WHY THAI CONSUMERS ARE NOT SHOPPING ONLINE YET? THE VARIOUS ROADBLOCKS FACING E-COMMERCE IN THAILAND

BY

MRS. LULU XIE

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
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INDEPENDENT STUDY

BY

MISS LULU XIE

ENTITLED

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was approved as partial fulfillment of the requirements for
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ABSTRACT

Compared with other countries such as the US or China, Thailand lagged far behind in terms of e-commerce with only 1.9% of the retail happened online in 2015. This study aimed to understand current Thai consumers' online shopping behaviour, measure their satisfaction level of online shopping experience, and identify things that are holding them back from online shopping. The findings from this research would provide recommendations to e-commerce players in Thailand regarding how they can make more people buy online and make people buy more online.

Both qualitative research in the form of in-depth interviews, and quantitative research in the form of self-administered online questionnaire were conducted among Thai consumers aged between 20 and 60 years old. The main framework of the quantitative research is to compare light and heavy online shoppers regarding their satisfaction level and perceptions towards different aspects of online shopping. The constructs for perceptions towards online shopping were developed based on secondary research and qualitative research.

It is concluded that compared with heavy online shoppers, light online shoppers are more dissatisfied about payment process, and they feel less safe with the transaction with the websites. All three factors, perceived ease of use, perceived usefulness, and trust/risk can significantly affect future intention for online shopping. A few practical suggestions were made based on the conclusions for companies which want to sell online.

Keyword: online shopping adoption in Thailand, E-commerce, online shopping perception, online shopping satisfaction, online shopping behavior

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Finally, I must express my very profound gratitude to all 10 participants who kindly agreed to my in-depth interviews and 188 respondents who answered my online questionnaire, some of whom also helped me share my questionnaire with their families and friends.

Mrs. Lulu Xie

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CHAPTER 1
INTRODUCTION

1.1 Introduction to the Study

According to Euromonitor International (2016), in 2015, online retailing percentage, including internet retailing and mobile retailing, of total retail in the US was 11.7%, 20.9% in China, and only 1.9% in Thailand. As internet penetration and digital population in Thailand increased rapidly over the past years (Internet Users), electronic commerce (later referred to as "e-commerce") growth lagged behind. There are many major regional and local e-commerce platforms such as Lazada, Tarad, Zalora, WeLoveShopping, and so on, but most Thai consumers including the younger generations are not spending much money online yet compared with their counterparts in other countries.

This study investigated a contemporary topic in applied marketing related to society and technology. It aimed to understand current Thai consumers' online shopping behaviours, measure their satisfaction level of online shopping experience, and identify things that are holding them back from online shopping. The findings from this research would provide information about what areas should be improved to promote online shopping for Thai consumers and provide recommendations to major e-commerce players or any companies who want to sell their products online in Thailand. These together could provide hints to e-commerce players in Thailand regarding how they can make more people buy online and make people buy more online.

1.2 Key Terminology Definition

Online shopping and electronic commerce or e-commerce in this study were defined as business-to-consumer or consumer-to-consumer commercial transactions conducted on the Internet using personal computer, tablet, or mobile phone to buy a physical product for personal use. Even if the monetary transaction is conducted in the form of bank transfer or counter payment as long as the information searching and decision making is done online, the transaction is still within the scope of this research. Services such as food takeout, restaurant or hotel reservations, flight tickets, tour packages, media products such as online music or video and so on were excluded from this research.

1.3 Research Objectives

1) To understand basic online shoppers' behavior in Thailand:
    a. Shopping frequency in the past six months
    b. Categories shopped in the past six months
    c. Channels of shopping (device, platform/website)
    d. Product searching channels (Google, Facebook, Pantip, online shopping website)
    e. Decision process (Compare prices, check reviews)
    f. Payment method
    g. Product receipt process (How long)
    h. After-sales process (Return/Exchange, Review)
    i. Future intention to shop online
2) Measure the satisfaction level of the consumers' online shopping experience
    a. Product searching time
    b. Product searching effort
    c. Product information quality and richness
    d. Communication with the seller
    e. Payment process
    f. Delivery speed
    g. After sale service
3) Identify the problems that inhibit online shopping by comparing the perceptions of light online shoppers, heavy online shoppers, and non online shoppers regarding the following aspects:
    a. Perceived ease of use
        ii. Online shopping is easy to do.
        iii. Searching products online is easy.
        iv. It is easy to navigate the shopping sites.
        v. It is easy to contact the seller.

vi. Payment for online shopping is easy.

vii. Learning to shop online is easy.

viii. Returning/Exchanging product bought online is easy.

b. Perceived usefulness

i. Online shopping is convenient.

ii. Online shopping saves time.

iii. Online shopping saves effort.

iv. Online shopping offers better product assortment.

v. Online shopping offers more reasonable price.

vi. Products bought online have high quality.

vii. I can compare products more easily while shopping online.

c. Trust/Risk

i. I feel safe in my transactions with the Web site.

ii. I trust the website/seller with my personal information.

iii. I believe in the information the website/seller provides.

iv. I believe that what I see online is what I will get.

v. I trust the seller will deliver my product on time.

CHAPTER 2
REVIEW OF LITERATURE

There was very limited academic literature related to online shopping adoption in Thailand. A few academic literatures from Thailand, data from other sources such as Euromonitor, Electronic Transactions Development Agency, Thailand's National Electronics and Computer Technology Center (NECTEC), the World Bank, and research on similar topics done in other countries were reviewed. In addition, a few different theoretical models were reviewed.

According to the World Bank, internet penetration in Thailand was 39.32% in 2015 from 22.4% in 2010 (Internet Users). The rate almost doubled in the past 5 years, and if the increasing speed continued, most Thai people would have internet access very soon. According to Kemp, S. (2015) from We Are Social UK, 18% of the Thai population bought something online via a personal computer last month, and 11% of the Thai population bought something online via a mobile phone last month.

Laohapensang (2009) studied the factors influencing Thai consumers' internet shopping behaviour based on the theory of planned behaviour (TPB) developed by Icek Ajzen. This theory states that "A person's intention to perform a particular behaviour can develop from the person's attitude toward that behaviour, the subjective norm (beliefs about the attitudes of the person's associates), and perceived behavioural controls". Laohapensang defined the person's attitude toward that behaviour as price, reliability, and user-friendliness of online shopping. Subjective norm was measured based on the respondent's perception of their family, friends, and bosses. Perceived behavioural controls were measured by how easy or difficult the respondent thinks about online shopping. The results from 264 completed questionnaires showed that perceived behavioural controls and subjective norm significantly influenced the intention to shop online. Because how the family, friends, and bosses of the respondents think about online shopping cannot be directly measured nor easily influenced by e-commerce companies, these aspects were not included in this study. However, the perceived ease of use, which was defined as perceived behavioural control in Laohapensang's study was measured in this study.

Prompongsatorn, Sakthong, Chaipoopirutana, and Combs (2013), conducted a study for Internet shoppers in Thailand. The study tried to develop the profile of Thai online shoppers, test the relationship between consumers' perception of reputation, security, privacy, ease of use, usefulness, integrity, and consumers' trust in Internet shopping, and determine which factor can mostly impact consumers' trust in internet shopping. 400 samples were collected in 2010, and it was concluded that out of the six major factors listed above, only two of them had significant relationship with trust in Internet shopping, which were the perceived ease of use and integrity. It was recommended that online sellers should make their websites easy to use in terms of being easy to search or navigate information, and websites should simplify their online purchasing processes. In addition, it was recommended that online sellers should provide valid and update-to-date information about not only products but also the purchasing agreement to consumers without any request. Security, privacy, ease of use, usefulness, and integrity were adopted as important factors for online shopping adoption in this study. However, the relationship between these factors and actual online shopping behavior were measured instead of consumers' trust in internet shopping.

