

# **Factors Affecting Customer Satisfaction: Evidence from Beauty and Cosmetic Online Shopping i n Vietnam**

Nguyen Thi Nhu Thuan, Ph.D.

Doctoral Thesis Summary



**Tomas Bata University in Zlín**  
**Faculty of Management and Economics**

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**Factors Affecting Customer Satisfaction: Evidence  
from Beauty and Cosmetic Online Shopping in  
Vietnam**

**Faktory ovlivňující spokojenost zákazníků při on-line  
nákupu kosmetických výrobků ve Vietnamu**

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## **ABSTRACT**

In the context of Beauty and Cosmetic Online Shopping (BCOS) in Vietnam, this thesis investigates key variables that affect customer satisfaction while also evaluating the effects of gender and marital status on such relationships. First, it offers a reliable questionnaire that accurately captures the five constructs of the self-constructed theoretical model: Online Shopping Experience (OSE), External Incentives (EI), Seller Service (SS), Security/Privacy (SP), and Personal Characteristics (PC). The thesis also looks at how gender disparities in these factors affect customers' satisfaction with their online beauty and cosmetics purchases. The findings of the t-tests indicate that male clients are much more satisfied with their purchases than their female counterparts. Additionally, it reveals that male clients are more content with their online buying, customer service, and outside incentives provided by online vendors than their female counterparts. According to the regression analysis, there is a significant and positive correlation between customer satisfaction and the OSE, SS, and EI. Males are more likely to experience this good customer service effect, whereas security and privacy have a greater positive impact on female happiness. Third, the thesis looks into how marital status affects the levels of customer happiness and discovers that married and divorced/separated online buyers have significantly different levels of satisfaction. These findings add to the body of knowledge on customer satisfaction, especially in BCOS. They have repercussions for current internet firms as well as new or future competitors.

## **ABSTRAKT**

V kontextu Beauty and Cosmetic Online Shopping (BCOS) ve Vietnamu tato práce zkoumá klíčové proměnné, které ovlivňují spokojenost zákazníků, a zároveň hodnotí vliv pohlaví a rodinného stavu na takové vztahy. Za prvé, nabízí spolehlivý dotazník, který přesně zachycuje pět konstruktů samostatně vytvořeného teoretického modelu: Online nakupování (OSE), Externí pobídky (EI), Prodejce (SS), Bezpečnost/Soukromí (SP) a Osobní charakteristiky. (PC). Práce se také zabývá tím, jak genderové rozdíly v těchto faktorech ovlivňují spokojenost zákazníků s online nákupy krásy a kosmetiky. Výsledky t-testů ukazují, že mužští klienti jsou se svými nákupy mnohem spokojenější než jejich ženské protějšky. Navíc odhaluje, že mužští klienti jsou spokojenější se svými online nákupy, zákaznickým servisem a vnějšími pobídkami poskytovanými online prodejci než jejich ženské protějšky. Podle regresní analýzy existuje významná a pozitivní korelace mezi spokojeností zákazníků a OSE, SS a EI. U mužů je pravděpodobnější, že zažijí tento dobrý účinek zákaznických služeb, zatímco bezpečnost a soukromí mají větší pozitivní dopad na ženské štěstí. Za třetí, práce se zabývá tím, jak rodinný stav ovlivňuje úroveň spokojenosti zákazníků, a zjišťuje, že ženatí a rozvedení/odloučení online kupující mají výrazně odlišné úrovně spokojenosti. Tato zjištění doplňují soubor znalostí o spokojenosti zákazníků, zejména v BCOS. Mají dopad na současné internetové firmy i na nové či budoucí konkurenty

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# 1. INTRODUCTION

## 1.1 Rationale

This thesis places the emphasis on Customer Satisfaction (CS). According to prior literature, CS (the abbreviation will be interchangeably used as customer satisfaction throughout the present study) remains a critical aspects that affect numerous contours of corporate revenue, and as a consequence, the success achieved by a company. In particular, it assumes great significance in very competitive sectors like the cosmetics/beauty industry for a minimum of two plausible factors: (1) a high CS level can improve the loyalty of old customers while attracting new ones (Park et al., 2019); (2) The role of CS in augmenting the happiness levels of customer towards their consumptions and product/service usage is on the rise. In this study, I contend that the satisfaction of following the use of beauty and cosmetic products could illuminate feelings and experiences (i.e. Kotler, 2000; Hoyer & MacInnis, 2001). According to Nguyen (2020a), customer satisfaction is associated with two core notions. The first one alludes to individual satisfaction relevant to a specific transaction, whereas the second shows the customer's overall (cumulative) satisfaction. Hence, examining the CS levels and customers' post-service attitudes is more useful.

With the proliferation of online channels and digitalisation, in particular, people find it easy and convenient to share their views on the performance of various businesses, which has the ability to affect the outcome of a company. By contrast, in case customers are dissatisfied, the present study posits that negative feedback about an unpleasant buying experience can spread at a fast pace (Zairi, 2000). However, it can be difficult to understand the manner in which and the reasons why customers are dissatisfied notwithstanding the significance of creating and sustaining CS with respect to strategic planning.

When it comes to the gap in existing literature, many studies have placed the emphasis on CS. Having said that, many of these researchers (Hallowell et al., 1996; Bowen et al., 2001; Shankar et al., 2003) opine that the focus is confined to CS' recognition as a pivotal aspect in terms of customer behavior. It has also been found that the impact of CS on customer loyalty is significant. However, there is a *clear* gap in the literature that develops empirical models related to determinants of CS. To address the gap, a questionnaire has been developed as well as validated by the researcher concerning CS and more

specifically, Vietnamese Beauty and Cosmetic Online Shopping (hereafter it will be referred to BCOS).

There are three reasons behind choosing the aforementioned field in Vietnam (Nguyen, 2020ab; Nguyen, 2021). To begin with, the burgeoning growth of online channels has undoubtedly ushered in myriad online services. This includes internet shopping entities, especially in developing countries in Asia such as Vietnam. The credibility of such a postulation is established by a surge in the number of online shoppers. Next, the growth rate of Vietnam's BCOS sector was 115 percent back in the year, 2016 when compared to the previous year, thus exemplifying its popularity. This phenomenon can be ascribed to the country's rapid economic growth, coupled with a range of marketing pursuits and drastic alterations when it comes to business distribution.

The growing demand experienced by Vietnam-based businesses' distribution methods has catapulted the uptake of cosmetic and beauty products (Nguyen, 2020a, b; Nguyen, 2021). As a case in point, trading on social media and the increase in internet business reach has been growing since the year 2015 (Word Bank Vietnam, 2020), which has led to a wider range of choices for people to make online purchases. This is because they now have the option to choose their preferred products (which also include branded ones) through company websites and other social media platforms such as Facebook groups. This reach and flexibility have also been able to expand to rural areas of Vietnam, who feel empowered to place online orders for a product of their choice and have it delivered at home – thus creating a sense of knowledge and awareness-based convenience in comparison to physical shopping – and contributing to the BCOS sector's growing market share.

At the same time, the fact that the GDP of Vietnam has been growing at a healthy rate (it was almost 6.8% in 2016) and the concomitant higher living standards have also positively affected the purchasing power of Vietnamese consumers in terms of the BCOS sector (Nguyen, 2020a, b; Nguyen, 2021). Finally but importantly, the current study aims to pinpoint constructs of CS in the cosmetics/beauty market whilst preparing a mechanism to gauge the constructs and carrying out an empirical validation of instruments by leveraging online shoppers' data to provide CS-related practical knowledge to online BCOS businesses in Vietnam. Prior studies have, in the past, come up with questionnaires for investigating differences related to gender in relation

to behavioral patterns concerning financial transactions on the internet to purchase beauty and cosmetics products (Liu et al., 2013; Rita et al., 2019).

More importantly, current knowledge in this field provides evidence on the impact of factors on customers in general (e.g., Rita et al., 2019) as well as on the differences between genders when it comes to online consumers' behaviour (e.g., Liu et al., 2013). However, there is a lack of research looking at female customers' behaviour in BCOS, while the proportion of this kind of customer in this sector has been substantial and dominant. There is also a paucity of studies that have examined different satisfaction levels involving male and female consumers in relation to this topic against the backdrop of the Vietnamese market. While many studies have attempted to explore CS determinants (Giao et al., 2020; Nguyen et al., 2020; Nguyen, 2020a, b; Nguyen, 2021), not even a single of these studies have tried to explore whether marital influence has any effect on the customer satisfaction of online beauty and cosmetic products' buyers, especially in Vietnam's market given that the BCOS sector is one of the fastest growing industries within the nation.

