, music (streaming, downloading), video streaming, TV/movies (streaming, downloading), study and learning materials, online apps, mobile apps, Ebooks… (Statista, 2014).

**Theory of Planned Behavior (TPB)**
TPB is a major and popular research framework for explaining individual’s intention and predicting the actual behavior, developed by Ajzen (1985) and further enhanced in 1991. According to the theory, an individual’s behavioral intention and actual behavior is guided by three constructs of attitude, perceived behavioral control, and subjective norm. It is suggested by Taylor and Todd (1995) to decompose these main constructs to their antecedents to have a better understanding of the belief structures and behavioral intention. Later studies on online contents adopted this decomposed TPB (Figure 1).

![Figure 1. Decomposed Theory of Planned Behavior (Taylor and Todd, 1995)](image-url)
The TPB of Ajzen (1991) consists of three conceptually independent determinants of intention as attitude, subjective norm, and perceived behavioral control.

**Attitude** is defined as the feeling of favorableness or aversion of an individual about the specific behavior (Ajzen, 1991). Attitude is likely to reveal the psychological assessment of a product by the consumer (Eagly et al. 1995).

**Subjective norm** refers to the perceived social pressure to perform or not to perform the behavior (Ajzen, 1991). Subjective norm consists of interpersonal and external influence. Interpersonal or peer influence is defined as the effect from word-of-mouth on one’s behavior from the important people or referent groups, such as family members, friends, and colleagues. External or mass influence concerns with the larger social circle and environment of an individual, such as the government, schools, experts, mass media, and their effect on the individual to perform certain behaviors (Bhattacherjee et al., 2003).

**Perceived behavioral control (PBC)** refers to people's perception of the ease or difficulty of performing the behavior of interest. PBC reflects the amount of control an individual believes that he or she has while performing a certain behavior (Ajzen, 1991).

In TPB (Ajzen, 1991), **behavioral intention** is an indication of an individual's readiness to perform a given behavior. It is assumed to be an immediate antecedent of behavior. **Behavior** is an individual's observable response in a given situation with respect to a given target.

**Willingness to pay (WTP)**

WTP is considered to be a part of the price perception and judgment concepts together with reference price and acceptable price, and it is deemed to link with variables influencing decision-making processes such as loyalty, satisfaction, and culture (Marine, 2009). WTP helps the consumers or buyers formulate the judgment regarding a purchase situation. In this study, WTP reflects behavior intention.

**Antecedents of Attitude**

Lin et al. (2013) argued that attitude is influenced by perceived benefits and perceived sacrifices. **Perceived benefit** is typically classified into two primary categories of utilitarian or functional, and hedonic or recreational benefits (Childers et al., 2011). **Perceived sacrifice** is described as what an individual must give up or pay to perform a behavior, and how the individual feels about that giving up (Chu & Lu, 2007). Moreover, **Free Mentality** was also found to have the negative impact on the attitude toward payment for the contents. Dou (2004) argued that Internet users have developed the belief that online content and services should only be free, due to the free usage since the beginning of Internet. A free mentality is that everything should be free online started to root in most users’ minds. This “free” idea is continuously reinforced by many online service providers (Lin et al., 2013).

**Perceive benefits**

In the context of Internet and online content, delivering the benefits to the users are critical to build user base and encourage purchase. Perceived usefulness and perceived enjoyments are selected as benefit components for this study since they cover all the mentioned categories. **Perceived usefulness** is described as the degree to which consumers believe using a product or service achieve a certain purpose for them or can help them complete certain tasks or activities (Wang et al., 2013). In the context of online content, the superiority is the extent to which the fee-based content can offer better variety, quality, and features in comparison to the free content (Dutta, 2012). **Perceived enjoyment** is the hedonic benefit which focuses on fulfilling the desires of the consumers with the recreational benefits or emotional stimulation and is considered as an intrinsic motivator for behaviour (Kim et al., 2007). In the context of
Internet, perceived enjoyment is described as the joy or pleasure that users can derive from using the online content (Wang et al., 2013). Previous studies have shown that perceived usefulness and perceived enjoyment are instrumental components that impact the attitude towards paying for online contents (Chu & Lu, 2007; Wang et al., 2013). An online content with high quality and rich features which can help the users to accomplish activities, or simply deliver the delight and joy, will be highly appreciated by the users. If Internet users perceive they can gain benefits as either functional or recreational from the content, they will likely have a favorable attitude about purchasing it. Therefore, two hypotheses are proposed:

**H1:** Perceived usefulness positively impacts attitude of Internet users toward paying for the fee-based online contents.

