



**A STUDY ON THE INFLUENCING FACTORS OF THAI RESIDENTS
CONSUMPTION ON E-COMMERCE PLATFORM**

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ABSTRACT

Title: A Study on the Factors Influencing Thai Residents' Consumption on E-Commerce Platforms

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The abundance of research available on E-commerce shows that the intent of many enterprises, no matter the country, especially mainland China, desires to enter Thailand through investment or trade. Many of these enterprises have also become more attentive to the decision of Thai residents to make purchases through social e-commerce platforms and to understand what factors will affect their consumption on the e-commerce platform. Additionally, studies have shown that various types of consumers make an impact on purchasing through social e-commerce. Most of the research available is from an economic point of view that considers bilateral issues. When opportunities for Chinese enterprises to enter the market in Thailand emerge, they can not only provide suggestions and decision-making basis for the establishment of Thailand's e-commerce platform but also offer more advice on purchase decisions for Thai residents in the future. Similarly, the government's most significant innovation in socialized e-commerce is tolerance to allow the existence of some initial problems, and in a given time, will be corrected and improve. For example, without the indulgence and support of the government, Alibaba would not have developed substantially and would not have survived its instant success.

The objectives of this study were: 1) To sort the current status of Thai residents' purchases on social e-commerce platforms; 2) To read a sufficient amount of literature and refer to the relevant theories and research reports on the current status of Thailand to propose factors that affect most Thai residents' consumption on social e-commerce platforms. 3) To identify the research topic, background, purpose, hypothesis design,

method, and other frameworks of this paper. Both consumption behavior and decision-making of the e-commerce platforms used descriptive statistical analysis, inferential statistical analysis, factor analysis, and regression analysis. A conclusion and suggestions of this research, according to the analysis results, the problems, solutions, and suggestions of social e-commerce for Thai residents' purchasing decisions, were presented.

Keywords: Thailand residents, e-commerce, consumption propensity, purchasing decisions, influencing factors



Approved by

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摘要

标题：泰国居民在电子商务平台上消费的影响因素研究

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从选题来看，通过数据和研究结果，可以总结归纳出各个企业无论是哪个国家、尤其是中国大陆，假如想进入泰国投资或者做贸易，甚至想进一步了解泰国居民在社会化电子商务平台购买的消费倾向与决策，并了解泰国居民在电子商务平台消费时会受到哪些因素影响，以及可以知道不同的消费者在对待社会化电子商务持有什么态度。然而大部分研究是从经济学角度考虑双边问题。当中国企业有机会进入泰国，不但能为泰国的电子商务平台的建立提供建议与决策依据，而且能为日后的泰国居民在购买决策上提供更多的建议性意见。同时政府对社会化的电子商务最大的创新就是：包容。就是允许初期一些问题的存在，给时间就会慢慢完善、磨合。比如：阿里巴巴若没有政府的包容与支持早就不是很大的发展了，并活不到现在的成功。

首先，梳理泰国居民在社会化电子商务平台上购买的现状；其次，通过阅读大量的文献，然后参考相关理论以及泰国现状的研究报告提出影响大部分泰国居民在社会化电子商务平台消费的因素，确定本文研究的题目、背景、目的、假设设计、方法等论文框架；再次，通过设计调查问卷、发放问卷以及收集答复问卷获取原始数据；然后，根据数据统计方法分析调查结果，并对泰国居民在电子商务平台的消费行为与决策为特性进行描述性统计分析、推断性统计分析、因子分析、回归分析。最后，根据分析结果提出社会化电子商务对泰国居民的购买决策存在的问题以及解决方法和建议。

关键词：泰国居民；电子商务；消费倾向；购买决策；影响因素

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Due to my limited knowledge, there will inevitably be mistakes and improvements to be made. We sincerely welcome your valuable Suggestions.

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RESEARCH ON INFLUENCING FACTORS OF THAI RESIDENTS' CONSUMPTION ON E-COMMERCE PLATFORM

1. INTRODUCTION

1.1 Research Background

1.1.1 The Rise of E-commerce in Thailand

Since the establishment of diplomatic ties between China and Thailand, bilateral economic and trade relations have been constantly improved. In particular, the signing of the agreement on the free trade area between China and Thailand and the implementation of China's "One Belt And One Road" strategy in recent years have witnessed the continuous increase of bilateral trade volume. In recent years, Chinese enterprises' investment in Thailand has grown rapidly and expanded in scale. Since the beginning of the 21st century, China-Thailand economic and trade cooperation has developed rapidly. China has become Thailand's third largest export market and second largest source of imports, and bilateral trade ties are getting closer. According to the data released by the Ministry of Commerce of Thailand, from January to August 2016, imports from China amounted to 27.579 billion US dollars. Exports to China totaled US \$14.447 billion, down 7.37% year on year.^④In addition to economic and trade relations, China's direct investment in Thailand is also on the rise. The proportion of Chinese enterprises in the industrial zones of Rayong Province is also on the rise. China's investment in Thailand is mainly concentrated in processing trade, machinery manufacturing, trade and real estate. Then how Chinese enterprises enter the Thai market and how to increase trade volume become the urgent problem for Chinese smes.

On the consumer side in Thailand, the latest survey on Internet user behavior in Thailand in 2016 has been released from the Electronic Transactions Development Office of Thailand (ETDA), a government public organization. In 2016, thanks to the popularity of smartphones and 4G commercial services, the amount of time Thai users spent accessing the Internet from mobile devices each day increased by 9% to about 6.2 hours (up from 5.7 hours last year).By the end of 2016, China had 731 million Internet users, accounting for 53.2 percent, according to the 39th China Internet Network Development Statistical Report. China's Internet users are mainly aged

^④ Data sources: <https://www.moc.go.th>

10-39 years old. By December 2016, the age group accounted for 73.7% of the total Internet users, and the number of Internet users aged 20-29 years old accounted for 30.3%.The population aged 10-19 and 30-39 accounted for 20.2% and 23.2% respectively. In the occupational structure of netizens, the student group is the largest, accounting for 25%.By December 2016, the number of online shopping users in China had reached 467 million, accounting for 63.8 percent of Internet users.^⑤

In January 2017, research firm We Are Social released its latest survey on Internet use. Facebook 69 percent, Youtube64 percent, LINE53 percent, FBMessenger48 percent, Instagram44 percent, Google41 percent, Twitter40 percent, LinkedIn23 percent, WeChat20 percent, Pinterest18 percent, WhatsAPP18 percent, tumblr6 percent, Tumblr16 percent.^⑥You might see YouTube, Facebook and Line as the most visited social media platforms. In the report, it is also mentioned that the number of users of social e-commerce (B2C) is about 11.58 million, and the penetration rate of e-commerce purchase is 17%. In 2016, the total value of Thailand's e-commerce market is 2.5 billion US dollars, and the average annual spending in Thailand in 2016 is 212 US dollars.

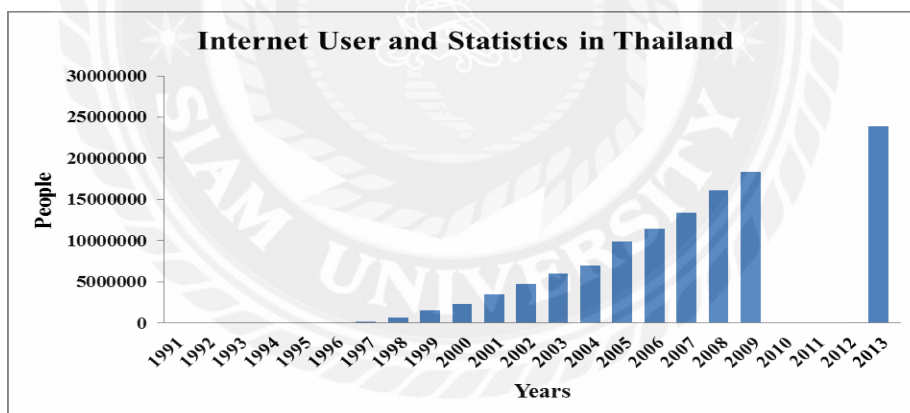


Figure 1.1 Internet Users and Statistics in Thailand (no records from 2010 to 2012)^⑦

Thai users (National Center for Electronics and Computer Technology,2013), surf the Internet at home online shopping for a variety of activities, using email, paying bills, downloading software/games/music, chatting, playing games, and searching information for job-related tasks, finding jobs for products and services, for educational details, and news coverage.

^⑤ Data sources: <http://www.cac.gov.cn>

^⑥ Data sources: <https://wearesocial.com>

^⑦ <https://www.nectec.or.th/en/>

The number of Internet users in Thailand has grown dramatically since 1998 (see Figure 1.1). There are 670 million, 2.3 million, 4.8 million, 6.9 million, 11.4 million, 1.34 million, 16.1 million, 18.3 million, 23.8 million in 1998, 2000, 2002 and 2004 respectively, 2006, 2007, 2008, 2009 and 2013 (National Center for Electronics and Computer Technology, 2013). The number of Internet users is related to the number of online shoppers suggested by SO, and Internet users may also become online consumers. It also shows that any business conducted through Internet channels, such as e-commerce and online games, often offers a good chance of business success because potential consumers are already there. Some business organizations have made Internet channels part of their marketing strategies; They worry that if they cannot keep up with new developments in technology, they may lose their business competitors (Pan, 2003). This has led to a lot of research over the past two decades. The researchers studied various aspects of technology channels, such as online shoppers' attitudes toward e-commerce; How consumers feel about online shopping, what concerns they have while online, and demographics of those most likely to shop online in the e-commerce field (Changetal, 2004).

According to Thai media, online retail sales in Thailand will account for a double-digit share of the overall retail market by 2021 due to consumers' preference for mobile devices and the implementation of the Thai government's e-payment plan. Influenced by the rising popularity of smart phones and fierce competition among e-commerce platforms, the importance of Thailand's mobile e-commerce market is gradually increasing. In 2016, Thailand's mobile e-commerce market accounted for 49% of the national e-commerce market share. Meanwhile, Among ASEAN countries, Thailand ranks the fourth in e-commerce market, after Singapore, Indonesia and Malaysia. All these indicate that Thailand has great potential in developing e-commerce. Due to the great development of technology, the government's policy of vigorously promoting the creation of digital economy and society, and the rapid innovation of financial business operation, the development trend of e-commerce in Thailand is good. The Thai government supports the e-commerce industry to further expand its business to the ASEAN market and even the global market.

At present, there are still many problems in the development of e-commerce in Thailand. The main problems it faces are:

(1) Easily affected by external factors. As a result of the global financial crisis in 2009, Thailand's B2C sales fell by 27.6%, resulting in a compound annual growth rate of e-commerce sales of only 7.2% from 2007 to 2012, accounting for only 0.8% of the global market.

(2) The structure of the industry model is unreasonable. For example, the most popular B2C transaction model in 2012, online transaction volume accounted for only 1/6 of the e-commerce market transaction volume, and the B2G model transaction volume still accounts for the bulk.

(3) The issue of tax payment for e-commerce operations. Although the e-commerce industry in Thailand is developing rapidly, there are very few people who pay taxes. For this reason, the government plans to officially regulate the e-commerce business tax payment regulations from 2015. The e-commerce association strengthens the provision of relevant knowledge and communication to operators to form electricity. Promotion mechanism for businessmen to actively pay taxes.

(4) A payment platform that lacks security. For now, Thailand still lacks a payment platform that guarantees the security of consumer online banking transactions, which has greatly hindered the development of Thai e-commerce. China Alipay's relatively complete payment guarantee system shows that it is imperative to gradually establish a safe and reliable e-commerce platform in Thailand.

In addition, in order to better solve the main obstacles (bottlenecks) in the development of e-commerce in Thailand, the reasons are as follows: First, the factors of operational problems, including: information communication with merchants, complicated online payment methods, restrictions on policies and regulations, and network infrastructure Problems, lack of online shopping experience, complicated design of e-commerce websites, and security of online payment; second, factors of credit problems, including: merchant credit problems, inconsistency between online descriptions and actual quality problems, and after-sales services; third, logistics problems Factors, including: high logistics costs, poor logistics attitude and service, and slow delivery time of logistics, etc., we need to take Thai residents as the main body to conduct a field research on e-commerce in Thailand.

Pawoot Pongvitayapanu, chairman of the Thai E-Commerce Association, said the Thai e-commerce market is the fastest growing market in Southeast Asia. Currently, Thailand has more than 500,000 e-commerce users. He said: "Thai people will be more actively involved in online shopping activities. 4G will become a driving factor for the growth of the e-commerce market and the transfer of offline businesses to online. E-commerce activities for mobile devices will also become more frequent. Internet users in Thailand account for 43% of the population are expected to grow to 50% next year."

1.2 Research Purpose

Based on the review of propensity to consume and the related research content, on the basis of Thai residents as the main research object, the questionnaire survey to collect data, combined with the actual situation of Thai residents, analysis influence Thai residents may influence factors of online shopping behavior, construct suitable for Thai residents online shopping behavior description and model of influencing factors. In the past, Chinese smes entered the Thai market by traditional means, such as looking for suppliers, traders, logistics and factories. However, this method is increasingly unable to adapt to the development of Thai society, because most Thai consumers begin to use social software for purchasing and shopping, posting information on Facebook, Line, Instagram, Twitter and other software.

The main purpose of this study is to investigate the consumption tendency of Thai residents on e-commerce platforms. A report by the National Bureau of Statistics (2012) states that the study also investigated the factors influencing their online shopping, the majority of Internet users in Thailand. Therefore, the target survey was conducted in Thailand. Planned behavior theory (TPB) has been adapted as a conceptual model throughout the research process. TPB was chosen as the theoretical basis because it has been confirmed by previous studies (George, 2004; Hansen, Jansen, and Solgard, 2004) are considered suitable for predicting consumer behavioral intentions, especially in technology adoption.

The three specific objectives of this study are as follows:

1. Determine the important factors that influence the consumption tendency of Thai residents on e-commerce platforms;
2. I hope to enrich the connotation of social e-commerce research in Thailand and provide reference for Chinese smes to enter the Thai market;
3. Most of the studies on the factors affecting online shopping are based on literature reviews in the western context. Hope this research findings will help Thailand online shoppers purchase intention of literature, so marketers can develop a better understanding of consumer behavior in Thailand, buy products online, through empirical research methods, to explore which factors will affect consumers' online shopping consumption tendency, and then puts forward countermeasures of Chinese enterprises into Thailand electric dealer market.

1.3 Research Hypothesis

This section mainly reviews all variables under the four constructs in the

conceptual model and proposes hypotheses.

1.3.1 Dependent Variables

E-commerce has become one of the basic characteristics of the Internet era. According to UCLA's Center for Communication Policy (2001), online shopping has become the third most popular Internet activity, following email/instant messaging and web browsing. It is even more popular than searching for entertainment, information and news, two of the most common ideas given what Internet users do online.

In recent years, people's attitudes and behaviors towards online shopping have been deeply studied. Most of them are trying to find out the factors that influence or promote the attitude and behavior of online shopping. Researchers seem to have different perspectives and focus on different factors in different ways. For example, Case, Burns, and Dick (2001, p.873) believed that network knowledge, income and education level were important predictors of college students' online shopping. According to an online survey of 425 American undergraduate and MBA students. Ho and Wu (1999) found that there was a positive correlation between online shopping behaviors and five factors, including electronic stores, logistics support, product features, websites, technical features, information features and home page display. Schubert and Selz (1999) examined the quality factors, protocols and settlement stages of e-commerce websites from the perspective of information. They also reviewed the factors related to the e-commerce community.

These studies have made important contributions to our understanding of the dynamics of online shopping. However, there is a lack of coherent understanding of the influence of relevant factors on network attitude and behavior, and the identification of relevant independent variables and dependent variables is inconsistent. This makes different studies more difficult, the application of research results is limited, and the prospect of integrating and integrating empirical literature in this field is elusive.

Analysis shows that online consumer behavior is still fragmented. For example, Goldsmith (2000) and Limayem et al. (2000) found that personal innovation ability is a key personality trait to explain consumers' online purchase intention. Chau et al. (2000) studied the influence of display mode, search engine and product navigation structure on online shopping. Jarvenpaa et al. (2000) conclude that trust in online stores is a significant determinant of online shopping. Finally, Lee (1999) focuses on online buyback and believes that consumer trust and consumer satisfactions are the

key prerequisites for continuous purchase.

Na Li and Ping Zhang (2002) both believe that through testing 35 empirical studies, they found a total of 10 related factors, and empirical evidence shows that there is a significant relationship between these factors. The ten factors are external environment, population, personal characteristics, supplier/service/product characteristics, attitude to online shopping, willingness to buy online, decision to buy online, online shopping, consumer satisfaction. The five items (external environment, demographics, personal characteristics, supplier/service/product characteristics, and website quality) are usually independent, and the five items (attitude to online shopping, willingness to shop online, decision making, online shopping, and consumer satisfaction) are usually dependent variables in the empirical literature.

Almost all 10 factors were not covered in the 35 studies, and there were some inconsistencies in the empirical results that included similar factors. However, for the sake of discussion, we integrate these 10 factors into a model (Figure 2.5) that describes the desired relationship between them. These five factors are usually independent variables before they are identified, although some studies have used site quality as a dependent variable. These five factors directly determine people's attitude towards online shopping. In the existing empirical literature, the attitude and willingness of online shopping have been clearly defined and extensively studied. Decision making is the stage before a consumer commits to an online transaction or purchase, sometimes referred to as a behavioral stage. The relationships described between attitudes, intentions, decisions, and online shopping are based on the theory of rational behavior (Fishbein and Ajzen 1975), which attempts to explain the relationships between beliefs, attitudes, intentions, and actual behavior. Consumer satisfaction is considered to be an independent factor in this study. It can happen at all possible stages, depending on how engaged the consumer is in the online shopping process. The relationship between satisfaction, attitude, willingness, decision making and online shopping is considered a two-way relationship because they influence each other. In addition, supplier/service/product features and website quality were found to have a direct impact on customer satisfaction. Therefore, in this section, we will select the consumption tendency similar to the intention of online shopping as the dependent variable.

1.3.2 Independent Variables

After reviewing a large number of literature, this paper cites dwells (2016) in the research of Shanghai college students' online shopping behaviors examined factors,

used to study the situation of Thai residents, combined with field investigation in Thailand at the same time, through the way such as interviews to investigate whether the referenced variable has rationality, also combined with the technology acceptance model (TAM) and wei-hong wang (2002), the basic features of e-commerce, finally it is concluded that Thai residents in the consumption on the e-commerce platform variables influencing factors model of financial management, expected results, subjective norm, perceived behavioral control, as the main influence factors of the model.

1.3.3 Hypotheses

There are four hypotheses in this study.

Table 1 Summary of Hypotheses

Assuming that	Variable
H1: Financial services have a positive and significant impact on consumption tendency.	Financial services
H2: The expected results have a positive and significant impact on consumption tendency.	Desired outcome
H3: Subjective norms have a significant positive effect on consumption tendency.	Subjective norms
H4: Perceived behavioral control has a positive and significant influence on consumption tendency.	Perceptual behavioral control

1.4 Research Significance

(1) Enrich and deepen consumer behavior theories, especially e-commerce consumer behavior theories in the Internet environment. Based on the theory of rational Behavior (TRA), theory of Planned Behavior (TPB), theory of Technology Acceptance (TAM) and theory of consumption tendency, this study is aimed at potential consumers of e-commerce websites in Thailand to explain the obstacles that affect consumers' consumption on e-commerce platforms in Thailand. As for the consumption tendency of consumers on e-commerce platform, this study will combine detailed theories and models to build a research model of consumers' online shopping attitude and behavior. Based on a variety of theories, this study makes an in-depth study of the consumption tendency of Thai residents on e-commerce platforms, which can not only deeply analyze the motivations that influence consumer behavior, but also help enrich and develop the theoretical system for the study of consumer behavior

in Thai e-commerce.

