Customer Buying Behavior
– Online shopping towards electronic product

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ABSTRACT

Online shopping in EU has been shown to a good potential market. The electronic equipment takes a high percent of the individuals shopping. Compared with other goods, online shopping of electronic goods adds great convenience to the life of the people. Buying electronic gadgets online gives customers an opportunity to find a great variety of product online, and customers can review a wide selection of products and find special offers and discount with the best deals online. In the coming years, the development of online retailers is improving and promises a bright future. However, the tangible and intangible problems of electronic product online shopping still exist and the online store retailers lack the customer knowledge in some extent. Therefore, our intention is to explore customer behavior when purchasing electronic products through investigating the factors that can affect online shoppers’ attitudes, intention and actual buying behavior. Furthermore, through the findings of our research, we offered the online retailers some suggestions to improve their sales and attract more customers.

Our research was conducted at Umeå University, the participants are students who come from four different departments. We categorized the important influencing factors into customer-oriented and technology-oriented factors. We utilized quantitative method in the term of questionnaire to exam how the respondents think about these factors, and we figured out the relationship between the factors and the consumers’ attitudes and online buying intention for electronic product.

Our final findings show that only the experienced shoppers’ attitudes highly affect their buying intention. Transaction security and product quality as the most important elements of electronic product online shopping in the customer-oriented factors are voted by the respondents; while in the technology-oriented factors, easy to navigate and useful web content are the most important issues which drawn more customers’ attention. In addition, we suggested that the online retailers should guarantee a safe and accurate transaction process, moreover, make more efforts to web design and enhance the return and refund after-sales service. Our study is expected to contribute the e-commerce, especially focused on the electronic product field, the further research can take our research as a basic and go deeper to investigate.

Key words: online shopping, electronic product, customer buying behavior, factors
## Table of Content

**CHAPTER 1: INTRODUCTION** ................................................................. 1  
  1.1 Research Background ........................................................................... 1  
  1.2 Research problem .................................................................................. 2  
  1.3 Research question ................................................................................ 4  
  1.4 Research purpose .................................................................................. 4  
  1.5 Research outline .................................................................................. 4  
  1.6 Definitions ............................................................................................ 5  
  1.7 Limitation .............................................................................................. 6  
**CHAPTER 2: SCIENTIFIC METHOD** ...................................................... 7  
  2.1. Research philosophy .......................................................................... 7  
  2.2. Research approach .......................................................................... 8  
  2.3 Research design .................................................................................. 9  
  2.4 Choice of theories .............................................................................. 10  
**CHAPTER 3: THEORETICAL FRAMEWORK** ........................................ 11  
  3.1 Online shopping attitude and behavior .............................................. 11  
      3.1.1 Online shopping attitude ............................................................... 11  
      3.1.2 Online shopping intention ............................................................. 12  
      3.1.3 Theory of planned behavior model (TPB) ...................................... 13  
  3.2 Factors influence customers’ attitude .................................................. 14  
      3.2.1 Trust .......................................................................................... 15  
      3.2.2 Perceived risks .......................................................................... 16  
      3.2.3 Shopping experience ................................................................... 17  
      3.2.4 Product perception .................................................................... 18  
      3.2.6 Web quality .............................................................................. 19  
  3.3 The framework of online shopping behavior for electronic product .... 21  
**CHAPTER 4: PRACTICAL METHOD** ...................................................... 24  
  4.1. Sampling ............................................................................................ 24  
  4.2 Sample design .................................................................................... 24  
  4.3 Sample size ......................................................................................... 25  
  4.4. Data collection ................................................................................ 26  
      4.4.1 Primary data collection ............................................................... 26  
      4.4.2 Secondary data collection ............................................................. 27  
  4.5 Data analysis ...................................................................................... 28  
  4.6. Validity and reliability ..................................................................... 29  
**CHAPTER 5: ANALYSIS AND DISCUSSION** ....................................... 31  
  5.1 Demographic of respondents .............................................................. 31  
  5.2 Factors influence customers’ attitude ................................................ 32  
      5.2.1 Trust .......................................................................................... 32  
      5.2.2 Shopping experience ................................................................. 33  
      5.2.3 Product perception ................................................................. 35  
      5.2.4 Service perception ................................................................. 36
5.2.5 Web quality ................................................................. 38
5.3 Online shopping attitude and intention ........................................... 41
  5.3.1 Online shopping attitude .................................................... 41
  5.3.2 Online shopping intention .................................................... 43
  5.3.3 The relationship between attitude and intention ......................... 47
CHAPTER 6: CONCLUSIONS .................................................................. 54
  6.1 General Conclusion .................................................................... 54
  6.2 Implications .............................................................................. 55
  6.3 Recommendations of future research ........................................ 55
  6.4 Evaluation of study .................................................................... 56
Reference ............................................................................................ 57

Appendix

Appendix 1: Factors influence trust
Appendix 2: Factors influence product perception
Appendix 3: Correlation between actual buying behavior and time spending and
frequency of shopping online
Appendix 4: Correlation between intention to continue purchasing and satisfaction
Appendix 5: Questionnaire
List of figures

Figure 1. Research outline .......................................................... 5
Figure 2. TPB Model (Azjen, 1991) ............................................. 14
Figure 3. The model of online shopping behavior for electronic product .......... 22
Figure 4. Demographic of respondents ........................................ 32
Figure 5. Satisfaction towards previous experience .......................... 34
Figure 6. Higher level of satisfaction can yield more intention of continue purchasing .................................................. 35
Figure 7. Factors influence service perception ................................ 37
Figure 8. Favorite ways of communication .................................... 38
Figure 9. Factors influence choosing a website ................................ 39
Figure 10. Favorite payment methods .......................................... 40
Figure 11. Favorite websites ...................................................... 41
Figure 12. Attitude towards online shopping electronic product (Inexperienced shopper) ......................................................... 42
Figure 13. Attitude towards online shopping electronic product (Experienced shopper) ......................................................... 43
Figure 14. Willingness of starting purchasing .................................. 44
Figure 15. Recommendation and willingness to continue............... 45
Figure 16. Frequency of shopping online and actual online buying behavior for electronic product online ........................................ 46
Figure 17. Buying intention and gender ....................................... 47
Figure 18. Extent to continue purchasing ..................................... 48
Figure 19. Better attitude can yield more intention of continue purchasing .......... 49
Figure 20. Test result for the research model: online shopping behavior for electronic product ......................................................... 50
Figure 21. Modified model of online shopping behavior for electronic product .... 53
List of Tables

Table 1. Factors influence online purchasing electronic product ........................................ 23
Table 2. Schedule for gathering of questionnaires ............................................................. 25
Table 3. Types of Validity (William, Cook and Campbell, 2005, p. 38) ......................... 29
Table 4. Relationship between attitude, transaction security, vender’s reliability and      
    credibility, and customer privacy ........................................................................... 33
Table 5. Correlation between intention to continue purchasing and satisfaction .... 34
Table 6. The relationship between attitude and product quality, product price,        
    product variety and product availability ................................................................ 36
Table 7. The relationship with attitude and communication channels, ease of return     
    and refund, and delivery channels ........................................................................ 37
Table 8. The relationship between attitude and factors of influencing choosing a       
    website .................................................................................................................. 40
Table 9. Correlations between intention to continue to buy and spending time online,  
    frequency of shopping online and recommend to others ...................................... 45
Table 10. Correlation between intention to start and attitude ...................................... 48
Table 11. Correlation between intention to continue to buy and attitude ................. 49
CHAPTER 1: INTRODUCTION

The introduction chapter will explain the purpose of our research. The research background, research problem, research questions, research outline, definitions of relevant academic words and limitation of the research will be presented as well.

1.1 Research Background

The internet is a worldwide means of exchanging information and communicating through a series of interconnected computers. It offers a fast and versatile communications capabilities. (Belch & Belch, 2004, p. 486.) Internet shopping has received considerable attention in the popular press as the future of in-home shopping. The climb in online sales to consumers may reflect compelling advantages of Internet shopping. It promises a number of benefits to both businesses and consumers. From business perspective, Internet was visualized as unique linkage between consumers and supplier using proprietary technology. For the consumer, Internet can be a valuable communication medium to facilitate controlled search for up-to-date information and assistance with comparison shopping and decision making. (Hoffman, Novak & Chatterjee, 1996, p. 2)

Online shopping market in EU has been shown to a good potential. Between 2004 and 2008, the percentage of individuals who had ordered goods or services over the internet for private use in the past year in the EU25 (Top first 25 member states of the European Union) rose significantly from 22 percent to 34 percent. In 2008, 32 percent of individuals in the EU27 (Top first 27 member states of the European Union) had ordered online in the last year. According to a study by the Association ACSEL(Acsel du numérique), based on the number of online purchasers, a mature market in Northern Europe, including UK, Germany, and the Nordic countries, where between 60 percent and 80 percent of Internet users are online purchasers. (Commission of the European Communities, 2009.) In Sweden, online shopping sales rose in the third quarter of 2009 by 5.8 percent compared with last year (HUI, 2009).

Among online purchasers, young people become more interested in online shopping and they spend more time and money on online shopping. Young people make active choices of the media they use according to their personalities, socialization needs, and personal identification needs. They will select and use the media to best fulfill their individual needs (Arnett, 1995, p. 521). With the increasing use of the internet as shopping medium, young consumers, particularly college students aged 20-29, are becoming the internet’s “hottest” market and a prime source of current and future growth in online sales, as 74 percent of this demographic group made an online purchase in 2006. Older consumers do not make purchases as frequently as the younger
ones; 60 percent between age 40 to 49, and 41 percent between age 50 to 59 had made at least one Internet purchase in 2006. The consumer group that increases their level of purchasing on the internet the most from one year to another is the age group 40 to 49 years (HUI, 2009). One interpretation of these facts could be that older consumers generally shop less than younger consumers in online stores.