Accordingly, to the best of my knowledge, this is the *first* study that examines the important facets that affect CS and the implications of both genders as well as marital status on these aspects against the backdrop of Vietnam's BCOS market. In general terms, my thesis will be split into three separate studies, the first of which developed and validated the Customer Satisfaction Survey (CSS) Scale by using samples from Vietnam. As of now, only one study has developed and validated questionnaires for different markets. Examples include the development of a questionnaire by Bargas-Avila et al. (2010) for gauging CS in relation to e-Government portals. Aletras et al. (2010), Huber et al. (2007), Phau and Ferguson (2013) and Boß et al. (2016). However, at the time of carrying out this study, no research has identified CS constructs to establish the survey's validity/reliability in the context of data collection within the online shopping industry, the BCOS sector, and in Vietnam. Therefore, I aim to develop and validate a questionnaire on CS in the context of BCOS, in Vietnam.

*Secondly*, this study will utilize the aforementioned questionnaire within the first portion of CS survey determinants in Vietnam's BCOS market to understand the difference made by gender. So far mixed findings have been revealed by existing literature that has explored gender-related CS levels. While some studies (such as Ross et al., 1999) have not found any major differences, others such as the one conducted by Buller and Buller (1987)

suggest that female users tend to be more satisfied when compared to their male counterparts. On the other hand, authors like Bendall-Lyon and Powers (2002) have exhibited contrasting findings by positing that the proclivity of males being satisfied when compared to females is higher when it comes to the quality of services. However, some studies (Voss & Cova, 2006) postulate that females will derive higher satisfaction levels in the event they are able to experience a heightened sense of happiness in value expressive characteristics as compared to their male counterparts. However, these studies have not examined gender-based dissimilarities of CS determinants whilst buying products in the BCOS sector within Vietnam. According to these studies, both genders have varying preferences concerning processing upon being confronted with message stimuli (Shapiro & Mahajan, 1986; Brunel & Nelson, 2000). Given that previous literature has explored how the quality of a service or product affects customer satisfaction. Thus, I shall expand the scope of the results of the above-mentioned studies across both domains by exploring the manner in which CS determinants have been perceived by males as well as females. In businesses that are marginally online, it seems that the satisfaction of males is affected by how they evaluate perceived functional characteristics whereas, in the case of females, it is the perceived attributes of value expressiveness that make a difference. Colbert (2003) opines that both genders must examine if the product exchange necessitated risks across psychological/functional/economic levels.

*Finally*, this thesis will be the first one placing on the association between marital status and customer satisfaction in Vietnam. Specifically, I focus on the variations in CS degrees among three different groups: single or never married; legally married; and divorced/separated. Gender is then related to such findings by classifying male and female customer groups of examinations. The motivation is from the fact that the changes in physical and psychological well-being can be a result of legal marriage but this differs between males and females (Williams, 1988; Glenn & Weaver, 1977). In principle, scholars of “selection explanation” opine that married individuals are found to be happier, hence, they have proved a positive relationship between marriage and well-being (Gove et al., 1990). In addition, “social role explanations” scholars support that males may be less likely to face stressful periods than females, and therefore, they seem to obtain more benefits from their legal marriages (Bernard, 1972). Interestingly, Mookherjee & Png (1995) found that compared to their male peers, females who are legally married

enjoyed a higher level of satisfaction. Despite mixed arguments, the above research still supports marriage, which brings an individual better mental and social well-being, leading to a higher level of CS (see Nguyen & Homolka, 2021). In congruence with the findings of previous studies (Frieze, 1978; Vanfossen, 1981), I predict that gender and marriage are related to each other and they will determine the level of customer satisfaction. As a case in point, CS level can be associated with the quality of legal marriage but that result might be stronger in the female groups than the male groups. Gender is taken into account because of the different orientations and expectations between males and females, especially within the online beauty and cosmetics sectors.

My thesis is expected to significantly complement the CS literature on online beauty and cosmetics shopping in a developing country such as Vietnam. The results raise several implications for existing businesses and future entrants.

## **1.2 Online Shopping and E-commerce Businesses in Vietnam**

The world has experienced considerable changes in our current century, typically significant developments in technology and innovation (Sutherland and Jarrahi, 2018; Le et al., 2020). This affects every aspect of human life, including businesses and their operations through the digital economy concerning interpersonal interactions and, in turn, creating new scientific research and breakthroughs (Hindman, 2018). Notably, the use of the internet has played an incredible role in changing customer behaviour and business types. Along with new information and communications technologies (ICTs), the internet started in developed countries and nowadays spread around the world (Ivanova and Sceulovs, 2018) and then generated a new digital business (IT-driven knowledge enhancement) and reshaping all sectors.

In Vietnam, Nguyen (2020b) has indicated a rapid development of online businesses which can be the result of the internet introduction. Those businesses obtained a growth rate of about thirty percent, (2018). According to Linh (2020), user penetration would increase from 56.7% to 64.4% by 2020-2023. The number of internet users in this country is also expected to increase to 67.8 million in 2021. All these numbers can demonstrate the high e-commerce market of Vietnam on the map of the world. In wake of the heightened competition, physical stores have begun to offer a combination of

physical offerings and e-commerce by engaging with online shoppers to adjust to the growing trend and maintain a competitive edge.

In Vietnam, online shopping (or OnS) has emerged as a major attraction, especially for female customers. In particular, female customers are increasingly depending on OnS as a vital aspect of their lives (Nguyen, 2020a, b; Nguyen, 2021). At the same time, economies funded and based on technology are transforming how OnS is affecting the purchase habits of both male and female shoppers.

Owing to the ongoing COVID-19 pandemic, online shopping worldwide, including in Vietnam, has emerged as the way in which customers can purchase their products and enjoy remote services. IMF (2020) revealed that mobility has decreased by 25 percent only after one week of the national lockdown. This highlights the importance of my study in the context of Vietnam, where people cared about the government policies related to the COVID-19 pandemic (Wolin & Korgaonkar, 2003)

## **2. LITERATURE REVIEW AND THEORITICAL FRAMEWORK**

### **2.1 Developing customer satisfaction constructs**

#### **2.1.1 Online Shopping Experience (OSE) construct**

The rapid evolution of technology has witnessed a shift either in a partial or a complete mode to the digital world, including shopping experience (Pantano & Priporas, 2016); therefore, OSE has been portrayed as a vital component in this global competition. Despite its importance, a body of literature has shown that understandings of OSE have still been nascent (Bilgihan et al., 2016), particularly gender differences in consumer behaviour and decision making online. Previous studies on gender differences have reported inconsistent findings. For example, men and women differ from each other in terms of their psychological behaviours when they attempt to make any purchases online (Wolin & Korgaonkar, 2003). Indeed, men display more positive attitudes towards online shopping because they perceive the potential risks of purchasing online, familiarise with website design, and gain technology acceptance. However, Alreck and Settle (2002) state that women's attitudes towards online shopping are found to be similar with those of men even though it is obvious that women are more likely to show more positive attitudes towards shopping in general. Other studies have shown that women do not derive immense satisfaction in OSE compared with men (Kim, 2015; Rodgers & Harris, 2003). From conflicting findings in previous studies, it is essential to devote more attention and seek better understandings of gender differences in OSE. This also stimulates the potential needs on the relationships among gender differences, OSE and cosmetics because the use of cosmetics is no longer exclusive to women (Lai, 2005; Liu et al., 2013)

#### **2.1.2 Seller or Customer Service (SS) construct**

As mentioned above, the BCOS sector is considered as an exponentially thriving yet intensively competitive business; therefore, the biggest challenge for online shopping is how to maintain adequate and efficient CS. To achieve this, it is essential for online businesses to bring the customers high-quality products and services that is argued to positively affect their loyalty

(Gounaris et al., 2010). If SS is highly appreciated by the online shoppers, they will be likely to have favourable behavioural intentions (Brady & Robertson, 2001). A demonstration for this is about website design quality, i.e., online shoppers can easily find all important and relevant information of the products including characteristics, functions, origin, and payments. Given that electronic services are considered as one of the most critical determinants for an online business' success (Sharma & Lijuan, 2015). CS, therefore, will be positively affected by both, the attributes and characteristics of e-service quality through an excellent e-service quality (Blut et al., 2015). Importantly, delivery/fulfilment, which refers to activities of online businesses, is able to ensure that online shoppers could receive the correct order (i.e., delivery time and condition, order accuracy) (Blut, 2016). It is able to be assessed after the purchase and payment process was fully completed. Previous evidence has shown that compared to in-store shopping, it is more likely that customer post-payment dissonance occur during online shopping stages. This is simply because online shoppers could not see the purchased products/services in person before making a purchasing decision (Liao & Keng, 2013). Online businesses, consequently, need a guarantee and assurance for their customers that they will deliver correct products in an agreed time and date as well as other conditions. I therefore consider fulfilment as one of the determinants of e-service quality. Moreover, SS also include other aspects such as ordering, payment method, guarantee policy, and other customer services. If these elements are excellent, the CS might be increased as their purchasing experience is good.