(2) It is conducive to improving the service effectiveness of e-commerce website providers in Thailand. Before selling products and services, operators need to understand the needs and consumption behaviors of target customers, so as to design targeted marketing strategies.

(3) It is helpful to improve the theoretical research results in the field of e-commerce in Thailand and promote the launch of the development policies of e-commerce in Thailand. From the perspective of consumers, based on a variety of theories and using effective analytical methods, this research will investigate the influencing factors of the differences in consumer characteristics and consumption tendency of E-commerce platforms in Thailand, which will make up for and improve the deficiencies in the study of e-commerce in Thailand.

(4) can be for the government to provide basis for the development of e-commerce platform policies, government support is one of the power source of Thai e-commerce development, formulate and implement electronic commerce should use real information policies and plans for reference, such as improving the Internet infrastructure, making e-commerce related laws and regulations, building the security system of electronic commerce, etc. By analyzing the consumption tendency and behavior of Thai residents, this study reveals the reality of e-commerce in Thailand. The research results are helpful to understand the factors influencing the consumption behavior of different consumers on e-commerce platforms, and can provide a basis for the Thai government to make policies.

(5) the Thai residents as the mainstay of online shopping in Thailand groups, their online shopping behavior in the very great degree can reflect the network shopping the mainstream of the market, Thailand as southeast Asia one of the fastest growing e-commerce, existence of development potential, and will appeal to many countries in Thailand to carry out the electronic commerce, therefore, by studying the Thai residents the influence factors of online shopping, on the one hand, can accurately grasp their needs, to help China's enterprises predict the Thai market, help related enterprises to determine the target market and business model, help China electricity enterprises better understand the development of electronic commerce in Thailand and the enterprise's own development direction, on the other hand can dig the relationship between the electronic commerce and the consumer socialization, especially the Chinese enterprises to provide reference to Thailand market, and the development of e-commerce in Thailand, promoting layout overseas enterprise attaches great importance to the application of the new media provides the electricity

enterprises in China into the development of Thailand and Thailand to boost consumption. In addition, I also emphasize the consumption tendency of consumers, in order to highlight the differences between the Thai market and the Chinese market, so that Chinese investors can attach importance to the differences and thus develop strategies with regional characteristics and according to local conditions.

Internet technology has not only changed the way people connect with each other, but also derived many convenience functions. Through the network, people begin to communicate without time and space restrictions. It is also because the Internet has brought so many convenience functions that people more and more used to its existence, and has become dependent on it. In recent years, e-commerce has become one of the derivatives of the Internet industry. Through the combination of technology and consumption methods, online shopping has also been born. People have changed their consumption views and are more and fonder of the popular trend of online shopping. The Internet has changed the way people shop, and many countries in the world have joined this change. The new shopping method, online shopping, has quickly become popular among the public. Online shopping is an important part of e-commerce. It refers to the shopping behavior of consumers using the Internet on e-commerce shopping platforms or e-commerce enterprise shopping sites shopping behavior.

Thailand is one of the most developed countries in Southeast Asian countries. Due to Thailand's high level of informatization in Southeast Asia, Thailand's e-commerce has developed rapidly and its scale has continued to expand. Thai E-Commerce Association) Chairman Pawoot Pongvitayapanu said that the Thai e-commerce market is the fastest growing market in Southeast Asia. With the help of 4G network services in Thailand, the Thai e-commerce market will usher in rapid development. According to data from the China E-Commerce Research Center, the total value of e-commerce in Thailand reached 2.5 trillion baht in 2016 (about USD 75.6 billion), a year-on-year increase of 14.3%. According to the Electronic Transactions Development Agency of Thailand, the entire e-commerce market in Thailand will grow by 9.86% in 2017. According to data from the Thai Electronic Trading Development Agency, the market value of the Thai e-commerce market in 2015 reached 2.2 trillion baht (about 58.4 billion US dollars), most of the revenue of the Thai e-commerce market in 2015 was mainly from three major industries.

The industry value is 658.9 billion baht, followed by the manufacturing industry 350.29 billion baht and the wholesale and retail industry 325.08 billion baht. In recent years, the Thai e-commerce market has developed rapidly. In 2015, the online retail

market in Thailand increased by 30% year-on-year.

According to predictions by Thai media, by 2021, due to consumers' preference for mobile device shopping and the implementation of the Thai government's electronic payment plan, Thailand's online retail sales will account for double digits in the overall retail market. Affected by rising smartphone penetration and fierce competition between e-commerce platforms, the importance of the Thai mobile e-commerce market has gradually increased. In 2016, the Thai mobile e-commerce market accounted for 49% of the national e-commerce market share. Meanwhile, in the east, among allied countries, Thailand's e-commerce market ranks fourth. After Singapore, Indonesia and Malaysia, these all show that Thailand has great potential for developing e-commerce. Due to the great development in technology, coupled with the government's vigorous promotion of the digital economy and social policies, and the rapid innovation of financial business operation methods, Thailand's e-commerce development trend is good, and the Thai government supports e-commerce companies to further expand their business. To the ASEAN market and even the global market.

In today's rapid development of the information industry, the most able to keep up with the trend is the group of college students. The main reason is that college students are most likely to have access to new knowledge and the ability to master new technologies. Computer operation is relatively simple for college students. Therefore, college students can learn more new things through the Internet, and are most willing to try new things, so e-commerce can attract college students as soon as they appear, and the resulting online shopping method is also popular among college students, through online shopping. As university students have more choices, the advantages of online shopping quickly manifest themselves.

"The 39th China Internet Network Development Statistics", according to the report, by the end of 2016, the number of Chinese netizens reached 731 million, accounting for 53.2%. China Net, The majority of the population are 10-39-year-old groups. As of December 2016, 10-39-year-old groups accounted for 73.7% of the total netizens, of which 20-29-year-old netizens accounted for the largest proportion, reaching 30.3%; 10-19-year-olds, 30 the proportion of the 39-year-old group was 20.2% and 23.2% respectively. In the occupation structure of netizens, the student group is the largest, accounting for 25%. As of December 2016, the number of online shopping users in China reached 467 million, accounting for 63.8% of netizens. Same in Thailand, according to the 2016 survey report on Internet user behavior in Thailand published by the Thai Electronic Transaction Development Agency (ETDA), in 2016,

due to the popularity of smartphones and 4G commercial services, the length of time that Thai users access the Internet through mobile devices increased every day 9%, about 6.2 hours. YouTube, Facebook and Line are the most visited social media platforms. Of the 16,661 respondents, more than 85% of respondents indicated that they use smartphones to access the Internet. Social media is very popular in Thailand, and 86% of respondents said that they access social media through mobile phones. Followed by YouTube (66%), e-books (55.7%), search (54%), and electronic transactions (45%). Millennials (born 1980-2000) are hot fans of YouTube. Online shopping is also becoming more and more popular, and among them, the number of young college students aged 20 to 29 accounted for 75.3%.

To sum up, for the Chinese online shopping market, young people are the main consumers. Also in Thailand, the younger generation is more likely to accept e-commerce and other information technologies. Moreover, college students as representatives of young people have a high level of education and technology Acceptance is strong, and they are more willing to shop online. Online shops generally pay more attention to college students' consumption and even take it as a guide. Thailand, as one of the fastest growing e-commerce countries in Southeast Asia, is of great significance to study the online consumption of Thai college students.

1.5 Conceptual Framework

The theory of rational behavior has been successfully applied to explain many consumer behaviors, but it does not consider external variables. The technology acceptance model applies to situations where social pressure does not force the adoption of the target technology, which is ideal for buying products online. Planned behavior theory has been applied to situations where underlying attitudes and beliefs may be too complex or poorly understood. In order to obtain reliable variables and research results, planned behavior theory (TPB) was adopted in this study. The reason is that this theory is most suitable in a mature market, and it can be used to discover consumers' behavioral intention, that is, to buy products online according to the objectives of this study.

The expected outcome is a standard that people have drawn up ahead of time for something. If the standard is met, the expected result will be met.

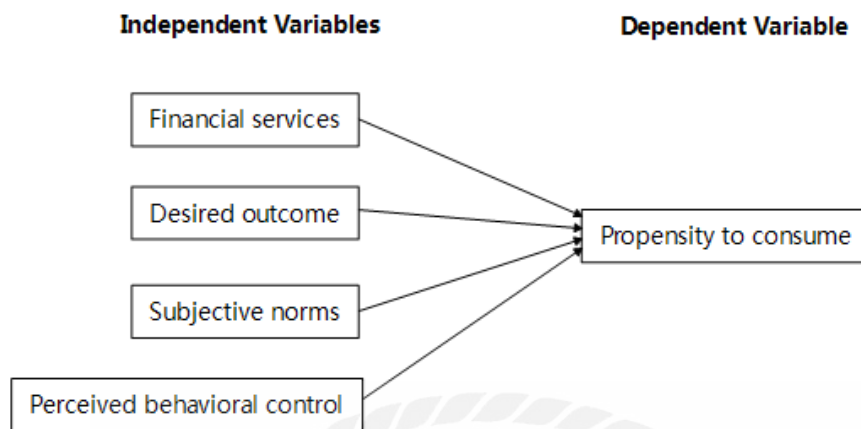


Figure 1.1 Conceptual Model: Factors Affecting Consumption Tendency

1.6 Definition of Variables

Financial service refers to the whole financial industry to play its various functions to promote economic and social development. Specifically, financial services refer to financial institutions through the conduct of business activities to provide customers with financing investment, savings, credit, settlement, securities trading, commercial insurance and financial information consulting and other aspects of services. Among them, security, online ordering, transaction management, electronic accounts, online payment holding a positive attitude, its consumption tendency will be higher. Strengthening the awareness of financial services and improving the level of financial services will speed up the construction of China's modern financial system, improve the management of financial institutions, enhance the competitiveness of the financial industry, and better promote economic and social development. It is of great significance.

Planned Behavior theory (TPB) has been widely used in many articles (Athiyaman, 2002; Cook et al, 2002; George, 2002, 2004; Hansen et al., 2004; Xu, Zhao, 2004; Kalafatis, Pollard, East and Tsogas, 1999; Limayem, etc., 2000; Ramus and Nielsen, 2005; Rhodes and Courneya, 2003; Shim et al. 2001), focusing on purchase intention and online shopping. It is applicable to discover consumers' behavioral intention based on three independent variables. (1) Attitude to behavior; (2) Subjective norms; (3) Perceptual behavior control.

Attitude is a person's belief based on the results and values of his/her actions, whether positive or negative (Ajzen, 2002; Francis, Eccles, Johnston, Walker, Grimshaw, Foy, Kaner, Smith, and Bonetti, 2004).The attitude towards online

shopping refers to the possibility that consumers may want to use the Internet for the first time or for a long time based on their subjective thinking. See if they have the ability to create tasks that arouse consumer perceived behavior control, how confident consumers are in performing their own behavior on the task, and how much control they have over their own behavior on the task. First of all, they know about computers and the Internet, and secondly, businesses must improve their functions and advertising on e-commerce platforms.

Francis et al. (2004) argue that subjective norms are "one's own estimate of social pressure to perform or not perform the target behavior". That is, the merchant's service transmission, consultation, consultation and negotiation are the factors that affect its online purchase intention. And Thai shoppers' friends, shoppers' relatives, shoppers' family members and shoppers' colleagues are factors that affect their willingness to buy online, and they tend to follow their own social norms.

Perceived behavioral control refers to a person's confidence in and control of his/her ability to complete a task, whether or not he/she completes the task successfully (Ajzen, 2002; Francis et al., 2004).

These three keys are the components that form a person's purchase intention. For example, a person's attitude may affect his/her purchase intention, a person's subjective norms may affect his/her purchase intention, and his/her perception of control may affect his/her purchase intention.

The desired result consists of four variables :(1) universality ,(2) convenience ,(3) wholeness and (4) coordination

2. LITERATURE REVIEW

2.1 Conceptual Review of Consumption Tendency

The early research on consumption tendency comes from abroad. In 1999, there were articles about American college students buying CDS in large quantities on the Internet and college students' Internet use behavior. Donna McCloskey surveyed 138 college students in 2002. When studying why college students choose online shopping, he used the technology acceptance model and concluded that the main factors influencing college students' online consumption tendency were perceived ease of use, perceived usefulness and subjective norms. From 2004 to 2008, King Stephanie (2004), Bijou Yang & David Lester (2003), chun-rong Yang (2008), and other scholars

began to the differences of the college students' online shopping consumption tendency properties are studied, mainly refer to the consumer the theoretical basis of economics, economics and government from the region, gender and so on various aspects of the college students' online shopping consumption tendency, the difference of the analysis of all aspects of their online shopping behavior, puts forward the desired results affect the propensity to consume. After 2008, Scholars such as Yoo-Kyoung & Lauren (2013), Tao Dan (2011) and Wang Xin 'an (2012) started to study various factors affecting college students' online consumption from the perspective of influencing factors of online consumption tendency, mainly studying online shopping experience, price, website setting, perceived behavior control and other factors. Ayako Hiramatsu. Etal. (2009) took Japanese college students as the research object and studied the following conclusions through questionnaire survey: perceived risk has a negative effect on the online shopping behavior of Japanese college students, while perceived usefulness encourages college students to shop online. Chen Xianhai (2010), Wu Xiao-meng et al. (2011) also divided college students' consumption motivation and psychology from the perspective of psychology. In terms of motivation, they studied entertainment motivation, convenience motivation and perceived behavior control, etc., and in terms of psychology, they studied the psychology of comparison and risk.

Zheng Meng, Liu Wanjun et al. (2017) mainly investigated college students in Tianjin to study their online shopping behaviors. The survey found that online consumption has become one of the major shopping methods for college students in Tianjin. About 50% of the students will spend 100 to 300 yuan on online shopping, among which male students prefer to buy electronic products online, while female students prefer clothes and accessories. Lin Yue (2017) took Bengbu University City as the survey area and conducted a questionnaire survey among 250 students in the University City. In terms of online shopping, the majority of students are sopand juniors, accounting for more than 85%. Among them, 32% of college students shop online frequently, more than five times a month. Li Jiayi (2016) to distinguish the network shopping consumer groups, the students groups separate out and compared with ordinary shoppers, the study found that college students' online shopping frequency is higher, and more than other ordinary shoppers, but to buy the product value is not high, love in a festival time for online shopping, online purchasing power is higher than the senior students of lower grade students, college students' online shopping market has huge potential.

Chen Yu (2016) believes that college students' online shopping development is

reflected in three aspects. At the beginning, they just try to shop online, then they may shop online in a planned way, and finally they may form a habit. Online shopping is attractive to college students, which can meet their various needs, but the risks are also easy to make them lose themselves. Only when college students are aware of the risks and trust the factors of financial services, can they make online shopping more reasonable.

Ding Jian (2016), Cao Min (2016) and so on all college students in Shanghai as the research object, put forward the factors of the desired outcome (such as: universality, convenience, unity and coordination) and investigate the current situation and existing problems of the network shopping, the study found that most college students in Shanghai have both the network shopping, the more understanding, they choose e-commerce website also exist differences, college students' Internet consumption ability also each are not identical, but the popularity of online shopping in Shanghai college students is very high. Liu Meng (2015) to the college students as the research object, the two countries, and Thailand, contrast between China and Thailand are analyzed college students' consumption tendency on e-commerce platform, studies: Chinese students shopping online more value quality, price, hope to be able to have sales promotion activity, Thai students is sensitive to these no Chinese students, but also more attention to the brand and quality, puts forward the desired outcome and perceived behavior control of these two factors affect the propensity to consume; In terms of the development of E-commerce in Thailand, Liu Meng put forward Suggestions on how to accelerate the construction of the platform, strengthen the construction of network security system, improve technical support and standardize the mechanism of e-commerce. Cui Min (2012) mainly for universities students in Shandong province has carried on the investigation and study, has carried on the empirical analysis to the data, the results show that Shandong university college students more focus on the question of trust and risk, worried that sellers integrity is insufficient, worried about logistics service does not pass, but the college students is more and more agree with the way the network shopping, more and more like the network shopping, shopping comparison on price and quality problems, and puts forward the factors affect the consumption tendency of subjective norms.

To sum up, I choose opinions related to financial services, expected results, subjective norms and perceived behavior control, which affect consumers' consumption tendency on e-commerce platforms.

Consumption is the fundamental motive force of human economic activities, so it is also the core of economic theory. Classical and neoclassical theories emphasize the

guiding and promoting effect of consumption on production, ignore the possible restriction of consumption tendency on economic development, emphasize the power of spontaneous adjustment of economy, and believe that economic equilibrium can be achieved at any level of consumption tendency. Moreover, the force of spontaneous market regulation can achieve the optimal allocation of resources and achieve full employment at any level of consumption tendency. As the father of modern economics, Keynes elaborated consumption tendency as the basic independent variable of the economic system and regarded consumption tendency and investment as the decisive factors of national income and employment level. Therefore, consumption tendency received unprecedented attention and has since become an important research content of modern economics. The development of economic theory system usually has a certain historical coherence. The systematic sorting of Marx's consumption thought, classical consumption theory, neoclassical consumption theory and modern consumption theory is the theoretical foundation for analyzing the consumption tendency of residents.

2.1.1 Marx's Consumption Theory

Marx emphasized the distinction and connection between living consumption and productive consumption, especially between workers' consumption of means of production and workers' consumption of life. "Workers spend in two ways," he says. In production itself he consumes the means of production through his own labor and converts them into products of higher value than the value of the prepaid capital. That's his production and consumption. And this is also the consumption of his labor by the capitalist who's buying his labor. The worker, on the other hand, USES the money he is paid for his Labor for the means of subsistence: it is his personal consumption. It can be seen that the production and consumption of workers and personal consumption are completely different. First of all, the two are not the same process. The former occurs within the production process, while the latter occurs outside it. Marx pointed out: "In the former case, the worker plays the role of the power of capital and belongs to the capitalist; In the latter case, he is his own man, performing the functions of life outside the productive process. The former results in the survival of capitalists, while the latter results in the survival of workers themselves. Second, they produce different results. The product of the latter is the consumer itself, while the product of the former is a product other than the consumer. In addition, there is also a certain relationship between the two, namely the dialectical relationship between production and consumption, production is consumption, and consumption is

production. First, "Labour consumes its own material elements, that is, the objects and materials of its Labour, and therefore consumes them." Second, "Even the personal consumption of workers is, to a certain extent, only a factor in the process of capital reproduction. The personal consumption of workers, on the one hand, ensures their maintenance and reproduction, and, on the other hand, their constant presence in the Labour market through the consumption of means of subsistence.

Marx emphasized the dialectical relationship between consumption and production. Production is directly consumption, and consumption is directly production. "Production is directly also consumption," he stressed. The double consumption, the subject and the object... The act of production itself is also the act of consumption for all its elements. Consumption produces "the main body of production", consumption also produces "the purpose of production", production also produces "the consumption itself" and production also produces "the object of consumption". In Marx's social reproduction link, production is the starting point, consumption is the end point, and the two are related, but not the same.

There are many similarities between Marx's research on consumption tendency at the micro level and that of classical economists. In Marx's theory, capitalists and workers are two opposing classes, and their consumption levels are quite different. As the owner of the means of production, capitalists have higher income and consumption levels, while the working class has to sell their labor force to survive and continue their offspring. Their income and consumption levels are controlled at a lower level by the value of labor force, and are often even depressed below the value of labor force in the form of labor price. Worker consumption is a necessary condition for labor force reproduction and social reproduction, and also an important means for capitalists to realize exploitation and accumulation. Marx's explanation of the value of labor force is similar to that of the iron law of wages in classical economics.