Buying electronic product online takes high percent of individual online shopping, because customers can take advantage of the benefits of online shopping for electronic products. According to the report of commission of the European communities, travel and holiday accommodation ranks the first which takes 42 percent of the individuals online shopping, and the electronic equipment takes 25 percent of the individuals shopping (Commission of the European communities, 2009). Popular brands like Sony, LG, Samsung and Philips are coming up with some of the best products. Compared with other goods, online shopping of electronic goods adds great convenience to the life of the people. For one thing, buying electronic gadgets online gives customers an opportunity to find a great variety of product online under one roof. Customers can review a wide selection of products and find special offers and discounts with the best deals online. As long as an upgraded model of electronic devices launches in the market, users can access to the latest news via visiting the online shops. (EzineArticles, 2010) For another thing, customers can get the goods delivered to the doorsteps, so they do not have to spend their time going to a store nor driving to retail stores and carry heavy electronic goods all the way to home. (ArticleSnatch, 2009). Hence, buying electronic appliances online is always a beneficial deal than visiting retail stores in terms of more various options and time efficiency. (EzineArticles, 2010)

In conclusion, electronics has become a very important role in everyone’s life, especially in youth’s life and the field of electronics consumption is always going through some developments. The customers’ demand for the latest electronic products is increasing day by day, thus online shopping offers an effective and convenient channel to reach the customers and satisfied with their demands. In the coming years, the development of online retailer is improving and promises a bright future. The electronics online retailers should catch the commercial opportunity and develop consistently their product and service to gain more market.

1.2 Research problem

With the competition is fierce in e-commerce, the online retailers supposed to get to know more about the influencing factors work on the online consumers. In other words, the online retailers should understand the customer relationship management, especially in e-commerce field, which can lead to make effective business strategy and achieve the market demands in a right way. (Donthu & Garcia, 1999; Kim& Park, 2005; Shim& Drake, 1990), however, there is a lack of research concerning online purchasing electronic products particularly and some problems concerning customer online purchasing electronic products still exist. In general, those problems can be considered
from two aspects which are customer-oriented and technology-oriented.

From customer aspects, firstly, consumer trust has been acknowledged in marketing literature as a crucial factor for successful business trades, because online businesses are essentially intangible and consumers cannot use physical and tangible features to infer trust (Rios & Riquelme, 2008, p. 733). When purchasing electronic products online, customers are more concerning with the quality and the function of the products, and they are worried about that the actual product is different from the sample picture displayed from the webpage, meanwhile, they are afraid of the function does not match the product description on the website, which would highly affect the use of electronic product. (Lowengart & Tractinsky, 2001, p. 14)

Secondly, online shopping electronics involves various levels of risk/uncertainty. On one hand, customers have to take a risk to provide an online retailer with their personal information, such as email address, home address and telephone number. From another point of view, customers worry about the leak of the credit card information through the online transaction. In addition, according to the nature of the electronic products, which are weak and easy to broke, thus, in this vulnerable situation, delivering the electronic products safely is crucial. (Dean, 1999, p. 1)

From technology aspect, when buying electronic products online, customers always take after sales service into consideration. After sales service normally in forms of the guarantee to keep in good repair, the convenience of returning or refunding, and the efficient e-retailer contact. However, due to the technology factor, not all the online retailers can offer a satisfied after sales service. (Lohse & Spiller, 1998, p.18; Liang & Lai, 2000) Also, design of website is another technical perspective. Good website designs allure visitors to at least visit through the whole site. Online retailers design website by adding visual applets and special effects or putting attractive templates. However, converting online visitors into buyers is one of the biggest problems that many online businesses face in daily basis. (Ranganathan & Ganapathy, 2002, p.468)

The problem of this thesis is what specific factors affect customers’ attitude to buy electronic product online and how the relationship between their attitude and online buying intention is. Therefore, our intention is to explore the factors that affect online shoppers especially buying electronic products and how customers’ attitude influence their intention when online shopping electronic product, through developing a model. It is impossible to cover all the potential factors, but we are intent to figure out the most important and relevant factors which highly affect the consumers’ online shopping toward electronic products.
1.3 Research question

The emerged research questions are:

- What are the factors which highly affect customers’ attitude towards purchasing electronic products over the internet?
- How does customers’ attitude towards online shopping electronic products influence their intention of starting/continue to buy electronic products online?
- What is the efficient way for overcoming the drawbacks of online shopping and increasing the potential sales of online store?

1.4 Research purpose

Converting online visitors into buyers is one of the biggest problems that many online businesses face in daily basis. Another significant issue with the online shopping is that online shopping still lacks critical tactile aspects of an offline shopping experience. The purpose of this thesis is to identify and get insight into what main factors online customer takes into consideration when purchasing electronic product online. We also want to know the relationship between customers’ attitude towards online shopping electronic product and their intention of starting /continue to buy electronic products online. The purpose presented above is narrowed down further with the help of research questions. The research questions are derived from the theoretical framework. The findings of this research will outlined as implication for online electronic stores in order to enhance their customer knowledge and develop their online marketing strategy effectiveness. Also help online retailers learn how to convert browsers to purchasers to capture revenues lost to abandoned shopping carts.

1.5 Research outline

The thesis is divided into six parts. The first section is a brief introduction, helps the readers to know the thesis in a general context, mainly including the background of the research and research purpose and research questions. Furthermore, the theoretical of framework are considered.

Scientific method, as the second chapter, is the foundation of our thesis. This foundation affects the result of the study and is therefore important for the readers to understand and become aware of. In this section, we mainly talk about three parts: research philosophy research approach and research design.

The third part highlights the theories which are applicable and closely connected to the subject, but also essential for the discussion and critical thinking in order to provide contributions in this area.
The empirical section as the fourth chapter illustrates the research methodology. This content presents a brief introduction about the research, including sample selection, data collection, data analysis, as well as reliability and validity discussion. The research results were interpreted by constructing a model based on the research findings.

Chapter five presents the data analysis and interpretation of outcomes. Finally in chapter six, the most important issues are highlighted in order to reason and answer the research questions and reach the research purpose. In discussions and conclusions a deepened reasoning is presented. Based on the findings, the analysis, discussions and conclusions, further research is also presented. Figure 1 below summarizes the structure of this thesis.

Figure 1. Research outline

1.6 Definitions

**Electronic shopping / Internet shopping/ Online shopping:** “The buying of goods or services over the Internet, using either a computer or an Internet television” (Laudon & Traver, 2008, p. 56)

**Consumer behavior:** Consumer behavior is the study of when, why, how, and where people do or do not buy products. It blends elements from psychology, sociology, social anthropology and economics. It attempts to understand the buyer decision making
process, both individually and in groups. (Sandhusen, 2000, p. 218)

**E-commerce:** consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. (Laudon & Traver, 2008, p. 156)

**Inexperienced shoppers:** Based on the survey, we refer to people who have never conducted an online purchase, as “non-shoppers”.

**Experienced shoppers:** Based on the survey, we refer “shoppers” to people who do have conducted an online purchase.

**Intention:** “Intentions represent motivational components of a behavior, that is, the degree of conscious effort that a person will exert in order to perform a behavior” (Ajzen, 1991, p. 201).

**Attitude:** “Attitude toward a behavior is referred as an individual’s positive or negative evaluation of a relevant behavior and is composed of an individual’s salient beliefs regarding the perceived consequences of performing behavior” (Ajzen, 1991, p. 207).

### 1.7 Limitation

This study is not without limitations. The limitation of the study mainly includes two aspects. Firstly, the theoretical sources from scientific articles mainly focused on the general online shopping behavior without a specific field. Our research concentrated on online shopping behavior, but narrowed down to a specific electronic product field, however, there is lack for the electronic product online shopping research. Thus, we utilized the limited sources to support our research, meanwhile, through reviewing a large amount of previous relevant researches, we figure out the similarity and difference of the sources, and collected the valuable ones to serve our research of the electronic product field.

From another point of view, our study used a convenient sampling of university students to participate and test our proposed framework of online shopping behavior for electronic product (Figure 3.). This demographic group is meaningful to investigate due to the strong consumer demand and buying power. However, the focus group can only representative for a limited demographic group, similar study experience and environment, but may not be generalized to other populations. Therefore, for the future research, it should take a more various sample with different demographic factors.
CHAPTER 2: SCIENTIFIC METHOD

In this chapter, we will discuss the scientific method, which provides a solid base to our study. Since scientific method will directly influence the result of the study, it is vital to communicate and make the reader to be aware of the method.

2.1. Research philosophy

All researches make certain assumptions about the nature of the ‘‘reality’’ that is being studied, about how ‘‘knowledge’’ is produced and about the angle or perspective from which the research is approached. (Kent, 2007, p.47) The main methodological assumptions in our study will be based on an assumption which is the consumer online buying behavior towards electronic product. Discussing philosophical assumptions is a crucial step because it defines the stance taken by the researcher in conducting his/her study. (Creswell, 2007, p.16-19) In this section, we will try to explain the nature of the philosophical assumption. Hence the ontological and epistemological approach will be discussed.

Ontology is a branch of metaphysics that is concerned with the nature of reality (Kent, 2007, p.48). There are two ontological positions which are objectivism and constructionism. Objectivism is an orientation which states that the social reality is external to the researcher, and that social phenomena and their meaning are beyond the reach of social factors. In other words, it exists independently of consciousness or experience and remains unaltered, so there is only one ‘‘reality’’ and this reality is the same for everybody. On the other hand, constructionism is another orientation which states that the reality is constructed by social actors and these actors have a permanent influence on social phenomena and its meaning. (Bryman & Bell, 2007, p. 22-25; Kent, 2007, p.48)

Considering our research, consumer online shopping behavior is shaped by factors such as product perception (Lowengart & Tractinsky, 2001, p. 142), service perception (Liang & huang, 1998, p.30), perceptions of risks and trust toward online shopping (Lutz & Reilly, 1973, p.400) and web quality (Dean, 1999, p.1). And those factors have a constant influence on consumer online shopping behavior. Furthermore, consumer online shopping behavior reality varies overtimes due to social constructed. In conclusion, the philosophy is then based on constructionism.