### **2.1.3 External Incentives (EI) construct**

Previous studies have defined external incentive (EI) as a factor including several elements such as Price of products, Promotion activities and policy, Product attributes and quality, brands of products and source of opinion (Rita et al., 2019). These factors are expected to significantly affect customer experience and therefore CS. Typically, online shoppers can buy products and services with lower prices while they do not need to pay for other costs such as expenses of negotiating traffic, spending time, and using energy to compare product prices. This reduces the pressures for online shoppers resulting in comfortable and convenient feeling, which includes obtaining lower price and more accurate product information from different online sellers. In addition to

this, the customers can obtain their favourable products and services more quickly than in-store shopping that may delay their purchasing (Park et al., 2009; Shin & Biocca, 2017). Furthermore, online businesses could offer better promotion policies such as reducing prices (EI), which in turn, affects CS. This is consistent with the study of Wang (2011) who have argued that a customer is more likely to choose a retailer giving them more attractive promotion policy. This suggests that promotion and lower price plays vital roles in enhancing the consumers' perception of emotional value, and in turn, CS. Moreover, unique attributes and excellent quality of online beauty and cosmetics products also influence the customers' trust and enjoyment, which leads to their higher satisfaction. Last but not least, brands of products may be bias customers that they offer them more value in terms of quality.

#### **2.1.4 Security and Privacy (SP) construct**

Previous evidence (e.g. Liu et al., 2013; Chiang & Dholakia, 2003; Rita et al., 2019) has also highlighted the potential effects of security and privacy on CS. I therefore include this group of constructs into the survey and my theoretical model. More specifically, SP can be described as the security of credit card payments from customer purchasing transaction. In other words, it is considered as the privacy of shared information (Blut, 2016). In the situation that online businesses make their advertising activities and purchasing transactions via their website, they should increase the confidence of customers towards SP (e.g., security of personal information and payment details such as demographics, contact number, delivery address and credit card information) (Holloway & Beatty, 2008; Wang et al., 2015). Failure to do so may reduce the customers' trust and as such their satisfaction can be destroyed. An effective website, according to Schmidt et al. (2008), is one which features well SP. It can protect online shoppers against fraud after they made a purchasing transaction. I argue that SP construct plays an important role in improving customer trust and CS.

#### **2.1.5 Personal characteristics (PC)**

I also include personal characteristics into the models and survey. According to Carey and Ziebermann (2002), PC comprising of customers' gender, age, marital status, and education has significant impacts on their perceived risks of Internet usage. For example, Simon (2005) has also noted that males and

females reveal differential perceptions and satisfaction on the use of websites. As this thesis considers e-commerce as one of the key facets of internet activity, it argue that the finding of Simon can be applicable to the context of online shopping. In addition, other factors (i.e., trust, commitment, relational embeddedness, and social interaction ties) have been also empirically examined by several prior research (Chen and Cheng, 2009; Chang & Hong, 2015). The next category emphasizes transaction-related factors such as perceived price fairness, participation volume, Internet advertising, prior purchase experience, and satisfaction (e.g., Shiau & Chau, 2016; Zhang et al., 2015), where theories of transaction cost economics, expectation–confirmation, and social identity have been adopted.

## **2.2 Constructing the conceptual framework for determinants of CS in BCOS**

Previous studies have introduced several models of CS. While the American Customer Satisfaction Framework (ACSF) has described the relationships between CS and its determinants such as customer expectation, perceived quality and perceived value (Bryant, 1995), the European Customer Satisfaction Framework Model (ECSF) has added the image factor into the model and classifies perceived value of quality into the perceived quality of product and that of services, as well as of price (Anderson & Fornell, 2000). The former focuses on the customers' experience in physical stores and the latter focused on the re-purchase factors which affect CS. All of these theoretical determinants have been reflected in my self-constructed theoretical model with five-constructs.

Furthermore, with the above five constructs (i.e., OSE; SS; EI; SP; PC) demonstrated in Section 2.1.1 to 2.1.5, I have constructed the Figure 2.1 which shows a theoretical model. For the first construct (OSE), this study classified the consumers into three types: (1) those who have OSE for all product, (2) those who have no OSE; and (3) those having OSE for beauty and cosmetics products. As mentioned earlier, the thesis expects that customers' prior experience may affect their purchasing behaviour in the future and their judgement on new online products' orders may be compared to prior experience, and in turn, influence their CS. For the second construct (SS), it is likely to affect the CS because matters related ordering, payment method, delivery and fulfilment, guarantee, website design and customer service are

imperative in creating great experience for online customers. If their trust on SS was reduced due to negative experience on these matters, their CS may be significantly and adversely affected. The third construct (EI) is built up upon on the traditional marketing mix which includes four P(s) (McCarthyin, 1960): Product (i.e., Product attributes, Brand and Quality), Place, Promotion and Price. Place is ignored because of online shopping. The research has already included the delivery in SS construct. Source of opinion is also added as an important element of EI. The last construct is SP. This has been added to the theoretical model of BCOS because SP is important to online shopping which is subject to the cybersecurity. For example, personal information and payment details of customers can be stolen by online businesses or internet hackers. For online businesses, it is no doubt that PS will affect CS. Compared to these previous frameworks, my model is constructed based on the situations and sectors' characteristics, as such, it can fully reflect factors potentially influencing the CS in BCOS.

Consistent with previous CS studies, this part of the thesis has constructed the hypotheses as follows:

H1: A positive correlation exists between internet shopping experiences and customer satisfaction

H2: A positive correlation exists between the services of sellers and customer satisfaction

H3: A positive correlation exists between extraneous incentives and customer satisfaction

H4: A positive correlation exists between privacy/security and customer satisfaction

## **2.3 Gender and Customer Satisfaction**

Prior studies (Kaufman & Rousseeuw, 2009) have highlighted some important variables particularly demographic factors (i.e., gender, age, income, education, tastes, habit, routines, social norms and expectations, dominant cultural values) which are potentially associated with customers' behaviour as well as their satisfaction. Typically, different gender (i.e., males versus females) has different consuming behaviour towards products and services (Kotze, Anderson, & Summerfield, 2016; Anderson & Fornell, 2000). Yet this does not suggest that customers with same gender (or age, etc.) reveal same psychological characteristics as these might be different depending on

individuals' own interests, habit and characters. More specifically, Hoyer and MacInnis (2010) has defined gender as a set of characteristics differentiating male individuals from their female peers. They expect that these two legal genders differ each other about several aspects comprising of their personal trait, attitude as well as activities that have significant linkage with customer behaviour and satisfaction. They also have dissimilar observations and viewpoints towards life, environment, society, politics, culture, and processes. Therefore, male and female customers are likely to show their different judgements and overall consuming and purchasing satisfaction (Karatepe, 2011; Rodgers & Harris, 2003).

Some studies have argued that the purposes for online shopping between male and females might be dissimilar (e.g., Fraj & Martinez, 2006). While the former (i.e. male customers) has special interests and attention on key online product functions, the latter (i.e. female customers) tends to see online shopping as their own interests as well as a social need. Furthermore, these two groups of gender reveal their difference in expectation, want, need, lifestyle, and so on, which in turn, affects their difference in consumption behaviour and satisfaction. One of good illustrations for this is that females pay more attention on either personally relevant information or information relevant to others or both. As such, they tend to get involved in a more detailed and more in-depth examination of a message, and ultimately base on product attributes to make their extended decisions. On a contrary, male customers tend to focus solely on the personally related information. For example, they might utilise simpler heuristics and process information based on few details (Hoyer & MacInnis, 2010; Karatepe, 2011). Taken together, this current research makes a theoretical prediction that female online shoppers are more likely to focus their attention on the products' quality (i.e., detailed consideration and evaluation on every single aspect of the purchased products) than their male counterparts (i.e., focused on overall products). This leads to the systematic difference in purchasing satisfaction between men and women. In other words, gender plays a vital role in consumer behaviour and CS.