2.1.2 The Consumption Tendency Scale

Most of the early studies on consumption tendency centered on products. Researchers focused on how products induced consumers to buy and studied the consumption tendency scale of Limayem and George

Limayem et al. (2000) and George et al. (2004) argue in their research on consumption tendency that consumers' reactions to financial services, expected results, subjective norms and perceived behavioral control during the purchase process are the key points to trigger consumption tendency. They developed a research propensity to consume scale to measure this propensity to consume. The scale includes 20 questions

in four dimensions: financial services, desired outcomes, subjective norms and perceived behavioral control. It measures not only the propensity to consume, but also the planning and acceptance of novelty.

The questionnaire design of this study draws on two similar studies by Limayem et al. (2000) and George et al. (2004) to provide the validity, reliability and reliability of the results (Cavana et al., 2001). The survey was designed to be anonymous so that the target respondents would not feel uncomfortable filling out questionnaires and would give honest answers. Each variable contains five questions. The questionnaire USES an interval scale. This is a standard score, and researchers define a certain number of scoring answers (Cavana et al., 2001), such as 5 points ranging from strongly agree to strongly disagree, which are about financial services, desired outcomes, subjective norms and perceived behavioral control. All questions are closed (Cavana et al., 2001) because it is easy for the target interviewees to choose the answers quickly.

Table 2.1 Consumption Tendency Scales of Limayem and George

The dimension	The title
Financial services	1. I don't think it's safe to shop online on impulse.
	2. I should order it as soon as I see it, especially on the e-commerce platform.
	3. Whether the transaction management is perfect or not is my primary consideration when Shopping on the e-commerce platform.
	4. If the encryption of the electronic account on the e-commerce platform is high, I will feel more secure about shopping.
	5. When shopping on the e-commerce platform, I will often shop if the online payment process is convenient.
Desired outcome	I shop online because it is convenient and I don't need to go to the store.
	2. I choose online shopping because it connects manufacturers, distributors, consumers and the government in general.
	3. The reason why I like shopping online is that e-commerce can regulate the workflow of transaction processing.
	4. The utilization rate of manpower and material resources, and the rigor of platform system operation are what I often consider when Shopping online.
	5. E-commerce enables customers to coordinate with the company,

	manufacturers, wholesalers and retailers, so I feel more at ease in shopping.
Subjective norms	1. My friends influence my online shopping.
	2. My family (relatives, parents, children and spouse) think I should shop online.
	3. My colleagues influenced me to go shopping online.
	The shopping experience led me to go shopping.
	5. I will buy something online to change my mood.
Perceptual behavioral control	1. I know what To do when I'm online.
	I have the ability to shop online.
	3. It's easy to shop online.
	4. I know how to identify product quality on the Internet.
	I can identify the risks of shopping online.

2.1.3 Concept Type and Relationship of Consumption Tendency

Consumption tendency refers to the tendency of consumers' demand for goods. It reflects the change of consumption intention of different consumer groups or the same consumer group in different periods. The main factors that restrict the consumption tendency are social and economic policies, progress and achievements of science and technology, social productivity level, market supply and demand, and residents' purchasing psychology. The share of consumption in income. Represents the dependence between consumption expenditure and income level. John Maynard Keynes. There are average consumption tendency and marginal consumption tendency. The former is the proportion of consumption per unit of income.

Propensity for consumption consists of two concepts, a average propensity to consume (APC) and a marginal propensity to consume (MPC).The two concepts are close in name, but fundamentally different in meaning. The average propensity to consume, also known as the propensity to consume, expresses the ratio of personal consumption expenditure to disposable income. However, the concept itself involves an analysis of historical data, involving the statistics of consumer spending and disposable income over a given period, so the average propensity to consume is less applied to economic analysis. Still, the average propensity to spend can explain the gap between rich and poor among people of different incomes. Formula of average consumption tendency:

$$APC = \frac{C}{Y_d}$$

C is consumer spending, *Y_d* is disposable income. The marginal propensity to consume is much more important than the average propensity to consume. It is an analysis of the increase in disposable income. It shows that every unit of income increase will lead to a fixed percentage increase in consumption expenditure. For the sake of economic theory, the marginal propensity to consume is often assumed to be fixed. This assumption helps to predict the value of the induced increase in consumption, so that GDP growth becomes stable. In fact, of course, the marginal propensity to consume cannot remain unchanged. Generally speaking, with the increase of disposable income, the individual's propensity to consume should be decreasing, because the same combination of economic goods with more consumption will only result in the individual's diminishing marginal utility. So people will keep spending as much as they did, and the share will gradually decline. The marginal propensity to consume formula:

$$MPC = \frac{dC}{dY_d}$$

Since both average and marginal propensity to consume are expressions of expenditure ratio, marginal propensity to consume is different from average propensity to consume, which is the ratio between total consumption and disposable income. So the average propensity to consume and the average propensity to save is equal to 1; the sum of marginal propensity to consume and marginal propensity to save is equal to 1, that is, $MPC + MPS = 1$.

The changes of APC and MPC have the following basic rules:

(1) The APC of average consumption tendency and MPC of marginal consumption tendency are decreasing, that is, as income increases, consumption also increases, but the growth rate of consumption is smaller than that of income growth (APC decline), and gets smaller and smaller (MPC decline). APC and MPC decline is an important point of Keynes, is one of Keynes three laws to explain the effective demand shortage.

(2) MPC is the slope of the consumption curve $C = C_0 + bY$. The slope of each point on the consumption curve should be the same, but in the long run, the slope of the consumption curve becomes smaller and smaller.

(3) $APC > MPC$, which can be seen from the comparison of APC and MPC Numbers in the table. That's because even if your income is zero, you're going to have a base consumption of C_0 . MPC should be less than 1, but greater than zero.

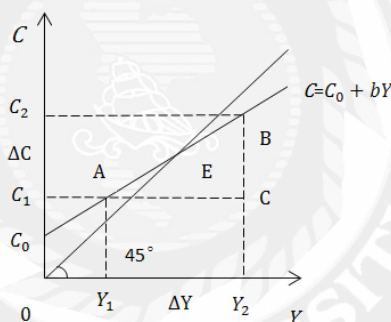
(4) The relationship between consumption and income can be divided into three categories:

$C > Y, APC > 1$

C is less than $Y, 1 > APC > 0$

$C=Y, APC=1$, the performance of consumption tendency in today's society

Draw a 45° line in the figure and the intersection point of the consumption curve is E, then at this point, $C=Y, APC=1$; To the left of E, $C > Y, APC > 1$; To the right of E, C is less than $Y, 1 > APC, b > 0. APC+APS=1. APC+APS=1$



2.2 Review of E-commerce Concepts

2.2.1 Introduction to E-commerce

E-commerce refers to the commercial activities centering on Commodity Exchange by means of information network technology. It can also be understood as trading activities and related services conducted by means of electronic transactions on the Internet, enterprise Intranet and value-added network. It is the electronization, networking and informatization of all links of traditional business activities. Internet as the medium of business activities are under the category of e-commerce.

E-commerce usually refers to a wide range of commercial trade activities around the world, in the Internet open network environment, based on client/server applications, buyers and sellers never met in various business activities, realize consumer online shopping, online transactions between merchants and online

electronic payment and various business activities, trading activities, financial activities and related comprehensive service activities of a new type of commercial operation mode. Governments, scholars and business people in different countries have given many different definitions according to their position and different perspectives and degrees of participation in e-commerce. E-commerce includes: ABC, B2B, B2C, C2C, B2M, M2C, and B2A (namely B2G), C2A (namely C2G), O2O, etc. E-commerce refers to the use of simple, fast, low-cost electronic means of communication, buyers and sellers do not see each other for a variety of business activities. Electronic commerce can be done through a variety of electronic means of communication. However, the e-commerce that people are talking about today is mainly done with EDI (electronic data interchange) and INTERNET (INTERNET). Especially with the increasingly mature INTERNET technology, the real development of e-commerce will be based on the INTERNET technology. So some people call e-commerce IC for short.

E-commerce is the direct product of the explosive development of The Internet and a new development direction of the application of network technology. The Internet itself has the characteristics of openness, global, low cost, high efficiency, has become the inherent characteristics of the e-commerce, and greatly beyond the electronic commerce as a new form of trade is the value of, it will not only change the enterprise's own production, management, management activities, but also will affect the whole social economic operation and structure. The "electronic" technology platform based on the Internet provides a vast space for the development of traditional business activities, and its outstanding advantages are incomparable to traditional media.

Electronic commerce is a business activity carried out by network communication technology. Governments, scholars and business people in different countries have given many different definitions according to their position and different perspectives and degrees of participation in e-commerce. Although e-commerce has different definitions in different countries or in different fields, its key is still the business model that relies on electronic equipment and network technology. With the rapid development of e-commerce, it has not only included the main content of its shopping, but also included ancillary services such as logistics distribution. E-commerce includes electronic currency exchange, supply chain management, electronic trading markets, network marketing, online transaction processing, electronic data interchange (EDI), inventory management and automatic data collection systems. The information technologies used in this process include the

Internet, extranets, E-mail, databases, electronic directories, and mobile phones.

E-commerce is a growing concept. IBM put forward the concept of Electronic Commerce (e-Commerce) in 1996, and then put forward the concept of Electronic Business (e-Commerce) in 1997. But when these concepts were introduced in China, they were translated into e-commerce, and many people confused the two concepts. In fact, these two concepts and content are different, e-commerce should be translated into e-commerce, some people call e-Commerce as a narrow sense of e-commerce, e-commerce as a broad sense of e-commerce. E-commerce refers to the realization of the electronic trade activities in all stages of the whole trade process, and e-commerce is the realization of the electronic Business process of all Business activities through the Internet.

Firstly, e-commerce is divided into a broad sense and a narrow sense of e-commerce. In a broad sense, e-commerce is defined as the use of a variety of electronic tools for business activities; in narrow sense, e-commerce is defined as the use of the Internet to engage in business or activities. Whether the broad or narrow sense of the concept of e-commerce, e-commerce covers two aspects: one is inseparable from the Internet this platform, without the network, cannot be called e-commerce; Second, the completion of the Internet is a business activity. In a narrow sense, Electronic Commerce (EC) refers to the global business and trade activities conducted by using Electronic tools such as the Internet (these tools include telegraph, telephone, radio, TELEVISION, fax, computer, computer network, mobile communication, etc.). It is the sum of all kinds of business activities carried out on the basis of computer network, including the relevant activities of commodity and service providers, advertisers, consumers, intermediaries and so on. The e-commerce that people understands commonly is the e-commerce in narrow sense. In a broad sense, the term "Electronic Business" comes from Electronic Business, which refers to the Business activities conducted by Electronic means. Through the use of the Internet and other electronic tools, the company, suppliers, customers and partners, the use of electronic business information sharing, electronic business process between enterprises, with the enterprise's internal electronic production management system, improve the efficiency of production, inventory, circulation and capital and other links.

The United Nations Working Group on Facilitation of International Trade Procedures defines e-commerce as the use of electronic forms of commerce, including the use of any electronic tools among suppliers, customers, governments and other participants. Share unstructured business information such as EDI, Web technology,

and E-mail, and manage and complete transactions in business activities, management activities and consumer activities. Electronic commerce is the whole process of realizing electronization, digitization, networking and commerce by using computer technology, network technology and telecommunication technology. It is a business activity as the main body, based on the computer network, electronic means as the means, in the legal scope of the business transactions. In 1997, the company proposed the concept of Electronic Business (e-Business). E-commerce focuses on electronic transactions and emphasizes transactions and cooperation between enterprises and external parties, while e-commerce expands its scope a lot. Broadly defined as the use of electronic tools for business or activity. The narrow sense refers to the use of the Internet for business activities. Constitute its four elements: mall, consumer, product, and logistics.

Trading: Major online platforms provide consumers with high quality and low price commodities, attracting consumers to buy and encouraging more merchants to enter. Cooperation: Establishing cooperative relations with logistics companies to provide ultimate protection for consumers' purchase behavior is one of the mandatory conditions for e-commerce operation. Service: One of the three elements of e-commerce logistics is mainly to provide consumers with purchase services, so as to achieve another transaction.

Associations

The formation and transaction of e-commerce cannot be separated from the following four aspects:

Trading platform

The third party e-commerce platform (hereinafter referred to as the third party trading platform) refers to the sum of the information network systems that provide the transaction matching and related services for the two or more parties in the e-commerce activities;

Platform operators

The term "third-party trading platform operator" (hereinafter referred to as "platform operator") refers to any natural person, legal person or other organization

that has been registered in the administrative department for industry and commerce and has obtained a business license to operate the third-party trading platform and provide services for both parties;

Station operator

Operators in a third-party trading platform (hereinafter referred to as "operators in a third-party trading platform") refer to natural persons, legal persons and other organizations engaged in trading and related service activities on the e-commerce trading platform.

Payment system

Payment System is a financial arrangement, sometimes called Clear System, which is composed of intermediaries providing Payment and clearing services and professional technical means to realize Payment order transmission and fund clearing. E-commerce, there are portal business more perfect information flow, capital flow, logistics and so on.

Electronic Commerce comes from English Electronic Commerce; short for EC. As the name implies it contains two aspects: one is electronic mode, the other is commercial activities. E-commerce in a broad sense means doing business and trading on the Internet. From the perspective of trade activities, e-commerce can be realized in multiple links, which can also be divided into two levels, the lower level of e-commerce, such as e-commerce, e-commerce, electronic contract; The most complete and most advanced e-commerce should be using the INTERNET network to all the trade activities, that on the INTERNET, information flow, business flow, cash flow and will be part of the logistics complete to achieve, that is to say, you can start looking for customers, to negotiate, order, pay online (closed), and to open the electronic invoice up to the same electronic customs clearance, tax and so on through the INTERNET. To realize complete e-commerce, in addition to buyers and sellers, Banks or financial institutions, government agencies, certification agencies, distribution centers and other institutions should be involved.

The existence value of e-commerce is that it enables consumers to shop and pay online through the Internet, which saves time and space for customers and enterprises and greatly improves transaction efficiency. Especially for busy office workers, it also saves a lot of their precious time. In the 21st century, when consumer information is

diversified, it has become a consumer habit to understand the commodity information of local shopping malls and then enjoy the fun of on-site shopping through the network channels such as Baidu micro-shopping, taobao, Tmall and alibaba. This has facilitated consumer demand. Mobile e-commerce is the B2B, B2C or C2C e-commerce conducted by using wireless terminals such as mobile phones, PDA and PDA. It will be the Internet, mobile communication technology, short distance communication technology and other information processing technology perfect combination, make people can at any time, any place all kinds of commercial activities, anytime, anywhere, online shopping and trading, online electronic payments and a variety of trading activities, business activities, financial activities and related comprehensive service activities, etc.

Mobile e-commerce is generated in the case of highly developed wireless transmission technology, such as the often mentioned 3G/4G technology, the carrier of mobile e-commerce technology. In addition, Wi-Fi and WaPi technology, also wireless e-commerce options. A mobile conference call solution that USES mobile phones to quickly hold conference calls in a timely manner. Experience the new concept of mobile conferencing with the help of 3G/4G/Wi-Fi network. Manage the meeting with your mobile phone at any time to maximize your work efficiency.

Virtual worlds are a very interesting model for e-commerce. It is a user-defined world where people can interact, entertain and do business, and experience different lives in a virtual world. The most famous virtual world is Second Life. Marketing methods: Service marketing, experiential marketing, knowledge marketing, emotional marketing, experiential marketing, educational marketing, differentiated marketing, direct selling, network marketing, search marketing, etc.

2.2.2 Features and Functions

Wang Weihong (2002) can see from the meaning and development process of e-commerce that e-commerce has the following basic characteristics:

1. The universality

E-commerce, as a new way of transaction, brings production enterprises, circulation enterprises, consumers and government into a new world of network economy and digital existence.

2. The convenience

In the e-commerce environment, people are no longer limited by geography, and

customers can complete complex business activities in a very simple way. For example, through the network bank can access account funds, query information 24/7, and at the same time make the enterprise customer service quality can be greatly improved. In e-commerce business activities, there are a large number of human resources development and communication, working time is flexible, to meet the requirements of the company, money and leisure.

3. Integrity

E-commerce can standardize the workflow of transaction processing and integrate manual operation and electronic information processing into an inseparable whole, which can not only improve the utilization rate of manpower and material resources, but also improve the rigor of system operation.

4. Security

In e-commerce, security is a crucial core issue, which requires the network to provide an end-to-end security solution, such as encryption mechanism, signature mechanism, security management, access control, firewall, anti-virus protection and so on, which is very different from traditional business activities.

5. Coordination

The business activity itself is a kind of coordination process, it needs the coordination between the customer and the company, the manufacturer, the wholesaler, the retailer. In the e-commerce environment, it requires the full cooperation of Banks, distribution centers, communication departments, technical services and other departments. The whole process of e-commerce is often completed at one go.

6. Various functions

E-commerce can provide online transactions and management of the whole process of services. Therefore, it has advertising, consultation and negotiation, online order, online payment, electronic account, service delivery, consultation, transaction management and other functions.

7. Advertising campaigns

E-commerce can rely on the enterprise's Web server and customer browsing, publishing all kinds of business information on the Internet. Customers can quickly find the information they need through online search tools, and businesses can use the web home page and E-mail to advertise worldwide. Compared with all kinds of

advertising in the past, online advertising is the cheapest and most informative to customers.

8. Consulting

E-commerce can use non-real-time E-mail, newsgroups and real-time discussion groups to learn about markets and commodities, negotiate transactions, and exchange real-time graphics at the White Board Conference on the Internet in case of further demand. Online consultation and negotiation can transcend the limitations of face-to-face negotiation and provide a variety of convenient forms of remote communication.

9. Order online

Electronic commerce can realize online ordering by means of interactive mail delivery in the Web. Online ordering usually provides friendly ordering information and interactive ordering formatting box on the product introduction page. When the customer fills out the order form, the system will usually reply with a confirmation message to ensure that the order information is received. Ordering information can also be encrypted so that customer and merchant business information is not disclosed.

10. Pay online

E-commerce should be a complete process. Online payment is an important link. A credit card account can be used for payment between the customer and the merchant. The direct adoption of electronic payments over the Internet would eliminate many of the human costs of transactions. Online payments will require more reliable security controls over the transmission of information to prevent fraud, eavesdropping, fraud and other illegal activities.

11. Electronic accounts

Online payment must be supported by electronic finance, which means that financial institutions such as Banks or credit card companies and insurance companies should provide online operation services for financial services. And electronic account management is an essential part of it. A credit card number or bank account number is a sign of an electronic account. And its credibility should be guaranteed by necessary technical measures, such as digital certificate, digital signature, encryption and so on. The application of these means provides the security of electronic account operation.

12. Service delivery

Paid customers should have their orders delivered to them as soon as possible. While some goods are local, others are not, the email will be able to carry out the logistics allocation in the network. The goods most suitable for direct transmission on the Internet are information products. Such as software, electronic books, information services, etc. It can deliver goods directly from the electronic warehouse to the client.

13. Consultation

It is very convenient for e-commerce to collect users' feedback on sales and service by using the format files such as "select" and "fill in the blanks" on the web page. In this way, the market operation of enterprises can form a closed loop. Customer feedback can not only improve the level of after-sales service, but also provide enterprises with business opportunities to improve products and find markets.

14. Transaction management

The management of the whole transaction will involve the coordination and management of human, financial and material aspects, enterprises and enterprises, enterprises and customers as well as enterprises' internal and other aspects. Therefore, transaction management involves the whole process of business activities. The development of electronic commerce will provide a good transaction management network environment and a variety of application services system. In this way, e-commerce can be guaranteed to be more widely used.

2.2.3 Logistics and Warehousing

According to the characteristics of e-commerce logistics industry, the basic functions of e-commerce logistics system include: order management: including order control process, order life cycle, order validity standard, order adjustment, order processing process.