Epistemology can be defined as “an area of philosophy that is concerned with how knowledge is established” (Kent, 2007, p.48). Bryman and Bell (2007, p. 16-21) discuss two approaches: positivism, and interpretivism. According to them, positivism is assuming that knowledge of a reality is built beyond the human mind. Positivists apparently believe that human experience of the world reflects an objective, independent reality and that this reality provides the foundation for human knowledge.
Normally, the objectively verifiable knowledge is possible by setting up and then testing hypotheses that relate to identifiable and measurable variables. The researchers who are labeled as positivists tend to use certain kinds of research methods in their work-experiments, surveys, and field studies. On the other hand, an alternative epistemology is interpretivism which assesses that the researcher needs to interpret the reality recognize that the knowledge they build reflects their particular goals, culture, experience, history, and so on. They intentionally constitute knowledge. In other words, they try to make sense of the world, recognizing their sense-making activities occur within the framework of their life-worlds and the particular goals they have for their work. Knowledge is built through social construction of the world. Unlike positivists, interpretivists tend to use other kinds of research methods in their work-case studies, ethnographic studies, and ethnomethodological studies.

With regarding to our research conducted, we try to explore consumer online shopping behavior towards electronic product and the factors influence online shopping electronic product will be investigated as well. Our knowledge can be acquired only by quantitative research method in order to measure and test hypotheses. Thus, we decided then to follow a positivism epistemology.

Considering both ontological and epistemological considerations, the research philosophy is based on a constructed approach of reality where social interactions are interpreted. Indeed the aim is to understand consumer online shopping behavior towards electronic product. In this way the research approach is based on both constructionism and positivism.

2.2. Research approach

According to Saunder, Lewis and Thornhill (2007), there are two overall approaches to conducting research: induction and deduction. Whether research is deductive or inductive depends on how the study relates theory to reality. If data is first collected and a theory is later developed as a result to the data analysis, an inductive approach is applied. If the researcher starts with developing a theory and hypothesis and later designs a research strategy to test the hypothesis, a deductive approach is applied. In this study, existing theories concerning consumer behavior, such as attitude towards online shopping, have created the consumer online purchasing electronic product framework through which the collected data were analyzed. We chose a deductive research approach for our study as we move from the more general (online shopping) to the specific (online shopping electronic product). Therefore, a deductive approach was applied to this study.

Research methods can have either a quantitative or qualitative approach. Quantitative research is used to answer questions about relationships among measured variable with the purpose of explaining, predicting, and controlling phenomena. In contrast, qualitative research is typically used to answer questions about the complex nature of
phenomena, often with the purpose of describing and understanding the phenomena from the participants’ point of view. (Leedy & Ormrod, 2001, 101-103.)

When mapping out the customer online purchasing electronic product, the quantitative approach was used. By using the quantitative approach, a larger portion of the population can be investigated, than could have been by only using a qualitative research. Using a quantitative approach enabled the results to be conceptually generalized, which mean that the findings could be applicable in the sense of the critical case. The purpose also aims at finding factors of customer online shopping electronic product.

2.3 Research design

Apply to our study, when mapping out the behavior of customer concerning their Internet shopping electronic products, a descriptive form was used. There are many research design frameworks, but they can be classified into three basic types: exploratory, descriptive and causal. Exploratory research is on the discovery of ideas and insights. (Gilbert, Churchill & Iacobucci, 2005, p.74). Kent (2007, p.18) explains that descriptive research is concerned with measuring or estimating the sizes, quantities or frequencies of characteristics. For exploratory and for descriptive research, the objective may simply be to collect the information that has been specified at the research design stage. However, causal research analyses the degree of influence of one or more independent variables upon one or more dependent variables.

On one hand, descriptive studies require a clear specification of who and what the research (Gilbert et al., 2005, p.107). Our search focuses on the specific group buying specific product, meaning that the customers buy electronic online. On the other hand, the purpose of this thesis is to describe characteristics of certain group, i.e. the customer who buy electronic product online. Hence, we want to identify and get insight into what main factors online customer takes into consideration when purchasing electronic product online.

We achieve research purpose by adapting sample survey, which typically involves summarizing and generalizing the data collected meaning that we use college-age student as our sample due to the strong consumer demand and buying power. In general, descriptive studies involve two types: longitudinal and cross-sectional. Longitudinal studies rely on panel data which is simply a fixed sample of individual or some other entities form who repeated measurements are taken. Cross-sectional studies, or sample survey, rely on a sample of elements from the population of interest that are measured at a single point in time. (Gilbert et al., 2005, p.118) We will discuss more about sampling in Chapter 4.1.
2.4 Choice of theories

We have selected theories which will contribute to the understanding and solving of our research questions and problems. Our research area is focus on customer online shopping electronic products. Although there are plenty of previous researches about online shopping, there are not enough researches focused on buying electronic product. This brought some difficulties to find suitable models and theories. Since our research questions are with regard to the factors that influence customers’ attitude towards online shopping electronic product, and the how customers’ attitude influence their intention when shopping electronic product online. Therefore, we divided our theoretical framework into three parts. The first part is start with online shopping attitude and intention. We found out different definitions of online shopping attitude and intention. For example, there are three forms of online shopping intentions which are intention to purchase (Kim & Park, 2005), intention to spend more time at the online store (Wolfinbarger & Gilly, 2001) and intention to recommend the online store to other (Stone, 1954). Knowing these different definitions and forms of online shopping attitude and intention can help us have a clear picture of these concepts. Furthermore, in order to investigate the relationship between attitude and intention, in other word, how attitude influence intention. We use “Theory of planned behavior model” (Ajzen, 1985) to understand the link between attitude and intention.

After we have enough knowledge about online shopping attitude and intention, we continue to search for the factors that influence online shopping electronic products in order to solve research question two. We have found out different determinants such as trust, perceived risk, shopping experience, product perception, service perception and web quality.

In the last section of our theoretical framework, we summarized the first two parts and develop a new model- the framework of online shopping behavior for electronic product (Figure 3). This model is based on Ajzen’s (1985) “Theory of planned behavior model” and we added different factors also.

Although there are not so many “pure theories” presented in this thesis, we include different explanations of several concept, such as online shopping intention and attitude. This will also create an understanding of chosen area. More literature review will be presented in the following chapter.
CHAPTER 3: THEORETICAL FRAMEWORK

The growth of using internet offer consumers a wide and effective platform to gain information, it is worthy to mention that more and more customers are changing their shopping way from traditional store to online shop. Thus, the study of e-commerce for consumers is becoming a valuable topic to discuss among the researchers. In this research, the authors reviewed and utilized a large amount of previous researches which are concerned within the research fields of online buying behavior, determinants, and conceptual model. What's more, the authors attempt to mainly concentrate on identifying the factors which affect the consumers’ buying behavior for electronic products in Internet shopping. The following content presents respectively what the factors are and how these factors influence the consumers’ attitudes when they are buying in online stores, what's more, all the elaborations and argumentations are supported and based on empirical studies.

3.1 Online shopping attitude and behavior

Attitude is an immediate determinant of intention to perform a behavior (Ajzen, 1991, p. 201). Previous researches demonstrate that attitudinal factors have been tested and shown to be significant predictors of retail patronage intentions. For example, in the research of Shim, Eastlick, Lotz and Warrington (2001), in the context of internet shopping, consumers’ attitudes toward internet shopping affected their intentions to purchase via the internet. The positive attitude toward the internet shopping significantly increased intention to use the internet for purchasing. In other words, the more positive attitude of consumers toward a brand or store, the higher intentions to buy the brand or at the store. In conclusion, attitude toward Internet shopping will positively predict intention to use the internet for product information search. In the following section, we will illustrate online shopping attitude and intention and their relationship respectively.

3.1.1 Online shopping attitude

Attitude is defined as a kind of individual’s overall impression and evaluation for electronic product online shopping, which could be expressed in positive or negative way, or even more emotional feeling like favorable or unfavorable way. In a previous research, the researchers defined that there are three ways to measure consumers’ attitude, firstly, “regarding the hedonic aspect that could be measured by items of fun/frustrating, enjoyable/not enjoyable and, interesting/boring, while for the utilitarian aspect could be measured by items such as safe/risk, ordered/chaotic, wise/foolish, and reliable/unreliable and the overall aspect could be measured by items such as useful/useless, pleasant unpleasant, entertaining/weary, and nice/awful” (Huang, 2005, p.841-847)
According to previous researches, there are many different categories for the determinates of attitude toward online shopping, take the researches of Limayem (2000) and Shergill and Chen (2005) as examples, which illustrate trust, shopping experience, perceived usefulness, ease of use, perceived risk, customer service and website design, all these factors are commonly used in surveys to investigate their relationship with the online shopping attitudes. Therefore, based on many previous researches, we avoid overlapping factors, and picked up the most representative ones applying into our research, which are trust, perceived risk, web quality, shopping experience and product and service perception. All of these factors will be explained in detailed in chapter 3.2.

3.1.2 Online shopping intention

Purchase intention measures have been used frequently to identify buying likelihood for products within defined time periods (Whitlark, Geurts & Swenson, 1993, p. 19). At the beginning, the consumers’ good attitude of online shopping positively decides the consumers’ buying intention. Furthermore, the buying intention will affect the consumers’ final buying decision and actual buying behavior. Apart from that, the evidence also proves that online buying intention and customer satisfaction influence interact to each other. In general, consumers’ intention can be expressed in terms of intention to purchase, intention to spend more time at the online store and intention to recommend the online store to others (Kim & Kim, 2008, p.131).

Intention to purchase

The relationship between intention to use the internet for information search and intention to use the internet for purchasing was found in the online pre-purchase intentions model developed by Shim et al. (2001, p. 411). Intent to search via the internet contributed a substantial portion of the variance explained in internet purchase intention. Consumers who report intentions to search a product possess higher actual buying rates than consumers who report that they have no intention of searching (Whitlark et al., 1993, p. 21). In addition, consumers tend to search more information from the internet when purchasing products online (Kim & Park, 2005, p.111; Lohse, Bellman & Johson, 2000, p. 21).

Previous studies (Kim & Park, 2005; Lohse et al., 2000) also suggested that an intention to search the internet for product information leads to an intention to purchase through the same medium. Therefore, information search and its selected channel should be considered extremely crucial elements leading to a choice in purchase format.

Intention to spend more time at the online store

There are substantial differences between shoppers and non-shoppers in the time spent with their computers and on-line. Shoppers use computers more, are on-line more, and are more comfortable with both computer and Internet use. This may indicate that the
amount of the internet use for information search influences purchasing behavior online. (Lohse et al., 2000, p.21).