**H2:** Perceived enjoyment positively impacts attitude of Internet users toward paying for fee-based online contents.

**Perceived sacrifices**

The key determinants of perceived sacrifice are perceived fee and perceived risk (Lin et al., 2013; Wagner & Hess, 2013; Wu et al., 2015). In the context of online content, perceived fee is considered as the extent to which Internet users consider paying for the online content is too expensive for them (Wang et al., 2013). Previous studies suggested that perceived fee has a significant negative impact on the attitude of users (Chu & Lu, 2007; Lin et al., 2013; Wang et al., 2013; Wagner & Hess, 2013). Therefore, this study suggests the below hypothesis:

**H3:** Perceived fee negatively impacts attitude of Internet users toward paying for the fee-based online contents.

Perceived risk is the non-monetary sacrifice reflecting the concerns of Internet users about the security of online transaction due to the widespread of viruses, malicious soft-wares, and scams (Wang et al., 2005). The consumers must provide sensitive details such as their personal information and particularly the details of their credit cards for the payment for online content. Therefore, it has been suggested that certain Internet users do not want to pay for online content because they perceive the safety risk of having their personal and financial information stolen from the payment transactions (Duo, 2004; Wang et al., 2005). Lin et al. (2013) also suggested that perceived risk include the risk of performance to reflect the users’ concern about the reliability of the product or service. As these perceived risks increase, the favorable perception of the users for the content will reduce. The hypothesis is formed as below:

**H4:** Perceived risk negatively impacts attitude of Internet users toward paying for the fee-based online contents.

**Free Mentality**

Since the beginning of the Internet era, providing free contents for users has been a common practice for online businesses to attract and build a larger user base and ultimately earn higher revenue from advertising, since advertising is paid based on user traffic. This long-term use of free usage has made “free” become the commonly accepted norm about online content (Lin et al., 2013). Therefore, the users feel certain levels of unfairness when being asked to pay for the contents by the businesses (Wagner & Hess, 2013; Wang et al., 2005; Ye et al. 2004). The empirical results from previous studies suggested a robust and adverse impact on free mentality on the attitude of users toward paying for the fee-based online contents (Dou, 2004; Lin et al. 2013, Wagner & Hess, 2013). If the Internet users have this free mentality, they are not likely to be open to the notion of paying for the contents. Therefore, the following hypothesis is formed:

**H5:** Free mentality negatively impacts attitude of Internet users toward paying for the fee-based online contents

**Subjective norm and Attitude**

In the original model of TPB, there is no
connection between Attitude and Subjective norm. However, Tarkiainen and Sundqvist (2005) suggested that the positive or negative attitude of individuals about a product or service has the crossover effect on other people via their communication. Since the influence of other peoples is considered a component of subjective norm, it is suggested that subjective norm can be regarded as a determinant of attitude. Later empirical studies from Kwong and Park (2008), Li & Cheng (2014), and Wu et al. (2015) supported this relationship in the context of online content. It indicates that if an individual believes the nearby people have the positive attitude about the payment for online content, he or she will also likely to develop a favorable attitude as well. Therefore, this hypothesis is formed:

H6: Subjective norm positively impacts attitude of Internet users toward paying for the fee-based online contents.

Attitude and WTP

According to Ajzen (1991), attitude is the degree of which an individual evaluates and believes a behavior to be favorable or unfavorable, and this evaluation determines the intention of the person to perform that behavior. If the attitude toward the behavior is positive, the intention to conduct the behavior is strong. In the context of paying for online content, attitude is formed by the evaluation of the user on the potential outcomes of making the payment of the content (Lin et al., 2013). If the users assess that by paying for the contents, they will receive an overall positive result, or in other words, more gains than losses, they will be more willing to pay. Attitude has been consistently found in past studies to have the strongest positive impact on the WTP for online contents (Dutta, 2012; Kwong & Park, 2008; Lin et al. 2013; Wagner & Hess, 2013). Therefore, this hypothesis is formed:

H7: Attitude toward paying positively affects WTP for the fee-based online contents.