Customer management: including customer basic information management, commodity information management, and key business index analysis. Supplier management: including basic information, procurement management, inventory management, return and exchange management, settlement management, advance payment, payment days, supplier performance management.

Warehouse management includes basic process design, basic data management, warehousing management, inventory management, inventory management,

replenishment management, outbound management, return management, RF bar code management system. Transportation management: including dispatching management, transportation management, transportation operation management, transportation capacity management, terminal distribution and distribution management, and interrupt distribution information management. Billing and settlement management: including billing management, settlement management. Data analysis management: including report management, BI report analysis management.

2.3 Literature Review of Influencing Factors of E-commerce Development

2.3.1 Theory of Rational Behavior

TRA (Theory of Reasoned Action) was started in 1975, and was mainly concluded by two scholars who discussed it together, namely Fishbein and Ajzen. This theory mainly shows the relationship in three aspects, involving four variables. First, attitude and subjective norms will influence behavioral intention together, and their influence and influence are the embodiment of behavioral intention. Attitudes can also act on beliefs, which are hidden in subjective norms; Behavioral intention will ultimately have an effect on actual behavior. Thus, TRA theory is composed of five parts. Since belief is embodied in subjective norms, the theoretical framework of TRA is shown in Figure 2.1. Among them, subjective norms mainly depend on two factors, one is belief, and the other is motivation. Belief mainly comes from the expected feelings of the important people around them about their behaviors. Meanwhile, the individual's evaluation of the results of behaviors is also understood as belief. Motivation is also called compliance motivation, which mainly depends on the extent to which an individual is willing to accept the influence of others. In short, normative beliefs are an individual perception factor. The behavioral attitude is mainly reflected in the evaluation level, which relies on the individual to describe and evaluate the behavior to happen. Behavioral intention is a subjective factor, which mainly depends on the individual's willingness to the occurrence of a certain behavior and the probability of the occurrence of the desired behavior. Finally, the actual behavior refers to a specific behavior, which can appear under the influence of attitude, belief and motivation.

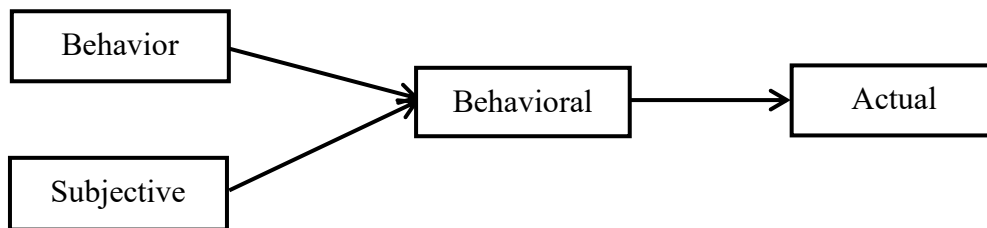


Figure 2.1 Theoretical structure of rational Behavior

2.3.2 Theory of Planned Behavior

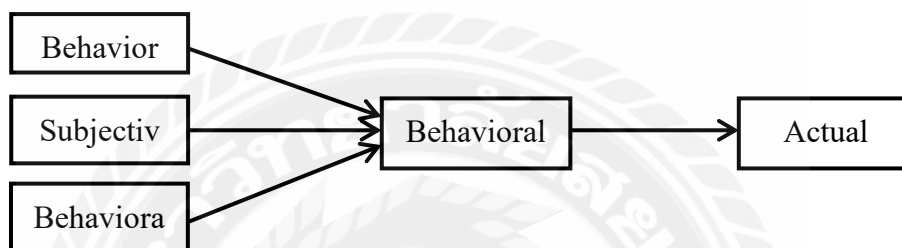


Figure 2.2 Theoretical structure of planned Behavior

As scholars for the use of the Theory of rational Behavior, discovered the Theory ignores the individual's Behavior is not fully controlled, the behavioral attitude and subjective norm of the original model can't measure the behavioral intention of individual, so Ajzen proposed to improve the Theory in 1991, namely the Planned Behavior Theory (going of Planned behaviors, TPB), on the basis of the Theory of TRA joined the cognitive Behavior control variables, formed the TPB model, the effect of the model and TRA models the same way, is the Behavior of the net effect on behavioral intention, The difference is that the TPB model is much more of a variable, influence the behavioral intention of variables in addition to the behavioral attitude, subjective norm, also includes the cognitive behavior control, cognitive behavior control is refers to the individual in the past experience and may encounter difficulties in the future to predict a recognition, when a person think you will encounter a few obstacles in the future, or now has a lot of opportunities and resources, the greater the cognitive behavior control. The inclusion of behavioral control cognitive variables in TPB theory is to prevent the research on individual behavior from becoming unscientific when the behavior is not controlled by the will. The addition of such variables can make the study on individual behavior more scientific.

2.3.3 Technology Acceptance Theory

In order to further study users' Acceptance of Technology, Davis (1989) proposed the Technology Acceptance Model (TAM), the theoretical basis of which was also derived from the above TRA theory, which included the theory of TRA, and extended to the specific use behavior of information system. Past the technical route of TRA theory is the combination of behavioral attitude and subjective norm the behavior intention and behavior intention of eventually actual behavior, but Davis thinks that the reaction between the behavioral attitude and subjective norm is different, the two factors of attitude factor is more important, and how to measure the attitude factor, Davis, and puts forward the perceived ease of use and perceived usefulness of these two variables, also exist between the two variables must adjust the relationship of some external variables will effect on perceived ease of use, for example, which ACTS on the perceived usefulness, Therefore, perceived ease of use and perceived usefulness are the key factors to measure an individual's acceptance of a certain science and technology. Davis not only proposed the theoretical basis of TAM, but also verified the TAM model. Therefore, many later scholars began to use technology acceptance theory to study issues involving attitude, intention and behavior factors, and this theory developed into the main model for studying technology acceptance behavior. As shown in Figure 2.3, technology acceptance theory includes the following important factors: perceived ease of use, which means the degree of difficulty that individuals value when accepting a certain technological behavior. The simpler the perception, the stronger the perceived ease of use. Perceived usefulness refers to the degree of usefulness that an individual values when accepting a certain technical behavior. When an individual feels that the technology can improve its efficiency, perceived usefulness becomes stronger. The model role relationships are: first, the external variables of perceived ease of use and usefulness will play a role, and their usefulness and ease of use, second, perceived ease of use and usefulness are likely to affect the use of the individual attitude, third, use intention by using attitude role at the same time, also affected by perceived usefulness, fourth, passing from the use of behavior by the above factors, the final use intention directly applied to actual behavior.

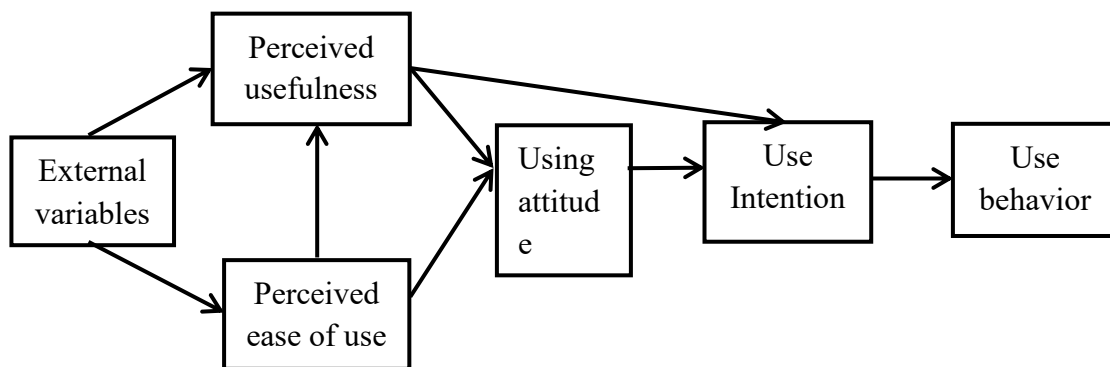


Figure 2.3 Theoretical structure of technical acceptance

2.3.3 Current Situation of Online Shopping in Thailand

2.3.3.1 Online Store

Online shopping is a relatively new form of retail. The rise of the online store or online store is an Internet-based e-commerce that has proliferated worldwide since the mid-1990s. This is another way of selling and buying products and services today. It reduces the cost of online business investment, including advertising cost, human resource cost, inventory cost, time to market cost, product improvement cost and service quality cost, and one can easily set up an online store (Strader and Shaw, 1997). People can sell products and buy products through online stores once the shopkeeper has established his/her store. There will be a website for customers to visit in the form of URL, such as:

<http://www.ebay.com>, <http://www.taobao.com>, <http://www.china.alibaba.com>.

Generally, the shop owner will provide customers with the necessary information about the shop. This includes product details, product prices, delivery times, search capabilities, email contacts; contact Numbers, shopping carts, and online payment systems. When shoppers shop online, there is no face-to-face contact between sellers and shoppers, but other communication channels, such as help buttons, search, functions and online chat services, are provided to shoppers (Monsuweetal, 2004). In this way, online store services will not be reduced to offline stores with salespeople on hand to assist shoppers. In 2013, e-commerce in Thailand was booming. Thanks to 3G coverage, 131 per cent mobile penetration and the country's estimated 52 million Internet users, more people than ever shop online. Indeed, the Thai E-commerce Association expects e-shopping to grow 30 per cent online this year, up from 119.64bn baht (\$3.65bn) in 2012.

In Thailand, the boom has been driven by new forms of e-commerce that have developed from more established channels, such as regular e-stores and

consumer-to-consumer sales through forums. Here are two emerging social e-commerce trends we saw in Thailand in 2018.

F - Commerce

With 24 million Facebook users in Thailand, it's natural for people to take advantage of the crowded social network to share things with each other. This trend is called "Facebook Commerce," or F-commerce. In Thailand, F-Commerce sellers typically focus on women's products, from accessories to clothing, from skincare to cosmetics. However, just creating a page to sell was so in 2012; in 2013, marketers began using promotional posts and other types of Facebook ads. This makes businesses more social.

This new trend across Asia, and not just in Thailand, is an opportunity for startups to serve these sellers. So we're seeing services like Page365, Insteps, and Bent web build solutions for Facebook vendors in the region. Each of these sites provides sellers with an analytics panel that monitors customer behavior, product requests, purchases, and social sharing on Facebook. In some cases, the Facebook stores in Thailand generated more than \$100,000 a month in revenue.

Mobile commerce

Mobile commerce is an undeniable trend across the region, but in 2018 it flourished in Thailand. The current king of m-commerce is the popular messaging app Line, the online marketing platform of choice for most regional companies. That may be because Line has 230m registered users, 18m of whom are in Thailand. This makes China the second largest user base after Japan. This year we have also seen strong interest in events such as the weekly online sales blitz in Thailand, and strong growth in e-commerce related companies that provide useful services to the industry, such as a commercial company and a trusted company. They are grappling with some of the remaining problems that have held back e-commerce in Thailand this year, such as low acceptance of electronic payments and a lack of trust in online sellers. Including that message, which seems to be positive, the growth of e-commerce is significant among Thailand's online commerce investors from 1998 to 2017. This number is expected to continue to grow in the coming years. The importance of this business is described below.

2.3.3.2 Types of Online Products

By 2012, there were more than 24 million Internet users or Internet stores registered in Thailand with the Commerce Department (E-commerce Group, 2012). They report that the types of products that Thai consumers buy most online are (1) beauty and fashion, (2) food and beverages, (3) health, (4) accessories, and (5) entertainment.

2.3.3.3 Gap in Cognition

Charoenying (2012) found that consumer behavior had a significant impact on the growth of B2C (online business-to-Customer, B2C) in Thailand. In addition, the Internet business in Thailand has not been as successful as that in other places so far (Yawai, 2004; Gunawardana and Avatchanakorn, 2011). This new type of business is booming in most countries, but is rare in Thailand. This new business model developed slowly in Thailand, despite the high awareness of online business and its advantages (Gunawardana and Avatchanakorn, 2011).

Muthitachoen and Palvia (2012) believe that many online shopping studies are based on the United States and other developed countries. Thailand lacks online shopping information that Thai online business investors use to improve their business. In addition, Thailand's private and state-owned companies have realized that they must do business online if they are to survive and grow significantly.

Most marketing scholars strongly support the idea that the best way to do business is through e-commerce through Internet channels (Chang et al., 2004) to sell products and services. Have an e-commerce strategy and execute it according to the plan, as well as an established marketing strategy; Otherwise, business may slow and, as the Thai proverb says, "With a good plan, half the battle is won." Smith and Rupp (2003) argue that not only is online business the key to business success, but understanding online consumer behavior is also a necessary condition for successful growth of online businesses.

2.3.3.4 Research on Influencing Factors of E-commerce Development

Online shopping or e-commerce is a relatively new business channel, which has been developing rapidly around the world. Previous studies have shown that the most influential factors for online shopping are convenience and time saving (Bellman et al., 1999; Bhatnagar et al., 2000; Chang et al., 2004; Limayem et al., 2000; Sim and Koi,

2002) for online shoppers. In addition, online technology is easy to operate (Ahn, Ryu, and Han, 2004; Chang et al., 2004; Liu and Wei, 2003; O 'Cass and Fenech, 2003).Some specific products, such as books, CDS and computer software (Bhatnagar et al., 2000;Chang et al., 2004;Sim and Koi, 2002) are usually cheaper than other stores. They can offer competitive prices to their customers. The literature reveals that trust in online stores is another factor that directly affects online business (Bhatnagar et al., 2000; Chang et al., 2004; Hoffman, Novak and Peralta, 1999; Limayem et al, 2000; Martinez-Lopez, Luna and Martinez, 2005).

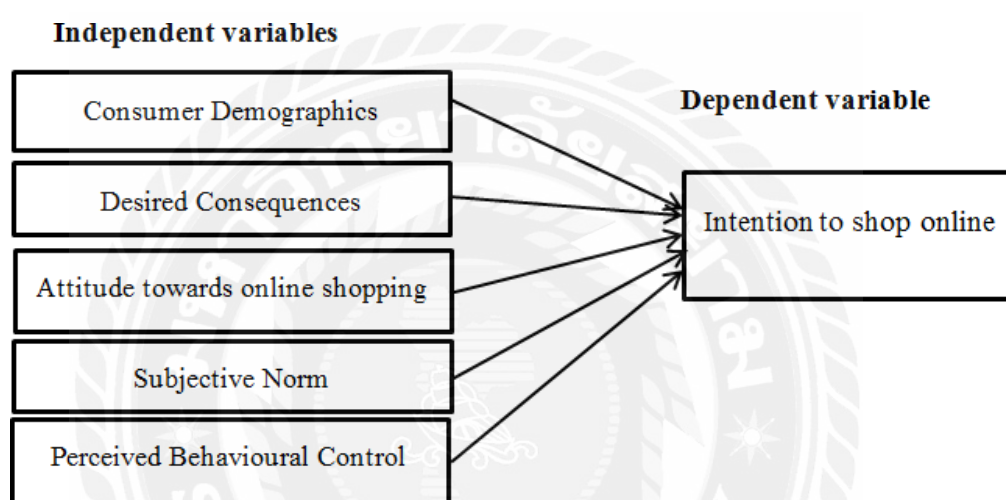


Figure 2.4 Conceptual model: Factors influencing online shopping behavior[®]

Bhatnagar et al. (2000); Chang et al., 2004; Corbitt, Thanasankit, and Yi (2003); Mahmood et al. (2004); Monsuwe et al. (2004); Wu (2003) found that not only these factors would affect online shoppers, but also demographic data. For example, men are more likely to shop online than women; most male consumers buy hardware and home appliances online because it is convenient. Women shoppers, on the other hand, buy less. In addition, people who are interested in online shopping tend to have higher incomes and higher education levels. Therefore, previous studies suggest that factors influencing online shopping are convenience, time saving, pricing, and trust and consumer demographics. These additional factors were added to the model as variables in this study to test whether they were factors influencing the purchase intention of online shoppers in Thailand.

The conceptual model adopted in this study is shown in Figure 2.4. It is adapted from the theory of planned behavior (Ajzen, 1991). It has two additional constructs.

[®] Quoted from: adapted from Ajzen (1991)

The first is a consumer statistical structure, composed of gender, income, education, age, occupation and online shopping experience, adapted from Bhatnagar et al. (2000); Chang et al. (2004); Corbitt et al. (2003); Mahmood et al. (2004); Monsuwe et al. (2004); Wu (2003). The other is the desired outcome structure, consisting of convenience, time saving, trust, and pricing, as cited in Triandis (cited from Limayem et al., 2000, p.423). Limayem et al. (2000) used this approach in their study and found it to be significant. This structure is the result of each performance and can have negative or positive results. Since the purpose of this study is to find the intention of online shopping rather than the actual shopping behavior, there is no behavioral construct in this framework.

The reasons for adding these two new constructs to the conceptual model are as follows. First, there is evidence that people's profile data is important in marketing (Swaminathan et al., 1999), and knowing who the potential customers are will benefit online commerce, business management and marketers. These people can develop a good marketing strategy to compete in the market they are in (Fahy, 2002). Second, online shopping experiences or past online buying behaviors were identified by Bentler and Speckart in an earlier study; Sutton and Hallett (quoted in Shim et al., 2001, p. 403) suggest that it significantly improves the prediction of behavior. Therefore, online shoppers' personal information will also affect their purchase intention. Finally, the expected results were found in the literature, namely convenience, time saving, pricing, and trust. For example, people may shop online because of convenience, time saving, lower prices of products, and their trust in online stores (Bellman et al., 1999; Bo, 2000; Chang et al., 2004; Limayem et al, 2000; Sim and Koi, 2002). It can also identify the specific results of online shopping and the factors that influence shoppers' behavior of purchase intention. Therefore, use this construct.

Based on the adaptability of planned Behavior theory (TPB), the research questions and hypotheses are proposed. The following sections discuss each hypothesis in detail.

2.4 A Brief Conclusion

The effects of external environment, demography, online shopping decision making and consumer satisfaction is not well reflected in IS literature. As Figure 2.5 shows, consumer satisfaction is a key factor in online shopping, yet only three studies have investigated this. Factors such as seller/service/product characteristics, website

quality, online shopping attitude, online shopping willingness, online shopping decision, and online shopping behavior all affect consumer satisfaction. More importantly, customer satisfaction is directly related to their attitude towards online shopping or specific online stores. The relative importance of this factor in determining consumer behavior such as repeat purchases suggests that further research is needed into consumer satisfaction with online purchases.

These ten factors and different methods used in different studies show that online shopping is a multidimensional, multidisciplinary phenomenon. Our research suggests that different studies have different approaches to implementing seemingly identical constructs. This methodological issue needs to be addressed in future research so that an effective tool can be developed to measure consumers' attitudes and behavior towards online shopping. There is also no consensus on the theoretical models used to describe and predict online shopping attitudes and behaviors. Due to the lack of a common theoretical framework, it is necessary to establish a comprehensive model of this phenomenon to facilitate the systematic study of its components and the online shopping process. By identifying common elements and developing models based on THE IS literature, we hope that we have taken a step towards the interdisciplinary integration and integration of the relevant literature.

One of the limitations of this study is the selection of existing studies. Due to time constraints, we searched only a few IS journals and meeting minutes. This may exclude some other prominent empirical studies. In addition, due to the multidisciplinary nature of online shopping, it IS interesting to compare IS literature with other disciplines that study attitudes and behaviors related to online shopping. These limitations will be addressed in our future research.

By combing and analyzing THE LITERATURE of IS, this study summarized the current research status in the field of online shopping, identified ten factors in the field of online shopping, and proposed a model to describe and predict the relationship between these factors. It provides a comprehensive picture of the situation in the area. This model needs to be verified theoretically or empirically in future studies.