I anticipate that female customers have greater expectation of the beauty and cosmetics products which are purchased via online channels, than male customers who have much lower perceptions on detailed characteristics of those products. This in turn, influences the level of CS. More specifically, although I expect that male customers perceive customer service quality and external incentives better than female customers, but they may perceive

privacy and security more important as men are often more concerned of technological aspects and information protection which they are more understood about and more interested in. Regarding the previous online experience, I also predict that male customers have more positive experience than their female counterparts because they are less likely to place their attention on details and characteristics of products. In other words, it may be easier to make males satisfied with the purchasing online as OnS is convenient for them, especially many Asian or Vietnamese males are still not comfortable to shop in physical stores because beauty and cosmetics products have long been perceived to be those for females rather than males. OnS helps them to overcome this challenge and hence, they tend to do more shop and consume more these types of products. Following my self-constructed five-construct theoretical framework in another paper, I have added the expected effects of gender on the relationships between constructs and CS variable. In term of econometrics, gender is measured as a dummy factor which takes value of one if the observed respondent is female and otherwise zero. Accordingly, the hypothesis of this study is stated in the alternative form as below:

H5: Satisfaction levels of male customers tend to exceed that of female customers

H6: A positive correlation exists between the experience of Online shopping and customer satisfaction, although this holds truer for male customers as compared to female customers

H7: A positive correlation exists between customer and seller service and customer satisfaction, although this holds truer for male customers as compared to female customers

H8: A positive correlation exists between extraneous incentives and customer satisfaction, although this holds truer for male customers as compared to female customers.

H9: A positive correlation exists between privacy/security and customer satisfaction, although this holds truer for female customers as compared to male customers.

## **2.4 Marital Status and Customer Satisfaction**

Research in the effects of marital status on customer satisfaction has been conducted (e.g., Dittmar, Long, & Meek, 2004), yet no studies to date, to my

best of knowledge, focus on online shopping in the beauty and cosmetics sector in Vietnamese market. As highlighted in several studies (e.g., Kim, Vogt, & Knutson, 2015), technology and internet have contributed to the significant changes of the shopping behaviour in recent year, in that customers can shop whatever they want via their smart phone, or any internet connected devices, or website. Several shopping apps were therefore launched to the market and receive great attention from customers. This also happens within the beauty and cosmetics e-commerce. Previous literature (e.g., Naser, Jamal, & Al-Khatib, 1999; Saini, 2013) further find a significant influence of demographic characteristics in shaping customers' perspectives which in turn, affect their expectations, perceptions and behaviour and hence, their overall satisfaction when shopping. Among these, demographic sub-groups of gender and age are found to be important. Besides, there are other significant factors that could be related to customer satisfaction, particularly marital status where show whether customers are classified as single or legally married or divorces/separated. However, little studies test for this variable while more focus on demographics in general terms, and age or gender more specifically. Some exceptions include the study of Oyewole, Sankaran, & Choudhury (2008) examining customers' socio-demographic characteristics with services in the airline sector, that of Dewan & Mahajan (2014) testing the customer satisfaction and the moderating impact of demographic factor including marital status and gender in public sector banks, that of Jham (2018) which investigate the relationships between customer satisfaction, service quality, demographic factors and word of mouth communication perspectives in the retail banking in United Arab Emirates.

Under the existing mixed findings regarding the effects of marital status on customer satisfaction in other and various industries and countries, the present research conducts the current research which aims to explore the real effects of marital status (i.e., single or never married; married; divorces/separated) on customer satisfaction, and then consider the moderating impacts of gender on such relationship. This study is the first to address these research questions in the unique context of online shopping within beauty and cosmetics sector, particularly in the growing countries like Vietnam where these have become hot trend in recent decades. It expects that there exists a significant difference in customer satisfaction between single, married, and divorced/separated online shoppers, and furthermore, gender plays an important role during this process. This is consistent with the expectation on the significant role of gender in online shopping on the customers' intention to buy online (e.g., Rodgers &

Harris, 2003; Sanchez-Franco, 2006; Van Slyke, Comunale, & Belanger, 2002). In addition, it is also in line with findings in online shopping related to the relationship between gender difference and various factors including perceived risk of online purchasing (Garbarino & Strahilevitze, 2004), website usability and design (Cyr, Bonanni, & Ilsever, 2005), and technology acceptance (Gillenson & Sherrell, 2002; Sanchez-Franco, 2006), and other outcomes (e.g., Van Slyke, Comunale, & Belanger, 2002; Chang, Wang, Kanamori, Shih, & Kawai, et al., 2005; Cyr, Bonanni, & Ilsever, 2005). Taken together, I propose the two main hypotheses as below:

H10: The customer satisfaction levels among single, married, and separated online shoppers are different

H11: The association between marital status and customer satisfaction levels among male and female internet shoppers is different

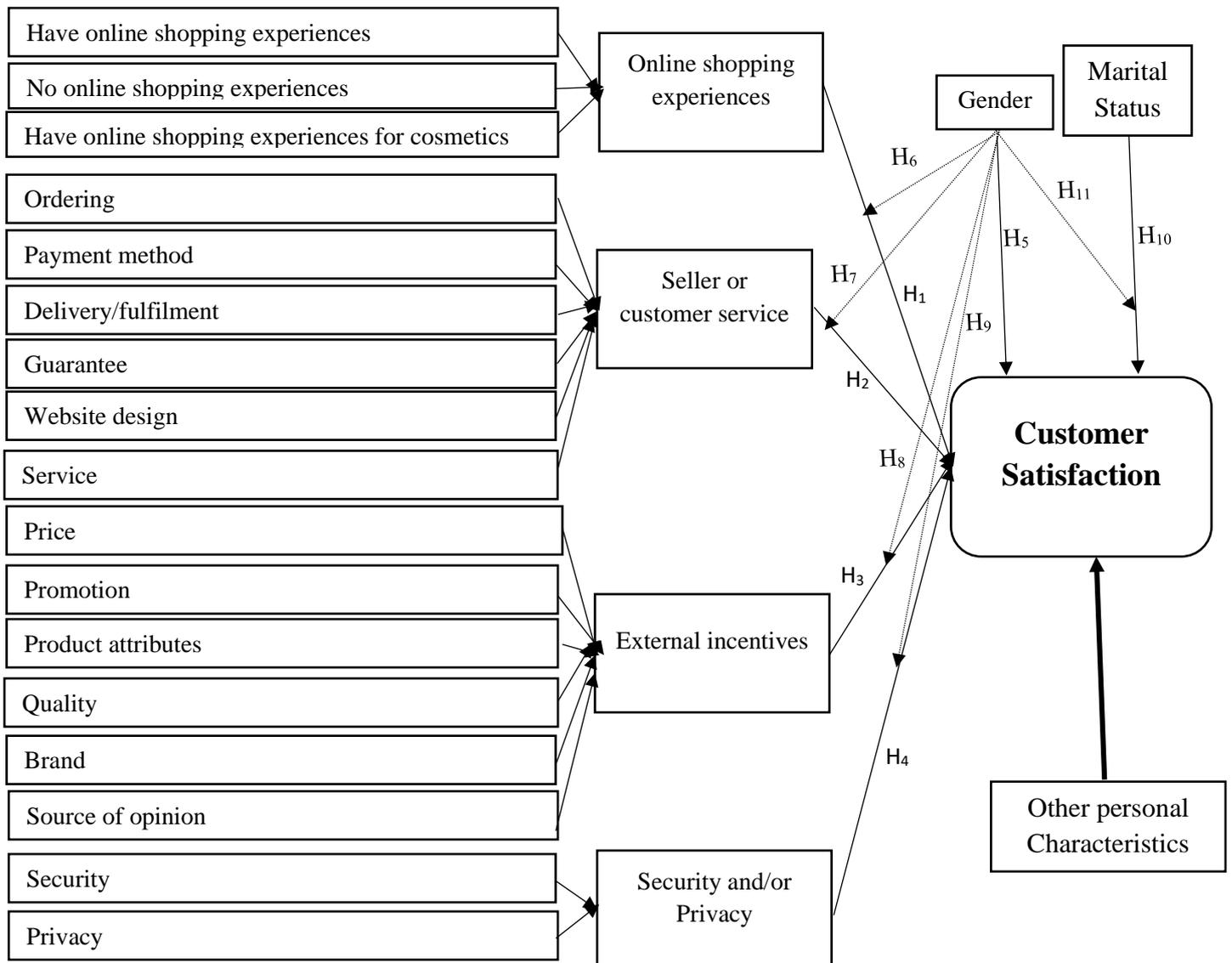


Figure 2.1: Five-construct Theoretical Model of Customer Satisfaction

Source: Own research & Rita et al. (2019)

### 3. RESEARCH METHODOLOGY

#### 3.1 Research goals

The main purpose of this research is to identify key factors which can affect the customer satisfaction in online beauty and Cosmetic sector in Vietnam. As such, the research questions (RQ) are: Which factors affect the purchasing satisfaction of consumers when buying beauty and cosmetics products online?