Subjective norm and WTP

Past studies suggested that Internet users consider the opinion of other people and the social norms in the decision making about the purchase of online contents. The suggested reasons are the need for social companionship and conformity, as well as the potential of the social norm in reducing uncertainty in decision making (Li & Cheng, 2014). Subjective norm has been found in past studies to have a strong impact on WTP for online contents (Dutta, 2012; Kwong & Park, 2008; Lin et al. 2013; Wagner & Hess, 2013). If the users believe that the people close to them have a positive attitude about paying for online content, and paying is considered acceptable or encouraged by society, they will be more likely to make the payment. Therefore, the below hypothesis is proposed:

H8: Subjective norm positively affects WTP for the fee-based online contents.

Ethical Self-Efficacy for Online piracy (ESEOP) and WTP

Since Internet piracy severely hampers online content industry by decreasing sales and profits and increasing costs for intellectual protections, several studies have tried to identify the determinants of piracy behaviors to find the effective strategies to combat piracy. Online piracy is defined as the duplication, download, purchase, distribution, and usage of unauthorized or unlicensed products including multimedia, digital entertainment contents, software (Prasad & Mahajan, 2003). This issue has been pervasive around the world since the beginning of the Internet due to the low costs of reproduction and distribution of illegal contents.

Self-efficacy is defined according to social cognitive theory as the judgment of people about their capabilities to perform certain behaviors and achieve the expected results, and it has a substantial impact on the conducting or changing the behaviors (Bandura, 1986). Self-efficacy is also considered as a determinant of perceived...
behavioral control in TPB (Dutta, 2012; Wu et al., 2015). Wang et al. (2013) further developed this concept in the context of online content to propose Ethical Self-efficacy for Online piracy (ESEOP), which is the tendency to use online content ethically. If an individual with a high ESEOP faces a situation involving illegal usage of online content, that person will likely conduct the moral behavior of not using the content, and thus the chance that the person will purchase the legal content for usage is increased. Empirical results from Lin et al. (2013) and Wang et al. (2013) supported this positive relationship between ESEOP and WTP for online contents. The hypothesis is summarized as below:

**H9:** ESEOP positively affects WTP for the fee-based online contents.

**Research model**

Based on the relationships mentioned above, a research model is shown in Figure 2.

![Figure 2. Research model](image)

### 2.2. Methodology

The study consists of two stages: preliminary study and formal study. **Preliminary study** is conducted using the qualitative approach. The draft questionnaire is developed from literature review to find out the relevant constructs. The in-depth interview with the preliminary questionnaire is conducted on five internet users who have made payment for online contents to adjust the content and wording, and to remove items of constructs relevant to Vietnamese context. After qualitative research, the questionnaires were revised to suitable for survey in Vietnam. **Quantitative research** is implemented in the stage of formal study. The closed questionnaire is used to survey. Revised measurement scales consist of 34 items of the ten factors (Table 1). The targeted respondents are Internet users over 18 years old and living in Vietnam, who frequently use online contents and have made payment for online contents previously. As a result, 309 suitable questionnaires were collected. The techniques for data analysis were Cronbach’s Alpha, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) are used to test the reliability and validity of measurement scale. Structural Equation Modeling (SEM) was used for testing hypotheses of the research model.
Table 1
The revised measurement scale

| Factors                     | The revised measurement scale                                                                 | Sources          |
|-----------------------------|-------------------------------------------------------------------------------------------------|------------------|
| **Perceived enjoyment**     |                                                                                                |                  |
| Enj01                       | Online content is very interesting to me                                                       | Wang et al., 2013|
| Enj02                       | I feel happy using online content                                                              | Wang et al., 2013|
| Enj03                       | I enjoy using online content                                                                   | Wang et al., 2013|
| **Perceived usefulness**    |                                                                                                |                  |
| Use04                       | Fee-based online content is easy to use, easy to find information                               | Wang et al., 2013|
| Use05                       | Fee-based online content has good quality                                                      | Wang et al., 2013|
| Use06                       | Using fee-based online content makes it easier to get the content information.                 | Wang et al., 2013|
| Use07                       | Fee-based online content provides a high variety for selection                                  | Wang et al., 2013|
| Use08                       | Using fee-based online content improves my content appreciation                                | Wang et al., 2013|
| **Perceived fee**           |                                                                                                |                  |
| Fee09                       | The fee for fee-based online content is too high.                                               | Wang et al., 2013|
| Fee10                       | The fee for fee-based online content is not reasonable.                                         | Wang et al., 2013|
| Fee11                       | I am not happy with the fee of fee-based online content                                         | Wang et al., 2013|
| **Perceived risk**          |                                                                                                |                  |
| Ris12                       | I feel unsafe and unsecured to provide personal information (credit card, name, address, etc) | Lin et al., 2013 |
| Ris13                       | I think the fee-based content providers may not be able to provide reliable services as committed | Lin et al., 2013 |
| Ris14                       | I think I may have issue while using fee-based online content (e.g. cannot connect service, cannot download content) | Lin et al., 2013 |
| **Free Mentality**          |                                                                                                |                  |
| Fm15                        | Providing free online content is reasonable                                                    | Lin et al., 2013 |
| Fm16                        | All online content should be provided for free                                                  | Lin et al., 2013 |
### Factors