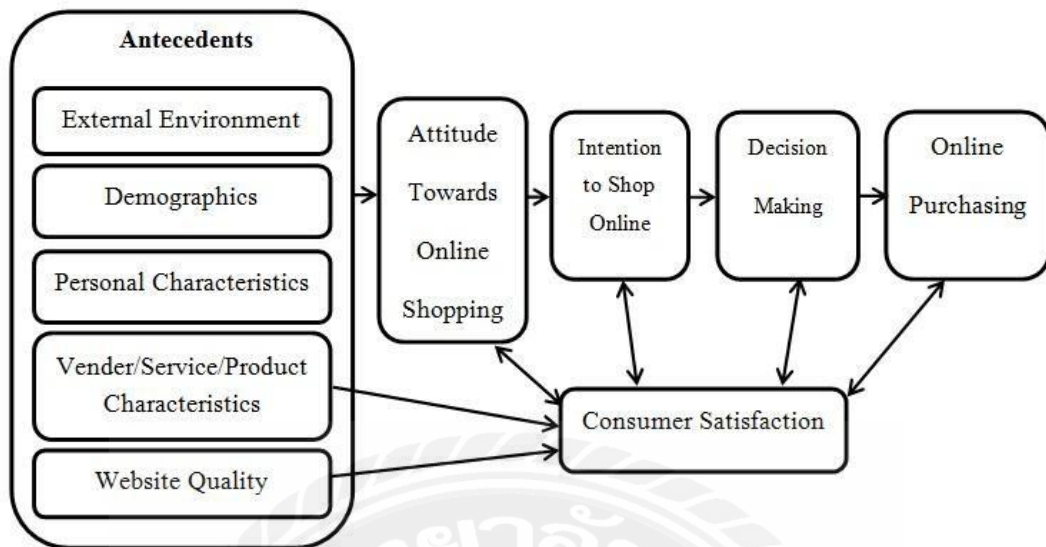


Figure 2.5 Research model of consumers' online shopping attitude and behavior[®]

[®]Quoted from Limayem et al, 2000, p.423

3. RESEARCH METHODS

3.1 Research Design

In this study, cross-sectional or single-period studies were used, which are often used in market research (Malhotra, 2004). A single cycle is suitable for collecting data. Given more time to collect data, the results may be less reliable and effective because consumer behavior may change over time. This can lead to unreliable data as respondents do not want to be disturbed at a future time.

Cavana etc. (2001); Molhotra (2004); Aaker, Kumar, and Day (2007) believed that descriptive research was the most common research method in the field of marketing. This method describes the characteristics of a specific group of people, using clear research questions/problem statements and focused assumptions to identify and predict their behavior in a given situation. Therefore, descriptive research design is adopted in this study to describe the characteristics of online shoppers.

Literature research: this paper studies the Thai residents in the consumption situation of e-commerce platform, need a lot of predecessors' research achievements for reference, especially in terms of model selection and variable selection, need to study the relevant theoretical basis and model of online shopping behavior, such as the TPB model, on the basis of reference about development model put forward by the scholars, to build the relationship between the variables, finally used to study the situation of residents in Thailand.

3.2 Population

There is evidence that adults aged 20 and over are the largest Internet users in Thailand, according to the National Statistics Office (2019). As a result, the study was conducted on adults in January 2019, as these frequently visited sites such as Facebook, Twister and Google. This questionnaire research designed an online questionnaire, which realized a very fast and simple way of answering. The main websites of this study include Facebook, Twister, shopping Web Thailand and Thai online marketing. Respondents have returned questionnaires through these websites. These people were selected by a convenient sampling method.

3.3 Sampling

For the uncertain population, this study USES five dimensions of independent variable financial services, expected results, subjective norms, perceived behavioral

control and dependent variable consumption tendency. Based on the above demographic statistics, a total of 30 scale questions are set to determine the sample size of 318, so as to prevent possible errors and higher accuracy.

In this study, the researcher takes the consumption of Thai residents on e-commerce platforms as the research object to see which factors are the most important factors affecting the online shopping behaviors of Thai residents. The author adopted planned Behavior theory (TPB) as the theoretical basis of the conceptual model. By testing the four concepts of the conceptual model, the most important influencing factors of online shopping in Thailand are found out. In this study, descriptive research and anonymous questionnaire were used as data collection methods to conduct an online questionnaire survey in January 2019 with a total of 318 sample respondents. The target sample was adults over 20 years old with Internet skills. Frequency and mean are used to describe the personal data of the sampled respondents. T-test, one-way analysis of Variance (ANOVA) and Multiple Regression analysis were used as statistical tools to conduct effective significance level analysis on all variables affecting the consumption of Thai residents on the e-commerce platform. For the uncertainty of the population, this study USES the survey company We Are Social released including southeast Asia global digital Internet statistics, using the latest research report shows that 2019 Internet users in Thailand has as many as 57 million people, accounting for 82% of the population, including active mobile Internet users up to 55.01 million people, accounting for 79% of the total population.[®]

The sample size was calculated based on Yamane Taro's simple random sampling

Simple random sampling formula:

$$N = n / [1 + n (e)]^2$$

When n = sample size n = population, E = sampling error (0.05 was used in this study)

According to Yamane equation, the sampling scale can be calculated and n = 318

So the researchers decided to use 318 samples to prevent possible errors and increase accuracy.

[®]Data sources: <https://wearesocial.com>

3.4 Ethical Issues

There were no questions about the respondents' background, such as full name, home address, phone number or email address. Every respondent volunteered to take part in the survey. If he/she wishes, he/she can stop the questionnaire at any time. The researcher explained the purpose of the study if he or she would fill out the questionnaire. The instructions on the questionnaire indicate that he/she may withdraw at any time without any obligation.

3.5 Research Instrument

Through previous related literature research, according to the research purpose of this paper, for the dependent variable as the propensity to consume, then to determine the factors that influence the propensity to consume in the TPB model, on the basis of building the suited to study Thai residents network shopping behavior model of affecting factors, through field investigation and design the corresponding survey questionnaire, using interviews, get some samples, and the empirical analysis, finally to quantify the dependent variable and expressed.

The questionnaire design of this study draws on two similar studies by Limayem et al. (2000) and George et al. (2004) to provide the validity, reliability and reliability of the results (Cavana et al., 2001). The survey was designed to be anonymous so that the target respondents would not feel uncomfortable filling out questionnaires and would give honest answers. Each variable contains five questions, except for the section on consumer demographics. Three scales were used in the questionnaire. The first method is to classify the data, called nominal scale (Cavana et al., 2001), such as gender. The second is to sort the data, known as the scale (Cavana et al., 2001), for example, age over 20. The third is the interval scale. This is a standard score, and the researcher defines a certain number of scoring answers (Cavana et al., 2001), such as a 5-point range from very approving to very disapproving, which is about independent variable financial services, desired outcomes, subjective norms and perceived behavioral control, and dependent variable consumption propensity. All questions are closed (Cavana et al., 2001) because it is easy for the target interviewees to choose the answers quickly.

In order to ensure the scientific nature of the research on the influencing factors of Thai residents' consumption on e-commerce platforms, this paper tries to refer to mature scales at home and abroad in the choice of measurement questions of variables, and then combines with the actual situation of Thailand to define the variable options. The questionnaire consists of three parts. The first part is a simple greeting to explain

the purpose of the survey. The second part is the survey of basic information of Thai residents, including the classification of demographic data related to gender, age, education, income level and online shopping experience. It contains five multiple choice questions about consumer demographics. The third part is to analyze the standards; Thailand is the influence factors of residents in the consumption of e-commerce platform, including independent financial services, the desired result, subjective norm and perceived behavior control and affect the Thai resident's consumption online will dependent variable consumption tendency, including 25 questions, using likert scale, a total of five levels, as follows:

Strongly against 1

Don't agree with 2

Neither agree nor disagree with 3

Agree with 4

Strongly agree 5

Translating the questionnaire into local Thai is essential so that all respondents can understand all the questions (Cavana et al., 2001; Sekaran, 2003).

3.5.1 Analysis of Validity/Validity

The questionnaire used in the study was adapted from two previous studies by Limayem et al. (2000) and George (2004) mentioned in Chapter 2. Their conceptual model is adapted from the theory of planned behavior, which has been used in this study.

Validity analysis mainly measures the validity of questionnaire data. KMO sample adequacy test was conducted, and Bartlett ball test was used to evaluate whether the scale could be evaluated by factor analysis according to the test results, which was also one of the methods to test validity. KMO ranges between 0 and 1. If the KMO value is less than 0.5, it is not suitable for factor analysis. The general criterion for factor analysis is that the KMO value should be at least 0.6 or above. The commonly used standards are shown in Table 3.1:

Table 3.1 KMO Evaluation Criteria

KMO value	standard
KMO < 0.5	You can't use
0.5 or less KMO < 0.6	Not suitable for
0.6 or less KMO < 0.7	ordinary
0.7 or less KMO < 0.8	Is suitable for
0.8 or less KMO < 0.9	Suitable for
0.9 or less KMO	Very suitable for

SPSS 21.0 software was used to test the validity of the questionnaire, and the KMO value and Bartlett test results in Table 3.2 were obtained. It can be seen from the table that the KMO value of the total sample is $0.931 > 0.8$, which indicates that the survey data related to the influencing factors of Thai residents' consumption tendency on the e-commerce platform involved in this paper is suitable for factor analysis. In addition, since the significance of Bartlett's sphericity test is 0.000, which has reached a significant level, there are common factors among the correlation matrices of the sample population. To sum up, both the total large sample questionnaire data and individual variable data had a satisfactory KMO value, and the significance of Bartlett's sphericity test was 0.000, which had reached a significant level. Therefore, the questionnaire data also passed the validity test.

Table 3.2 KMO and Bartlett Tests

KMO and Bartlett tests		
Kaiser-meyer-olkin measurement with sufficient sampling.		0.931
Bartlett's sphericity test	The approximate chi-square	5245.632
	df	300
	Sig.	0.000

Above, KMO is the "sampling relevancy" test and Bartlett is the "spherical" test. The results show that the survey data of online shopping consumption behavior of Thai residents is suitable for factor analysis, and there are common factors among the correlation matrices of the sample population. Therefore, the principal component method can be used to conduct factor analysis on the online shopping related data of Thai residents to further test the validity of the questionnaire. Some indicators presented by factor analysis can be used to determine whether structural validity is

appropriate, such as cumulative variance ratio and factor load indicators. The cumulative variance rate is shown in Table 3.3, reflecting the cumulative interpretation degree of the common factor to the scale or questionnaire, and the factor load is shown in Table 3.4, reflecting the correlation degree of each item option to the variable.

Table 3.3 Explains the Total Variance

ingred ients	Initial eigenvalue			Extract the sum of squares and load			Sum of squares of rotation loaded		
	A combin ed	% of the varianc e	Cumul ative %	A combin ed	% of the varianc e	Cumul ative %	A combin ed	% of the varianc e	Cumul ative %
1	9.925	39.699	39.699	9.925	39.699	39.699	3.824	15.296	15.296
2	3.104	12.416	52.115	3.104	12.416	52.115	3.661	14.645	29.940
3	1.936	7.743	59.857	1.936	7.743	59.857	3.549	14.195	44.135
4	1.640	6.560	66.418	1.640	6.560	66.418	3.429	13.716	57.851
5	1.196	4.786	71.204	1.196	4.786	71.204	3.338	13.352	71.204

Factor analysis is conducted on the questionnaire data of influencing factors of consumption tendency of Thai residents on the e-commerce platform, mainly to observe whether the data can provide common factors. If the common factors can be obtained, the questionnaire design is reasonable to a certain extent. The eigenvalue is the sum of squares of the loads of each factor. It is generally believed that if the initial eigenvalue of a factor is greater than 1, the factor is a meaningful factor, but the number of factors can also be selected in combination with the cumulative contribution rate. By table 3.3 shows that using principal component analysis of five factors, and the vast majority of eigenvalues greater than 1, 5 factors explained 71.204% of the total variable, namely questionnaire to explain the influence Thai residents in the influence factor of e-commerce platform on propensity to consume most of the information, at the same time also suggests that the factor of the original variables had a significant correlation between indicators.

Table 3.4 Factor Loading Table of Each Variable

Variable	Measuring item	Factor loading
Financial Services 1	H1	0.830
Financial Services 2	H1	0.879
Financial Services 3	H1	0.784
Financial Services 4	H1	0.804
Financial Services 5	H1	0.902
The expected result is 1	H2	0.799
The expected result is 2	H2	0.681
Desired outcome 3	H2	0.727
The expected result is 4	H2	0.632
Desired outcome 5	H2	0.817
Subjective norm 1	H3	0.755
Subjective norm 2	H3	0.812
Subjective norm 3	H3	0.705
Subjective norm 4	H3	0.738
Subjective norm 5	H3	0.809
Perceptual behavior control 1	H4	0.770
Perceptual behavior control 2	H4	0.758
Perceptual behavior control 3	H4	0.753
Perceptual behavior control 4	H4	0.825

Table 3.4 shows the factor load after rotation. According to actual needs, small data are deleted and data with factor load greater than 0.4 are retained. After sorting, the factor load of each variable is shown in Table 3.4. According to the standards proposed by some scholars, the factor load greater than 0.3 is effective and greater than 0.5 is the ideal. According to the data in Table 3.4, the validity of the questionnaire system in this paper is qualified.

To sum up, the questionnaire has appropriate validity. The questions in the questionnaire can better reflect the true meaning of variables, which lays a foundation for the feasibility and accuracy of the research data.

3.5.2 Questionnaire Test/Reliability Analysis

Prior to the actual field survey, the researchers conducted a preliminary study to measure the reliability of the questionnaire (Cavana et al., 2001; Sekaran, 2003). Cavanaugh et al. (2001) argue that reliability: "denotes the degree of measurement without deviation (error free), thus providing consistent measurements across time and across different items in the instrument." By doing so, as Malhotra (2004) suggests, the pre-test sample size should be between 15-30 people and drawn from the same population as the actual survey. So we chose 30 samples. A total of 30 samples volunteered to answer the questionnaire before the researchers conducted the actual survey. The samples were taken from The Facebook site, which is well-known in Thailand. The qualifications of the respondents are as follows: they are familiar with the Internet, are 20 years old or above, and are working.

Cronbach's Alpha method was used to load the pre-test data into SPSS version 21.0, and the results of all variables were greater than 0.60 (Table 3.5), indicating that the questionnaire had sufficient reliability. Cavanaugh et al. (2001) held that: "Reliability below 0.60 is poor, acceptable within 0.7, and good above 0.8" (P.324)

Table 3.5 Reliability Test

Variable	Alpha.
1. Financial services	0.90
2. Desired outcome	0.86
3. Subjective norms	0.78
4. Perceived behavioral control	0.87
5. Propensity to consume	0.89

3.6 Statistical Treatment

Descriptive statistical analysis: The use of tabulation and classification, graphics, and computation of generalized data to describe the characteristics of the data. Descriptive statistical analysis is a statistical description of the relevant data of all variables in the survey population, mainly including data frequency analysis, central trend analysis, dispersion analysis, distribution and some basic statistical graphs. Frequency analysis of data. In the preprocessing part of data, frequency analysis and crossover frequency analysis can be used to check outliers. Central trend analysis of data. Used to reflect the general level of data, commonly used indicators are mean, median and mode. (3) Data dispersion degree analysis. Mainly used to reflect the

degree of difference between the data, common indicators have variance and standard deviation. The distribution of data. In statistical analysis, it is usually assumed that the distribution of the population to which the sample belongs to the normal distribution, so two indexes, skewness and kurtosis, are needed to check whether the sample data conforms to the normal distribution. Draw a statistical chart. The data can be expressed more clearly and concisely in graphical form than in words. In SPSS 21.0 software, it is easy to draw statistical graphs of various variables, including bar chart, pie chart, graph, etc.

Inferential statistical analysis: based on descriptive analysis, it USES sample statistics or inferences the significance of the relationship between variables based on mathematical statistical principles. It is a statistical method to study how to infer general characteristics from sample data. For example, in order to understand the demographic characteristics of a region, it is impossible to measure the characteristics of each individual, and to test the quality of products, which is often destructive, is also impossible to measure each product. This requires the sampling of some individuals, namely samples, for measurement, and then the overall characteristics of the study can be inferred based on the obtained sample data, which is the problem to be solved by inferential statistics. Inferential statistics mean that each group of the experiment may have different arithmetic averages, but this difference may also be based entirely on random levels. Even without experimental manipulation, people often experience fluctuations in their operations. It was also common for the two 22 groups of subjects to differ in the discrete uniform distribution of a variable, but not in relation to experimental regulation. For example, if you toss ten COINS on the table twice, the number of heads you get on the E side of each coin may be different, and the chances of getting the same number of heads on each coin are much less than the chances of not getting the same coin.

Factor analysis: Factor analysis refers to the statistical technique of extracting common factors from variable groups. It was first proposed by the English psychologist C.E. Spearman. He found that there was a certain correlation between students' scores in various subjects. Students with good scores in one subject usually had better scores in other subjects, so he deduced whether there were some potential common factors or some general intelligence conditions that affected students' academic performance. Factor analysis can identify hidden representational factors among many variables. By subsuming variables of the same nature into a factor, the number of variables can be reduced and assumptions of relationships between variables can be tested.

Regression analysis: In statistics, a regression analysis is a statistical analysis method for determining quantitative relationships in which two or more variables are dependent on each other. According to the number of variables involved, regression analysis is divided into unitary regression analysis and multiple regression analysis. According to the number of dependent variables, it can be divided into simple regression analysis and multiple regression analysis. According to the relationship between independent variables and dependent variables, it can be divided into linear regression analysis and nonlinear regression analysis. Through regression analysis to verify the proposed hypothesis, independent variables and dependent variables under different conditions are determined according to the influence relationship of different variables, and then independent analysis is carried out.

3.6.1 Descriptive Statistical Analysis

Frequency and percentage are used to check and classify how many respondents answered each question in the consumer demographics section. Chapter 4 analyzes and explains the results.

Using the mean value and standard deviation, the mean and deviation of the four constructed variables in the conceptual model, independent variables financial services, expected results, subjective norms and perceived behavior control, were obtained. The results of measuring data central tendency are given and discussed in detail in the next chapter.

3.6.2 Inferential Statistical Analysis

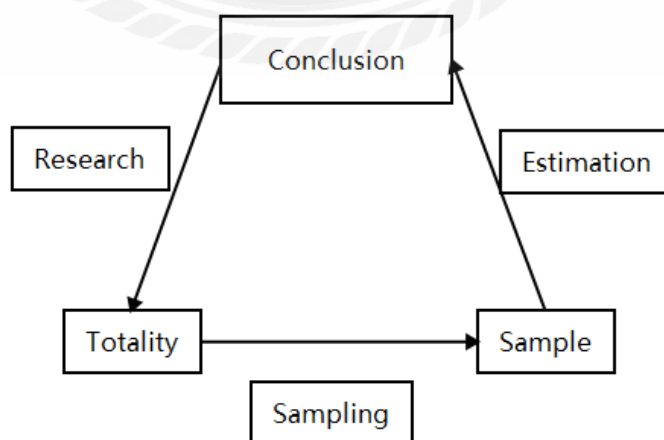


Figure 3.1 Statistical Inference Processes

Three statistical test methods were used in this study.

T test

Also known as the Student's T test, it is used for the normal distribution of an unknown population standard deviation with a small sample size (e.g., $n < 30$). T-test is to use the T-distribution theory to deduce the probability of the occurrence of differences, so as to compare whether the difference between the two averages is significant. T-test is divided into independent sample T-test and paired sample T-test, that is, to check whether there is a difference between the two groups of means. The method was used to test the difference and significance of the mean value in the sex group.