Online shoppers express that they could fully examine various options for product purchases through online shopping, compared to the offline shopping context (Wolfinbarger & Gilly, 2001, p. 40). On the hand, information is an important resource for consumers, so they search information to reduce uncertainty about sources, product features, prices and brand before making decision. Customers also actively look out for promotional offers. Therefore, they may spend more time at the online retailer to explore alternatives or to examine the detailed product information to fulfill their utilitarian needs (i.e. making right decisions) and/or intrinsic motivations (i.e. enjoy searching for more product info for itself). (Kim & Kim, 2008, p.131).

**Intention to recommend the online store to others**

One facet of our conceptualization of behavioral intention toward the online store was willingness to recommend the online store to others. Positive word-of-mouth (WOM) for online retailers has been one of the most effective formats of advertising. It has been demonstrated that WOM has a significant effect on online behavioral intentions. Kim and Kim (2008) found out that the more consumers feel confident with shopping at the online store, the higher behavioral intention will be toward the online store, indicating that consumers are more willing to recommend the online store to others. Stone (1954) also revealed that WOM of the retailer’s online operations had the dominant effect on online trust and the effect was found to be much stronger than that of offline trust. In contrast, consumers with a low level of online purchasing experience were more likely to engage in higher levels of negative word of mouth, if they felt dissatisfied after a service failure incident. In general, online WOM is becoming an important marketing tool for retailers these days, and it is much more powerful than offline WOM because it affects many people over a short period of time (Kim &Kim, 2008, p.137).

**3.1.3 Theory of planned behavior model (TPB)**

The theory of planned behavior is a theory about the link between attitudes and behavior developed by Ajzen (1985, 1991). Symbolically, the TPB model is presented in Figure 2 where it is illustrated that each of the determinants of intention, i.e. attitude to behavior (AB), subjective norm (SN) and perceived control (PBC) is, in turn, determined by underlying belief structures.
According to TPB, attitude toward the target behavior and subjective norms about engaging in the behavior are thought to influence intention, and TPB includes perceived behavioral control over engaging in the behavior as a factor influencing intention. (Azjen, 1991, p.180). More specifically:

- Attitudes to behavior (AB): AB is a positive or negative evaluation of performing that behavior. It is determined by the sum of the expected outcomes, and is weighted by an evaluation of the desirability of the outcome. (Azjen, 1985, p.20)

- Subjective norm (SN): The SN, like AB, are also based on salient beliefs, called normative beliefs, about whether particular referents think the respondent should or should not do the action in question. Norms are informed by normative beliefs and motivation to comply. (Azjen, 1985, p.26)

- Perceived behavioral control (PBC): an individual’s perceived ease or difficulty of performing the particular behavior. It is assumed that perceived behavioral is informed by beliefs about the individual’s possession of the opportunities and resources needed to engage in the behavior (Azjen, 1991, p.185).

Furthermore, TPB also includes a direct link between perceived behavioral control and behavioral achievement. Given two individuals with the same level of intention to engage in a behavior, the one with more confidence in his or her abilities is more likely to succeed than the one who has doubts (Azjen, 1991).

### 3.2 Factors influence customers’ attitude

As we mentioned in the previous section, there are several determinants of online
shopping. Apply to our research, we divided those factors into customer-oriented factors and technology-oriented factor. Customer-oriented factors include trust, perceived risks, shopping experience and product perception. Technology-oriented factors include web quality and service perception. Both customer-oriented and technology-oriented factors are believed to impact the customers’ online buying behavior and will be discussed in the following section.

3.2.1 Trust

There are seven previous researches contributed to trust factor description, however, we can see that the category of trust online based on different criteria and refers to different aspects. Different researches gave different descriptions for the online trust, even though the general statements of online trust from different researchers are similar in some extent, everyone contributed some new things in the term of feature, dimension, element and role of trust. Another reason why we listed a variety of categories from different scientific articles is that collecting different views from previous studies can get a deep insight for the “trust” concept more clear and comprehensive, which is helpful to conduct a further research with respect to online purchasing electronic products.

Kim and Benbasat (2003) identified four categories of trust related issues: “personal information, product quality and price, customer service, and store presence”. In the case of e-commerce shopping, Ang, Dubelaar, and Lee (2001) built three dimensions of trust which improve the perception of trust on the internet. The three dimensions include the ability of the online merchant to deliver a product or service that performs as promised, the willingness of the online merchant to rectify should the purchase not meet the customer’s satisfaction, and the presence of a privacy policy or statement on the web site.

In the research of Kim, Song, Braynov, and Rao (2001), it claimed that there were six dimensions of online trust, namely information content, product, transaction, technology, institutional, and consumer-behavioral. The division of dimensions is different from other literature about trust online, because it broken down into many sub-dimensions or properties. The most important worth to mention is that the researchers built the theoretical framework of online trust, covering the different stages that a consumer went through to complete an online transaction. Kim et al. (2001) proposed that consumer could perceive trust before, during, or after the online transaction, furthermore, the researchers emphasized that different determinants of trust were associated with different stages of the transaction.

According to a study was conducted by Ba and Pavlov (2002), which involved 95 experienced eBay buyers, the result reported that trust can be built by the positive and negative feedback about the sellers, their offers and delivery service. It also states that positive feedback was associated with greater trust in a seller than was negative feedback, presented to the buyer subjects as experimenter-controlled reputation profiles.
According to the statement above, we can see that the different divisions of online trust are similarity and overlapped in some extent. To sum up, the whole process of online transaction security, vendor’s reputation and capability, privacy and customer’s feedback should be considered by consumer perceiving online trust, however, apply to our research, we picked up transaction security, consumer privacy and vendor’s reputation and capability as the three most important elements of trust to test their importance of affecting customers’ attitude, when the consumers purchasing online for electronic products.

3.2.2 Perceived risks

The following researches declare different perceived risks online shopping; a single research is not convincible to be a theoretical support to our research. Thus, we reviewed and compared the previous researches, and combined the valuable elements including in the perceived risks to apply into our research.

According to the research of Grobe, Douthitt and Zepeda (1999), it reports that determinant of consumers’ willingness to buying online, individuals, both experts and non-experts, who differ their perceptions of risks depending on the nature of the online product. In the research, it shows that 40 percent of respondents were concerned about financial losses and 25 percent were concerned about the quality of product. Another research which was conducted by Shergill and Chen (2005), it illustrates that in the customers’ point of view, risk perception of online shopping mainly concerns the online transaction security, the privacy and security of customers’ personal information, and the potential risk for the product quality, because they cannot check the product quality online.

Miyzaki and Fernandez (2001) made surveys to figure out the variances in different perceptions by contrasting the relationship of Internet experiences with perceived risk and online purchasing patterns. The survey revealed that the perception of system security was the biggest fear of online shopping, especially to the threat of third-party fraudulent behavior and the leak of credit card information. The inconveniences of online shopping is the second, the over privacy concerns and the fraudulent behavior of line retailers respectively ranked third and fourth.

Previous studies also reported that brand name as a risk reducer. Consumers tend to employ extrinsic cues when they do not have much knowledge about the product category (Dean, 1999, p. 1). The study of Dawar and Parker (1994) presented that brand name is the most important signal across cultures when consumers feel uncertainty about products. Landes and Posner (1987) stated that brand name can help consumers reduce search cost and cognitive effort when making product evaluation, what’s more, can reduce their perception of risk about product quality. The research conducted by
Erdem and Swait (1998) shows that consumers have a higher purchase probability for a well-respected brand than for a less well respected brand due to awareness of the brand name can significantly reduce the perceived risk.

All in all, according to the statement of these researches findings, perceived risks involve in many different aspects. Concerning with the most common elements cause the online risks, the security of online transaction systems, fraudulent behavior of online retailers, and the uncertainty of product and service, unawareness of brand name are four elements which could highly increase the online risk and decide the final consumers online shopping behavior. Through the comparison of the elements of trust and perceived risks, it is obvious to see that trust is interwoven with risk (McAllister, 1995, p. 25) It is not difficult to see that raising trust means reducing risk, these two factors affect to each other, thus all the sellers would like to gain more consumers’ trust through lowing risk in different aspects as much as possible. (Ganesan, 1994, p. 3). For our research, we avoided the overlapped elements from trust and perceived risk, trust is regarded as the main factor which highly represents and covers uncertainty and risk as well. Therefore, in our research, only trust factor will be discussed and examined for the electronic product online shopping instead of talking both conducting trust and perceived risk factors

3.2.3 Shopping experience

Miyazaki and Fernandez (2001) states that “ higher Internet experience and the use of other remote purchasing methods are related to lower levels of perceived risk toward online shopping, which in turns results in higher online purchase rates.

Ahmad’s (2002) research presents certain aspects of online shopping experience from consumers’ perspective, specifically, concentrates on the consumers’ react to service failures and initiative to enhance the online service recovery. The researcher figured out that the factors which would cause a bad online shopping experience. Through the responses of the shopper who had bad experience when they shopped online, the researcher presented that the factors are involved in such as late deliver, defective product, and partial order; meanwhile, the shoppers also have bad experience that the online shop’s customer service representative made no efforts to fix problems. In addition, the survey also presents that the respondents who had problems with online shopping, they choose to contact the online shops by using telephone, and emails to communicate, however, the results indicates that customers prefer to use the telephone to communicate. All the respondents can get the reply by email from the companies, but response time could rank from a few minutes to six days.

Consumers’ online activities are very easy to be affected by their online experience, previous online experience left positive or negative impression in customers’ memory in some extent, this impression highly influence consumers’ actual buying behavior, thus customers’ emotional feeling could lead a conversion from product navigation to
purchasing. (Wolfinbarger & Gilly, 2001, p.44 ;). Wolfinbarger and Gilly’s research (2001) indicated that impulsive buying seldom happen on the goal-oriented consumers, but they enjoy the freedom and control, while the experiential online shoppers enjoy the surprise and excitement of the shopping experience. Positive affect make task-oriented online shopping consumers have less time to browse and search related information online before their actual buying behavior, however, negative affect make task-oriented online shopping consumers focus on pure entertainment more than really purpose of actual shopping online. According to the brief description of these studies, it is not difficult to see that the shopping experience could affect the consumers’ emotion which decides if the consumers can convert the emotion into purchasing behavior. Most of the online experience refers to the service aspect of online shopping; furthermore, a bad shopping experience could be harmful for the image of the online store and affect the ongoing buying behavior in the same website.