According to Euromonitor International (2016), the challenges faced by online retailers include how to present pages to attract consumers, how to improve delivery, hotlines, and other logistics in order to create a more convenient environment for consumers to buy online. Even though many people in Thailand still cannot access the internet, the ones who can still prefer store-based retailing because of the experience of family shopping trips and socializing with others. Electronics is the biggest category in terms of market value followed by media products and food and drink. As a result, delivery and logistics were included as a factor for online shopping in this study.

According to Electronic Transactions Development Agency (2015), the top five reasons for people not to shop online are: 1) worried about fraud; 2) unable to touch or test the product; 3) unavailability of the needed product; 4) like the experience of shopping offline; and 5) unable to actually meet the seller. These reasons were also incorporated into the factors influencing online shopping adoption in this study.

According to ECOMScape (2016), Lazada is the biggest player in E-commerce in Thailand, but others such as WeLoveShopping.com and Wemall.com are also competing for different niches. Beside business-to-consumer e-commerce marketplaces, consumer-to-consumer platforms are also fiercely competing with new entrants focusing on mobile e-commerce. Social commerce is very strong in Thailand compared to other countries. It is estimated that 50% of online shoppers in Thailand shop through social network, which may be the highest ratio in the world. The full e-commerce landscape by ecommerceIQ in Thailand can be found in Appendix A. Due to the importance of social commerce in Thailand, purchasing products through Facebook, Instagram, or even Line were included in this study.

Faqih (2016) studied the factors deterring consumers from adopting online shopping in developing countries. The research was conducted in Jordan through self administered questionnaires collecting 261 samples. The factors influencing online shopping being researched included "perceived ease-of-use, perceived usefulness, perceived compatibility, social influence, trust, perceived risk, privacy, security, Internet shopping anxiety, Internet self-efficacy and price." All the factors except perceived risk, privacy, and security were significant in influencing online shopping intention.

Tabassam, Chaudhry, and Nusair (2016) conducted a research in Pakistan in order "to examine the behavioural acceptance of consumers towards online shopping using technology acceptance model (TAM). Results showed "that trust, perceived usefulness, perceived ease of use and online shopping enjoyment influence attitude as well as customer intention to adopt online shopping". Technology acceptance model (TAM) is widely used in the study of online shopping adoption, thus the construct from the model were adopted in this study.

Venkatesh, Morris, Davis, and Davis (2003) reviewed and compared the eight most well-known models for information technology acceptance research, namely Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM) and its improved version TAM2, Motivational Model (MM), Theory of Planned Behavior (TPB), Combined TAM and TPB (C-TAM-TPB), Model of PC Utilization

(MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). A new model named Unified Theory of Acceptance and Use of Technology (UTAUT) was developed and its validity tested. The UTAUT theory includes construct such as perceived ease of use, extrinsic motivation, job-fit, relative advantage, and outcome expectations.

This study included most of the constructs from UTAUT, and the items under each construct were created referring to all eight models and other similar researches done in this field. Because most of the researches were conducted in developed countries and other developing countries, the constructs and items also included the findings from in-depth interviews conducted with Thai consumers. Some constructs or items from these models are related to the social expectation of the respondent about whether he or she should adopt a certain new technology or way of doing things. These factors are important in determining the respondent's' online shopping adoption. However, these are difficult for companies to act on. Therefore, in order to ensure the complete response rate of the questionnaires distributed in this study, the construct and items were limited to the ones that can directly lead to recommendation for e-commerce companies in Thailand.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research Methodology

Both qualitative and quantitative research were conducted. Qualitative research was conducted prior to quantitative research to establish the hypotheses and help to develop the final questionnaire for quantitative research. Qualitative research was carried out in the form of in-depth interview. In total, 10 respondents were interviewed independently to discuss their past online shopping experience, and what should be improved. The in-depth interviews were conducted in English because of the language limitation of the researcher. Likewise, the questionnaire for quantitative research was first developed in English, and then translated to Thai. The English version questionnaire can be found in Appendix B.

3.2 Sampling Plan

The respondents for both the in-depth interviews and online questionnaire were residents of Thailand aged from 20 years old to 60 years old. Both gender were included in the in-depth interviews for understanding perspectives from both genders. For online questionnaire, a total of 180 complete responses were collected. No quota for each group or gender were set in order to make data collection faster.

3.3 Data Collection

The respondents for in-depth interviews were selected with convenience sampling, and the interviews were conducted from November to December in 2016. Quantitative research were conducted in the form of self-administered online questionnaire using Google Forms. Convenience sampling was adopted by sending the questionnaire to the researcher’s acquaintances, and then snowballing sampling was adopted by asking the respondents to share the questionnaire with their families and friends. Incentives were provided to encourage the answering and sharing of the questionnaire. The online questionnaire was open from February 6th to March 15th 2017.

3.4 Data Analysis

The in-depth interviews were summarized to highlight the key findings from the 10 respondents interviewed regarding their online shopping experience and future expectations.

For the online questionnaire, where quantitative data was collected, the dependent variable of this study is the respondent's current online shopping frequency being classified as light online shoppers and heavy online shoppers, as well as their intention to shop online in the future. The main independent variables include satisfaction level of online shopping experience, perceived ease of use of online shopping, perceived usefulness of online shopping, and statements related to trust and risk, which were measured on a seven point scale.

Statistical Package for the Social Sciences (SPSS) was used for data analysis. Frequency analysis was used for developing the profile of Thai online shoppers. Factor analysis was used to identify key factors, and Chi-Square and t-test were used for comparison between different clusters. Moreover, regression analysis was used to determine the importance of each factors.

3.5 Theoretical Framework

The main framework for this study was to compare light and heavy online shoppers in terms of their satisfaction level and perception towards online shopping in order to find areas to improve to make more light online shoppers become heavy online shoppers.

	Light Online Shopper	Heavy Online Shopper
Satisfaction	Product searching time	
	Product searching effort	
	Product information quality and richness	
	Communication with the seller	
	Payment process	
	Delivery speed	
	After sale service	
Perception	Perceived ease of use	
	Perceived usefulness	
	Trust/Risk	

Table 1: Theoretical Framework

3.6 Limitations of the study

Because the data was collected using convenience sampling, age, gender, education level, and income of the sample were not representative of the general Thai consumers. Only 10 out of the total 180 effective samples collected did not shop online in the past 12 months, thus analysis can only be made comparing light and heavy online shoppers. It will be interesting to have a bigger sample of non online shoppers, and it may yield some other findings. Light and heavy online shoppers are defined by their frequency of online shopping in the past 12 months. As will be shown in the analysis part, heavy online shoppers tend to shop more apparel, footwear, food, and drink, which are in nature more fast moving compared to other product categories such as consumer electronics or appliances. For future studies, it may be useful to define light and heavy online shoppers based on the value amount they spent online during a certain period.

CHAPTER 4
RESULTS AND DISCUSSION

4.1 Qualitative Research - Key Findings

From the 10 interviews with Thai consumers who have shopped online in the past year, it can be summarized that they normally buy things online because it is difficult to find the same product offline. Some people can buy things that are available offline online as well if they know exactly want to buy, which model, which size, and it has to be a known brand.

The reasons for these respondents to choose not to shop online include trust issues, difficulty in returning and exchanging the product once bought, past bad experience, online negative reviews of certain online shopping platform, and price. First of all, many respondents do not want to buy online because of trust issues. Products could be fake or bad quality. The respondents defined bad quality as the product being not the same quality as claimed on the web page. Sellers can just refuse to deliver products to the buyer, and since the buyer has transferred the money already, there is nothing much the buyer can do. There is no authority for the buyers to make complaint either. In addition, returning products is a pain. Many sellers in Thailand including physical stores do not accept returns. Even if they accept returns, the buyer needs to bear all the logistics cost. Repackaging, going to the post office, contacting the seller, and confirming whether the money has come back are too troublesome. Thus most people cannot buy high value products online because of the bad return policies and processes. Furthermore, many people do not buy online because of bad past experience. Some of them bought something online that looked completely different from pictures, and they did not bother to return. Online negative reviews of certain E-commerce website also make people not to shop in those platforms. Lastly, many respondents do not see online price as cheaper, so they do not see much value in shopping online when they have to bear much more risks than shopping offline.