The research questions and objectives (RO) are given in Table 3.1. as follows:

Table 3.1 Research question/ objective

RQ1	What are the key factors affecting the customer satisfaction for purchasing online Beauty and Cosmetic products in Vietnam?
<i>Objective 1</i>	▪ <i>To identify key factors affecting the customer satisfaction for purchasing online beauty and cosmetics products in Vietnam.</i>
RQ2	Are there any differences between female and male customers?
<i>Objective 2</i>	▪ <i>To identify differences between male and female customers regarding their satisfaction for purchasing online beauty and cosmetics products in Vietnam and its determinants.</i>
RQ3	Does marital status affect satisfaction of online shoppers in the Beauty and Cosmetic sector in Vietnam?
<i>Objective 3</i>	▪ <i>To identify the impact of marital status on the levels of satisfaction of online shoppers in the beauty and cosmetics industry in Vietnam.</i>

Source: Author estimation

#### 3.2 Methods

##### 3.2.1 Selected processing methods

This research employs quantitative methods, which can be used for all research questions. Prior literature shows that quantitative approach helps to explain the phenomena by gathering numeric data and using mathematically to analyse the data. It is applied to describe variables, evaluate the relationship between variables

and examine which factors could significantly impact on CS to online shopping then establish an equation to clarify that effect.

An online questionnaire survey was used in this study with the primary purpose of examining determinants of CS and gender differences on this (see Liu et al., 2013; Chiang & Dholakia, 2003; Rita et al., 2019). In order to enhance the validity of content, reliability and rates of responses, the questionnaire will be designed following the study of Churchill and Iacobucci (2002). Their recommendations included questionnaire design and layout, survey piloting and pre-notification and post-survey follow-up reminders. I also conduct a comparison of early and late respondents on a number of key characteristics to check for non-response bias. I expect no significant differences between the two groups.

### 3.2.2 Hypotheses testing and empirical models

In this study, empirical models will be tested through the multiple regressions using ordinary least square (OLS). This is one of the most common methods in studies, which tested factors or determinants. To do this approach, one dependent variable and two or more independent variables need to be measured comprehensively and accurately (see Models 1-4). Diagnostics tests for heteroscedasticity and multicollinearity will be conducted to detect issues of data. In addition, robustness checks and sensitivity tests will be also implemented to check if the results are robust across different model specifications and measurements of variables

Empirical models 1 to 4 has been established based on the research framework, which is designed by following previous studies in CS in online shopping sector and in online shopping sector for beauty and cosmetics (e.g. Liu et al., 2013; Chiang & Dholakia, 2003; Rita et al., 2019)

RQ1: What are the key factors affecting the customer satisfaction for purchasing online beauty and cosmetics products in Vietnam?

$$\text{Full sample: } CS_i = \beta_0 + \beta_1 PC_i + \beta_2 OSE_i + \beta_3 SS_i + \beta_4 EI_i + \beta_5 SP_i + \varepsilon_{it} \quad (1)$$

RQ2: Are there any differences between female and male customers?

$$\text{Female sample only: } CS_i = \beta_0 + \beta_1 PC_i + \beta_2 OSE_i + \beta_3 SS_i + \beta_4 EI_i + \beta_5 SP_i + \varepsilon_{it} \quad (2a)$$

$$\text{Male sample only: } CS_i = \beta_0 + \beta_1 PC_i + \beta_2 OSE_i + \beta_3 SS_i + \beta_4 EI_i + \beta_5 SP_i + \varepsilon_{it} \quad (2b)$$

And t-test statistics can be conducted to find the differences between male and female customers; and for RQ3, ANOVA can be used to test the difference between single, married, and divorced/separated customers.

### 3.3 Data Collection Procedure

This section explains the five-step development and validation of the questionnaire on CS. A wide range of reviews was undertaken in order to draft the initial items for the questionnaire. In brief, the first step is the initial development of the questionnaire following the review of relevant literature (Crocker & Algina, 1986). As mentioned in section 2, this research has identified one outcome construct (i.e. CS) and five main implementation constructs (i.e. OSE; EI; SS; and SP; and personal characteristics). The detailed concept and elements of each group of variables are indicated in Table 3.2 below. Subsequently, a two-round Delphi iterative consultation process (qualitative and quantitative) with a panel of experts (Keeny et al., 2006) was employed, which is widely used for the purpose of developing and validating a questionnaire (Blasco et al., 2010). Fourthly, a pilot study was conducted on a sample of 100 participants. Finally, a cross-validation was made through a main validation study including 334 participants.

Table 3.2 The Concept of Variables Constructs

Variables	Construct	Source
<i>Outcome construct</i>		
Consumer Satisfaction (CS)	Describe the satisfaction of consumers in buying online products	Bryant (1995); Hokanson (1995) Anderson et al. (2000); Liu et al. (2013); Rita et al. (2019).
<i>Implementation construct</i>		
Online Shopping Experience (OSE)	Describe consumers' prior experience in buying online products	Bryant (1995); Hokanson (1995) Anderson & Fornell (2000); Liu et al. (2013), Rita et al. (2019).
External Incentives (EI)	Describe incentives from the online businesses for consumers	
Customer Service (CS)	Describe the quality of online business services	
Security/Privacy (SP)	Describe the security and privacy of consumers when buying online products	

Personal Characteristics (PC)	Describe the demographics of the consumers and their frequency of internet use	
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Source: Author estimation

## 4. VALIDATING THE FIVE-CONSTRUCT MODEL OF CUSTOMER SATISFACTION AND QUESTIONNAIRE

### 4.1 Exploratory factor analysis (EFA)

Regarding survey items on CS questionnaire, all 39 items were run through and validated by using principal component analysis (PCA) procedure, followed by the varimax rotation method. The factorability of these items was examined by using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy test and Bartlett's test of sphericity in order to determine whether the sample size was sufficient, and the data were suitable for factor analysis. As a result, the validity of the PCA was confirmed by a satisfactory value of the KMO test for sampling adequacy,  $KMO = 0.827$ , exceeding the 0.60 suggested limit, and the statistically significant Bartlett's test of sphericity ( $\chi^2 (741) = 3221.178, p = 0.000$ ). These measures affirmed that the data were satisfactory for the EFA procedure and favourable for explaining CS (Khan and Adil, 2013), revealing five extracted factors having an eigenvalue greater than 1 and accounting for 52.014% of the total variance. In addition, based on the decision for EFA (cut-off limit = 0.50), two items were excluded from the analyses and further analyses were conducted with the remaining 37 items. (Table 4.1 – Provided upon request)

The first factor labelled 'Customer satisfaction' (CS) involved nine items that captured 21.920% of the variance. Factor two was termed 'External incentives' (EI) that included ten items and explained 13.608% of the variance. Seven items were extracted and loaded onto factor three named 'Online shopping experience' (OSE) with 6.869% of the total variance. The fourth factor labelled 'Seller service' (SS) included eight items accounting for 5.377% of the total variance. The fifth factor named 'Security and Privacy' (SP) included six items and captured 2.602% of the variance.

Internal consistency reliability was tested by using Cronbach's Alpha coefficients ( $\alpha$ ) for the five explored constructs. SS ( $\alpha = 0.759$ ) and SP ( $\alpha = 0.717$ ) were greater than 0.70, showing acceptable consistency. EI ( $\alpha = 0.866$ ) and OSE ( $\alpha = 0.840$ ) were greater than 0.80 and showed good consistency, while CS ( $\alpha =$

0.931) was greater than 0.90 and displayed excellent consistency (Henson, 2001). These results revealed that the five emerged factors were all reliable for examining CS.

## 4.2 Confirmatory factor analysis (CFA)

Next, the CFA, which aims to test the construct validity and reliability of the survey, was conducted with the second sample of 167 respondents. Hair et al. (2013) suggest that the factor loading, t-values, average variance extracted (AVE) and composite reliability (CR) were appropriate for assessing the construct validity and reliability. Previous studies on CFA indicate that no perfect index for assessing model goodness of fit exists. Hence, I consider using variety of approaches such as Minimum Discrepancy per Degree of freedom (CMIN/DF), Goodness-of-fit index (GFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). However, it has been recommended that the GFI should be avoided when deciding what indices to report (Sharma et al., 2005). This is because the GFI is sensitive and lacks sophistication to become a stand-alone index (Hooper et al., 2008). I employ convergent and discriminant validity for the purpose of examining the construct validity. The former refers to the degree where the variables in a particular dimension indicate the same construct. The latter is the degree to which the dimensions identified are independent. Results of the CFA confirmed the good model fit for a five-factor model measuring CS.

### *Convergent validity*

The summary of the accepted and observed values for the fit indices is present in Table 4.2 and Figure 4.1. The overall model fit indices showed that goodness-of-fit measure was within the acceptable range ( $\chi^2 (619) = 1015.949$ ,  $p = 0.000$ , CMIN/DF = 1.641, IFI = 0.914, TLI = 0.907, CFI = 0.913, and RMSEA = 0.062). In addition, Table 4.2 shows that all values of construct reliability (CR) surpassed the acceptable level of 0.70 (Raykov, 1997), and all estimates of average variance extracted (AVE) were higher than 0.50. These results supported a clear convergent validity for all constructs.