### 3.2.4 Product perception

“Customers’ online shopping behavior is impacted by the product features which are variety of goods, product quality/performance/product uncertainty, product availability, price, social presence requirement, product presence requirement, dependability of product, possibility of customized product and brand” (Liang & Huang 1998, p.33; Lowengart & Tractinsky, 2001, p. 20; Muthitacharoen, 1999, p.533).

Firstly, the product can be characterized by using the distinction between search-goods versus experience-quality goods (Nelson, 1974, p.732-735). This distinction concerned with how product quality can be determined. Quality can be determined in advance before the consumers buy or use (e.g., thickness of cloth), which is search goods. The quality of some other products cannot be determined prior to purchase and use (e.g., sharpness of an image on a television screen). Thus, the researcher defined that search goods are products whose physical characteristics are known prior to purchase (e.g., book), while experience goods have some uncertainty with respect to their quality of higher likelihood of physical malfunctioning (e.g., a computer). For our research, electronic product belongs to the experience goods, since customer cannot tell the product quality, function and performance until purchasing and using. (Lowengart & Tractinsky, 2001, p.142).

Liang and Huang (1998) claimed that online consumers have ability to get more information about both price and non-price attributes, which presents a more prominent advantage of online to offline shopping. More information about prices could decide the consumer price sensitivity for undifferentiated products. In the same way, more information about non-price attributes could reduce price sensitivity for differentiated products. Therefore, for electronic product online shopping, it offers consumers a platform to get more price information and more opportunities to make price comparison between products.
Brynjolfsson, Hu and Smith (2003) pointed out that increased product variety made products available through electronic markets can be a larger source of consumer surplus gains. The researchers gave an online book store example, the number of book titles available at Amazon.com is more than 23 times larger than the number of books on the shelves of a typical Barnes & Noble superstore, and 57 times greater than the number of books stocked in a typical large independent bookstore. The online consumers can easily locate, evaluate, order, and receive millions of books that are not available on the shelves of local bookstores. The researchers’ analysis figured out that the increased product variety of online bookstores enhanced consumer welfare by $731 million to $1.03 billion in the year 2000.

For our research, electronic product online shopping also highly concerned with product perception, we focus on the product perception in term of four aspects: product price, product quality, product availability and product variety. We would like to examine the four aspects through our survey in order to see how these aspects affect the consumers’ buying behavior when they make decision for purchasing electronic product online.

3.2.5 Service perception

Researchers (Ho & Wu, 1999; Liang & Huang, 1998; Lohse & Spiller, 1998; Kim et al., 2001; Muthitacharoen, 1999) tested different service factors concerning online shopping attitudes and behavior, including “(1) customer communication channels/ease of vendor contact, (2) response to customer needs, (3) accessibility of sales people, (4) reliability of the purchasing process/process uncertainty, (5) timeliness of orders or services/waiting time, (6) availability of personalized services, (7) ease of return and refunds, (8) fraud, (9) delivery (speed, tracking and tracing), (10) transaction costs, (11) peripheral costs, and (12) promotion”

Through the review of above theoretical information, product and service perception refers to a wide range, which is mainly related to twelve factors. The authors picked up customer communication channels, ease of return and refunds, and delivery tracking. All of these factors should be considered when design the product and service perception on the internet.

3.2.6 Web quality

For the web quality factor, we used four previous researches to describe the elements which are related to web quality and how they affect the consumers’ buying attitude and intention.

Ranganathan and Ganapathy (2002) claimed that the principles of designing a B2C web site highlight three important issues: ease of navigation of the web site, time taken for navigation and page download, and use of multimedia to improve its visual appeal. B2C
web sites provide electronic means of interactivity to consumers, meanwhile, B2C web sites should incorporate appropriate security measures and adopt privacy practices in order to develop consumer trust, thus, an effective B2C web site should be qualified with three factors: easy to navigate, consumer less time in searching, and have an aesthetic appeal. According to the survey conducted by Ranganathan and Ganapathy (2002), the result revealed security as the most important factor. Providing non-online modes with provision of individual accounts with logon-ID and password for consumers can attract more consumers to their web sites. Privacy is the second highest discriminate, which is a key factor discriminate between high and low purchase intents of online shoppers. Thus, more attention should be paid to guard consumers’ privacy when designing website. The third one is information content which represents another predictor of online purchase intention and differentiates competing ones.

Zhang, von Dran, Small, and Barcellos (2000)’ research showed that the main objective is to exam if the web quality can affect the consumers’ satisfaction, the researchers divided the web design into two different factors: hygiene factor and motivator factor. Hygiene factors are mainly related to function and service aspect of a website, take some example to explain further, it could concern consumers’ privacy and transaction security, ease of navigation, and useful information of the web content. In turn, motivator factors include five specific factors which are empowerment, web appearance, arrangement of web content, entertainment, and reliability. Through reading the result of the research, the conclusion told us hygiene factors are voted as the most influencing to the web quality by the online consumers. In another similar research conducted by Liang and Lai (2000), they reviewed the website quality factors and added a new group based on the previous category, in addition to hygiene and motivator factors, media richness factors as a third one to contribute by adding more information channels or richness in information presentation. What’s more, they suggested providing good transaction support which will help internet vender to beat their competitor, while they should highly consider the hygiene factors if they want to attract consumers from traditional stores.

In the survey of Song and Zahedi (2001), the authors developed the belief structures about online shoppers’ behavior and used them to provide a theoretical framework for categorizing web design elements. Through analysis of the belief structures, the authors further discussed information interpersonal influence in order to show how the changes in shoppers’ beliefs through the manipulation of web design elements could change their purchase intentions via changes in their attitude, subjective norm, and perceived behavioral control. According to the conceptual model the researchers developed, they identified five belief constructs “perceived price, perceived service, information interpersonal influence, self-efficacy and resource” may influence the web design elements.

In summary, web quality refers to many technological functions of the web design, as Zhang, Von Dran, Small, and Barcellos (2000) mentioned user satisfaction perspective
as a standard instrument to measure the website quality. Through combination of these research findings, we summarized that the web quality can be divided into hygiene and motivator factors. For hygiene factors, we emphasized ease of navigation, use of multimedia, and information content. For motivator factors, we concentrated on enjoyment and visual appearance. The two categories for web quality can be applied into our research to exam the website quality of electronic products online shopping.

3.3 The framework of online shopping behavior for electronic product

With the blooming of online shopping, more relevant researches are increasing and intent to investigate how to gain more new potential consumers and still keep the existing ones, consumer-oriented and technology-oriented are two important considerations involve in many researches. For the consumer-oriented, it concentrates on consumers’ salient beliefs towards online shopping, which could affect consumers’ attitude and buying intention. For the technology-oriented, it concerns how to develop specific technology aspects to improve the online shopping function and service. The technology aspects cover many factors related to web quality, such as ease of navigation, web appearance, use of multi-media. As we see from the statement above, it is easy to see that customer-oriented and technology oriented enhances to each other. Apply to our research, we adopt both technology-oriented and consumer-oriented view of online shopping in this study. Online retailers should get to know more about how to utilize these factors to increase the consumers’ online buying intention, and how to develop effective business and marketing strategy to reach the goal of retaining old consumers, and attract more potential new consumers.

Through developing the model, we stated the prediction and explanation about consumer acceptance of online shopping for electronic products. To summarize, we developed a model (See Figure 3) that can report and help the readers form a holistic view to the influencing factors-attitude-buying intention.

As Figure 3 shows, there are two main core concepts which are attitude and intention towards online shopping. In the attitude section, according to an amount of previous research, we adopted two aspects of factors which are technology-oriented and customer-oriented. Since there are too many factors involved in both aspects according to previous researches, we decided to narrow down to 16 factors and investigated. Those technology-oriented factors involve web design and service perception; customer-oriented factors include trust, shopping experience, product perception and customer demographic. Table 1 shows those factors in a more detail. There are two reasons why we chose the factors above, firstly, through reviewing the studies conducted before, these factors have very high rate to be considered when consumers make the buying decision for online shopping. Secondly, based on the nature of electronic products, the consumers would pay much more attention to these factors. Therefore, we selected these factors, and would like to further exam which ones are more important for the actual purchasing behavior online for electronic product. In the
intention section, there are three ways to lead the buying intention as the model presents, intention to spend time on online, intention to purchase online and intention to recommend the online store to others.

According to the connection of influencing factors-attitude-buying intention in the model shows, it can be seen that the model synthesized the mixed factors which are related to consumer acceptance online buying. Furthermore, the model reveals that the actual online shopping behavior results from a systematical process in the term of forming by many different factors, which decide the final online buying behavior. Through the model, it is easy to get to know the relationship and how to connect to each other for those different factors. It is very significant to mention that there is one streamline which runs through the whole process: technology-oriented factors and customer-oriented factor can influence consumer’s attitude towards buying electronic products. And then, intention can be established based on the existing attitude. Eventually, buying intention brings out the actual buying behavior; such finished actual buying behavior can be treated as another finished shopping experience to lead another shopping cycle for the next time.