Other insights found from the interviews include that many respondents think that brand webpage or brand Facebook page may be more trustworthy than online marketplace because they are official while online marketplace is a combination of small sellers that the buyers do not even know. Moreover, different from the US where Amazon is the biggest e-commerce site and China where Taobao by Alibaba is the biggest e-commerce site, there is no single dominant online shopping platform. Most respondents said that they start their search from Google, and buy things from different places that they cannot even remember the name of the website.

4.2 Quantitative Research - Sample Summary

A total of 188 responses were collected, and 180 of which were complete answers from qualified respondents. Table 1 below is the demographic summary of the 180 effective samples collected for this study.

n = 180		Number	Percentage
Age	20 - 29 years old	105	58%
	30 - 39 years old	67	37%
	40- 49 years old	6	3%
	50 - 60 years old	2	1%
	Total	**180**	**100%**
Gender	Female	125	69%
	Male	55	31%
	Total	**180**	**100%**
Highest Education	High School	2	1%
	Bachelor's Degree	97	54%
	Master's Degree	80	44%
	Doctor's Degree	1	1%
	Total	**180**	**100%**
Income	Below 10000 THB	5	3%
	10000 - 19999 THB	9	5%
	20000 - 29999 THB	42	23%
	30000 - 39999 THB	48	27%

n = 180		Number	Percentage
	40000 - 49999 THB	30	17%
	50000 - 59999 THB	15	8%
	60000 - 69999 THB	9	5%
	70000 - 79999 THB	5	3%
	80000 - 89999 THB	4	2%
	90000 THB and above	13	7%
	Total	**180**	**100%**
Online shopping experience in the past 12 months	Shopper	170	94%
	Non-Shopper	10	6%
	Total	**180**	**100%**

Table 2: Quantitative Research - Sample Summary

The sample is highly concentrated in the age group between 20 to 29 years old with 58% of the respondents falling in this group, and the second largest group is from 30 to 39 years old. There is only 4% of the respondents who are 40 years or older. There is more female respondents in the sample, and almost all respondents have either Bachelor's degree or Master's degree. Regarding income, half of the respondents have between 20,000 and 40,000 THB personal monthly salary, and 25% of the respondents have income ranging from 40,000THB to 60,000THB. 170 out of 180 respondents shopped online in the past 12 months. Overall, comparing to the general population in Thailand, this sample is relatively younger, more concentrated in female, and has higher education and higher income.

4.3 Quantitative Research - Online Shopper Behavior

For the 170 respondents who had online shopping experience in the past 12 months, shopping frequency, where the respondents normally start their shopping process, and the shopping platforms used were summarized in the below table.

n = 170		Number	Percentage
Shopping Frequency	Once	6	4%
	Twice	19	11%
	3 times	14	8%
	4 times	17	10%
	5 times	8	5%
	6 times or more often	106	62%
	Total	**170**	**100%**
Main Device Used	Computer	55	32%
	Mobile	105	62%
	Tablet	10	6%
	Total	**170**	**100%**
Where to start the online shopping process	Google	108	64%
	Facebook	32	19%
	Shopping websites	22	13%
	Pantip	6	4%
	Other	2	1%
	Total	**170**	**100%**
Shopping Platform	Shopping websites/APPs	124	73%
	Facebook	86	51%
	Line	78	46%
	Instagram	36	21%
	Total	**170**	**100%**
Most used payment method	Online credit card payment	89	52%
	Bank transfer	52	31%
	Online debit card payment	9	5%
	Cash on delivery	9	5%
	PayPal	5	3%
	Counter payment	3	2%
	Others	2	1%
	Line Pay	1	1%

n = 170		Number	Percentage
	Total	**170**	**100%**

Table 3: Quantitative Research - Online Shopper Behavior

62% of the 170 online shoppers shopped online 6 times or more often in the past 12 months, meaning on average they shopped at least once in every 2 months. 62% of the online shoppers purchase online through their mobile phones, and 32% of them buy through computers. Most people start their search from Google and then go to other sites for the actual purchase. Surprisingly, 19% of online shoppers start their buying process from Facebook. Pantip is the best well-known online forum in Thailand where many people check product reviews, and only 4% of the online shoppers start their shopping journey from there. The majority of the online shoppers shopped either through websites or mobile phone APPs. Regarding payment methods, more than half of the online shoppers use online credit card payment most often, followed by bank transfer.

From the 124 online shoppers who either shopped on the website or mobile APPs in the past 12 months, the websites they used were summarized in the below table.

n = 170		Number	Percentage
Shopping Websites	Lazada	75	44%
	Ebay	24	14%
	Amazon	21	12%
	Central	19	11%
	Apple	10	6%
	Wemall	8	5%
	Zalora	8	5%
	Pomelo	6	4%
	Shopee	5	3%
	Tesco Lotus	4	2%
	Konvy	4	2%

n = 170		Number	Percentage
	Big C	2	1%
	Tarad	2	1%
	Tops Market	2	1%
	11 Street	2	1%
	Others	24	14%
	None	62	36%

Table 4: Quantitative Research - Shopping Websites

Lazada is the shopping websites with the highest market share, which confirms the data from Euromonitor from secondary research. 44% of the online shoppers shopped in Lazada in the past 12 months. Ebay and Amazon surprisingly followed behind with 14% and 12 % respectively even though they do not directly operate in Thailand. It may be due to the fact that the respondents in the sample have high education level and have a high chance of having studied/lived abroad where Ebay and Amazon are the dominant shopping platforms or be very well exposed to foreign culture.

For the 170 online shoppers, the below table summarizes the categories of products they purchased online in the past 12 months. Based on the data shown below, the most often purchased product categories online are apparel and footwear, beauty and personal care, and consumer electronics.

n = 170		Number	Percentage
Category Purchased	Apparel and footwear	118	69%
	Beauty and personal care	61	36%
	Consumer electronics	59	35%
	Personal accessories and eyewear	33	19%
	Food and drink	26	15%
	Traditional toys and games	24	14%
	Consumer Appliances	21	12%
	Consumer health	18	11%
	Home improvement and furnishing	15	9%
	Books magazines	11	6%
	Home Care	8	5%
	Video games hardware	7	4%
	Pet care	4	2%
	Stationary	4	2%
	Baby items	3	2%
	Sports equipment	2	1%
	Others	7	4%

Table 5: Quantitative Research - Categories Purchased

Regarding product review, among the 170 online shoppers, only 28% of them said they reviewed a product in the past 12 months. On a 7 point scale, the respondents were asked about how they feel about review. 87.6% of the respondents agreed (top 3 boxes) to the statement that "I need to check the reviews online of the product I want buy before ordering.", indicating the importance of review for the purchase decision online. In addition, 50.6% of the respondents agreed (top 3 boxes) to the statement that "I do not believe the reviews of product in the same website as the one I am going to buy the product.", and 84.1% of the respondents agreed (top 3 boxes) to the statement that "I need to check the reviews of product from a different source than the website I am going to buy the product." From these data, we can conclude that despite the fact that most people do not review the products they bought, they need reviews from multiple sources in order for them to make the final purchase decision online.

4.4 Quantitative Research - Online Shopper Satisfaction

The satisfaction level of the 170 online shoppers were measured on the seven point scale regarding different aspects of their online shopping experience as listed in the below figure, 1 being highly dissatisfied, and 7 being highly satisfied.