Table 4.2 Results of convergent validity

Construct	M	SD	AVE	CR
CS	3.587	0.798	0.554	0.879
EI	3.589	0.813	0.557	0.895
OSE	3.359	1.126	0.684	0.898

SS	3.646	0.728	0.537	0.852
SP	3.340	0.985	0.555	0.661

Note. M = Mean; SD = Standard deviation; AVE = Average variance explained; CR = Composite reliability

Source: Author estimation

Discriminant validity focuses on whether the correlations between items measuring different construct are relatively low. Correlations of more than 0.80 imply an overlap between the constructs and poor discriminant validity (Brown, 2014). As depicted in Table 4.3, the results showed that the highest correlation was 0.772, thereby satisfying the conditions of discriminant validity.

Table 4.3 Correlations between five subscales of the questionnaire (N = 167)

Variable	1	2	3	4	5
1. CS	1.0				
2. EI	0.772***	1.0			
3. OSE	0.449**	0.417***	1.0		
4. SS	0.526***	0.544***	0.489***	1.0	
5. SP	0.728***	0.625***	0.293***	0.417***	1.0

Note. \*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01

Source: Author estimation

### 4.3 Evaluation of the structural model: Hypothesis Testing

The overall model fit indices showed that goodness-of-fit measure was within the acceptable range ( $\chi^2$  (625) = 1255.418, p = 0.000, CMIN/DF = 2.009, IFI = 0.910, TLI = 0.902, CFI = 0.908, and RMSEA = 0.078). In addition, p-value of each pair of constructs are lower than 5% or 1%, which suggests a positive effect of OSE on CS, that of SS on CS, that of EI on CS and that of SP on CS. (See Table 4.4). These results are consistent with all the hypotheses and previous literature. The R-squared is 0.66, suggesting that the four constructs have explained 66% of the variance of CS.

Table 4.4 Results of the Structural Equation Modelling

	Casual path	Path coefficient	p value	Supported?
H <sub>1</sub>	OSE → CS	0.15**	0.012	Yes
H <sub>2</sub>	SS → CS	0.18***	0.004	Yes
H <sub>3</sub>	EI → CS	0.57**	0.000	Yes
H <sub>4</sub>	SP → CS	0.53***	0.000	Yes

Note. \*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01

Source: Author estimation

## 5. GENDER DIFFERENCE IN DETERMINANTS OF CUSTOMER SATISFACTION

### 5.1 Hypothesis Testing

As mentioned earlier in Section 3, for the second research question, empirical models will be tested through the multiple regressions using ordinary least square (OLS). This is one of the most common methods in studies which tested factors or determinants. To employ this approach, one dependent variable and two or more independent variables need to be measured comprehensively and accurately (see Models 1-4). Diagnostics tests for heteroscedasticity and multicollinearity will be conducted to detect issues of data. In addition, robustness checks and sensitivity tests will be also implemented to check if the results are robust across different model specifications and measurements of variables. I find that there is no heteroscedasticity and multicollinearity in the models. Tables will be provided upon request.

Table 5.1 shows detailed information of demographic factors. Briefly, I find that the sample was predominantly female consumers (65.4%) while the proportion of males in my sample accounts for 34.6%. The highest percentage of both males (50.3%) and females (38.7%) are married, which is followed by 30.3% single males and 35% single females. In addition, 44.8% males and 52.6% females obtained a bachelor's degree. In term of income, the highest proportions of males earn salary in a range of 18-32 million VND (26.9%) and 10-18 million VND (24.1%) while those of females have salary from 10-18 million VND (32.8%) and 18-32 million VND (24.5%). Only 1.4% males and 0.7% females have high income of over 80 million VND.

Table 5.1 Demographic information of respondents (new sample)

	Male (n <sub>male</sub> = 145)	Female (n <sub>female</sub> = 274)	Total (N = 419)
<i>Age range</i>			
18 – 20	10 (6.9%)	33 (12.0%)	43 (10.3%)
21 – 25	33 (22.8%)	69 (25.2%)	102 (24.3%)
26 – 30	57 (39.3%)	108 (39.4%)	165 (39.4%)
31 – 35	28 (19.3%)	44 (16.1%)	72 (17.2%)
Over 35	17 (11.7%)	20 (7.3%)	37 (8.8%)
<i>Marital status</i>			
Single	44 (30.3%)	96 (35.0%)	140 (33.4%)
Married	73 (50.3%)	106 (38.7%)	179 (42.7%)
Others	28 (19.3%)	72 (26.3%)	100 (23.9%)
<i>Highest qualifications</i>			

High School Diploma	21 (14.5%)	53 (5.1%)	74 (17.7%)
Bachelor's Degree	65 (44.8%)	144 (52.6%)	209 (49.9%)
Masters' Degree	47 (32.4%)	53 (19.3%)	100 (23.9%)
Doctoral Degree	11 (7.6%)	10 (19.3%)	21 (5.0%)
Others	1 (0.7%)	14 (3.6%)	15 (3.6%)
<i>Salary</i>			
<5 million VND	12 (17.2%)	39 (14.2%)	51 (12.2%)
>=5 million VND; <10 million VND	25 (17.2%)	54 (19.7%)	79 (18.9%)
>=10 million VND; <18 million VND	35 (24.1%)	90 (32.8%)	125 (29.8%)
>=18 million VND; <32 million VND	39 (26.9%)	67 (24.5%)	106(25.3%)
>=32 million VND; <52 million VND	25 (17.2%)	21 (7.7%)	46 (11.0%)
>=52 million VND; <80 million VND	7 (4.8%)	1 (0.4%)	8 (1.9%)
>=80 million VND	2 (1.4%)	2 (0.7%)	4 (1.0%)

Source: Author estimation

## 5.2 Descriptive Statistics

Table 5.2 reports descriptive statistics on each construct of customer satisfaction (CS) and itself. First, the study finds that the mean and median of CS are 3.4443 and 3.5714, respectively. This shows that customer satisfaction score is higher than the average of 3. For predicted determinants of CS, the mean (median; standard deviation) of OSE, SS, EI and SP are 3.6065 (3.75), 3.6216 (3.6667), 3.5631 (3.6667), and 3.6683 (3.6667) respectively. All those variables are made from 5-likert scales questions; hence, min-max range is from 1 to 5. Higher value shows a positively increasing agreement of the statements. The remaining variables, which include CS1 to CS5, OSE1 to OSE7, SS1 to SS8, EI1 to EI10, and SP1 to SP3 presents detailed elements of CS, OSE, SS, EI and SP, respectively. They show the mean and median values falling within a range of 3.5 to 4. The skewness and kurtosis results show relatively normal distribution of all observed variables. Moreover, due to the nature of these types of variables, I do not find any outliers, supported by p1 and p99 figures.

Table 5.2 Descriptive Statistics

Variables	N	Mean	p50	Std.	Min	Max	Skewness	Kurtosis
CS	419	3.4443	3.5714	0.5822	1	5	-0.8898	5.3174
OSE	419	3.6065	3.7500	0.6123	1	5	-0.9968	4.9773

<i>SS</i>	419	3.6216	3.6667	0.5750	1	5	-1.1528	5.8864
<i>EI</i>	419	3.5632	3.6667	0.7162	1	5	-0.9798	4.3039
<i>SP</i>	419	3.6683	3.6667	0.5372	1	5	-0.7903	6.0003

Source: Author estimation

### 5.3 Expected findings

I first use the pair-sample t-test results for two subsamples including female and male customers. I expect to find that the mean difference of customer satisfaction between the two groups of customers is statistically significant, that is, male customers have higher levels of customer satisfaction than female customers, which should be supported by t-value and p-value

To test the next five hypotheses (H5 to H9) regarding the effects of each construct (OSE, SS, EI and SP) on customer satisfaction, and the influence of gender on such relationship, I will further conduct multiple regressions via OLS approach with robust standard errors. To observe if there are any differences between males and females towards determinants of CS, beside testing for full sample, I also test for female sub-sample and male sub-sample. I expect to find that on average, factors will be significantly and positively associated with customer satisfaction (CS). These are consistent with my hypotheses. When comparing the results of determinants of CS between female and male groups of customers. I expect that there is a positive relationship between factors and CS for full sample, however, this is more likely for male customers than their female counterparts.