| Factors | The revised measurement scale | Sources |
|---------|-------------------------------|---------|
| Fm17    | I only use online content if it is free | Lin et al., 2013 |

### Attitude toward paying

| Attitude       | Description                                                                 | Sources   |
|----------------|-----------------------------------------------------------------------------|-----------|
| Att18          | Paying for the fee-based online content would be a right idea.              | Lin et al., 2013 |
| Att19          | Paying for the fee-based online content would be an unwise idea. (*)        | Lin et al., 2013 |
| Att20          | Paying for the fee-based online content would be a good idea.               | Lin et al., 2013 |

### Interpersonal Influence

| Influence | Description                                                                  | Sources   |
|-----------|-----------------------------------------------------------------------------|-----------|
| Int21     | My family members think that paying for online content is the right thing   | Lin et al., 2013 |
| Int22     | My colleagues think that paying for online content is the right thing        | Lin et al., 2013 |
| Int23     | My friends think that paying for online content is the right thing           | Lin et al., 2013 |

### External Influence

| Influence   | Description                                                                   | Sources   |
|-------------|------------------------------------------------------------------------------|-----------|
| Ext24       | Most media promotes that paying for online content is the right thing         | Lin et al., 2013 |
| Ext25       | Schools suggest that paying for online content is the right thing             | Lin et al., 2013 |
| Ext26       | Internet experts suggest that paying for online content is the right thing   | Lin et al., 2013 |

### ESEOP

| ESEOP       | Description                                                                 | Sources   |
|-------------|-----------------------------------------------------------------------------|-----------|
| Esp27       | I will not use online content illegally even when its fee is too high for me | Wang et al., 2013 |
| Esp28       | I will not use online content illegally even when no one can know about that| Wang et al., 2013 |
| Esp29       | If my friends or colleagues have a content that I like very much, I will not ask them to copy the content illegally | Wang et al., 2013 |
| Esp30       | If one of my close friends badly needs a content and ask to copy that illegally from me, I will reject the request | Wang et al., 2013 |
| Esp31       | I will not use online content illegally even when everybody around me is doing that | Wang et al., 2013 |

### WTP

| WTP         | Description                                                                 | Sources   |
|-------------|------------------------------------------------------------------------------|-----------|
| Wtp32       | I intend to learn more about fee-based online content                         | Lin et al., 2013 |
| Wtp33       | I intend to use fee-based online content in the future                        | Lin et al., 2013 |
| Wtp34       | I intend to use fee-based online content in the next three months             | Lin et al., 2013 |

*Note: Item (*) was recoded in data analysis.*

### 3. Result and discussion

#### Sample description

There were 309 suitable questionnaires used for analysis. The table 2 describes the main characteristics of the sample.
Table 2
Sample description

| Description       | Frequency | Percent | Description       | Frequency | Percent |
|-------------------|-----------|---------|-------------------|-----------|---------|
| **Gender**        |           |         | **Income**        |           |         |
| Male              | 115       | 37.2    | Under 5 million VND | 27        | 8.7     |
| Female            | 194       | 62.8    | 5-20 million VND  | 154       | 49.8    |
| **Total**         | 309       | 100     | Over 20 million VND | 128       | 41.4    |
| **Age**           |           |         | **Total**         | 309       | 100     |
| 18-30             | 95        | 30.7    |                   |           |         |
| 31-40             | 134       | 43.4    | Undergraduate     | 32        | 10.4    |
| 41-50             | 52        | 16.8    | Graduate          | 183       | 59.2    |
| Over 50           | 28        | 9.1     | Postgraduate      | 94        | 30.4    |
| **Total**         | 309       | 100     |                   | 309       | 100     |
| **Internet usage per day** | | | | | |
| Under 1 hour      | 23        | 7.4     |                   |           |         |
| 1-4 hours         | 167       | 54      |                   |           |         |
| Over 4 hours      | 119       | 38.5    |                   |           |         |
| **Total**         | 309       | 100     |                   |           |         |