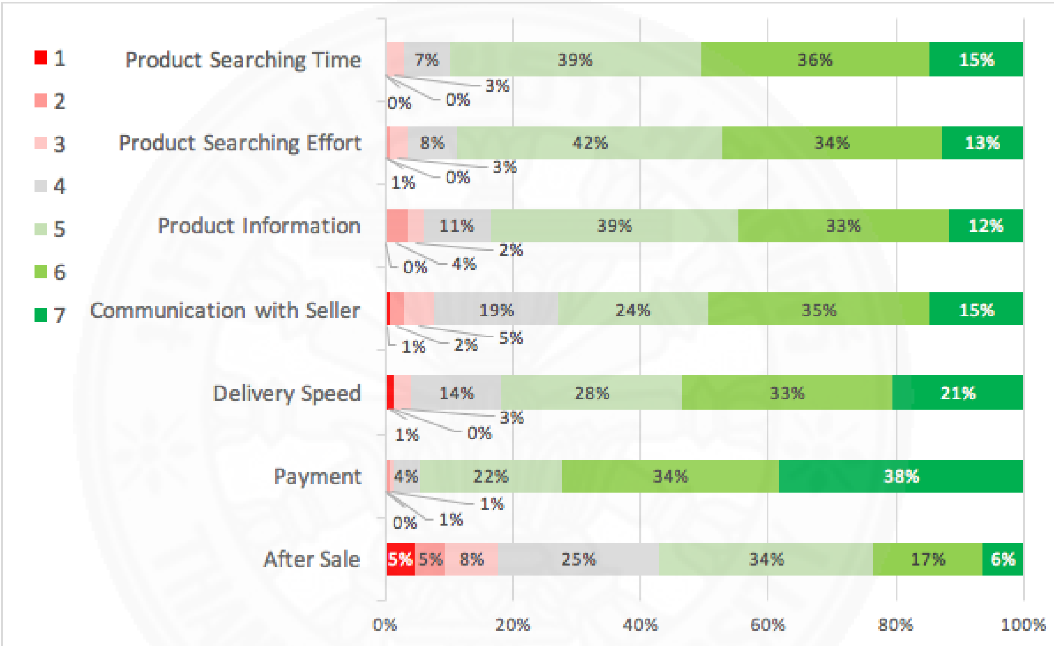

Figure 1: Online Shopper Satisfaction

Payment is the most satisfied aspect of the experience with 85% are on the satisfied side of the scale (top 3 boxes), while after sale is the most dissatisfied aspect with only 57% of the online shoppers selecting the satisfied side of the scale (top 3 boxes). When being asked about return and exchange, only 17% of the people returned the products they bought in the past 12 months, and 13% of the people exchanged their products. This may due to the seller's after sale policy and logistics difficulty, thus making after sale the most dissatisfied aspect of all.

The respondents are relatively satisfied with the delivery speed, with 74% of the online shoppers get their products within 2 to 4 days after the order was made as shown in table 5 below.

n = 170		Number	Percentage
Delivery Time Experienced	1 day	2	1%
	2 days	32	19%
	3 days	68	40%
	4 days	25	15%
	5 days	16	9%
	6 days	3	2%
	7 days or longer	24	14%
	Total	170	100%

Table 6: Quantitative Research - Delivery Time Experienced

4.5 Quantitative Research - Light vs. Heavy Online Shoppers

As mentioned earlier, more than half of the online shoppers shop 6 or more times online in the past 12 months. These people are defined as heavy online shoppers, and the people who shopped less than 6 times in the past 12 months are defined as light online shoppers. These two groups are compared on aspects such as satisfaction level and their perceptions about online shopping.

Among the seven satisfaction aspects, only satisfaction towards payment is significantly different between light and heavy shoppers with heavy shoppers being more satisfied on average as shown in table 7 below. (Given that Levene's test has a significance more than 0.05, population variance is relatively equal, and the 2-tailed significance for t-test is 0.018, which is smaller than 0.05, meaning the means are significantly different.) The t-test analysis for all seven satisfaction aspects can be found in Appendix C.

Group Statistics

	Q4Light_Heavy_Shopper	N	Mean	Std. Deviation	Std. Error Mean
Q17ePayment_Satisfaction	Light Shopper	64	5.81	1.037	.130
	Heavy Shopper	106	6.17	.889	.086

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Q17ePayment_Satisfaction	Equal variances assumed	.684	.410	-2.383	168	.018	-.357	.150	-.653	-.061
	Equal variances not assumed			-2.294	117.416	.024	-.357	.156	-.666	-.049

Table 7: Light vs. Heavy Online Shoppers - Satisfaction towards payment

When comparing perceptions towards online shopping, only the statement "I feel safe in my transactions with the Web site" is found to be significantly different between the light and heavy online shoppers. (Given that Levene's test has a significance more than 0.05, population variance is relatively equal, and the 2-tailed significance for t-test is 0.016, which is smaller than 0.05, meaning the means are significantly different.) The t-test analysis for all perception constructs can be found in Appendix D.

Group Statistics

	Q4Light_Heavy_Shopper	N	Mean	Std. Deviation	Std. Error Mean
Q20ol_feel_safe_in_my_transactions_with_the_Websites	Light Shopper	64	4.73	1.288	.161
	Heavy Shopper	106	5.20	1.158	.112

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Q20ol_feel_safe_in_my_transactions_with_the_Websites	Equal variances assumed	2.429	.121	-2.424	168	.016	-.464	.191	-.841	-.086
	Equal variances not assumed			-2.361	122.083	.020	-.464	.196	-.853	-.075

Table 8: Light vs. Heavy Online Shoppers - Perception towards online shopping

Other differences between light and heavy online shoppers include that heavy online shoppers tend to shop more apparel and footwear (Appendix E), and food and drink (Appendix F) categories. Surprisingly, light online shoppers also tend to review more online. (Appendix G)

4.6 Quantitative Research - Drivers for Online Shopping Intention

Factor analysis was performed to identify key factors regarding perception towards online shopping. Three key factors are identified, namely perceived ease of use, trust/risk, and perceived usefulness, as shown in the below table. (Appendix H)

Rotated Component Matrix[a]

	Component		
	1	2	3
	Perceived Ease	Trust/Risk	Perceived Usefulness
Online shopping is easy to do.	**0.87**	0.12	0.15
Searching products online is easy.	**0.58**	0.11	**0.61**
It is easy to navigate the shopping sites.	**0.59**	0.01	**0.55**
It is easy to contact the seller.	**0.30**	**0.35**	0.02
Payment for online shopping is easy.	**0.83**	0.31	-0.01
Learning to shop online is easy.	**0.84**	0.19	0.18
Returning/Exchanging product bought online is easy.	0.13	**0.46**	0.15
Online shopping is convenient.	**0.79**	0.19	0.39
Online shopping saves time.	**0.76**	0.18	0.38
Online shopping saves effort.	**0.39**	**0.46**	0.24
Online shopping offers better product assortment.	0.40	0.18	**0.70**
Online shopping offers more reasonable price.	0.25	**0.53**	**0.55**
Products bought online have high quality.	-0.06	**0.72**	0.33
I can compare products more easily while shopping online.	0.08	0.37	**0.71**
I feel safe in my transactions with the Web site.	0.28	**0.72**	-0.07
I trust the website/seller with my personal information.	0.04	**0.83**	0.04

Rotated Component Matrix[a]			
I believe in the information the website/seller provides.	0.15	**0.80**	0.24
I believe that what I see online is what I will get.	0.13	**0.72**	0.16
I trust the seller will deliver my product on time.	0.32	**0.58**	0.19
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 8 iterations.			

Table 9: Factor Analysis

The result of the factor analysis is slightly different from the assumptions in research design. Some perceived ease of use constructs are also perceived usefulness constructs such as "Searching products online is easy" and "It is easy to navigate the shopping sites." Some of the perceived usefulness constructs are more correlated with perceived ease of use such as "Online shopping is convenient", "Online shopping saves time", and "Online shopping saves effort". Finally some of the perceived ease of use or perceived usefulness are more correlated with trust/risk contracts such as "It is easy to contact the seller", "Returning/Exchanging product bought online is easy", "Online shopping offers more reasonable price", and "Products bought online have high quality."