Figure 3. The model of online shopping behavior for electronic product
Table 1. Factors influence online purchasing electronic product

<table>
<thead>
<tr>
<th>Customer-oriented factor</th>
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<tbody>
<tr>
<td><strong>Trust</strong></td>
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<tr>
<td>• Transaction security</td>
</tr>
<tr>
<td>• Customer privacy</td>
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<tr>
<td>• Vender’s reputation and capability</td>
</tr>
<tr>
<td><strong>Shopping experience</strong></td>
</tr>
<tr>
<td>• Satisfaction</td>
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<tr>
<td><strong>Product perception</strong></td>
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<tr>
<td>• Product quality</td>
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<tr>
<td>• Product price</td>
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<tr>
<td>• Product variety</td>
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<td>• Product availability</td>
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<table>
<thead>
<tr>
<th>Technology-oriented factor</th>
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<tbody>
<tr>
<td><strong>Web quality</strong></td>
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<tr>
<td>• Ease of navigation</td>
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<tr>
<td>• Use of multi-media</td>
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<tr>
<td>• Useful web content</td>
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<tr>
<td>• Enjoyment</td>
</tr>
<tr>
<td>• Web appearance</td>
</tr>
<tr>
<td><strong>Service perception</strong></td>
</tr>
<tr>
<td>• Customer communication channels</td>
</tr>
<tr>
<td>• Ease of return and refunds</td>
</tr>
<tr>
<td>• Delivery channel</td>
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</tbody>
</table>
CHAPTER 4: PRACTICAL METHOD

This chapter will present the methodological framework used for collecting and analyzing the data in order to solve the research problem and answer the research question. The overall methods available to obtain data will be presented and explained before selecting the appropriate ones. The chapter starts with sampling, sample design and sample size. Afterwards, data analysis will be presented. Lastly, an analysis around the validity and reliability of the study will be presented in the end.

4.1. Sampling

Our target group is the students in Umeå University. University students were selected since, from the practitioner’s perspective, these young adults are potential valuable customers for online retailers because they are likely to present strong purchase power on online stores.

Sample techniques can be divided into two broad categories of probabilities and non-probability sample. Probability sample (also commonly called random samples) are distinguished by the fact that each population element has a known, nonzero chance of being included in the sample. It is not necessary that the probabilities of selection be equal, only that one can specify the probability with each element of the population will be included in the sample. With non-probability samples, in contrast, there is no way of estimating the probability that any population element will be included in the sample, and thus there is no way of ensuring that the sample is representative of the population. All non-probability samples rely on personal judgment in the process. (Gilbert et al., 2005, p.324) In this study, we employed non-probability sample technique since it seemed to be suitable as the questionnaire would take place in Umeå University campus, such as cafeteria and library. Also, as sampling frame is unknown, in other word, we do not have a complete list of the population who has online shopping electronic products experience. Hence, probability sampling cannot be applied to the study.

4.2 Sample design

There are four main procedures that used in the design of samples, they are stratification, clustering, imposing quotas and staging. Stratification is a random sampling technique in which simple random subsamples are drawn from separate groups; clustering is the random selection of cases or unites in geographically concentrated areas. Random sampling with quotas means the imposition of quotas on a set of cases that were initially selected on a random basis. Lastly, multistage sampling means taking a sample in two or more stages. (Kent, 2007, p. 233) Apply to our research, we conducted respondent into multistage sampling. First, we selected respondents by area and Umeå University campus is a good choice since students are easy to access in there, and we can minimize travel time due to the time restraint. Then the selected region is divided into four parts
which are according to the four faculties of the university. Hence, sampling took place in USBE building, KBC building, Humanity building and Medicine library. And the number of respondents from different faculty is 62 for each. We employed multistage sampling since such procedure is useful where population is widely dispersed. Also, it is quicker, cheaper and relatively simpler to administer than other procedures (Kent, 2007, p.239).

The respondents were asked to respond to a questionnaire in Umeå campus between April 19th to April 21st according to the schedule below.

Table 2. Schedule for gathering of questionnaires

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Place</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010.04.19</td>
<td>10.00-12.00</td>
<td>USBE building</td>
<td>62</td>
</tr>
<tr>
<td>2010.04.19</td>
<td>13.00-15.00</td>
<td>KBC building</td>
<td>62</td>
</tr>
<tr>
<td>2010.04.20</td>
<td>10.00-15.00</td>
<td>Humanity building</td>
<td>62</td>
</tr>
<tr>
<td>2010.04.21</td>
<td>13.00-16.00</td>
<td>Medicine library</td>
<td>62</td>
</tr>
</tbody>
</table>

4.3 Sample size

Determining the size of sample that is needed for a particular piece of research is a complex issue. Kent (2007) suggests that for any kind of quantitative analysis, a minimum sample size of 100 or so is needed even to be able to calculate simple percentages for each variable. In thinking about sample size it is helpful to draw a distinction between:

- The size of sample attempted or drawn from a list
- The number of questionnaire returned
- The number of usable returns

Considering the large number of factor above, we decided to distribute questionnaire to 250 undergraduate students in Umeå University and we got 248 responses. So 248 is considered to be our sample size, and the returned rate is quite positive (nearly 100%). In order to control the number of usable return, we tried to design the questionnaire which is easy to answer, and we also provided extra explanation to the respondents who have difficult to answer the questionnaire. In turn, this would also allow achieving a minimum sampling error and a maximum of accuracy in this research.
4.4. Data collection

Data can be collected in different ways depending on if it is primary or secondary data it is to be collected. Primary data is collected especially to answer the purpose and research questions of the current study. This data must be gathered by the researcher of the study at hand and can be done by observation, interviews or questionnaires. Secondary data is data that has been collected earlier, to fulfill the purpose of some other study. (Saunders et al., 2007, p. 246) To achieve the data necessary to accomplish the purpose of this thesis are both primary and secondary data used. How primary and secondary data was collected to this study will be described in the two following sections.

4.4.1 Primary data collection

Primary data can be collected through observation, interviews and questionnaires (Saunders et al. 2007, p. 282). Questionnaire can be distinguished by several methods, such as interview, telephone, post and online. For this data collection the decision was to use an interview questionnaire, meaning that face-to-face, personal contact with respondents should be involved. (Grattion & Jones, 2005, p.119-122) We asked the questions which are read out from the questionnaire, and recorded the responses by ticking appropriate boxes or noting down answers in the space provided in the questionnaire. We decided to collected data by using interview questionnaire for the following reasons: first, personally administrated questionnaire ensure that all questions are asked in the required order, and that all applicable questions are asked. Secondly, we can encourage respondents to answer as fully as possible and check, as appropriate, that the question is correctly understood. Thirdly, the response rate is consistently higher than for other methods of questionnaire administration. Last but not the least, we can usually persuade respondents to complete the interview. However, collecting primary data is time consuming. It takes us several days from the start-point of initial plan to the end-point in order to get results. So it is much longer than the time it takes to acquire secondary data. The other drawback of collecting primary data is the difficult to reach every target group. For us, it is impossible to find all the people to be involved in this research.

Questionnaire in marketing, as an instrument with which to capture date generated by asking people questions and systematically noting their responses, has been a method of conducting social research. The total number of research questions is nineteen, which was mainly divided into two sections. The first section starts with questions 1 to question 4 about personal background information; the second section including fifteen questions related to consumer behavior online shopping toward electronic product, which were designed based on “the framework of online shopping behavior for electronic product”, in other words, every question of the questionnaire derived from corresponding theoretical support.

When designing a questionnaire, there are two kinds of question formats can be uses, one is fixed choice question and the other is open-ended question. In our questionnaire, we employed fixed-choice questions which give respondents a list of possible answers from which to choose.
Filter questions can be used when you meet the situation that you don’t want to miss the potential respondents, but some of your questions are inapplicable to certain respondents, thus you should consider avoiding the potential respondents reading large numbers of irrelevant questions. Using filter questions can minimize the time taken to complete the questionnaire and reduce the potential frustration that respondents may feel when reading through a number of questions that don’t apply to them. (Grattion & Jones, 2005, p. 124). In our research, question 7 is to take advantage of this type of question to divide the respondents into two groups, so that the researchers can analyze the response more logically.

Liker scales generally is used to assess attitudes. It also can be used to measure the extent to which participants agree or disagree with a particular statement, and are useful for questions where there may be no clear responses, such as “yes” or “no”. The scale could offer a five-item or seven-item scale to make the respondents to tick the appropriate point on the scale that matches most closely their feelings or attitudes. (Grattion & Jones, 2005, p. 123). In our questionnaire, question 9, 10, 11, 12, 15 and 17 are liker scales. However, Likert scale has its possible shortage. For example, scores on 5-point Likert scales are affected by some dogmatic respondents. Those people tend to choose extreme values or their favorable responses, such as “strongly agree” and “neutral”. Therefore, we tried to avoid this situation by designing more types of questions like multiple questions and ranking questions. (Grattion & Jones, 2005, p. 143)

The second section is the most important in our research; the categories were built upon the different factors influencing consumer online shopping behavior toward electronic products. Question 5 to question 7 is concerned with indirectly examining the intention of electronic product online shopping. Question 7 is dividing line which separated the respondents into two groups, one is experienced shoppers who bought electronic product online, and the other is inexperienced shoppers who have not bought electronic product online. Thus, experienced shoppers will go to question 9, and inexperienced shoppers will go to question 8, if the inexperienced shoppers are not willing to start to buy electronic product online, they will stop to fill up the questionnaire, in turn, the experienced shoppers will jump to question 12 to continue the rest of questions. Question 8 and question 9 is to separately test the experienced shoppers and inexperienced shoppers’ online buying intention for electronic product. Question 10 and 11 is to measure the likelihood and satisfaction level for experienced shoppers for the electronic product online shopping. Respondents’ attitude of buying electronic product online can be examined by question 12. Question 13 and 14 regards to reveal the most important factors in trust and product perception, when the participants want to buy electronic product online. Question 15 to question 18 is mainly related to the service perception; meanwhile, they also refer to test the technology- oriented factors in the customers’ point of views. The final one is to get to know the most popular commerce sites for electronic products the respondents often visit.

4.4.2 Secondary data collection

For many research questions and objectives the main advantage of using secondary data is the enormous saving in resources, in particular time and money. Secondary data also provide me more time to think about theoretical aims and substantive issues. Further, it can be useful to compare data that have been collected with secondary data, meaning
that we can place our findings within a more general context or, alternatively, triangulate findings. However, the disadvantage is that the data may not fit the problem perfectly and that accuracy may be more difficult to verify for secondary data than for primary data. (Saundert et al., 2007, 257-259.)