**Cronbach’s Alpha and EFA Testing**

The Cronbach’s Alpha reliability analysis is a measurement of the internal consistency of the constructed items to assess the reliability of each factor in measurement scales. The result of reliability analysis (Table 3) indicates that all of measurement scales are reliable (Cronbach’s Alpha > 0.7).

Exploratory factor analysis (EFA) is used to test the validity of measurement scales by using the principal axis factoring with extracting fixed number of factors (10 factors) and Promax rotation. Final EFA using all criteria for factor retention shows that KMO and Barlett’s test MSA are satisfactory to confirm the appropriateness to use factor analysis. The accumulative variance extracted of 66.63 % (Table 3) is satisfactory for retention based on total variance criterion. Thus, the factor analysis meets the reliability and validity of the measurement scales. Thirty four variables of ten factors can be used for CFA.
### Table 3

Cronbach’s Alpha and final EFA

| Factors | Enjoyment | Usefulness | Fee | Risk | Free-Mental | Attitude | Interpersonal | External | Ethics | WTP |
|---------|-----------|------------|-----|------|-------------|----------|---------------|----------|--------|-----|
| Enj01   | .866      |            |     |      |             |          |               |          |        |     |
| Enj02   | .887      |            |     |      |             |          |               |          |        |     |
| Enj03   | .663      |            |     |      |             |          |               |          |        |     |
| Use04   | .771      |            |     |      |             |          |               |          |        |     |
| Use05   | .712      |            |     |      |             |          |               |          |        |     |
| Use06   | .733      |            |     |      |             |          |               |          |        |     |
| Use07   | .758      |            |     |      |             |          |               |          |        |     |
| Use08   | .928      |            |     |      |             |          |               |          |        |     |
| Fee09   |           | .817       |     |      |             |          |               |          |        |     |
| Fee10   |           | .916       |     |      |             |          |               |          |        |     |
| Fee11   |           | .813       |     |      |             |          |               |          |        |     |
| Ris12   |           | .621       |     |      |             |          |               |          |        |     |
| Ris13   |           | .797       |     |      |             |          |               |          |        |     |
| Ris14   |           | .839       |     |      |             |          |               |          |        |     |
| Fm15    |           | .728       |     |      |             |          |               |          |        |     |
| Fm16    |           | .771       |     |      |             |          |               |          |        |     |
| Fm17    |           | .564       |     |      |             |          |               |          |        |     |
| Att18   |           |           |     |      |             |          |               | .509     |        |     |
| Att19   |           |           |     |      |             |          |               | .733     |        |     |
| Att20   |           |           |     |      |             |          |               | .625     |        |     |
| Int21   |           |           |     |      |             |          |               | .769     |        |     |
| Int22   |           |           |     |      |             |          |               | .913     |        |     |
| Int23   |           |           |     |      |             |          |               | .921     |        |     |
| Ext24   |           |           |     |      |             |          |               | .747     |        |     |
| Ext25   |           |           |     |      |             |          |               | .885     |        |     |
| Ext26   |           |           |     |      |             |          |               | .689     |        |     |
| Esp27   |           |           |     |      |             |          |               | .789     |        |     |
| Esp28   |           |           |     |      |             |          |               | .875     |        |     |
| Esp29   |           |           |     |      |             |          |               | .857     |        |     |
| Esp30   |           |           |     |      |             |          |               | .806     |        |     |
| Esp31   |           |           |     |      |             |          |               | .860     |        |     |
| Wtp32   |           |           |     |      |             |          |               | .703     |        |     |
| Wtp33   |           |           |     |      |             |          |               | .975     |        |     |
| Wtp34   |           |           |     |      |             |          |               | .676     |        |     |
| Cronbach’s Alpha | 0.851 | 0.888 | 0.882 | 0.790 | 0.747 | 0.791 | 0.909 | 0.832 | 0.920 | 0.842 |
| Eigen-values | 8.302 | 3.957 | 3.094 | 2.29 | 1.857 | 1.71 | 1.411 | 1.334 | 1.128 | 0.824 |
| Total Variance extracted: 66.63% |
Confirmatory Factor Analysis (CFA)