After the key factors were identified, linear regression analysis was performed with the dependent variable being intention to shop online in the future, and independent variables being the three factors. The model R Square is 0.498, indicating the model can explain 49.8% of the variance in future intention to shop online. As shown in the below table, all three factors significantly predict intention to shop online in the future ($p < 0.05$). Comparing the coefficients of the three factors, it can be concluded that perceived ease of use has the greatest effect on future intention to shop online followed by perceived usefulness and then trust/risk. (Appendix I)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.978	.061		97.335	.000
	Percieved Ease	.514	.062	.446	8.350	.000
	Trust/Risk	.414	.062	.359	6.724	.000
	Percieved Usefulness	.475	.062	.412	7.713	.000

a. Dependent Variable: Q20ul_intend_to_shop_online_in_the_future

Table 10: Linear Regression with Three Factors

CHAPTER 5
SUMMARY AND RECOMMENDATIONS

This chapter discusses the key findings from the study and suggestions to companies which are selling online already or plan to sell online in the near future.

As discussed in data analysis and results, mobile smartphones are the most often used device for online shopping with 62% of the respondents shop through mobile smartphones. Thailand has very high smartphone penetration rate and consumers perform various tasks through their mobile smartphones including online shopping. It is very important for all shopping platforms to be mobile friendly with responsive design where the layout of the page will adjust to the screen size for better user experience.

Most people (64%) start their online shopping journey from Google search. As also found from the in-depth interviews, there is not one single shopping platform that consumers always go to look for the products they want. Even though 44% of the respondents bought from Lazada in the past 12 months, but their journey may still start from Google search, and Lazada was one of the search results. Thus, it is very important for company to invest in search engine optimization where their pages can show higher up in the search result list in Google, and use Google AdWords if necessary to have the pages stay at the top of the list.

Reviews are also very important in the purchase decision process. 87.6% of respondents said they check reviews before purchase online, and 84.1% said they need to check reviews from a different source. Contrary to that, only 28% of the respondents said they reviewed in the past 12 months. Checking the major e-commerce platforms, it is not hard to see that there are not much reviews available. It is very important for companies to generate reviews of the products they sell online both inside and outside of their platform. For example, the companies can offer points for each review, and consumers can redeem those points in the future to purchase items in the platform.

Among the satisfaction levels for the seven selected online shopping processes, after sale service is the most dissatisfied aspect. As also found from in-depth interviews, most of the respondents are not satisfied with after sale service and return/exchange processes. For most people, once the purchase decision is made, it is final. The respondents think most online sellers do not accept returns, and even if they do, contacting the seller, repacking the products, going to the post office to send the products back, and confirming with the seller again to check whether the products were received and when the money will be refunded are just too troublesome for most people. What the sellers can improve is to communicate their return and exchange policy and procedures, so consumers know whether or how they can return or exchange the products. In addition, the returning and exchanging processes need to be made simpler and more transparent. For example, the seller can offer pick-up services of the products to be returned or exchanged, and they can share the status of the return and exchange with the consumers in a more transparent and simple manner. Some extra cost and system development may be required in order to improve after sale satisfaction level, but in return more people will buy online, and probably also buy more online.

Comparing the light and heavy online shoppers, the only significant difference found in satisfaction levels is payment. Heavy online shoppers are more satisfied with payment than light online shoppers. Even though payment has the highest satisfaction level among all online shopping processes for all respondents, improving payment may be able to encourage more light online shoppers to become heavy online shoppers.

Also comparing light and heavy online shoppers in terms of their perceptions toward online shopping, heavy online shoppers feel safer of their transactions with the websites. This is the only significant difference observed between these two groups. Therefore, it can be concluded that improve the safe feeling with the websites is very important to make more light users to become heavy users.

Finally, the regression analysis performed proved that all three factors, namely perceived ease of use, perceived usefulness, and trust/risk can significantly affect future intention for online shopping. In order to improve, perceived ease of use, the sellers need to improve all processes during all stages of online shopping to make the whole experience simpler and smoother. In order to improve perceived usefulness, the sellers need to provide better product assortment, more reasonable price, and make it easier for the consumers to compare different products. Lastly, to improve trust/risk perceptions, the sellers need to make it simple for consumers to contact them, provide high quality products with accurate product description, make return and exchange processes simpler, and build credibility so that the consumers can trust the seller with their personal information, feel safe about the transaction, and believe the products will arrive on time.

A lot of suggestions have been made to the companies who want to sell online, and depending on the different situation of the companies, they can choose to prioritize on different aspects to improve. Even though online shoppers vs. online non-shoppers comparison could not be performed in this study due to the limited sample size collected for online non-shoppers, improving the above suggested aspects will not only make existing online shoppers to buy more frequently online, but also make non-shoppers to start shopping online.

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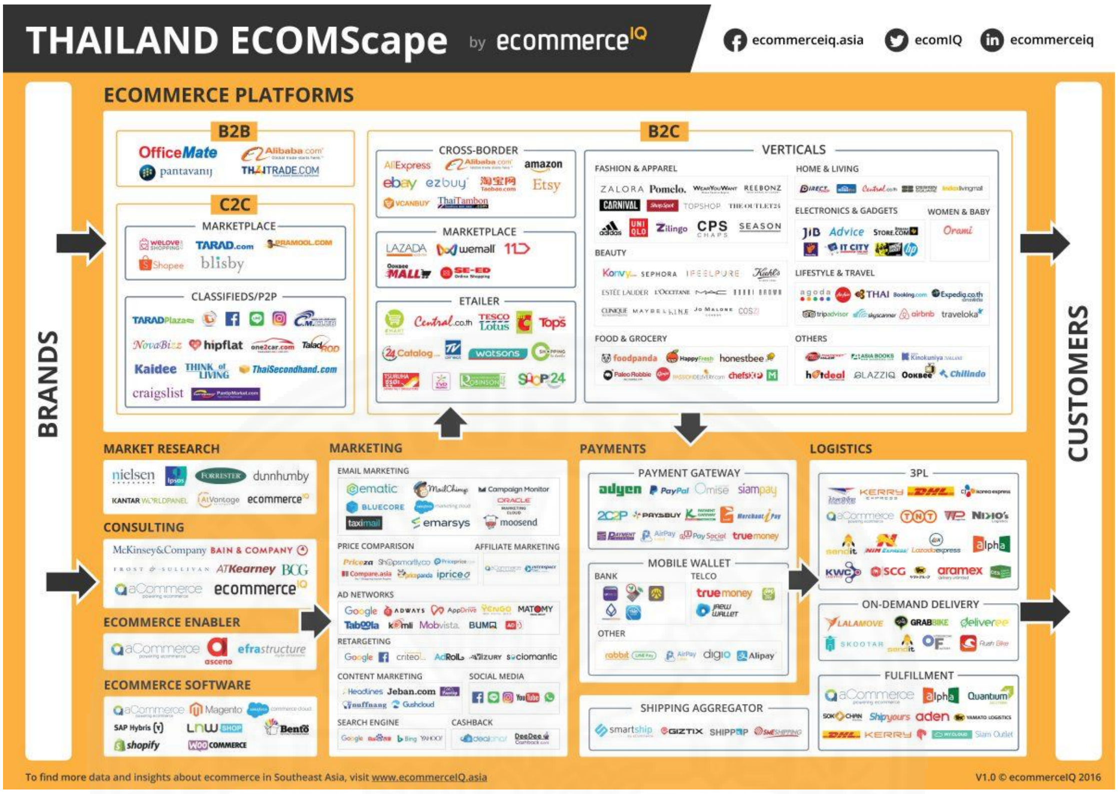
APPENDICES

APPENDIX A: Thailand ECOMScapate by ecommerceIQ (ECOMScape, 2016)



APPENDIX B: English Version Questionnaire

Thank you for agreeing to take part in this survey, which will take you only 5 to 10 minutes to complete. To thank you for your time and kind help, after all responses are collected, 3 lucky respondents will be drawn randomly to receive Xiaomi Mi Band 2 (Fitness tracker with heart rate sensor and smart Bluetooth).

My name is Lulu Xie, and I am a master student studying marketing in Thammasat University. I developed this survey to study consumers' online shopping behavior. The data collected will be kept strictly confidential and used for academic purposes only. If you have any questions or suggestions regarding the survey, you can contact me by my mobile phone 098-306-5587 or email lulu_xie66@hotmail.com. I really appreciate your help.