When searching for secondary data, we usually adopt several sources. For example, before we started writing the theoretical framework, we want to have a deeper understanding of the research problem and research background. So we browsed different online retailer web sites such as Komplett and Webhallen, as well as printed material with the purpose of gaining knowledge about online shopping. In order to form the conceptual framework of this study, an extensive search of literature and articles was conducted through the library of Umeå University, using their online search system. Several Marketing and Management Journals, for example, Journal of Business and Industrial Marketing were also searched using the full-text online database Emerald. These data bases supplied us with a great amount of secondary sources, which later developed into the foundation of our literature review. Several key words were used independently when searching for articles. Those are listed below:

- Online shopping
- Internet shopping
- Attitude
- Intention
- Word of mouth (WOM)
- Trust
- Shopping experience
- Product quality
- Product price
- Web quality
- Service perception

4.5 Data analysis

Data analysis is the process whereby researchers take the raw data that have been entered into the data matrix and create information that can be used to tackle the objectives for which the research was undertaken. The researchers should take the raw data to present in the form of tables, charts or graphs in order to be observed the total distribution on a single variable or the pattern of relationships between two or more variables. (Kent, 2007, p. 296-297)

For our research, the collected completed questionnaires as the raw data were analyzed. The researchers input the raw responses into computer through a survey analysis package SPSS (Statistical Package for the Social Science). Firstly, the researchers arranged the questionnaires through categorizing by four different majors, and each question of the questionnaire needed to be pre-coded, and each alternative should be coded with a number. Secondly, all questions should be defined by labels and variable names. Then, one researcher read the numerical code, the other one input it, the entire process lasted for 6 hours.

During the process of analyzing, the researchers utilized different functions, such as frequencies, descriptive, crosstabs, bivariate and correlations. The main objective to use frequencies and descriptive functions is to get the percentiles, and measures of central
tendency (mean, median, and mode), and create histograms to make the readers more directly understand the data that the researchers want to show. For instance, the researchers used frequencies and descriptive functions to analyze all the general information in order to get the percentage of different variables, which can be used to explain the tendency and centralization for the represents’ situation. The crosstab function can be presented as a table of data in which we count the frequency of intersection of variable categories. For instance, buying intention and gender is to test if gender makes a difference in whose buying intention for electronic product online, furthermore, the researchers tried to measure how much difference it makes. That’s what crosstabs are for. The correlation was used to find a correlation between at least two continuous variables.

According to the statement above, it is easy to see that SPSS is a very useful tool to measure the data and convert it in the term of various tables, bar charts and pie charts so that the readers gain a clear overview of the interpreted data. In addition, the most important is that the researchers can give prediction and recommendation based on the overview,

4.6. Validity and reliability

A measure is valid to the extent that variability in scores among objects reflects the true differences of the characteristic being measured (Gilbert et al., 2005, p. 293). Validity is especially important in experimental research, which addresses specific questions about causality. William, and Campbell (2005) distinguished four types of validity: statistical validity, construct validity, external validity, and internal validity. (Table3)

Table 3. Types of Validity (William, Cook and Campbell, 2005, p. 38)

<table>
<thead>
<tr>
<th>Type of Validity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical</td>
<td>The accuracy of the p-value on which a statistical decision is based</td>
</tr>
<tr>
<td>Construct</td>
<td>The degree to which the theory or theories behind the research study provide(s) the best explanation for the results observed</td>
</tr>
<tr>
<td>External</td>
<td>The extent to which the results of a particular study generalize to other people, places, or conditions</td>
</tr>
<tr>
<td>Internal</td>
<td>The extent to which we can be confident that the observed changes in the dependent variable were due to the effects of the independent variable, and not to the effects of extraneous variables</td>
</tr>
</tbody>
</table>
Statistical validity addresses the question of whether the basis for a statistical decision is reasonable and dependable. A statistical decision is based on probability. If alpha is set at .05, it means that you will reject the null hypothesis if there is less than a 5% chance of it being correct. To help to reduce threats to construct validity, a researcher should use clearly stated definitions and carefully build hypotheses on solid, well-validated constructs. The theoretical bases must be clear and well supported, with rival theories carefully ruled out.

In the study we conducted, primary data was collected in the term of questionnaire and our target participant group focuses on the students of Umeå University. The design of questionnaire is based on different sources which are to make sure that the questions included in the questionnaire serve the purpose of the research as directly as possible, and can be supported by the theory we used. Scientific articles and the factors from the new model we built toward electronic product online shopping behavior were used as base for the questions. These theories are valid and offer the researchers an effective instrument to measure the study and questionnaire. Therefore, through the reviews of those sources including scientific articles and books, the researchers used them to apply in the thesis to enhance the content validity for the research.

Reliability is an index of consistency we should see correlations between two measures of the same concept when we use the same measure. (Gilbert et al., 2005, p. 295) The basic methods for establishing reliability can be classified according to whether they measure stability of results over time or internal consistency of items in an attitude scale. Stability over time is assessed by repeating the measurement with the same instrument and the same respondents at two points in time and correlating the results. (Aaker, Kumar & Day, 2004, p. 304)

The objective of reliability is to minimize the errors and biases in the research. The data collection is from both primary and secondary date. The primary data was collected via questionnaire among a focus group. Firstly, the survey lasted for one week at USBE hall of Umea University (Library Entrance). In order to minimize the participant error, the researchers conducted the survey at different times from different working days. As thus, the participants can cover the students as many as possible; meanwhile, it avoided the biases of special time and student group visiting library. Secondly, the survey was conducted only by us. Before distributing the questionnaire, we discussed how to persuade people to answer the questionnaire in a proper manner. And then, we use the same opening words to start with the conversation. Therefore, the risk of observer error was reduced.
CHAPTER 5: ANALYSIS AND DISCUSSION

This chapter presents all the empirical findings from this study. It mainly includes the findings from primary data which was collected by conducting in a quantitative method of a questionnaire among 248 students in Umeå University. The chapter is divided according to the research questions, meanwhile it also make the findings accord with the research model of online shopping behavior for electronic product (Figure 3). The first section illustrates the demographic of respondents which provide the general information about the respondents including their gender, age and monthly income. The second section presents the findings for the first research question one “what are the factors highly affect purchasing electronic products over internet”. The third section is about research question two “how customers’ attitude towards online shopping electronic products does influences their intention of starting/continue to buy electronic product online”. The third part is to give suggestions connected to research question three, to help the online retailers to overcome the drawbacks of online shopping and increase the potential sales of online stores. The last section is a summary about the comparison between the theoretical studies with the findings.

5.1 Demographic of respondents

The questionnaire involves two major divisions, one part is general information of respondents, and the other part is specific questions regarding customers’ attitude, intention and different influencing factors of online shopping electronic product. There are four questions in the general information part, which separately are gender, age, monthly income and major. All of these demographics information need to be offered by the respondents and the aim is to give a clear picture to the readers about the respondents’ general information.

The following figure of gender shows that the percentage of male and female is similar; nearly half and half; the age mainly centralized in the range of 21-25 years old, and almost 68% of the respondents have 5001-10000SEK monthly income. Since our research was conducted in Umeå University which mainly divides into Humanity, Social Science, Tech & Science and Medicine & Health department, we made the questionnaire reach those faculties, and we randomly select gender in each faculty. In order to make our collected data easier to analyze, moreover, to avoid errors and biases result from the unequal respective samples, we selected the same number of sample, 62 for each faculty.
5.2 Factors influence customers’ attitude

As we mentioned in the theoretical section, there are customer-oriented factors and technology-oriented factors that influence consumer online shopping electronic products. In this section, we will explore what specific factors that are included in customer-oriented and technology-oriented factors highly affect customers’ attitudes toward electronic products over the internet.

5.2.1 Trust

Question 13 is concerning with consumer trust towards buying electronic product online. Respondents were asked to rank three important elements according to their perceived importance, and those elements are transaction security, vendor’s reliability and capability, and customer privacy. From Appendix 1, we can see that transaction security is considered to be the most important factor that influences customer’s trust when purchasing electronic products online since there are 64% of respondents take
transaction security into account. Meanwhile, vendor’s reliability and credibility become 47% of respondent’s the second important factor influence their trust. Furthermore, 72% of respondents take customer privacy as their third important factor that influence their trust towards online shopping electronic products.

We would like to know which factors of trust have the relationship with customers’ attitude towards electronic product online shopping. Table 4 below presents the relationship between attitude and transaction security, vendor’s reliability, and customer privacy separately. The null hypothesizes are shown as following,

*Ho1: There is no relationship between customers’ attitude and transaction security.*

*Ho2: There is no relationship between customers’ attitude and vendor’s reliability and credibility*

*Ho3: There is no relationship between customers’ attitude and customer privacy*

Table 4. Relationship between attitude, transaction security, vendor’s reliability and credibility, and customer privacy

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Attitude</th>
<th>Transaction security</th>
<th>Vendor’s reliability and credibility</th>
<th>Customer privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Pearson correlation</td>
<td>1</td>
<td>.238**</td>
<td>.108</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.119</td>
<td>.644</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>211</td>
<td>211</td>
<td>211</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

As we seen from Table 4 above, there is a relative strong and significant association between transaction security and attitude, because the p-value is .000 (<0.01) and Pearson correlation is, 238. While other two factors vendor’s reliability and credibility and customer privacy have no relationship with attitude. Therefore, Ho1 is rejected, Ho2 and Ho3 are not rejected, in other words, transaction security is the only factor among the three factors of trust which highly influences the customers’ attitude towards electronic product shopping online.

5.2.2 Shopping experience

Respondents who had experience of online shopping electronic product were asked to evaluate their previous experience of online purchasing electronic product (Question 10).
The result is quite positive since there are 45% of respondents who were satisfied with previous experience and 42% of respondents who were very satisfied with previous experience. Despite 2% of respondents did not satisfy at all, we can still draw conclusion that the overall previous experiences of customers are very positive and optimal. (Figure 5)

![Satisfaction towards previous experience](image)

Figure 5 Satisfaction towards previous experience

In order to test the relationship between customers’ intention to continue purchasing and satisfaction with previous buying experience, we applied correlation function to “intention to continue to buy electronic product” and “satisfaction”. The null hypothesis will be:

**Ho4: There is no relationship between intention to continue purchasing and satisfaction**

| Table 5. Correlation between intention to continue purchasing and satisfaction |
|-----------------------------------|---------------------------------|-----------------|
| **Correlations**                  | Intention continue to buy electronic product | Satisfaction |
| Intention to continue buy electronic product | Pearson Correlation | 1 | .523** |
|                                   | Sig. (2-tailed)               |       | .000  |
|                                   | N                              | 175   | 174   |
| Satisfaction                      | Pearson Correlation           | .523**| 1     |
|                                   | Sig. (2-tailed)               |       | .000  |
|                                   | N                              | 174   | 174   |

**. Correlation is significant at the 0.01 level (2-tailed).**
Table 5 above indicates the correlation between intention to continue purchasing and satisfaction towards previous experience of online shopping electronic product, and there is a relative strong (.523) and significantly (p<0.01) association between intention to continue purchasing and satisfaction.