## 6. MARITAL STATUS AND SATISFACTION OF ONLINE SHOPPERS

In this chapter, I will report the one-way ANOVA results for the satisfaction of B&C online shoppers based on their marital status. I expect that the mean of CS of the group of “other” (i.e., divorced or separated) is highest, which is followed by that of the group of single and married individuals, respectively. I also expect that the significance level is less than 1%, 5% or 10% showing an evidence for a statistically significant difference in the mean CS between the above three difference group of variables. This is consistent with my first hypothesis that there is significant difference in CS between single, married and divorce/separated online shoppers. I expect that there is a statistically significant difference in CS between divorced/separated and married individuals. This will be interesting as married online shoppers tend to be less satisfied with products they used in

relatively comparison with their divorced/separated counterparts. The former (married) may use beauty and cosmetics products for attracting their spouses and a possible case is their spouses negatively commented on those products that adversely affects the psychology of shoppers and result in their less positive satisfaction

Next, I will report ANOVA results for differences between male and female online shoppers' satisfaction based on their marital status. Expected findings will confirm my second hypothesis showing that there is significant difference in the marital status-satisfaction nexus between male and female online shoppers. In other words, my expected result will be observed only for female group of online shoppers. This can be explained that female individuals are usually more affected by marital status as they have more pressure in taking care of family and demands for beauty making. In contrast, males often have less pressure in taking care of their family and children and their expectations toward beauty and cosmetics products are lower (perhaps insignificant). Following these expected findings, I continue running the pairwise comparison of means with equal variances results for the Tukey post hoc test with an expectation that there is a statistically significant difference in CS between female & divorced/separated and female & married individuals. In summary, I expect that females are more sensitive to their marital status when shopping online.

Finally, I will present OLS regression results with robust standard errors on the determinants of CS on the basis of customer' marital status. I expect that there are some factors significantly affecting the CS of single individuals. In addition, I expect that all factors are significant and positively associated with CS of the group of legally married online shoppers. These expected findings could confirm that married online shoppers are sensitive to all factors such as online shopping experience, services and external incentives offered by the online sellers, and security and privacy protection of their personal information. Possibly married people are more tense and anxious with several things under the pressure of life and work. They have too many things to take into account, and hence, stricter to products and services they used.

## **7. CONTRIBUTION OF THE THESIS TO SCIENCE AND PRACTICE**

Numerous advancements in research and practice are made by this thesis. In comparison to earlier CS research on cosmetics, this thesis provides scientific insight into the parts of customers' experiences with their online purchases of

beauty and cosmetics that significantly impact their happiness with these services. First, it contributes to the creation of a valid and reliable questionnaire that accurately captures the five constructs that make up the developed theoretical model: the online shopping experience, external incentives, customer service, security/privacy, and personal characteristics. Therefore, these five-factor models can be used as a baseline for future studies in the same field. This thesis also contributes to the strands of CS literature (e.g., Rita, Oliveira, & Farisa, 2019; Chiang & Dholakia, 2003; Liebermann & Stashevsky, 2009; Giao, Hang, Son, Kiem, & Vuong, 2020; Giao, Thy, Vuong, Tu, Vinh & Lien, 2020; Nguyen, Pham, Tran, & Pham, 2020; Nguyen, Phan, Le, & Nguyen, 2020) and consumer behaviour for cosmetics (Liu, Lin, Lee, & Deng, 2013). In most cases, Giao, Hang, Son, Kiem, and Vuong (2020) investigate how satisfied tourists are with Bao Loc in Vietnam. They demonstrate how three things—responsiveness, dependability, and empathy—affect tourists' satisfaction. Additionally focusing on CS in their research were Giao, Thy, Vuong, Tu, Vinh, and Lien (2020). Specifically, they looked at variables affecting CS with smaller than container load cargo services provided by logistics firms in Ho Chi Minh City (Vietnam). The six crucial factors they have identified are the service process, image, resource, price, management, and outcomes.

In addition, Nguyen, Pham, Tran, and Pham (2020) look into how customer loyalty to e-banking in Vietnamese commercial banks is impacted by service quality, CS, and switching costs. They discovered that five variables, including e-banking service quality, dependability, responsiveness, service capacity, empathy, and tangibility, have a beneficial impact on CS.

Finally, Nguyen, Phan, Le, and Nguyen (2020) investigated the factors that influence e-government satisfaction in Hanoi (Vietnam) and their prospective consequences. They discovered six outside variables that are highly pertinent to how satisfied people are with the e-government. This includes transparency, community support, trustworthiness, convenience, and efficiency. Gender, age, educational attainment, and Internet usage frequency were also discovered as four control factors that were connected to satisfaction. I believe my study is the first to explore disparities between male and female customers regarding their satisfaction with buying online beauty and cosmetics products in Vietnam and its drivers after using all of these prior studies on CS in different contexts in Vietnam. Last but not least, my thesis' conclusions need to be added to the body of prior research on factors that influence consumer satisfaction.

In essence, existing online retailers of cosmetics and beauty products are quite interested in the thesis findings, especially the new entrants. The findings

specifically offer business owners and managers in the Vietnamese market of the online beauty and cosmetics purchasing sector practical implications. They are also anticipated to raise online businesses' understanding of the importance of client pleasure when purchasing beauty and cosmetics products. They may develop a suitable marketing plan for this distinct market niche, which is expected to grow dramatically in the upcoming years. These useful ramifications can also be applied to other Asian and developing nations like Thailand, Malaysia, and the Philippines, where online beauty and cosmetics purchasing has grown in popularity. In those nations, online retailers can take into account the key elements influencing clients. Furthermore, my research has implications for both current internet enterprises and upcoming entrants in Vietnam and other Asian nations (which show a similar online shopping trend). For instance, they may take into account the elements of my thesis while coming up with plans and strategies to increase consumer happiness, which would then increase their revenue and profits. Last but not least, my study is the first to create and validate a thorough questionnaire in Vietnamese, allowing other studies in the same market to refer to it without having to revalidate it. Similarly, online companies in the beauty and cosmetics industry can adapt my questionnaire survey to meet the specifics of their brand and use it as a starting point for their marketing survey.

One of the limitations of the thesis is that some of the other factors related to psychology are missing from the model. I, therefore, urge additional research to examine the impact of psychological variables on customer satisfaction while buying beauty and cosmetics products online. Furthermore, because my research was solely done on the Vietnamese market and in the beauty and cosmetics industry, its conclusions might not apply to other nations or other sectors. By testing new markets and sectors, further research can expand my findings. Furthermore, the scope of my research is restricted to the empirical models' control variables. Therefore, to have a better overall picture, researchers should add psychological and time elements in their future research.

Additionally, a qualitative approach can be employed to obtain detailed data that illuminate the reasons behind gender disparities in customer satisfaction and its factors. Finally, since my findings might not apply to other nations, industries, products, or services, more study can also adapt my research idea to various settings of sectors and countries.

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## 9. LIST OF PUBLICATIONS BY THE AUTHOR

### ❖ Journals Articles:

- ✓ **Nguyen, T. T. N. (2020).** Developing and validating five-construct model of customer satisfaction in beauty and cosmetic E-commerce. *Heliyon*, 6(9), e04887. **(indexed Scopus and ESCI)**
- ✓ **Nguyen, T. T. N. (2020).** Gender Differences in Determinants of Customer Satisfaction in Beauty and Cosmetic E-commerce. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(10), 811-822. **(indexed Scopus and ESCI)**
- ✓ **Nguyen, T. T. N., Homolka, L. (2021).** Marital Status and Satisfaction of Online Shoppers in the Beauty and Cosmetic Sector in Vietnam. *The Journal of Asian Finance, Economics and Business*. Accepted. (indexed Scopus and ESCI)

### ❖ Conferences Proceedings:

- ✓ Nguyen, T. T. N., & Nguyen, T. G., (2019). Attributes of Products and Vietnamese Consumers' Preferences for American Food Brands. *Proceedings of the International Scientific Conference for PhD Students and Young Scientists nt. 14TH INTERNATIONAL SCIENTIFIC CONFERENCE FOR PHD STUDENTS AND YOUNG SCIENTISTS MERKÚR 2019*, p ages 245-258.
- ✓ Nguyen, T. G., & Nguyen, T. T. N. (2020). Factors Affecting Research Performance of Vietnamese University Academic Staffs: A Case Study of Hoa Sen University. *Proceedings of the International Scientific Conference for PhD Students and Young Scientists nt. 14TH INTERNATIONAL SCIENTIFIC CONFERENCE FOR PHD STUDENTS AND YOUNG SCIENTISTS MERKÚR 2019*, pages 111-117.
- ✓ Nguyen, T. T. N. (2020). A Qualitative Study on E-Purchasing Cosmetics Product Intention towards Luxury Brands in Vietnam. *Proceedings of The International Conference on Business and Finance (ICBF)*.
- ✓ Nguyen, T. T. N. (2020). Logistics and Consumer Satisfaction: Evidence from Online Vietnamese Cosmetics Industry. *Proceedings of The International Conference on Business and Finance (ICBF)*
- ✓ Nguyen, T. T. N. (2020). Customer Satisfaction and Financial Performance: A Cross Sectional Analysis on Beauty and Cosmetics E-Commerce. *Proceedings of The International Conference on Business Management and Social Innovation (ICBMSI)*.
- ✓ Nguyen, T. T. N. (2020). Impact of Country of Origin on customer satisfaction: An analysis of online reviews for cosmetics brands in Vietnam. *Proceedings of The International Conference on Business Management and Social Innovation (ICBMSI)*.