(Picture: Xiaomi Mi Band 2)

Q1. Are you a resident of Thailand? (Choose only one)
1. Yes 2. No
(Terminate questionnaire if 2 is chosen)

Q2. What is your age? (Choose only one)
1. Below 20 2. 20 to 29 3. 30 to 39 4. 40 to 49
5. 50 to 60 6. Above 60
(Terminate questionnaire if 1 or 6 is chosen)

Q3. Have you ever bought a physical product for personal use on the Internet in the past 12 months? (Choose only one)
NOTE: Examples could be buying a physical product from a website, from a seller through LINE, Facebook, IG or other social media. Please note that services such as food takeout, restaurant or hotel reservations, flight tickets, tour packages, media products such online music or video and so on are excluded from this research.
1. Yes 2. No
(Skip Q4~Q19 if 2 is chosen)

Q4. How often do you shop online in the past 12 months? (Choose only one)
1. Once 2. Twice 3. 3 times 4. 4 times
5. 5 times 6. 6 times or more often

Q5. Which category of product did you buy in the past 12 months? (Can choose more than one)
1. Apparel and footwear
2. Beauty and personal care
3. Consumer appliances
4. Consumer electronics
5. Consumer health
6. Food and drink
7. Home care
8. Home improvement and furnishings
9. Personal accessories and eyewear
10. Pet care
11. Traditional toys and games
12. Video games hardware
13. Other (Please specify ________________)

Q6. What is the main device you used for online shopping in the past 12 months? (Choose only one)
1. Desktop computer 2. Mobile phone 3. Tablet

Q7. Where did you shop online in the past 12 months? (Can choose more than one)
1. Shopping websites 2. Facebook 3. Instagram 4. LINE
5. Other (Please specify __________)

Q8. For those who chose shopping websites, on which website did you shop in the past 12 months? (Can choose more than one)
1. www.lazada.co.th
2. www.wemall.com
3. www.apple.co.th
4. www.amazon.com
5. www.bigc.co.th
6. www.tarad.com
7. www.ebay.com
8. www.zalora.com
9. www.dell.co.th
10. shoponline.tescolotus.com
11. www.central.co.th
12. www.topsonline.com
13. www.pomelo.com
14. I did not shop in any websites
15. Other (Please specify ________________)

Q9. When you plan to buy a product online, where do you normally start? (Choose only one)
1. Search in Google
2. Search in Facebook
3. Search in Pantip
4. Search directly inside online shopping websites
5. Other (Please specify ______________)

Q10. What is your most used payment method for online purchases in the past 12 months? (Choose only one)
1. Online payment using credit card
2. Online payment using debit card
3. Bank transfer
4. Counter payment (seven-eleven, etc.)
5. Cash on delivery
6. Credit/Debit card payment on delivery
7. Line Pay
8. PayPal
9. Other (Please specify ____________)

Q11. How long on average you need to wait from the time you order the product online and receive the product? (Choose only one)
1. 1 day   2. 2 days   3. 3 days   4. 4 days
5. 5 days   6. 6 days   7. 7 days or longer

Q12. Did you ever return and refund the products you bought online in the past 12 months? (Choose only one)
1. Yes   2. No
(Skip Q13 if 2 is chosen)

Q13. Why did you return and refund the products you bought online in the past 12 months?
____
____
____

Q14. Did you ever exchange the products you bought online in the past 12 months? (Choose only one)
1. Yes   2. No
(Skip Q15 if 2 is chosen)

Q15. Why did you exchange the products you bought online in the past 12 months?
____
____
____

Q16. Did you ever review the product you bought online in the past 12 months? (Choose only one)
1. Yes   2. No

Q17. On a 7-point scale, please rate how satisfied you are with your online shopping experience in the past 12 months. 7 means extremely satisfied, 4 means neutral, and 1 means extremely unsatisfied. (Choose only one for each row)

Product searching time	1	2	3	4	5	6	7
Product searching effort	1	2	3	4	5	6	7
Product information quality and richness	1	2	3	4	5	6	7
Communication with the seller	1	2	3	4	5	6	7
Payment process	1	2	3	4	5	6	7
Delivery speed	1	2	3	4	5	6	7
After sale service	1	2	3	4	5	6	7

(Skip Q18 if all scores are equal or greater than 4)

Q18. Why are you not satisfied with the the below aspects?
Product searching time: ______________________
Product searching effort: ______________________
Product information quality and richness: ______________________
Communication with the seller: ______________________
Payment process: ______________________
Delivery speed: ______________________
After sale service: ______________________

Q19. On a 7-point scale, please rate how much you agree or disagree with the below statement. 7 means strongly agree, 4 means neutral, and 1 means strongly disagree. (Choose only one for each row)

1. I need to check the reviews online of the product I want buy before ordering.
1 2 3 4 5 6 7

2. I do not believe the reviews of product in the same website as the one I am going to buy the product.
1 2 3 4 5 6 7

3. I need to check the reviews of product from a different source than the website I am going to buy the product.
1 2 3 4 5 6 7

Q20. On a 7-point scale, please rate how much you agree or disagree with the below statement. 7 means strongly agree, 4 means neutral, and 1 means strongly disagree. (Choose only one for each row)

1. Online shopping is easy to do.
1 2 3 4 5 6 7

2. Searching products online is easy.
1 2 3 4 5 6 7

3. It is easy to navigate the shopping websites.
1 2 3 4 5 6 7

4. It is easy to contact the seller.
1 2 3 4 5 6 7

5. Payment for online shopping is easy.
1 2 3 4 5 6 7

6. Learning to shop online is easy.
1 2 3 4 5 6 7

7. Returning/Exchanging product bought online is easy.
1 2 3 4 5 6 7

8. Online shopping is convenient.

1 2 3 4 5 6 7

9. Online shopping saves time.
   1 2 3 4 5 6 7

10. Online shopping saves effort.
   1 2 3 4 5 6 7

11. Online shopping offers better product assortment.
   1 2 3 4 5 6 7

12. Online shopping offers more reasonable price.
   1 2 3 4 5 6 7

13. Products bought online have high quality.
   1 2 3 4 5 6 7

14. I can compare products more easily while shopping online.
   1 2 3 4 5 6 7

15. I feel safe in my transactions with the Websites.
   1 2 3 4 5 6 7

16. I trust the website/seller with my personal information.
   1 2 3 4 5 6 7

17. I believe in the information the website/seller provides.
   1 2 3 4 5 6 7

18. I believe that what I see online is what I will get.
   1 2 3 4 5 6 7

19. I trust the seller will deliver my product on time.
   1 2 3 4 5 6 7

20. I need to compare prices of the product I want to buy in many different websites.
   1 2 3 4 5 6 7

21. I intend to shop online in the future.
   1 2 3 4 5 6 7

Below personal information is collected for the purpose of profiling. The personal information will be kept strictly confidential and will not be disclosed individually.

Q20. What is your gender?
   1. Female   2. Male

Q22. What is the highest level of education you have completed?
   1. High school   2. Bachelor's degree   3. Master's degree
   4. Doctor's degree   5. Other (Please specify ____________)

Q23. Which monthly personal income range do you fall into?
   1. Below 10,000THB/month   2. 10,001 to 20,000THB/month
   3. 20,001 to 30,000THB/month   4. 30,001 to 40,000THB/month
   5. 40,001 to 50,000THB/month   6. 50,001 to 60,000THB/month
   7. 60,001 to 70,000THB/month   8. 70,001 to 80,000THB/month
   9. 80,001 to 90,000THB/month   10. Above 90,000THB/month

Below information is collected if you wish to enter the lucky draw to win free Xiaomi Mi Band 2. The information collected will be strictly confidential and will only be used when delivering the prize. The latest delivery for the prize will be end of March, so if by then you still have not received anything, it means you did not win the prize. ;)

Name: ____________________
Contact Number: ________-________-________
Delivery Address (Please provide complete address including postal code): ____________
____
____

Thank you very much for completing the survey and helping me completing my master's degree!