The final CFA measurement model is presented in Figure 3. Some variables are removed from the measurement model with below reasons:

- Ris12, Fm15: Two items have standardized factor loadings lower than ideal value of 0.7 (Hair et al., 2014). These variables also have high Modifications indices.
- Use06, Use07, Esp28, Esp29: These variables have standardized factor loadings higher than 0.7, but they have high Modification indices. After removing these variables, the related factors still have three items remaining. Thus the recommendation of three-indicator per factor is still satisfied (Hair et al., 2014).

**Overall fit assessment**

All the recommended values for fit indices are achieved (Table 4 and Figure 3). Therefore, the specified model is valid and can reproduce the covariance among the constructs closely to the reality.

### Table 4

| Index | CMIN/DF | GFI | TLI | CFI | RMSEA |
|-------|---------|-----|-----|-----|-------|
| **Recommended value** | < 3 | >.9 | >.9 | >.9 | <.08 |
| **Actual value** | 1.333 | .919 | .972 | .978 | .033 |

The tests of unidimensionality, convergent validity, and discriminant validity indicate adequate for the measurement model. Therefore, it is concluded that the final CFA measurement model achieves construct validity.

**Structural Equation Modeling (SEM)**

The structural model with standardized estimates and Goodness-of-fit indices is presented in Figure 4 and Table 5.

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**Figure 3.** Final CFA measurement model with model fit indices and standardized estimates
**Overall fit assessment**

All of the actual values in Table 5 meet the recommended values. Therefore, it is concluded that the SEM structural model has adequate fitness.

**Table 5**

Goodness-of-Fit Indices – SEM structural model

| Index          | CMIN/DF | GFI  | TLI  | CFI  | RMSEA |
|----------------|---------|------|------|------|--------|
| Recommended value | < 3     | > .9 | > .9 | > .9 | < .08  |
| Actual value    | 1.521   | .900 | .957 | .962 | .041   |

**Hypothesis testing**

The result of hypothesis testing is presented in Table 6 and Figure 5.
Table 6
SEM standardized regression weights for hypothesis testing

| Structural relationship          | Standardized regression weight | p-value | Comment      |
|---------------------------------|--------------------------------|---------|--------------|
| Attitude ---> Usefulness         | 0.178                          | 0.003   | Support H1   |
| Attitude ---> Enjoyment          | 0.157                          | 0.005   | Support H2   |
| Attitude ---> Fee                | -0.228                         | ***     | Support H3   |
| Attitude ---> Risk               | -0.01                          | 0.852   | Reject H4    |
| Attitude ---> FreeMental         | -0.532                         | ***     | Support H5   |
| Attitude ---> SubjectiveNorm     | 0.46                           | ***     | Support H6   |
| WTP ---> Attitude                | 0.549                          | ***     | Support H7   |
| WTP ---> SubjectiveNorm          | 0.066                          | 0.486   | Reject H8    |
| WTP ---> Ethics                  | 0.199                          | ***     | Support H9   |
| Interpersonal ---> SubjectiveNorm| 0.647                          | ***     |              |
| External ---> SubjectiveNorm     | 0.816                          | ***     |              |

Figure 5. Research model and hypothesis testing results

Model validation with Bootstrapping
To ensure that the results from SEM structural model can be generalized to the population, Bootstrapping technique is employed with N = 1000. All the structural relations are statistically significant except for the relationship between Risk toward Attitude and Subjective Norm toward WTP, which is matched with the rejected hypothesis H4 and H8. Therefore, it is concluded that the SEM
structural model is reliable and can be generalized to the population.

**Discussion**

The result of the research shows that there are seven out of nine hypotheses supported and two hypotheses are rejected. The result discussion is shown below.

*Perceived usefulness (H1) and perceived enjoyment (H2)*

The analysis results support that perceived enjoyment and perceived usefulness, or perceived benefits in general, are the significant determinants of the attitude of Internet users in Vietnam toward paying for fee-based online contents. While previous studies suggest that perceived enjoyment has a much bigger impact on attitude than that of perceived usefulness (Chu & Lu, 2007; Kim et al., 2007; Wang et al., 2013), this study shows a more balanced impact among those two factors. In fact, perceived usefulness has a slightly higher coefficient than that of perceived enjoyment ($\beta = 0.178$ and $\beta = 0.165$ respectively). That indicates Internet users in Vietnam value more equally the hedonic and utilitarian benefits of online contents. While it is generally believed that online content is more about leisure and entertainment-oriented, Vietnamese people also appreciate the practical benefits that the contents can bring to them, such as the email and online storage services, studying materials, or the utility applications on smartphones.