## **10. AUTHOR'S PROFESSIONAL CURRICULUM VITAE**

### **Personal information:**

- Full name: **Nguyen Thi Nhu Thuan**, born on 20/10/1987, Female, Nationality: Vietnam
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### **Biography**

My name's Nguyen Thi Nhu Thuan, I am a lecturer/researcher at the Hoasen University, Vietnam and Vice Director of NT-II Trading import export cosmetics company limited. I have more than ten years of experience working in companies and eight years of

teaching experience in tourism and hospitality, International Marketing & Business Management. My research interests are consumer behavior in Marketing, Economics and Business management.

I had published my research paper in prestigious journals such as Heliyon Journal, international journal of Finance, Economics, Business and among others.

I work wholeheartedly for the sustainable development of the education and wish to become an excellent teacher so that I can deliver my knowledge and practical experience to the young generation.

Teaching is the job I am always dedicated and wish to devote to the development of the country. I am constantly improving my experience, knowledge and skills. Affirm that the work I am doing is a real and professional job. Besides, I also constantly improve my knowledge to better serve my own business.

### **Education & Qualifications**

- From July 2017 to August 2021: Studied Doctoral at Thomas Bata University in Czech Republic. Majoring in Economic and management.  
Thesis: “Determinants of Customer Satisfaction: Evidence from Online Beauty and Cosmetic Shopping in Vietnam”.
- From October 2012 to January 2014: Studied master at Buckingham University, the UK, majoring in International Marketing Management. Graduate in January 2014.  
Thesis: “Key variabe that affect Consumer Decision Making in the Fashion Industry in Singapore”.
- From September 2006 to June 2010: Studied degree at Ton Duc Thang University, Ho Chi Minh City, Faculty of Social Affairs and Humanities, majoring in Tourism Management.
- From 1994 to 2006: Study at Nguyen Binh Khiem High School, Chu Se Town, Gia Lai Province.

### **Working Experience**

- From October 2018 to Now: Vice Director of NT-II Trading Import Export Cosmetics Company Limited. I manage all the company's business processes. Controlling all import and export activities, manage the budget and personnel of the company.  
(Full-time working) Website: <http://myphamntii.com/sanpham.html>.
- From September 2016 to Now: I have been working at Hoasen University as a Lecturer in Marketing Department, Faculty of Economics & Commerce. I currently teach the following subjects: Principle of Marketing, Public Relation, Branding Management, Consumer Behavior, Research Marketing... and most of subjects I teach by English. At the same time, I participated in writing scientific research papers with my colleagues.and instuction  
(Full-time working) Website: <https://www.hoasen.edu.vn/vi>

- From October 2015 to June 2016: Visiting lecturers, University of Finance – Marketing, Vietnam. I teach about Marketing, Business Administration and other relevant commercial sectors.  
(Part-time working) Website: <https://www.uef.edu.vn/>
- From February 2014 to July 2016: I have worked for Saigon Newport Corporation under Ministry of Defense. Currently, it is the biggest port in Vietnam and one of 20 world biggest ports. I am Deputy Manager of Sales & Marketing Department, in charge of overseas import and export. Moreover, I am in charge of training new employees of the Corporation. I usually work, negotiate contracts with foreign partners about imported and exported shipment. Involve in receiving foreign delegations which visit and work with the port. Act as interpreter for Board of Directors when going overseas.  
(Full-time working) Website: <https://saigonnewport.com.vn/Pages/Default.aspx>
- From April 2013 to December 2013: When I studied Master at Buckingham University – the UK, I was the collaborator of the university with the specific tasks such as translation of documents, guiding new students how to complete admission procedures, and interpreter for Vietnamese tourists. (Part-time working)  
Website: <https://www.buckingham.ac.uk/>
- From February 2011 to February 2012: I worked for Bluesky Trading Service Advertising Company as Manager of Event Organization Department. Specific tasks: Planning and staging of programs and workshops. Presentation of the draft programs to the partners and monitor programs. (Full-time working) Website: <http://blueskyvietnam.vn/>
- From February 2010 to February 2011: Teaching Assistant, Faculty of Social Affairs and Humanities, Ton Duc Thang University, Vietnam (Part-time working) Website: <https://www.tdtu.edu.vn/trang-chu>
- From February 2009 to February 2010: As the third-year student, I signed contract with SAVACO Tourism Trading Service Company and worked as Executive Assistant in charge of managing and operating tours. Specific tasks: Make plans, management and supervise domestic and international tours. Act as MC for the workshops of the company and partners. (Part-time working) Website: <http://www.savacotourist.com/>

### **Education Certificates & Research Training**

- Data Analysis in SPSS & Statistics Certificate in predoctoral Training center
- Certificate for publishing scientific articles in international journals
- Certificate in international Conference on Business Management and Social Innovation
- Certificate of Senior Lecturer, Ministry of Education and Training
- Postgraduate certificate in higher education, Buckingham University, UK
- The Degree of bachelor Certificate, Ton Duc Thang University, Vietnam

## **Teaching experiences in subject**

Developed and implemented various lesson plans and successfully achieved student participation by connecting the lesson with practical. Be responsible for teaching some subjects in English:

- Marketing Strategy
- Consumer behavior
- Research Marketing
- Public Relations
- International Marketing
- Brand management
- Direct Marketing
- Intergrated Marketing Communication
- Principle of Marketing

## **Skill related to the study**

- Communication and presentation skill at the Science conferences and class
- Planning, deploying, and monitoring skill
- Business Management
- Conference-organizing skill
- Skill of contract negotiation and receipt of foreign delegations
- Skill of research Methodology
- Work in a team or independently, honest, responsible, self-disciplined, inquisitive, enthusiastic.
- Capability to learn new thing. Ability to learn quickly and cope well under pressure and deadlines.
- Strong written and verbal communication skills in English and Vietnamese

## **Journals Aticles & Research Conferences Links**

- [https://www.sciencedirect.com/science/article/pii/S2405844020317308?fbclid=IwAR2bd9KOjAc\\_wFWVLsxhkACSejk0B2xRpKG6FyB6grxziAa\\_-VZP69JnSE0](https://www.sciencedirect.com/science/article/pii/S2405844020317308?fbclid=IwAR2bd9KOjAc_wFWVLsxhkACSejk0B2xRpKG6FyB6grxziAa_-VZP69JnSE0)
- [http://jafeb.org/journal/article.php?code=75810&fbclid=IwAR0LiQa5BpufC2z\\_5IEqNnzv\\_YpwRmIxMSqyHQdBQ\\_Gj7zBrED4\\_10uhTQ1k](http://jafeb.org/journal/article.php?code=75810&fbclid=IwAR0LiQa5BpufC2z_5IEqNnzv_YpwRmIxMSqyHQdBQ_Gj7zBrED4_10uhTQ1k)
- <https://conferences.euba.sk/merkur/files/zbornik-merkur-2019.pdf>
- <https://conferences.euba.sk/merkur/files/zbornik-merkur-2019.pdf>
- [https://worldresearchlibrary.org/proceeding.php?pid=3869&fbclid=IwAR21Phi6Qg0PDPXHo6m2BX6c4TQUR6a5J7iLjSKQ3hut\\_6x3v9yGUxvjmU](https://worldresearchlibrary.org/proceeding.php?pid=3869&fbclid=IwAR21Phi6Qg0PDPXHo6m2BX6c4TQUR6a5J7iLjSKQ3hut_6x3v9yGUxvjmU)
- [https://worldresearchlibrary.org/proceeding.php?pid=3869&fbclid=IwAR21Phi6Qg0PDPXHo6m2BX6c4TQUR6a5J7iLjSKQ3hut\\_6x3v9yGUxvjmU](https://worldresearchlibrary.org/proceeding.php?pid=3869&fbclid=IwAR21Phi6Qg0PDPXHo6m2BX6c4TQUR6a5J7iLjSKQ3hut_6x3v9yGUxvjmU)
- [http://koreascience.or.kr/article/JAKO202104142265641.page?fbclid=IwAR3tHhWZdQiqQb\\_G2U5GNcCxIL2JIpQeZIRWImSaEIWsXtrzdFx3WUxWW0I](http://koreascience.or.kr/article/JAKO202104142265641.page?fbclid=IwAR3tHhWZdQiqQb_G2U5GNcCxIL2JIpQeZIRWImSaEIWsXtrzdFx3WUxWW0I)

Nguyen Thi Nhu Thuan, Ph.D.

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kosmetických výrobků ve Vietnamu**

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