Appendix C: Light vs. Heavy Online Shoppers - Satisfaction Comparison Output

Group Statistics

	Q4Light_Heavy_Shopper	N	Mean	Std. Deviation	Std. Error Mean
Q17aProduct_searching_time_satisfaction	Light Shopper	64	5.50	.854	.107
	Heavy Shopper	106	5.54	.978	.095
Q17bProduct_searching_effort_satisfaction	Light Shopper	64	5.34	.761	.095
	Heavy Shopper	106	5.51	1.053	.102
Q17cProduct_information_satisfaction	Light Shopper	64	5.28	1.046	.131
	Heavy Shopper	106	5.32	1.151	.112
Q17dCommunication_with_seller_satisfaction	Light Shopper	64	5.22	1.147	.143
	Heavy Shopper	106	5.28	1.315	.128
Q17ePayment_Satisfaction	Light Shopper	64	5.81	1.037	.130
	Heavy Shopper	106	6.17	.889	.086
Q17fDelivery_speed_satisfaction	Light Shopper	64	5.48	1.127	.141
	Heavy Shopper	106	5.50	1.197	.116
Q17gAfter_sale_satisfaction	Light Shopper	64	4.53	1.221	.153
	Heavy Shopper	106	4.57	1.525	.148

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Q17aProduct_searching_time_satisfaction	Equal variances assumed	1.250	.265	-.255	168	.799	-.038	.148	-.329	.254
	Equal variances not assumed			-.264	146.881	.792	-.038	.143	-.320	.245
Q17bProduct_searching_effort_satisfaction	Equal variances assumed	8.708	.004	-1.097	168	.274	-.166	.151	-.464	.132
	Equal variances not assumed			-1.186	162.584	.237	-.166	.140	-.441	.110
Q17cProduct_information_satisfaction	Equal variances assumed	.557	.456	-.224	168	.823	-.040	.176	-.387	.308
	Equal variances not assumed			-.230	142.937	.819	-.040	.172	-.380	.301
Q17dCommunication_with_seller_satisfaction	Equal variances assumed	1.373	.243	-.324	168	.747	-.064	.199	-.456	.328
	Equal variances not assumed			-.335	147.040	.738	-.064	.192	-.444	.315
Q17ePayment_Satisfaction	Equal variances assumed	.684	.410	-2.383	168	.018	-.357	.150	-.653	-.061
	Equal variances not assumed			-2.294	117.416	.024	-.357	.156	-.666	-.049
Q17fDelivery_speed_satisfaction	Equal variances assumed	.000	.998	-.084	168	.933	-.016	.185	-.382	.350
	Equal variances not assumed			-.086	139.319	.932	-.016	.183	-.377	.345
Q17gAfter_sale_satisfaction	Equal variances assumed	2.126	.147	-.155	168	.877	-.035	.225	-.478	.408
	Equal variances not assumed			-.164	155.006	.870	-.035	.213	-.455	.385

Appendix D: Light vs. Heavy Online Shoppers - Perception Comparison Output

Group Statistics

Q4Light_Heavy_Shopper		N	Mean	Std. Deviation	Std. Error Mean
Q20aOnline_shopping_is_easy_to_do	Light Shopper	64	6.20	1.057	.132
	Heavy Shopper	106	6.25	1.049	.102
Q20bSearching_products_online_is_easy	Light Shopper	64	6.03	1.023	.128
	Heavy Shopper	106	5.92	1.152	.112
Q20cIt_is_easy_to_navigate_the_shopping_websites	Light Shopper	64	5.97	1.083	.135
	Heavy Shopper	106	5.97	1.125	.109
Q20dIt_is_easy_to_contact_the_seller	Light Shopper	64	4.97	1.195	.149
	Heavy Shopper	106	5.11	1.362	.132
Q20ePayment_for_online_shopping_is_easy	Light Shopper	64	6.13	.917	.115
	Heavy Shopper	106	6.15	1.031	.100
Q20fLearning_to_shop_online_is_easy	Light Shopper	64	6.03	.992	.124
	Heavy Shopper	106	6.04	1.013	.098
Q20gReturningExchanging_product_bought_online_is_easy	Light Shopper	64	3.98	1.527	.191
	Heavy Shopper	106	3.68	1.534	.149
Q20hOnline_shopping_is_convenient	Light Shopper	64	6.11	.961	.120
	Heavy Shopper	106	6.25	.944	.092
Q20iOnline_shopping_saves_time	Light Shopper	64	6.17	1.032	.129
	Heavy Shopper	106	6.22	1.033	.100
Q20jOnline_shopping_saves_effort	Light Shopper	64	5.00	1.309	.164
	Heavy Shopper	106	5.18	1.420	.138
Q20kOnline_shopping_offers_better_product_assortment	Light Shopper	64	6.02	.984	.123
	Heavy Shopper	106	5.87	1.196	.116
Q20lOnline_shopping_offers_more_reasonable_price	Light Shopper	64	5.00	1.098	.137
	Heavy Shopper	106	5.18	1.241	.120
Q20mProducts_bought_online_have_high_quality	Light Shopper	64	4.63	.917	.115
	Heavy Shopper	106	4.75	1.070	.104
Q20nI_can_compare_products_more_easily_while_shopping_online	Light Shopper	64	5.20	1.224	.153
	Heavy Shopper	106	5.14	1.659	.161
Q20oI_feel_safe_in_my_transactions_with_the_Websites	Light Shopper	64	4.73	1.288	.161
	Heavy Shopper	106	5.20	1.158	.112
Q20pI_trust_the_websiteseller_with_my_personal_information	Light Shopper	64	4.33	1.055	.132
	Heavy Shopper	106	4.46	1.259	.122
Q20qI_believe_in_the_information_the_website_seller_provides	Light Shopper	64	4.58	.851	.106
	Heavy Shopper	106	4.71	1.211	.118
Q20rI_believe_that_what_I_see_online_is_what_I_will_get	Light Shopper	64	4.86	1.271	.159
	Heavy Shopper	106	4.59	1.185	.115
Q20sI_trust_the_seller_will_deliver_my_product_on_time	Light Shopper	64	4.89	.945	.118
	Heavy Shopper	106	4.89	1.157	.112