*Perceived fee (H3)*

As expected, the empirical results show that perceived fee has a significant negative impact on the attitude of Internet users toward paying for the fee-based online contents ($\beta = -0.228$). This finding is in line with some previous studies, and consistent with the loss aversion theory which proposes the perceptions of people are more impacted by losses than by gains (Chu & Lu, 2007; Kim et al., 2007; Wagner & Hess, 2013). It indicates that even though the users may truly enjoy the contents and think they are useful for them, they still can think negatively about paying for the contents if they believe that the fees are too high or unreasonable.

*Perceived risk (H4)*

In contrast, the hypothesis about the impact of perceived risk is not supported by the empirical results. Even though this construct still shows a negative impact on attitude toward paying, the magnitude is negligible ($\beta = -0.01$), and it is also not statistically significant. Previous studies also have inconsistent conclusions about the impact of perceived risk on attitude. While the studies of Lin et al. (2013), Wang et al. (2005), Ye et al. (2004) supported the impact, the result was not the same in the study of Dutta (2012). It is explained that cyber security, identity theft, the usage of credit card and online payment are still relatively new for Vietnamese, it is understandable that the Internet users in Vietnam may not have the full understanding of all the potential risks associated with performing financial transaction online.

*Free mentality (H5)*

It is evident via the analysis results that free mentality has a significant and adverse impact on the attitude toward paying for fee-based online contents of Vietnamese users. This result is consistent with the previous studies (Dou, 2004; Lin et al., 2013; Wagner & Hess, 2013; Wang et al., 2005). However, while previous studies vary on the impacting magnitude of free mentality on attitude in comparison with other determinants, this study shows that free mentality is the strongest determinant of attitude ($\beta = -0.532$). With this long history of free usage, searching and using free contents has become a deeply ingrained habit. This habit forms the mentality of Vietnamese users that online content should be provided for free, and if some contents are not free, there are always other sources or ways of getting them without any
Subjective norm (H6 and H8)

There are two hypotheses regarding subjective norm in this study, that subjective norm has the influence on both attitude and WTP for the fee-based online contents. The influence of subjective norm on WTP is not supported due to the very small magnitude ($\beta = 0.07$). This is a fundamental difference of this study compared to the previous researches, which showed subjective norm has the significant positive impact on WTP (Dutta, 2012; Kwong & Park, 2008; Lin et al., 2013; Wagner & Hess, 2013). However, the other hypothesis that subjective norm is a determinant of attitude toward paying is strongly supported via a strong coefficient ($\beta = 0.46$) and statistically significant. In fact, subjective norm has the second largest impact on attitude among all other antecedents, only lower than that of free mentality. Since attitude is shown as the main factor influencing WTP, we can conclude that subjective norm has an indirect impact on WTP as well.

Attitude toward paying (H7)

The attitude of Internet users toward paying for fee-based online contents is found to have a robust and significant positive influence on WTP, with the strongest magnitude among the studied factors ($\beta = 0.55$). The same result was found in all of the previous studies (Chu & Lu, 2007; Dutta, 2012; Kim et al., 2007; Lin et al., 2013; Kwong & Park, 2008; Wagner & Hess, 2013; Wang et al., 2013; Wu et al., 2015), showing an high agreement on this influence. That implies Internet users in Vietnam who have a favorable attitude about the idea of paying for online contents are more likely to make the purchase or payment for the contents than those who have an unfavorable evaluation.

ESEOP (H9)

The results indicate that ESEOP has indeed a positive influence on WTP of Vietnamese users for fee-based online content. Internet users who are confident in their abilities to maintain the ethical consumption of online contents and avoid the piracy or illegal usage will have a higher intention to purchase or pay for the contents than those who have lower moral ground with regards to online content usage. This finding is in agreement with the previous studies on the same topic (Lin et al., 2013; Wang et al., 2013). On the other hand, Internet users who have higher moral standards and confidence in their ability to avoid using piracy will be more open and willing to pay for the contents they want since they view the purchase or payment as the right and ethical thing to do.