One-way Analysis of Variance (ANOVA)

This statistical test has been used to test whether there is a significant mean difference between nominal independent variables and a single interval dependent variable between and within two groups (Aaker et al., 2007; Cavana et al., 2001). Nominal independent variables are financial services, expected outcomes, subjective norms and perceived behavioral control. This method is used to test the difference and significance of the mean value of age, educational background, income level, online shopping experience and other groups, which is the difference of each group in various variables. The following formula was used to calculate the experiment (Aaker et al., 2007; Plonsky, 2006).

Univariate analysis of variance (ANOVA) is a completely randomized design in which the mean square deviation and SS and degrees of freedom of the total variation are decomposed into two parts, intergroup and intra-group respectively.

$MS_{\text{groups}} = \text{sum of mean squares of deviation/degrees of freedom between groups}$

$MS_{\text{group}} = \text{sum of mean squares of deviation/group of degrees of freedom}$

$\text{Total SS} = \text{between SS groups} + \text{within SS groups};$

One-way ANOVA: the core is to calculate the mean square sum of deviation between groups and within groups. Two or more groups of data, the large groups are

all in one group is within the group, calculate a mean by each group, and then calculate the mean sum of squares of deviation:

Between SS groups = sum of mean squares between groups; between MS groups = number of SS groups/group -1.

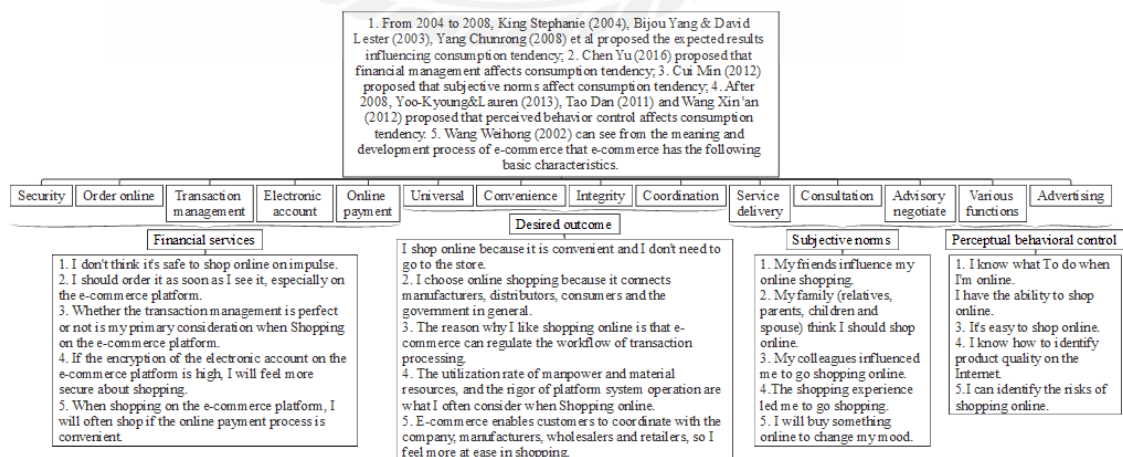
Within SS group = sum of mean squares of deviation within MS group = within SS group/all data - number of groups

F = between MS groups/within MS groups, look up F values.

Multiple regressions

This statistical test has been used to correlate two or more variables: an interval dependent variable (Y) is associated with an interval independent variable (X). The purpose of this test is to analyze the variance of interval dependent variables (propensity to consume) when interval independent variables financial services, expected results, subjective norms and perceived behavioral control are used (Aaker et al., 2007; Cavana et al., 2001). Hypothesis 1 through 4 is also used for testing. Therefore, a regression model is needed. In addition, this is consistent with previous studies (George, 2004; Limayem et al., 2000).

3.7 Research Process



4. DISCUSS

This article studies the main body the adult residents in Thailand, due to the language problem, the author entrusts the Thai students translate Chinese questionnaire Cheng Tai Wen questionnaire, and once again please understand Thai check was conducted in Chinese students, at the same time, the author will first draft questionnaire distributed small-scale test, invite some zhongtai international students in Thailand and yunnan province commercial office colleagues testing, such problems as the final wording on a questionnaire on the corresponding modification, get the final version of the questionnaire. The research method of this paper mainly adopts the form of questionnaire distribution on the spot, taking advantage of the internship opportunity in Thailand to distribute and collect questionnaire information on the spot. This questionnaire was issued on January 25, 2019 solstice on April 20, 2019. The subjects were residents of Thailand. A total of 400 questionnaires were issued and 350 were recovered, with a recovery rate of 87.5%.

This chapter presents the results of data analysis and research, which are divided into three main parts. Each section is described to analyze all data collected from the field work that took place in January 2019. The first part, providing 318 sampling survey of population statistics, description of sample to the overall situation, is mainly to research the questionnaire of each subject options data frequency distribution, percentage of simple numerical segmentation variables to describe the sample of the basic situation, through descriptive statistical analysis of the specific circumstances of the samples have a whole detailed cognitive, the questionnaire respondents of the present study of demographic variables, including: gender, age, education, income level, and online shopping experience. The second part, through the inferential statistical analysis using the T test, single factor analysis of variance (One - way analysis of variance, ANOVA) to compare different gender, age, education, income level, and online shopping experience in the differences of each variable and its significance, and the use of hypothesis test results of multiple regression testing method, it is concluded that the relationship between each independent variable and dependent variable, and confirmed the authenticity of assumptions. In the third part, the model is verified through the model constructed in the first two parts and the summary results and analysis.

4.1 Descriptive Statistical Analysis

4.1.1 Demographic Data

In the first part, descriptive statistics are the main data used to analyze the demographic data of the interviewees. In the descriptive analysis, raw data are presented in terms of frequency and percentage, including demographic information, gender, age, education, income level, and online shopping experience.

Table 4.1 Demographic Information

Statistic		
	N	
	Effective	Missing
Your gender	318	0
Your age	318	0
Your record of formal schooling	318	0
How much is your monthly income	318	0
Have you made a purchase on a shopping website in the past three months	318	0

Table 4.2 Frequency and Percentage of Population Profiles (Gender)

Your gender					
		Frequency	The Percentage	Significant Percentage	Cumulative Percentage
Effective	Male	129	40.6	40.6	40.6
	Female	189	59.4	59.4	100.0
	A Combined	318	100.0	100.0	

Table 4.2 shows that 318 people participated in the survey. According to the survey results, 129 men, accounting for 40.6%. There were 189 women, accounting for 59.4 percent.

According to Table 4.3, the majority of respondents were aged between 18 and 24 (frequency: 124; percentage: 39.0%). 25~30 years old (frequency: 85, percentage: 26.7%); Under 18 years of age (frequency: 73, percentage: 23.0%); 31-40 years old (frequency: 26, percentage: 8.2%).

Next, 41-50 years old (frequency: 6, percentage: 1.9%); 51~60 years old (frequency: 3, percentage: 3%); 61 years and over (frequency: 1, percentage: 0.3%).

Table 4.3 Frequency and Percentage of Population Profile (Age)

Your age					
		Frequency	The Percentage	Significant Percentage	Cumulative Percentage
Effective	Under the Age of 18	73	23.0	23.0	23.0
	18 ~ 24 Years Old	124	39.0	39.0	61.9
	25 ~30 Years Old	85	26.7	26.7	88.7
	31 ~ 40 Years Old	26	8.2	8.2	96.9
	41 ~ 50 Years Old	6	1.9	1.9	98.7
	51~ 60 Years Old	3	0.9	0.9	99.7
	Age 61 and Above	1	0.3	0.3	100.0
	A Combined	318	100.0	100.0	

Table 4.4 Frequency and Percentage of Population Profiles (Education)

Your Record of Formal Schooling					
		Frequency	The Percentage	Significant Percentage	Cumulative Percentage
Effective	Primary School	36	11.3	11.3	11.3
	Junior High School	120	37.7	37.7	49.1
	High School	90	28.3	28.3	77.4
	Undergraduate Course	42	13.2	13.2	90.6
	A Graduate Student	30	9.4	9.4	100.0
	A Combined	318	100.0	100.0	

Table 4.4 shows that most of the interviewees have junior middle school education and senior high school education, with 120 (37.7%) and 90 (28.3%) respectively. The second was bachelor degree, 42 (13.2%); Primary schools were the third, with 36 (11.3%); the graduate level was not far behind, with 30 (9.4%).

As can be seen from Table 4.5, the group with the largest monthly income is 9000-13,500 baht or the equivalent of 2000-2999 yuan, with 116 interviewees and the percentage is 36.5%. The next income group is 13500-22,500 baht or equivalent to 3,000-4,999 yuan. 103 respondents, with a percentage of 32.4%; the next income group is RMB 5,000 or above, equivalent to RMB 22,500. There are 59 respondents, representing 18.6%. The following two income groups have the same frequency and percentage of less than 1000 yuan and 1000-1999 yuan, the frequency is 20 yuan and

the percentage is 6.3%.

Table 4.5 Frequency and Percentage of Population Profiles (Income)

How much is your monthly income					
		Frequency	The Percentage	Significant Percentage	Cumulative Percentage
effective	Less than 1000 yuan	20	6.3	6.3	6.3
	1000-1999 yuan	20	6.3	6.3	12.6
	2000-2999 yuan	116	36.5	36.5	49.1
	3000-4999 yuan	103	32.4	32.4	81.4
	5,000 yuan and above	59	18.6	18.6	100.0
	A Combined	318	100.0	100.0	

Table 4.6 Frequency and Percentage of Demographic Data (Online Shopping Experience)

Have you made a purchase on a shopping website in the past three months					
		Frequency	The Percentage	Significant Percentage	Cumulative Percentage
Effective	Bought	318	100.0	100.0	100.0

According to Table 4.6, 318 respondents and 100% of respondents shopped online in the past three months.

4.1.2 Attitudes to Relevant Factors

This section USES descriptive statistics to describe the respondents' attitudes towards relevant factors. All factors were tested on a 5-point scale, ranging from strongly agree to strongly disagree, as follows:

5 points range	Descriptive scale
5.00	Strongly agree
4.00-4.99	Agree moderately
3.00-3.99	Neutral
2.00-2.99	Moderate disagrees
1.00-1.99	Strongly disagree

Table 4.7 Attitude Summary of Relevant Factors

The Factors	Cronbach's Alpha	Mean	Spyware Doctor.	Rating
Financial services	0.913	4.40	1.19	Indecision
Desired outcome	0.871	4.35	0.90	Indecision
Subjective norms	0.890	3.45	1.12	Don't agree with
Perceptual behavioral control	0.893	5.11	1.11	Agree
Propensity to consume	0.906	3.84	0.67	Don't agree with

As can be seen from Table 4.7, there are two factors at the undetermined level: financial services and expected results. Two other factors, subjective norms and propensity to consume, are the degree of disagreement. The last factor, perceived behavioral control, falls to the level of consensus.

In addition, Cronbach's Alpha, the reliability analysis, was used to measure the internal consistency of each factor. This is to ensure that the respondent responds to the similarity of all items. They are acceptable and reliable as both are higher than 0.70 (Cavana et al., 2001).

4.2 Inferential Statistical Analysis

Inferential statistical analysis includes two aspects: population parameter estimation and hypothesis testing. Among them, the methods used in hypothesis testing in this study include T test, one-way analysis of Variance (ANOVA) and Multiple Regression analysis.

4.2.1 T Test and One-way Analysis of Variance (ANOVA) Test

In this section, in addition to t-test for gender analysis, one-way analysis of Variance (ANOVA) was used to determine the relationship and difference between the basic situation in demographic data and the consumption tendency of Thai residents on e-commerce platform from the descriptive statistical analysis in 4.1. Levene test is also used to test whether the variance of two or more independent samples is equal, and the samples are required to be random samples and independent of each other. The P value of Levene test determines whether the variances of each group are equal. If not, then the P-value for Levene test is equal to the variance of the hypothesis, followed by the P-value test for one-way analysis of variance (ANOVA). Otherwise, the P-value of Levene test is not equal to the variance of the hypothesis. Next, the

P-value test of one-way analysis of variance (ANOVA) is performed, and the test result is less than 0.05, which is significant. This means that at least one group is significantly different from the other. Null hypothesis is rejected when P value is less than the significance level of 0.05.

4.2.2 Analyze the Differences of Demographic Variables in Each Independent Variable

In this section, the analysis compares the differences of gender, age, education, income level and online shopping experience in various variables and their significance. The following is the data obtained by loading data into the software SPSS 21.0 and analyzing it:

By mean standard deviations of all dimensions:

		statistic				
		Financial services	Desired outcome	Subjective norms	Perceptual behavioral control	Propensity to consume
N	Effective	318	318	318	318	318
	Missing	0	0	0	0	0
The Mean		3.1195	3.5811	3.3893	3.9019	3.7082
The Standard Deviation		0.98432	0.94379	1.02092	0.89693	0.96428

Thus, independent sample T test is conducted for gender:

The set of statistics					
	Your Gender	N	The Mean	The Standard deviation	The Standard Error of the Mean
Financial services	Male	129	3.1349	1.01402	0.08928
	Female	189	3.1090	0.96611	0.07027
Desired outcome	Male	129	3.4388	0.99092	0.08725
	Female	189	3.6783	0.90000	0.06547
Subjective norms	Male	129	3.3054	1.08572	0.09559
	Female	189	3.4466	0.97301	0.07078
Perceptual behavioral control	Male	129	3.7612	1.02166	0.08995
	Female	189	3.9979	0.78929	0.05741

Propensity to consume	Male	129	3.5566	1.07963	0.09506
	Female	189	3.8116	0.86472	0.06290

Table 4.8 Homogeneity Test of Variance (Levene Test of Variance Equation)

		F	Sig.
Financial services	Assume that the variances are equal	1.088	0.298
	Let's say that the variances are not equal		
Desired outcome	Assume that the variances are equal	1.892	0.170
	Let's say that the variances are not equal		
Subjective norms	Assume that the variances are equal	4.322	0.038
	Let's say that the variances are not equal		
Perceptual behavioral control	Assume that the variances are equal	12.048	0.001
	Let's say that the variances are not equal		
Propensity to consume	Assume that the variances are equal	5.875	0.016
	Let's say that the variances are not equal		

Table 4.9 T Test of Equation of Mean Value of A

T	df	Sig. (Double Side)	The Mean Difference
0.230	316	0.818	0.02589
0.228	266.179	0.820	0.02589
2.236	316	0.026	0.23955
2.196	257.202	0.029	0.23955
1.211	316	0.227	0.14113
1.187	254.690	0.236	0.14113
2.326	316	0.021	0.23664
2.218	227.789	0.028	0.23664
2.332	316	0.020	0.25505

Table 4.10 T Test of b Mean Value Equation

Standard error	The 95% confidence interval for the difference	
	The lower limit	ceiling
0.11258	0.19562	0.24740
0.11362	0.19782	0.24960

0.10711	0.45029	0.02880
0.10908	0.45434	0.02475
0.11651	0.37037	0.08810
0.11894	0.37537	0.09310
0.10173	0.43679	0.03649
0.10671	0.44691	0.02637
0.10936	0.47022	0.03988
0.11398	0.47961	0.03049

It can be seen from Table 4.8 that Levene's test p value of financial services is 0.298, greater than 0.05, which is not significant. Therefore, it is assumed that the variance is equal. Results Are shown in Table 4.9A, and the P value is 0.818, which is greater than the significance level of 0.05. Therefore, the null hypothesis of homogeneity of variance is accepted, which means that there is no significant difference between women and men.

As can be seen from Table 4.8, the P value of the expected result of Levene's test is 0.170, less than 0.05, which is significant. Therefore, the variance is assumed to be unequal. Results As shown in Table 4.9A, p value of 0.026 is less than the significance level of 0.05. Therefore, the null hypothesis of homogeneity of variance is rejected, which means that there are significant differences between women and men.

As can be seen from Table 4.8, the P value of Levene's test subjective specification is 0.038, less than 0.05, which is significant, so the assumed variance is not equal. Results As shown in Table 4.9A, P value of 0.227 was greater than the significance level of 0.05. Therefore, the null hypothesis of homogeneity of variance is accepted, which means that there is no significant difference between women and men.

As can be seen from Table 4.8, The P value of Levene's test for perceived behavior control is 0.001, less than 0.05, which is significant. Therefore, the variance is assumed to be unequal. Results As shown in Table 4.9A, the P value of 0.021 was less than the significance level of 0.05. Therefore, the null hypothesis of homogeneity of variance is rejected, which means that there are significant differences between women and men.

As can be seen from Table 4.8, the P value of Levene's test of consumption tendency is 0.016, less than 0.05, which is significant. Therefore, the assumed variance is not equal. Results As shown in Table 4.9A, P value of 0.020 is less than the significance level of 0.05. Therefore, the null hypothesis of homogeneity of variance is

rejected, which means that there are significant differences between women and men.

Then, age, educational background, income level and online shopping experience were analyzed by one-way analysis of Variance (ANOVA):

Table 4.11 Description of a's Age

		N	The mean	The standard deviation	Standard error
Financial Services	Under the age of 18,	73	2.8384	0.94084	0.11012
	18 ~ 24	124	3.0919	0.95267	0.08555
	25 to 30 years old	85	3.3647	1.03426	0.11218
	31 ~ 40 years old	26	3.2923	0.95537	0.18736
	41 to 50 years old	6	3.0333	1.07641	0.43944
	51 to 60 years old	3	2.9333	0.80829	0.46667
	Age 61 and above	1	2.8000	.	.
	The total number of	318	3.1195	0.98432	0.05520
Desired Outcome	Under the age of 18,	73	3.2493	0.98137	0.11486
	18 ~ 24	124	3.5097	0.93717	0.08416
	25 to 30 years old	85	3.9435	0.82497	0.08948
	31 ~ 40 years old	26	3.9231	0.74636	0.14637
	41 to 50 years old	6	3.1667	0.99130	0.40469
	51 to 60 years old	3	2.4000	0.52915	0.30551
	Age 61 and above	1	3.0000	.	.
	The total number of	318	3.5811	0.94379	0.05293
Subjective Norms	Under the age of 18,	73	2.7644	1.00739	0.11791
	18 ~ 24	124	3.3984	1.02251	0.09182
	25 to 30 years old	85	3.7718	0.86253	0.09355
	31 ~ 40 years old	26	3.9231	0.65011	0.12750
	41 to 50 years old	6	3.2667	0.91797	0.37476
	51 to 60 years old	3	3.3333	1.00664	0.58119
	Age 61 and above	1	2.4000	.	.
	The total number of	318	3.3893	1.02092	0.05725
Perceptual Behavioral Control	Under the age of 18,	73	3.5863	1.03727	0.12140
	18 ~ 24	124	3.8919	91185.	0.08189
	25 to 30 years old	85	4.1459	66217.	0.07182

		N	The mean	The standard deviation	Standard error
	31 ~ 40 years old	26	4.1154	63793.	0.12511
	41 to 50 years old	6	3.9000	1.31909	0.53852
	51 to 60 years old	3	3.2000	1.50997	87178.
	Age 61 and above	1	4.0000	.	.
	The total number of	318	3.9019	0.89693	0.05030
Propensity to Consume	Under the age of 18,	73	3.2932	1.05308	0.12325
	18 ~ 24	124	3.7210	1.01591	0.09123
	25 to 30 years old	85	3.9718	0.76230	0.08268
	31 ~ 40 years old	26	4.0923	0.58851	0.11542
	41 to 50 years old	6	3.5333	90037.	0.36757
	51 to 60 years old	3	3.0000	1.03923	0.60000
	Age 61 and above	1	3.2000	.	.
	The total number of	318	3.7082	0.96428	0.05407

Table 4.12 Description of b's Age

95% confidence interval for the mean		Minimum	The Maximum
The Lower Limit	Ceiling		
2.6188	3.0579	1.20	4.80
2.9226	3.2613	1.20	4.80
3.1416	3.5878	1.20	4.80
2.9064	3.6782	1.40	4.80
1.9037	4.1630	1.80	4.80
0.9254	4.9412	2.00	3.40
.	.	2.80	2.80
3.0109	3.2281	1.20	4.80
3.0203	3.4783	1.20	4.80
3.3431	3.6763	1.20	4.80
3.7656	4.1215	1.60	5.00
3.6216	4.2245	2.20	4.80
2.1264	4.2070	1.60	4.20
1.0855	3.7145	2.00	3.00
.	.	3.00	3.00

3.4770	3.6853	1.20	5.00
2.5293	2.9994	1.20	4.40
3.2166	3.5801	1.20	4.80
3.5857	3.9578	2.00	4.80
3.6605	4.1857	2.80	4.80
2.3033	4.2300	1.60	4.40
8327.	5.8340	2.40	4.40
.	.	2.40	2.40
3.2767	3.5019	1.20	4.80
3.3443	3.8283	1.00	5.00
3.7298	4.0540	1.20	5.00
4.0031	4.2887	2.00	5.00
3.8577	4.3730	2.80	5.00
2.5157	5.2843	1.40	5.00
- 5510.	6.9510	1.60	4.60
.	.	4.00	4.00
3.8029	4.0008	1.00	5.00
3.0474	3.5389	1.20	4.80
3.5404	3.9016	1.00	5.00
3.8073	4.1362	1.60	5.00
3.8546	4.3300	2.80	5.00
2.5885	4.4782	2.60	4.80
4184.	5.5816	1.80	3.60

Table 4.13 One-way ANOVA for Age

		Sum of Squares	df	The Mean Square	F	Significant
Financial services	Between groups	12.002	6	2.000	2.108	0.052
	Within the group	295.137	311	0.949		
	The total number of	307.139	317			
Desired outcome	Between groups	28.428	6	4.738	5.803	0.000
	Within the group	253.939	311	0.817		
	The total number of	282.367	317			
Subjective norms	Between groups	49.438	6	8.240	9.121	0.000
	Within the group	280.965	311	0.903		

	The total number of	330.404	317			
Perceptual behavioral control	Between groups	15.016	6	2.503	3.243	0.004
	Within the group	240.003	311	0.772		
	The total number of	255.019	317			
Propensity to consume	Between groups	24.283	6	4.047	4.653	0.000
	Within the group	270.476	311	0.870		
	The total number of	294.759	317			

As can be seen from Table 4.13, the Sig. Value of financial services in ONE-WAY ANOVA is 0.052, greater than the significance level of 0.05, but not significant. Therefore, the null hypothesis of equal variances and homogeneity of variances is accepted, which means that there is no significant difference in age in variable financial services.