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Q20aOnline_shopping_is_easy_to_do	Equal variances assumed	.001	.979	-.253	168	.800	-.042	.167	-.371	.287
	Equal variances not assumed			-.253	132.221	.801	-.042	.167	-.372	.288
Q20bSearching_products_online_is_easy	Equal variances assumed	1.655	.200	.610	168	.543	.107	.175	-.239	.452
	Equal variances not assumed			.628	145.311	.531	.107	.170	-.229	.443
Q20cIt_is_easy_to_navigate_the_shopping_websites	Equal variances assumed	.172	.679	-.017	168	.987	-.003	.176	-.350	.344
	Equal variances not assumed			-.017	136.930	.987	-.003	.174	-.347	.341
Q20dIt_is_easy_to_contact_the_seller	Equal variances assumed	1.810	.180	-.701	168	.484	-.144	.206	-.551	.262
	Equal variances not assumed			-.724	146.485	.470	-.144	.199	-.539	.250
Q20ePayment_for_online_shopping_is_easy	Equal variances assumed	.227	.634	-.166	168	.869	-.026	.157	-.335	.283
	Equal variances not assumed			-.170	145.103	.865	-.026	.152	-.327	.275
Q20fLearning_to_shop_online_is_easy	Equal variances assumed	.000	.998	-.041	168	.968	-.006	.159	-.321	.308
	Equal variances not assumed			-.041	135.257	.967	-.006	.158	-.320	.307
Q20gReturningExchanging_product_bought_online_is_easy	Equal variances assumed	.036	.850	1.259	168	.210	.305	.242	-.174	.784
	Equal variances not assumed			1.260	133.412	.210	.305	.242	-.174	.784
Q20hOnline_shopping_is_convenient	Equal variances assumed	.064	.800	-.903	168	.368	-.136	.151	-.433	.161
	Equal variances not assumed			-.899	131.076	.370	-.136	.151	-.435	.163
Q20iOnline_shopping_saves_time	Equal variances assumed	.504	.479	-.276	168	.783	-.045	.163	-.368	.278
	Equal variances not assumed			-.276	133.035	.783	-.045	.163	-.368	.278
Q20jOnline_shopping_saves_effort	Equal variances assumed	.397	.530	-.821	168	.413	-.179	.218	-.610	.252
	Equal variances not assumed			-.838	141.421	.404	-.179	.214	-.602	.244
Q20kOnline_shopping_offers_better_product_assortment	Equal variances assumed	4.208	.042	.832	168	.406	.148	.177	-.203	.498
	Equal variances not assumed			.873	152.643	.384	.148	.169	-.187	.482
Q20lOnline_shopping_offers_more_reasonable_price	Equal variances assumed	1.389	.240	-.952	168	.342	-.179	.188	-.551	.192
	Equal variances not assumed			-.981	145.600	.328	-.179	.183	-.540	.182
Q20mProducts_bought_online_have_high_quality	Equal variances assumed	.277	.599	-.749	168	.455	-.120	.161	-.438	.197
	Equal variances not assumed			-.777	148.755	.438	-.120	.155	-.426	.185
Q20nI_can_compare_products_more_easily_while_shopping_online	Equal variances assumed	4.560	.034	.258	168	.797	.062	.239	-.410	.534
	Equal variances not assumed			.277	161.238	.782	.062	.222	-.377	.500
Q20oI_feel_safe_in_my_transactions_with_the_Websites	Equal variances assumed	2.429	.121	-2.424	168	.016	-.464	.191	-.841	-.086
	Equal variances not assumed			-2.361	122.083	.020	-.464	.196	-.853	-.075
Q20pI_trust_the_websiteseller_with_my_personal_information	Equal variances assumed	1.616	.205	-.714	168	.476	-.134	.188	-.505	.237
	Equal variances not assumed			-.746	150.939	.457	-.134	.180	-.489	.221
Q20qI_believe_in_the_information_the_website_seller_provides	Equal variances assumed	3.771	.054	-.750	168	.454	-.129	.173	-.470	.211
	Equal variances not assumed			-.816	164.072	.416	-.129	.159	-.443	.184
Q20rI_believe_that_what_I_see_online_is_what_I_will_get	Equal variances assumed	.038	.846	1.374	168	.171	.265	.193	-.116	.646
	Equal variances not assumed			1.351	125.765	.179	.265	.196	-.123	.653
Q20sI_trust_the_seller_will_deliver_my_product_on_time	Equal variances assumed	4.632	.033	.022	168	.982	.004	.171	-.334	.342
	Equal variances not assumed			.024	153.347	.981	.004	.163	-.318	.326

Appendix E: Light vs. Heavy Online Shoppers - Category Bought (Apparel and footwear)

Q51Category_Bought_Apparel_and_footwear * Q4Light_Heavy_Shopper Crosstabulation

			Q4Light_Heavy_Shopper		
			Light	Heavy	Total
Q51Category_Bought_Apparel_and_footwear	No	Count	28	24	52
		Expected Count	19.6	32.4	52.0
		% within Q4Light_Heavy_Shopper	43.8%	22.6%	30.6%
	Yes	Count	36	82	118
		Expected Count	44.4	73.6	118.0
		% within Q4Light_Heavy_Shopper	56.3%	77.4%	69.4%
Total		Count	64	106	170
		Expected Count	64.0	106.0	170.0
		% within Q4Light_Heavy_Shopper	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.375[a]	1	.004		
Continuity Correction[b]	7.410	1	.006		
Likelihood Ratio	8.240	1	.004		
Fisher's Exact Test				.006	.003
Linear-by-Linear Association	8.325	1	.004		
N of Valid Cases	170				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.58.

b. Computed only for a 2x2 table

Appendix F: Light vs. Heavy Online Shoppers - Category Bought (Food and Drink)

Q56Category_Bought_Food_and_drink * Q4Light_Heavy_Shopper Crosstabulation

			Q4Light_Heavy_Shopper		Total
			Light	2	
Q56Category_Bought_Food_and_drink	No	Count	59	85	144
		Expected Count	54.2	89.8	144.0
		% within Q4Light_Heavy_Shopper	92.2%	80.2%	84.7%
	Yes	Count	5	21	26
		Expected Count	9.8	16.2	26.0
		% within Q4Light_Heavy_Shopper	7.8%	19.8%	15.3%
Total		Count	64	106	170
		Expected Count	64.0	106.0	170.0
		% within Q4Light_Heavy_Shopper	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.435[a]	1	.035		
Continuity Correction[b]	3.557	1	.059		
Likelihood Ratio	4.823	1	.028		
Fisher's Exact Test				.047	.026
Linear-by-Linear Association	4.409	1	.036		
N of Valid Cases	170				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.79.

b. Computed only for a 2x2 table

Appendix G: Light v.s Heavy Online Shoppers - Review

Q16Did_you_ever_review * Q4Light_Heavy_Shopper Crosstabulation

			Q4Light_Heavy_Shopper		Total
			Light	Heavy	
Q16Did_you_ever_review	Yes	Count	11	36	47
		Expected Count	17.7	29.3	47.0
		% within Q4Light_Heavy_Shopper	17.2%	34.0%	27.6%
	No	Count	53	70	123
		Expected Count	46.3	76.7	123.0
		% within Q4Light_Heavy_Shopper	82.8%	66.0%	72.4%
Total		Count	64	106	170
		Expected Count	64.0	106.0	170.0
		% within Q4Light_Heavy_Shopper	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.614[a]	1	.018		
Continuity Correction[b]	4.806	1	.028		
Likelihood Ratio	5.881	1	.015		
Fisher's Exact Test				.021	.013
Linear-by-Linear Association	5.581	1	.018		
N of Valid Cases	170				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.69.

b. Computed only for a 2x2 table

Appendix H: Factor Analysis Output

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.084	42.545	42.545	8.084	42.545	42.545	4.722	24.854	24.854
2	2.576	13.559	56.104	2.576	13.559	56.104	4.451	23.424	48.278
3	1.151	6.057	62.161	1.151	6.057	62.161	2.638	13.883	62.161
4	.983	5.176	67.337						
5	.886	4.661	71.997						
6	.753	3.962	75.960						
7	.612	3.220	79.179						
8	.559	2.943	82.122						
9	.486	2.560	84.682						
10	.462	2.433	87.116						
11	.429	2.257	89.372						
12	.395	2.079	91.451						
13	.338	1.781	93.233						
14	.271	1.426	94.659						
15	.268	1.411	96.070						
16	.239	1.260	97.330						
17	.198	1.043	98.373						
18	.178	.937	99.310						
19	.131	.690	100.000						

Extraction Method: Principal Component Analysis.

Appendix I: Multiple Regression Analysis Output:

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Percieved Usefulness, Trust/Risk, Percieved Ease[b]	.	Enter

a. Dependent Variable: Q20ul_intend_to_shop_online_in_the_future

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.706[a]	.498	.489	.824

a. Predictors: (Constant), Percieved Usefulness, Trust/Risk, Percieved Ease

b. Dependent Variable: Q20ul_intend_to_shop_online_in_the_future

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	118.423	3	39.474	58.144	.000[b]
	Residual	119.488	176	.679		
	Total	237.911	179			

a. Dependent Variable: Q20ul_intend_to_shop_online_in_the_future

b. Predictors: (Constant), Percieved Usefulness, Trust/Risk, Percieved Ease

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.978	.061		97.335	.000
	Percieved Ease	.514	.062	.446	8.350	.000
	Trust/Risk	.414	.062	.359	6.724	.000
	Percieved Usefulness	.475	.062	.412	7.713	.000

a. Dependent Variable: Q20ul_intend_to_shop_online_in_the_future

BIOGRAPHY

Name	Mrs. Lulu Xie
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