4. Conclusion

The study employed the research model with the constructs of Perceived Usefulness, Perceived Enjoyment, Perceived Fee, Perceived Risk, Free Mentality and Subjective Norm as the antecedents of Attitude. The proposed factors impacting WTP is Attitude, Subjective Norm, and ESEOP. The results of quantitative analysis of 309 samples collected (from internet users having payment for online content) confirm the relevance and validity of the research model. Most hypotheses proposed in the research model are supported with two exceptions. The attitude of Internet users in Vietnam toward paying for fee-based is shown to be determined by the two perceived benefits of usefulness and enjoyment, the perceived sacrifice of the fee, the free mentality of the users, together with the subjective norm. Together, these factors determine 81 percent of the variance of attitude. The perceived risk is not proven to have the significant impact on the attitude of users. Among the antecedents of attitude, the free mentality has the biggest impact, following by perceived fee and finally perceived usefulness and enjoyment. The results confirm attitude and ESEOP have direct influences on the final WTP of the
users, with the total explanation of the variance of WTP at 31 percent. Attitude is the strongest factor among these two factors. The direct impact from the subjective norm on WTP is not supported.

Based on the findings of the study, the following managerial implications are suggested to online content businesses and providers for Vietnam market in improving WTP:

**Maximizing perceived benefits (perceived usefulness and perceived enjoyment):** The businesses need to continuously find the ways to improve the services and products to be more enjoyable and offer more entertainment value to the users. On top of that, thanks to the rapid advancement of technology, the online businesses have more available tools and techniques to develop better functionality, offer innovative features and improve the quality of the products regarding user experience, information, content, and customer services.

**Minimizing perceived sacrifices (perceived fee):** The substantial impact of perceived fee on attitude toward paying for fee-based online contents in Vietnam is a critical point of which the online content businesses need to be aware. From this finding, the businesses need to develop the proper pricing strategies and structures to minimize this unfavorable perception. A potential solution is the use of consumer survey to explore the range of pricing of which Vietnamese users will be willing to accept before launching or offering new online products or services. The businesses can also modify the current pricing to be more matching with user preferences to increase customer retention as well as the potentiality of new user acquisition. In addition, identifying and segmenting the customers to offer customized or flexible pricing based on the specific needs of the users, or adapting the pricing in accordance to the income of local users in different parts of the country are potential solutions to consider.

**Lowering free mentality:** To the extent that the benefits perceived by the users about the contents are maximized enough, they can suppress or offset the adverse impact of free mentality to create the overall favorable attitude on the purchase of the contents. Offering and highlighting unique benefits of the paid contents or following freemium model also are effective ways to show the users the benefits of paid content over free content. Moreover, the stepping up in fighting online content piracy by the governments and businesses will also be helpful in reducing free mentality.

**Utilizing subjective norm:** The businesses can rely on the mass media and the cooperation with the government and other social organizations to combat online content piracy. This point will be discussed in more details in the discussion for ESEOP. In addition, the businesses can maximize the impact of mass media and social influence on promoting their contents and acquiring more customers. As more and more people become purchasers and payers, the businesses can take advantage of word-of-mouth effect by getting the current customers recommend the products to the people close to them.

**Influencing attitude toward paying:** Enhancing favorable attitude of the users can be done with a comprehensive approach, includes promoting all the hedonic and utilitarian benefits of the paid contents, reducing the perception of fee with proper pricing strategies, tackling the free mentality, and maximizing the influence of subjective norm.

**Enhancing ESEOP:** The government needs to ensure the laws about intellectual properties. It is also critical to ensure that the anti-piracy laws, prosecutions, and penalties for performing piracy get adequate publicity to make sure that the Internet users are aware of the potential risks involved in their illegal
behaviors. It is advisable that the authorities can exemplify famous cases with regards to the prosecution of piracy both local and worldwide to the people. The heightened awareness will enhance the effectiveness of deterrent efforts in the prevention of piracy.

The study has a certain limitation. Firstly, the study relies on convenient sampling using online questionnaire. Future researches can consider applying probability sampling methods for higher reliability. Secondly, the final sample size of 309 and the respondents are also mostly author’s acquaintances or friends of friends, which poses another limitation for the representativeness of the data. Future researches should consider increasing the sampling size and locations whenever possible.

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