As can be seen from Table 4.13, the Sig. Value of the expected result of one-way ANOVA is 0.000, less than the significance level of 0.05 and significant. Therefore, the null hypothesis of homogeneity of variances is rejected, which means that age has a significant difference in the expected outcome of the variable.

As can be seen from Table 4.13, the Sig. Value of the subjective norm of ONE-WAY ANOVA is 0.000, less than the significance level of 0.05, which is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances is rejected, which means that there is a significant difference in age in the subjective norms of variables.

As can be seen from Table 4.13, the Sig. Value of perceived behavior control in ONE-WAY ANOVA is 0.004, less than the significance level of 0.05, which is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which means that there is a significant difference in age in variable perceived behavior control.

As can be seen from Table 4.13, the Sig. Value of one-way ANOVA consumption tendency is 0.000, less than the significance level of 0.05, which is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which meant that there was a significant difference in age in variable consumption propensity.

Table 4.14 Education Description

		N	The Mean	The Standard Deviation	Standard Error
Financial services	Primary school	36	2.9056	0.95557	0.15926
	Junior high school	120	3.0967	0.98013	0.08947
	High school	90	3.1711	1.04787	0.11046
	Undergraduate course	42	3.2429	0.98628	0.15219
	A graduate student	30	3.1400	0.84388	0.15407
	The total number of	318	3.1195	0.98432	0.05520
Desired outcome	Primary school	36	2.5833	0.85973	0.14329
	Junior high school	120	3.4383	0.92702	0.08462
	High school	90	3.8956	0.74847	0.07890
	Undergraduate course	42	3.9857	0.74099	0.11434
	A graduate student	30	3.8400	0.94307	0.17218
	The total number of	318	3.5811	0.94379	0.05293
Subjective norms	Primary school	36	2.7778	1.13014	0.18836
	Junior high school	120	3.2983	1.04841	0.09571
	High school	90	3.5178	0.89387	0.09422
	Undergraduate course	42	3.5905	0.97875	0.15102
	A graduate student	30	3.8200	0.85718	0.15650
	The total number of	318	3.3893	1.02092	0.05725
Perceptual behavioral control	Primary school	36	3.4444	1.11828	0.18638
	Junior high school	120	3.8217	0.99505	0.09083
	High school	90	4.0022	0.71170	0.07502
	Undergraduate course	42	4.1952	0.58683	0.09055
	A graduate student	30	4.0600	0.84388	0.15407
	The total number of	318	3.9019	0.89693	0.05030
Propensity to consume	Primary school	36	3.0944	1.17155	0.19526
	Junior high school	120	3.6217	0.96799	0.08837
	High school	90	3.8489	0.88600	0.09339
	Undergraduate course	42	4.0238	0.78050	0.12043
	A graduate student	30	3.9267	0.79911	0.14590
	The total number of	318	3.7082	0.96428	0.05407

Table 4.15 Description of educational background

95% confidence interval for the mean		Minimum	The Maximum
The Lower Limit	Ceiling		
2.5822	3.2289	1.20	4.60
2.9195	3.2738	1.20	4.80
2.9516	3.3906	1.40	4.80
2.9355	3.5502	1.40	4.80
2.8249	3.4551	1.40	4.60
3.0109	3.2281	1.20	4.80
2.2924	2.8742	1.20	4.40
3.2708	3.6059	1.20	4.80
3.7388	4.0523	2.20	4.80
3.7548	4.2166	2.40	4.80
3.4879	4.1921	1.80	5.00
3.4770	3.6853	1.20	5.00
2.3954	3.1602	1.20	4.80
3.1088	3.4878	1.20	4.80
3.3306	3.7050	1.40	4.80
3.2855	3.8955	1.80	4.80
3.4999	4.1401	1.40	4.80
3.2767	3.5019	1.20	4.80
3.0661	3.8228	1.40	5.00
3.6418	4.0015	1.00	5.00
3.8532	4.1513	1.20	5.00
4.0124	4.3781	2.60	5.00
3.7449	4.3751	1.80	5.00
3.8029	4.0008	1.00	5.00
2.6980	3.4908	1.20	5.00
3.4467	3.7966	1.00	5.00
3.6633	4.0345	1.20	5.00
3.7806	4.2670	2.00	5.00
3.6283	4.2251	2.80	5.00
3.6018	3.8146	1.00	5.00

Table 4.16 One-way ANOVA for Educational Attainment

		Sum of Squares	df	The Mean Square	F	Significant
Financial services	Between groups	2.602	4	0.650	0.669	0.614
	Within the group	304.537	313	0.973		
	The total number of	307.139	317			
Desired outcome	Between groups	56.071	4	14.018	19.389	0.000
	Within the group	226.295	313	0.723		
	The total number of	282.367	317			
Subjective norms	Between groups	23.206	4	5.802	5.911	0.000
	Within the group	307.198	313	0.981		
	The total number of	330.404	317			
Perceptual behavioral control	Between groups	13.576	4	3.394	4.400	0.002
	Within the group	241.443	313	0.771		
	The total number of	255.019	317			
Propensity to consume	Between groups	21.856	4	5.464	6.267	0.000
	Within the group	272.902	313	0.872		
	The total number of	294.759	317			

As can be seen from Table 4.16, the Sig. Value of financial services in ONE-WAY ANOVA is 0.614, which is greater than the significance level of 0.05, but not significant. Therefore, the null hypothesis of equal variances and homogeneity of variances is accepted, which means that educational background has no significant difference in variable financial services.

As can be seen from Table 4.13, the Sig. Value of the expected result of ONE-WAY ANOVA is 0.000, less than the significance level of 0.05 and significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which meant that there was a significant difference in the expected outcome of variables.

As can be seen from Table 4.13, the Sig. Value of the subjective norm of ONE-WAY ANOVA is 0.000, less than the significance level of 0.05, which is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which meant that educational background had significant differences in the subjective norms of variables.

As can be seen from Table 4.13, the Sig. Value of perceived behavior control in ONE-WAY ANOVA is 0.002, less than the significance level of 0.05, which is

significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which meant that educational background had significant differences in variable perceived behavior control.

As can be seen from Table 4.13, the Sig. Value of one-way ANOVA consumption tendency is 0.000, less than the significance level of 0.05, which is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which means that educational background has significant difference in variable consumption tendency.

Table 4.17 Describes the Income Level

		N	The mean	The standard deviation	Standard error of
Financial services	Less than 1000 yuan	20	2.0500	0.69244	0.15483
	1000-1999 yuan	20	2.5900	0.85465	0.19110
	2000-2999 yuan	116	3.2569	0.84763	0.07870
	3000-4999 yuan	103	3.2544	1.00983	0.09950
	5,000 yuan and above	59	3.1559	1.05769	0.13770
	The total number of	318	3.1195	0.98432	0.05520
Desired outcome	Less than 1000 yuan	20	2.7900	0.96567	0.21593
	1000-1999 yuan	20	2.2200	0.74523	0.16664
	2000-2999 yuan	116	3.8259	0.80629	0.07486
	3000-4999 yuan	103	3.7767	0.79622	0.07845
	5,000 yuan and above	59	3.4881	0.96223	0.12527
	The total number of	318	3.5811	0.94379	0.05293
Subjective norms	Less than 1000 yuan	20	3.0900	1.07503	0.24038
	1000-1999 yuan	20	2.560	0.97894	0.21890
	2000-2999 yuan	116	3.4690	0.88979	0.08261
	3000-4999 yuan	103	3.5243	1.04792	0.10325
	5,000 yuan and above	59	3.3797	1.09084	0.14201
	The total number of	318	3.3893	1.02092	0.05725
Perceptual behavioral control	Less than 1000 yuan	20	3.8900	0.94585	0.21150
	1000-1999 yuan	20	3.3100	1.23369	0.27586
	2000-2999 yuan	116	4.1138	0.60848	0.05650
	3000-4999 yuan	103	3.8388	0.96693	0.09527
	5,000 yuan and above	59	3.8000	0.99931	0.13010

		N	The mean	The standard deviation	Standard error of
	The total number of	318	3.9019	0.89693	0.05030
Propensity to consume	Less than 1000 yuan	20	2.9500	0.95559	0.21368
	1000-1999 yuan	20	2.9900	0.95691	0.21397
	2000-2999 yuan	116	3.8845	0.79352	0.07368
	3000-4999 yuan	103	3.8097	0.93447	0.09208
	5,000 yuan and above	59	3.6847	1.11430	0.14507
	The total number of	318	3.7082	0.96428	0.05407

Table 4.18 Describes the Income Level

95% confidence interval for the mean		minimum	The maximum
The lower limit	ceiling		
2.5822	3.2289	1.20	4.60
2.9195	3.2738	1.20	4.80
2.9516	3.3906	1.40	4.80
2.9355	3.5502	1.40	4.80
2.8249	3.4551	1.40	4.60
3.0109	3.2281	1.20	4.80
2.2924	2.8742	1.20	4.40
3.2708	3.6059	1.20	4.80
3.7388	4.0523	2.20	4.80
3.7548	4.2166	2.40	4.80
3.4879	4.1921	1.80	5.00
3.4770	3.6853	1.20	5.00
2.3954	3.1602	1.20	4.80
3.1088	3.4878	1.20	4.80
3.3306	3.7050	1.40	4.80
3.2855	3.8955	1.80	4.80
3.4999	4.1401	1.40	4.80
3.2767	3.5019	1.20	4.80
3.0661	3.8228	1.40	5.00
3.6418	4.0015	1.00	5.00
3.8532	4.1513	1.20	5.00
4.0124	4.3781	2.60	5.00

95% confidence interval for the mean		minimum	The maximum
The lower limit	ceiling		
3.7449	4.3751	1.80	5.00
3.8029	4.0008	1.00	5.00
2.6980	3.4908	1.20	5.00
3.4467	3.7966	1.00	5.00
3.6633	4.0345	1.20	5.00
3.7806	4.2670	2.00	5.00
3.6283	4.2251	2.80	5.00
3.6018	3.8146	1.00	5.00

Table 4.19 One-way Analysis of Variance (ANOVA) for Income Level

		Sum of squares	df	The mean square	F	significant
Financial services	Between groups	32.626	4	8.156	9.300	000.
	Within the group	274.513	313	0.877		
	The total number of	307.139	317			
Desired outcome	Between groups	60.969	4	15.242	21.548	0.000
	Within the group	221.398	313	0.707		
	The total number of	282.367	317			
Subjective norms	Between groups	18.164	4	4.541	4.552	0.001
	Within the group	312.239	313	0.998		
	The total number of	330.404	317			
Perceptual behavioral control	Between groups	13.240	4	3.310	4.285	0.002
	Within the group	241.779	313	0.772		
	The total number of	255.019	317			
Propensity to consume	Between groups	26.512	4	6.628	7.734	0.000
	Within the group	268.247	313	0.857		
	The total number of	294.759	317			

As can be seen from Table 4.19, the Sig. Value of financial services in ONE-WAY ANOVA is 0.000, less than the significance level of 0.05 and significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which meant that there was a significant difference in income level in

variable financial services.

As can be seen from Table 4.19, the Sig. Value of the expected result of one-way ANOVA is 0.000, which is less than the significance level of 0.05 and is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances is rejected, which means that there is a significant difference in income level in the expected outcome of variables.

As can be seen from Table 4.19, the Sig. Value of the subjective norm of ONE-WAY ANOVA is 0.001, which is less than the significance level of 0.05 and is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances is rejected, which means that there is a significant difference in income level in the subjective norms of variables.

As can be seen from Table 4.19, the Sig. Value of perceived behavior control in ONE-WAY ANOVA is 0.002, which is less than the significance level of 0.05 and is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which means that there is a significant difference in the income level in the variable perceived behavior control.

As can be seen from Table 4.19, the Sig. Value of one-way ANOVA consumption tendency is 0.000, less than the significance level of 0.05, which is significant. Therefore, the null hypothesis of unequal variances and homogeneity of variances was rejected, which meant that there was a significant difference in income level in variable consumption propensity.

4.2.3 Multiple Regression Analysis

This section examines the influence of relevant factors on the dependent variable, assuming that the range is H1-H4. All four independent variables and one dependent variable are listed in Table 4.20.

Table 4.20 Independent and Dependent Variable Table

The independent variable	The dependent variable
Financial services	Propensity to consume
Desired outcome	
Subjective norms	
Behavioral control of perception	

The significance level of this study was set as 0.05, and the null hypothesis was rejected when p value was less than 0.05.

Hypothesis verification:

Table 4.21 Model Summary

Model	R	R party	Adjust the R square	Error of standard estimate
1	0.745 ^a	0.556	0.550	0.64682
A. Predictive variables: (constant), perceived behavioral control, financial services, expected outcomes, subjective norms.				

Table 4.22 Anova^a

One-way Anova ^a						
Model		Sum of Squares	df	The Mean Square	F	Sig.
1	Return to the	163.807	4	40.952	97.882	0.000 ^b
	residual	130.952	313	0.418		
	A total of	294.759	317			
A. Dependent variable: propensity to consume						
B. Predictive variables: (constant), perceived behavior control, financial services, expected results, subjective norms.						

Table 4.23 Coefficient^a

The coefficient of ^a						
Model		Nonstandard zed coefficient		The standard coefficient	t	Sig.
		B	Standard error of	A trial version		
1	(constant)	0.086	0.191		0.452	0.652
	Financial services	0.162	0.039	0.165	4.128	0.000
	Desired outcome	0.329	0.048	0.322	6.838	0.000
	Subjective norms	0.169	0.045	0.179	3.746	0.000
	Perceptual behavioral control	0.350	0.048	0.326	7.261	0.000
A. Dependent variable: propensity to consume						

1. Regression analysis of financial services and consumption tendency

By means of regression analysis, the relationship between financial services and consumption tendency is firstly explored and discussed, where the independent

variable is finance and the dependent variable is consumption tendency. The regression analysis results are shown in the table above. By observing the Sig value corresponding to Anova table (Anova table) of 4.18, the SIG value is 0.000, less than 0.05, indicating that the regression model as a whole has reached the significance level and a linear equation can be established. According to the calculation results in the table, the T value of financial services is 4.128, greater than 2, and the sig value is 0.000, less than 0.05, which is significant. So the null hypothesis is rejected. It can be shown that the independent variable financial services have passed the regression verification on the consumption tendency, and the standardized coefficient is 0.165, indicating that hypothesis H1 is established, and financial services have a positive and significant impact on the consumption tendency.

2. Regression analysis of expected results and consumption tendency

The relationship between the expected result and the consumption tendency was analyzed. The expected result was taken as the independent variable and the consumption tendency as the dependent variable for the regression analysis. The results were shown in the table above. By observing the expected results and the coefficient of consumption tendency in Table 4.19, it can be concluded that the T value is 6.838, greater than 2, while the Sig value is 0.000, less than 0.05, which is significant. So the null hypothesis is rejected. It indicates that the expected results of independent variables and the consumption tendency of dependent variables have passed the regression verification, and their standardized coefficient is 0.322, that is, the expected results have a positive impact on the consumption tendency. Therefore, the hypothesis H2 of the study is valid, and the expected results have a positive and significant impact on the consumption tendency.

3. Regression analysis of subjective norms and consumption tendency

The relationship between subjective norm and consumption tendency is analyzed by regression with consumption tendency as the dependent variable and subjective norm as the independent variable. The following results can be obtained: by observing the coefficient table of subjective specification and consumption tendency, t value is 3.743, greater than 2, while Sig value is 0.000, less than 0.05, which is significant. So the null hypothesis is rejected. This indicates that the regression relationship between the dependent variable's consumption tendency and the independent variable's subjective specification has been verified, and its standardization coefficient is 0.179, that is, the subjective specification has a positive and significant impact on the consumption tendency, so the hypothesis H3 is valid.

4. Regression analysis of perceived behavior control and consumption tendency

The relationship between perceived behavior control and consumption tendency was analyzed. The regression analysis was conducted with perceived behavior control as the independent variable and consumption tendency as the dependent variable. The results were shown in the table above. According to the coefficient of perceived behavior control usefulness shown in Table 4.19, t value is 7.261, greater than 2, while Sig value is 0.000, less than 0.05, which is significant. So the null hypothesis is rejected. It indicates that the independent variable perceived behavior control and the dependent variable consumption tendency have passed the regression verification, and their standardized coefficient is 0.326, that is, the perceived behavior control has a positive and significant influence on the consumption tendency. Its standardized coefficient value also has the highest significance. This means that perceived behavioral control is the most important predictor of consumption propensity. Therefore, perceived behavioral control is the most significant predictor of consumption tendency in this study. That is, hypothesis H4 is true.

4.3 Model Validation

This section summarizes the results of data analysis and hypothesis testing, before which four hypotheses have been verified. So four of the four hypotheses are supported. They are as follows:

H1: Financial services have a positive and significant impact on consumption tendency.

H2: The expected results have a positive and significant impact on consumption tendency.

H3: Subjective norms have a significant positive effect on consumption tendency.

H4: Perceived behavioral control has a positive and significant influence on consumption tendency.

Assuming that the significance level of 1, 2, 3 and 4 is 0.000, indicating that the regression model as a whole reaches the significance level, the regression linear equation can be established and the model is correct.

5. CONCLUSION

5.1 Summary of Research Results

This section provides a summary and identifies the important factors influencing the propensity of Thai residents to consume on e-commerce platforms and analyzes their demographic factors. From the findings of this study and the second chapter of the literature, nine factors: gender, age, education, income level, online shopping experience, financial services, expected results, subjective norms, perceived behavior control and other factors all affect the purchase intention of Online shoppers in Thailand. Other studies were also carried out in this study, such as Bellman et al., 1999; Bhatnagar et al, 2000; Chang, etc., 2004; Cook et al, 2002; Foucault and Huefer, 2002; George, 2004; Gupta et al., 2004; Helander and Khalid, 2000; Joines et al. 2003; Kalafatis et al., 1999; Khalifa and Limayem, 2003; Koivumaki, 2001; Li et al., 1999; Limayem, etc., 2000; Lokken et al., 2003; Ranganathan and Ganapathy, 2002; Rhodes and Courneya, 2003; Verbeke and Vackier, 2005; Whelan, 2001; White and Manning, 1998; Yang and Lester were very important in supporting this study in 2004. However, the researchers do not entirely agree with the results of these studies. The average value of each factor was less than 0.05, which was significant. In addition, female shoppers are more likely to shop online than male shoppers. Therefore, each factor is related to the online shopping propensity of Thai online shoppers. In this study, the key factor affecting the online shopping intention of Thai residents is perceived behavior control. This applies to previous studies (Brown et al., 2003; Forsythe and Shi, 2003; Goldsmith and Flynn, 2004; Poet and Bakkin, 2004; Sim and Koi, 2002; Cheung, Chi Yin, 2002).

5.2 Conclusions on the research model

The previous section identified the important factors affecting the online consumption tendency of Thai residents, and this section described them in turn according to the assumptions constructed by five conceptual model factors affecting online shopping behavior:

5.2.1 Demographic Data of Consumers/Customers

The first construct of the conceptual model is consumer statistics, consisting of six variables: (1) gender, (2) age, (3) education, (4) income and (5) online shopping experience. It is confirmed that gender is the key factor that leads to the purchase intention of shoppers. Proving that age is a key factor in shoppers' willingness to buy,

young people are more likely to shop online than the elderly. This proves that education is the key factor that leads to shoppers' purchase intention. The study found that highly educated people were more likely to shop online than those with less education.

5.2.2 Expected Results

The second construct of the conceptual model is the desired outcome, which consists of four variables: (1) universality, (2) convenience, (3) wholeness, and (4) coordination. Hypothesis 2 is:

Hypothesis 2 is supported, suggesting that universality is a factor influencing the consumption tendency of online shoppers in Thailand. The results of the study suggest that Thai shoppers believe online shopping is common and will spend less time shopping offline, queuing to pay bills and carrying all their purchases. This factor is also consistent with the research results of other countries, such as Chang et al. (2004); And Lepkowska - White (2004).

Hypothesis 2 is supported, and convenience is a factor influencing the consumption tendency of online shoppers in Thailand. The results of this study are consistent with those of Chang et al. (2004). Rohm and Swaminathan (2004).

Hypothesis 2 is supported, and the integrity is the factor that affects the consumption tendency of online shoppers in Thailand. This is consistent with the previous results of Brown et al. (2003); Chang (2004); Chiang Kai-shek and Dholakia (2003); Constantinides (2004); Donthu and Garcia (1999); Degeratu etc. (1999); Girard et al. (2003); Smith and Rupp (2003).

Hypothesis 2 was supported and coordination was a factor influencing the purchase intention of online shoppers in Thailand. The more familiar they are with online shopping, the more they will use this tool. In contrast, those who are not familiar with online shopping will use other tools. They're using the system less. They don't trust sellers. They don't believe in the quality of the product, they don't believe in delivery services that cause delays. This is consistent with previous studies: Hoffman et al. (1999); Khalifa and Limayem (2003); Gold and gold (2004); Lin (2003); and liu wei (2003); Martinez-lopez et al (2005); National Center for Electronics and Computer Technology (2005); Slyke et al. (2002).

5.2.3 Financial Services

This structure is designed to measure the attitudes of Thai residents towards online shopping tendency in hypothesis 1. Hypothesis 1 is supported, i.e. the positive

attitude of Thai consumers towards financial services is the key factor influencing their online shopping.

This hypothesis 1 is consistent with the previous study of Chartrucks(2004), which shows that Thai consumers have a higher propensity to consume when they have a positive attitude towards online shopping safety, online ordering, transaction management, electronic accounts, and online payment. The majority of respondents believe that the financial services on the shelves are the key to encouraging them to have an active willingness to buy online. Many previous studies have also revealed positive attitudes (George, 2004; Goldsmith and Goldsmith, 2002; Xu and Zhao, 2003; Kim and Park, 2005; Kim and Stoel, 2005; So et al., 2005; Sorce et al, 2005; Wu, 2003). In addition, Sorceet's (2005) study indicated that consumers' positive attitude towards online shopping safety may encourage them to have higher purchase behaviors in online stores.

In addition, three studies by Kittiworakhun(2001);Leelayouthayotin (2004); Taechataratip(2002) points out that when Thai consumers perceive risks such as product quality or payment, they will not consider buying products online. The more risk they perceive, the less they want to shop online. Gunawardana and Avatchanakorn (2011) also suggested that many Thai consumers should not trust e-commerce.

5.2.4 Subjective Norms

Hypothesis 3 tests this construct as follows:

Hypothesis 3 is supported, that is, the service delivery, opinion consultation and consultation of Thai merchants are factors affecting their online purchase intention. Moreover, Thai shoppers' friends, relatives, family members and colleagues are the factors that influence their willingness to buy online, and they tend to follow their own social norms. Therefore, they may shop online. This result is consistent with previous studies by Chartrucks (2004) in Thailand and Allred et al. (2006);Hansen (2005);Martin and Bush (2000);Orcas and Finnecke (2003);Zhang (2007), etc.

5.2.5 Perceptual Behavior Control

The fifth hypothesis was designed to test the Thai merchants' ability to create tasks that arouse consumers' perceived behavioral control, make consumers feel confident about performing their actions on tasks, and how much control they have over their actions on tasks.

Hypothesis 5 is supported. It shows that if Thai residents shop online, first of all, they know about computers and the Internet, and secondly, businesses must improve

various functions and advertising on the e-commerce platform. Perceived behavioral control was not a factor affecting their willingness to buy online. This is consistent with previous research on Ashjaman (2002);Hansen et al. (2004).In contrast, Chartruksa, (2004);And Taechataratip(2002) research shows that Thai shoppers are more likely to shop online when they know how to bypass the Internet.

5.3 Research Conclusions

This part is the results of this study. The results are as follows:

H1: Financial services have a positive and significant impact on consumption tendency.

H2: The expected results have a positive and significant impact on consumption tendency.

H3: Subjective norms have a significant positive effect on consumption tendency.

H4: Perceived behavioral control has a positive and significant influence on consumption tendency.

5.4 Implications and Recommendations of the Findings

The main purpose of this section is to make recommendations and implications on two aspects, theoretical and managerial, as follows:

5.4.1 Theoretical Significance of the Study

From the findings of this study, it may be implied that the theory used in this study, namely the theory of planned behavior, has been proven to be applicable to the findings of this study. These results are consistent with many previous studies on behavioral intention of these three concepts, namely positive attitude, influence or subjective norm of behavior and behavioral control. In this study, the intentional behaviors of online shoppers were tested, so all three concepts were used to study the online purchasing intentions of Thai residents. First, they perceived behavioral control as having positive or negative effects. Positive results led them to have more online buying intentions than other results. Second, their subjective norms, such as what they think of friends, relatives and colleagues, and the online shopping advice they rely on, are also important.

In addition, two other constructs, consumer demographics and desired outcomes, were added to the theoretical basis to test other factors found in the literature. The

results show that the two are consistent. Therefore, the theoretical basis and conceptual model of this study are appropriate. In this study, quantitative methods and statistical software tools of SPSS 21.0 were used for data collection and data analysis. In this study, 400 questionnaires were distributed and 350 were collected. Therefore, the response rate is 87.5%.

To sum up, the theory of planned behavior, conceptual model, research methods and SPSS 21.0 statistical software tools adopted in this study are reliable. These studies provide new knowledge about the buying intentions of Online shoppers in Thailand.

5.4.2 Impacts and Suggestions on Management

By targeting Thai consumers, many companies hope to gain market share and online business profits in Thailand while encouraging the following aspects to consider the impact and recommendations for improving their business.

5.4.2.1 Thai Enterprises Selling Goods and Services Online

It can be expected that there will be significant growth in online shopping or e-commerce in Thailand in the near future. The influences and Suggestions on them are based on the research results and become the factors influencing online shoppers in Thailand. One of the benefits that Thailand's online merchants will gain is that studies based on demographic factors have found that female shoppers with online shopping experience are an important group of people willing to shop online. It can be inferred that the majority of the Population of Thailand should be young Thai women, aged between 25 and 38, with online shopping experience, if they want to be successful. In addition, educating inexperienced online shoppers on how to use the Internet and how to access online stores, and providing a user-friendly Web interface are seen as desirable. The more shoppers know how to use these, the more likely they are to become online shoppers. Previous studies have shown that when the mode of online store is compatible with the mode of offline store, such as similar payment mode and commodity display or display mode, shoppers without shopping experience can easily adapt to the shopping habit of online store (Hansen, 2005).

To sum up, the above factors are likely to lead them to visit online stores for many times, leading to more online business growth (Leelayouthayotin, 2004).

The influence and suggestion of convenience factor: Convenience was found to be a factor influencing the purchase intention of online shoppers in Thailand, according to the study. Reducing the complex perception of traditional shoppers, who

may become online shoppers in the future, is a solution suggested by many previous studies. For example, Huang, Schrank and Dubinsky (2005) believe that the convenience of online shopping is a means to reduce the complex perception of online shoppers. Building a convenient and simple system platform for online products and services will create greater trust for online shoppers. Therefore, online business people need to implement this strategy to improve their online sales.

In addition, increasing financial services for online stores will be another solution to increase shoppers' willingness (Hoffman et al., 1999; For example, implementing and securing online store systems using password security, digital authentication and authentication agencies (Chellappa and Pavlou, 2002; Wilson, 1997). Owners of online stores should regularly upgrade security software to the online store's system to make the system secure at all times. To increase confidence, online stores should have a return and cash on delivery policy. This is to ensure that online shoppers can return items they have ordered without receiving them, so they do not need to pay in advance and improve transaction management. According to a report by the National Center for Electronics and Computer Technology (2012) and Muthitacharoen and Palvia (2012), this method of cash on delivery may be a good system for Thai online shoppers who do not want to give away their credit card Numbers via the Internet.

The disclosure of online sellers' information to the public should first be established to build strong confidence in online shoppers and improve their perceived behavioral control, so that they will not have any doubts about the store (Kim and Kim, 2004). This is another aspect that many online merchants may overlook, which may lead to the failure of online business.

In addition, the e-commerce division of the Ministry of Commerce has provided low-cost e-commerce registration for online sellers in Thailand. Online shoppers can verify the registration list of online stores with the DEPARTMENT before making a purchase. This is to make sure there are no fraudulent online stores so people can track and contact them. This is another solution that online sellers can refer to and make all online shoppers trust online stores.

Not only are these Suggestions worth a try, but Thailand's e-commerce law also protects shoppers' rights according to Thai government regulations. This is another important area for Online shoppers in Thailand to feel safe when conducting online shopping transactions (Charoenying, 2012). In conclusion, increasing online shoppers' trust and reducing online shoppers' perception of risk are recommended to Thai online merchants.

Meaning and suggestion of subjective norms: As a result of the study, subjective

norms were also found to be a factor influencing the purchase intention of online shoppers in Thailand. This is not surprising since Thai culture is recorded as collectivism (Singhapakdi et al, 1995) and Thais are largely dependent on others. Therefore, online business people are encouraged to develop marketing strategies related to shopper influencers, such as family, friends, relatives and colleagues, such as recommendation plans, competition plans and reward plans (Allred et al., 2006). At the same time, building product and service awareness, including goodwill and brand image, can help businesses.

5.4.2.2 Web Designers and Web Developers

The study found that financial services and subjective norms are the factors that affect the purchase intention of online shoppers in Thailand. These factors are related to the safety features and functions of the website, as well as the good image of online stores, which makes online shoppers have confidence in shopping and positive attitude towards online sellers. Therefore, Web designers and Web developers are the key people to accomplish this task.

Essentially, to satisfy online shoppers, online business people, Web designers, and Web developers can consider implementing a technical approach. It USES cookies to track the behavior of online shoppers every time they browse the store. Cookies are files that reside on an online shopper's computer. All online shoppers' activities are logged into cookies; Every time he/she enters the store, the system checks the data from the cookie and generates the most appropriate item for him/her based on his/her past shopping behavior. In this way, the online shoppers will be satisfied with the online stores and they may continue to visit these stores and even introduce the goods to their friends.

In conclusion, the implementation of the web design makes it possible for shoppers to provide friendly features that will lead to more online activities.

5.4.2.3 Government of Thailand

Regarding the influencing factors based on the survey results, the Thai government needs to enact the necessary e-commerce laws to protect online shoppers in Thailand and stimulate sales and purchasing activities. It aims to build more confidence and laws and regulations for online sellers and shoppers in Thailand so that they can gain more trust in e-commerce channels.

Trust in online stores is what brings online sellers and shoppers together. For example, the security of financial transactions is not enough, which may affect the

confidence of online shoppers. In addition, there must be a mechanism to prevent and punish any form of fraud. Therefore, the Thai government needs to build more trust by establishing online laws and regulations.

5.5 Limitations of the Study

This study may not cover all important aspects of this study. This study has the following three limitations:

1. Limited by the study time, this study is a cross-sectional study. The study was conducted over a period of January 2019, and the results could change as the criteria for assessing respondents changed. When online shoppers' buying behavior changes, their buying behavior changes due to poor service quality, poor product quality, poor delivery time, high online financial risks, or word of mouth. These will lead to changes in the purchase behavior (Soderlund, 1998), and the data will also change.

2. Limitations of sampling among respondents who voluntarily participate in the sample survey. In some questions, it is possible to have a false answer or forget to choose the answer because of the haste to answer the question and to re-check the answer. They may have influenced them in some of the answers, which researchers cannot control.

3. Limitations of conceptual models adapted from the theory of planned Behavior. Because the study focused on Thai residents' consumption on e-commerce platforms, rather than their actual buying behavior, the results only partially contribute to understanding actual shopping behavior.

5.6 Future Research

This study considers the factors that influence the consumption of consumers in Thailand on e-commerce platforms. Focusing on one area at a time is a good strategy, or cornerstone of new knowledge. The dynamic nature of Internet technology means that researchers need to constantly study the subject to stay up to date. Internet technology has never stopped evolving, but new and enhanced features and functions are constantly being developed every year, so users will continue to upgrade their systems and services. For example, there was no IP voice in the past, but now it is very common and popular. It is not expensive to make international calls on the Internet. As a result, online sellers may offer long-distance telephone service to online

shoppers at a low price. In terms of consumer behavior, future research can be as follows:

1. Future studies should study the most frequently purchased products online in the Thai market in order to determine these along with consumer behavior will benefit online merchants, and other interested people who want to learn about the most frequently purchased products online and consumer buying behavior.

2. Future research should focus on specific products, such as food and drink, or clothing, to further clarify the discovery of a specific product and consumer behavior towards the product, so as to extend the new knowledge in this study to specific product fields.

3. Future research should extend from intention to decision-making. The research results of shoppers' purchase intention may not cover all the needs. The need may be to understand the buying decisions of online shoppers, not just their buying intentions. Therefore, this future study will benefit them.

4. Future studies may be conducted in cross-sectional and longitudinal studies so as to empirically test the results.

5.7 Conclusion

This study investigates the factors that influence the consumption of Thai residents on e-commerce platforms. The conceptual model is adapted from the theory of planned behavior and serves as the basis for research to obtain reliable and credible results. The results will provide valuable new knowledge to investors in the business-to-consumer sector:

1. Improve their business and develop their marketing strategies by analyzing online shoppers' behaviors;

2. Maintain market competitiveness;

3. Increase business value;

4. Indirectly benefiting from the improvement of online shoppers, with a wider variety of products to choose from, better prices, and availability of goods to shoppers as the online stores are open 24 hours a day. This is a clear benefit for online sellers and shoppers alike. Online sellers can increase sales through online channels, expand customer base, and make customers more satisfied with other purchasing methods.

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APPENDIX

Appendix: Questionnaire

Part 1:					
1. What's your gender?(radio)			<input type="checkbox"/> Male	<input type="checkbox"/> Female	
2. What's your age?					
<input type="checkbox"/> Under 18 years old	<input type="checkbox"/> 18 ~ 24 years old		<input type="checkbox"/> 25 ~30 years old		
<input type="checkbox"/> 31 ~ 40 years old	<input type="checkbox"/> 41~ 50 years old		<input type="checkbox"/> 51~ 60 years old		
<input type="checkbox"/> Age 61 and above					
3. What's your education background?					
<input type="checkbox"/> Primary school	<input type="checkbox"/> Junior high school		<input type="checkbox"/> High school		
<input type="checkbox"/> Undergraduate course	<input type="checkbox"/> A graduate student				
4. How much is your monthly living allowance (including income from family and part-time job or internship)? (radio)					
<input type="checkbox"/> Less than 1000 yuan	<input type="checkbox"/> 1000-1999 yuan		<input type="checkbox"/> 2000-2999 yuan		
<input type="checkbox"/> 3000-4999 yuan	<input type="checkbox"/> 5,000 yuan and above				
5. Have you bought anything on a shopping website in the past three months? (Radio)					
<input type="checkbox"/> Bought			<input type="checkbox"/> Never buy		
Part 2:					
	Stro ngly Agr ee	Mod erat e Agr ee	Neu tral	Mod erat e Diss ent	Stro ng Opp ositi on
Score	5	4	3	2	1
1. I don't think it's safe to shop online on impulse.					
2. I should order it as soon as I see it, especially on the e-commerce platform.					
3. Whether the transaction management is perfect or not is my primary consideration when Shopping on e-commerce platform.					
4. If the encryption of the electronic account on e-commerce platform is high, I will feel more comfortable to shop.					
5. When shopping on the e-commerce platform, If the online payment process is convenient, I will often shop.					
6. I shop online because it is convenient and I don't need to go to the store.					

7. I choose online shopping because it connects manufacturers, distributors, and consumers with the government in general.					
8. The reason why I like shopping online is that e-commerce can completely regulate the workflow of transaction processing.					
9. The utilization rate of manpower and material resources, and the rigor of platform system operation are what I often consider when Shopping online.					
10. E-commerce enables customers to better coordinate with the company, manufacturers, wholesalers and retailers, so I feel more comfortable about shopping.					
11. My friends influence me to shop online.					
12. My family (relatives, parents, children and spouse) think I should shop online.					
13. My colleagues influenced me to go shopping online.					
14. My colleagues influenced me to go shopping online.					
15. I will buy something online to change my mood.					
16. I know what To do when I'm online.					
17. I have the ability to shop online.					
18. It's easy to shop online.					
19. I know how to identify product quality on the Internet.					
20. I can identify the risks of shopping online.					
21. For me, shopping online can relieve the pressure of daily life.					
22. When it comes to online shopping, my belief is "buy what you want, whether you need it or not".					
23. If I don't buy something I like on the e-commerce platform, I always feel dissatisfied.					
24. I don't have a plan for shopping online.					
25. On the Internet, I often buy products without realizing their actual use.					