To test whether the assumption of higher level of satisfaction would yield more intention of continue online shopping electronic products, a chart was constructed and it is visible that respondents who are satisfied with previous experience will have more intention of continue online shopping electronic products than who has less satisfaction. (Figure 6 below) Hence, satisfaction toward the previous shopping electronic product experience is positively related to internet shopping electronic product intention.

![Graph](image)

**Figure 6.** Higher level of satisfaction can yield more intention of continue purchasing

### 5.2.3 Product perception

In order to know the factors that can influence customer’s product perception and which factors is the most important, we designed Question 14. The result is shown in Appendix 2. Product price and product quality were chosen as the most important factors influence consumer’s product perception by 45% of respondents respectively. Never the less, product price was taken as the second important factor as product by 47% of respondents. When it comes to the third important factor that influences customer’s product perception, there were 48% of respondents considered product availability to be the third important factor. Lastly, 59% of the respondents thought product variety is the least important factor influences product perception.

In order to test the relationship between attitude and each factor of product perception, we applied correlation function separately to each factor “product quality, product price, product variety and product availability”.
**Ho5:** There is no relationship between attitude and product quality.

**Ho6:** There is no relationship between attitude and product price.

**Ho7:** There is no relationship between attitude and product variety.

**Ho8:** There is no relationship between attitude and product availability.

Table 6. The relationship between attitude and product quality, product price, product variety and product availability

<table>
<thead>
<tr>
<th>Correlations</th>
<th></th>
<th>Product Quality</th>
<th>Product Price</th>
<th>Product Variety</th>
<th>Product availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.341***</td>
<td>.374***</td>
<td>.039</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.572</td>
<td>.074</td>
</tr>
<tr>
<td>N</td>
<td>211</td>
<td>211</td>
<td>211</td>
<td>211</td>
<td>211</td>
</tr>
</tbody>
</table>

**.*** Correlation is significant at the 0.01 level (2-tailed).

The result shows in Table 6 above that Ho4 and Ho5 are rejected, because there is relatively strong correlation between product quality and attitude (.341), as well as product price and attitude (.374). The correlation is significant (p<0.01). The other two Ho6 and Ho7 are not rejected; there is no relationship between attitude and product variety and product availability. Thus, only product quality and product price can affect customers’ attitudes towards electronic product online shopping.

5.2.4 Service perception

We want to examine the factors that influence customer’s perception of online retailer’s service, especially the retailers who sell electronic product online. As we mentioned in the theoretical part, communication channels such as Email and telephone, ease of return and refund, as well as delivery channels are the important elements that can influence customer’s perception towards online retailer’s service. In order to find out the importance of each factor, we designed Question 15 by asking respondents to value each factor on a 1-5 Likert scale, where 1 stands for “the least important” and 5 stands for “very important”. Figure 7 demonstrates the mean value of each factor. In general, the entire factors are very important since the mean values are above 3.6 out of 5. “Ease of return and refund” is the most important factor since it scored the highest with value of 4.24. Other factors “Communication channel” and “Delivery channel” were scored very closely with values of 3.63 and 3.78.
The three factors of service perception need to be tested if they have relationship with customers’ attitude toward electronic product online shopping. The null hypotheses are shown as following:

Ho9: There is no relationship between attitude and communication channels

Ho10: There is no relationship between attitude and ease of return and refund

Ho11: There is no relationship between attitude and delivery channels

Table 7 presents the value of significance of each factor of service perception, ease of return and refund, and delivery channels have relationship with customers’ attitude, Ho10 and Ho11 are rejected, because the p-values are separately .000 and .039 (<0.05). Therefore, these two factors positively affect customers’ attitude. However, communication has no significant relationship with customers’ attitude; Ho 9 cannot be rejected.

Table 7. The relationship with attitude and communication channels, ease of return and refund, and delivery channels

<table>
<thead>
<tr>
<th></th>
<th>Attitude</th>
<th>Communication channels</th>
<th>Ease of return and refund</th>
<th>Delivery Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Pearson</td>
<td>.043</td>
<td>.580*</td>
<td>.142*</td>
</tr>
<tr>
<td>Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.531</td>
<td>.000</td>
<td>.039</td>
</tr>
<tr>
<td>N</td>
<td>211</td>
<td></td>
<td>211</td>
<td>211</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
5.2.5 Web quality

When profiling how web quality influences customers online shopping electronic products, we referred to several topics to cover as many aspects as possible. Hence, favorite way of communication, factors influence customers choosing a website, favorite payment method and favorite websites will be discussed in the following section.

Favorite way of communication

When it comes to online shopping electronic product, there are several ways of communicating with online retailers. We listed the most common communication tools which are Email, Telephone and Messenger. Then, we asked respondents to choose their favorite way of communicate with online retailers among the three options. Figure 8 below indicates the results. Obviously, respondents hold consistent opinions. Email has been voted for the most popular communication tool by 63% of respondents. Telephone was the in the second place as 32% of respondents considered it to be the most efficient communication tool. However, there are only 3% picked Messenger as their best option.

Figure 8. Favorite ways of communication

Factors influence customers choosing a website

Figure 9 below demonstrates the mean values of the factors influence customer choosing a website for shopping electronic products online. The respondents had to answer how important those factors are on a 1-5 Likert scale. The mean values vary from 2.43 to 4.07, where “fun experience” is the lowest and therefore the statement that the respondents think it the least important. “Easy to navigate” scored the highest of all the mean values, which indicate that the respondent agreed mostly with the
statement “I feel that browsing a online store which sells electronic products is a fun experience”. Besides, “Useful web content” and “Website appearance” are the second the third highest with the value of 3.96 and 3.71. Through reviewing these entire mean, it is not difficult to see that the mean of easy to navigate, useful web content and website appearance is very close. These three factors of choosing a website basically have equally important position in consumers’ minds.

Figure 9. Factors influence choosing a website

Table 8 shows the relationship between customers’ attitude towards electronic product online shopping and factors of influencing choosing a website. There are five factors which are “separately easy to navigate, useful web content, fun experience, multimedia and website appearance”. The null hypotheses are shown in the following as well:

*Ho12:* There is relationship between attitude and easy to navigate the website

*Ho13:* There is relationship between attitude and useful web content

*Ho14:* There is relationship between attitude and fun experience

*Ho15:* There is relationship between attitude and multimedia

*Ho16:* There is relationship between attitude and website appearance

The analysis results show that “useful web content” and “website appearance” have relationship with attitude; especially “website appearance” has very strong and positive relationship with customers’ attitude, because there are relative strong correlative relationships between useful web content and attitude (.374), as well as website appearance and attitude (.219). Moreover, those relationships are significant at 000 and .001level. Hence Ho13 and Ho16 are rejected, while Ho12, Ho14 and Ho15 cannot be rejected, which indicate “easy to navigate, fun experience, and multimedia” these
three factors influencing choosing a website can not affect the customers’ attitude towards electronic product online shopping.

Table 8. The relationship between attitude and factors of influencing choosing a website

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Attitude</th>
<th>Easy to navigate</th>
<th>Useful web Content</th>
<th>Fun experience</th>
<th>Multimedia</th>
<th>Website Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.053</td>
<td>.374**</td>
<td>-.019</td>
<td>.018</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.442</td>
<td>.000</td>
<td>.781</td>
<td>.792</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>211</td>
<td>211</td>
<td>211</td>
<td>211</td>
<td>211</td>
<td>211</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Favorite payment method

We want to understand the popular payment method and service by asking respondents Question 18. There were 211 out of 248 respondents answered this question, the rest 37 respondents do not have experience of online shopping electronic product. We asked them to pick three payment method and service they had used the most in the past. Some of respondents picked top three, while others only choose one or two options. Therefore, we got 525 responses in total. Among these answers, Internet bank considered to be the most popular since it was mentioned 169 times and took up 32.2% of all responses. Credit/Debit card was in the second place, where it was mentioned 146 times and took up 27.8% among responses. Paybal was the third most popular payment method which had 14.1% of responses. (Figure 10)

![Figure 10. Favorite payment methods](image-url)
**Favorite websites**

We found out the popular websites customers usually go to when purchasing electronic product online by asking respondents Question 19. As it is a multiple question, respondents choose more than one option. Figure 11 below demonstrate the results. Overall, there were 448 responses which covered the most popular websites customers often go to. Among these websites, customers go to Elgiganten’s website the most (19.2% responses accounted for Elgiganten). Komplett and Dustin home took up 15.4% of responses respectively and to be the second most popular websites that customer usually go to. Other websites that did not printed on the questionnaire but raised up by respondents are CDON, NetonNet, and Tradera. And still take up 10.7% of responses.

![Favorite websites chart](image)

Figure 11. Favorite websites

**5.3 Online shopping attitude and intention**

When exploring customer online shopping behavior towards electronic product, shopping attitude and intention are the most important elements in the buying process. In the following section, we will illustrate online shopping attitude and intention respectively, and the relationship between attitude and intention.

**5.3.1 Online shopping attitude**

**Attitude of inexperienced shoppers**

The participant sample of the research is totally 248, which is divided into two groups from Question 7 (‘‘Have you bought electronic product online?’’), one group includes 179 respondents who have experience of buying electronic product online, and the other group includes 67 respondents who have no online shopping experience of electronic
product. Respondents have no experience of electronic product shopping online who were asked to answer Question 8 which is concerned with how their willingness is toward starting purchasing electronic products in the future. There are three options of Question 8: “Yes, definitely”; “Probably”, and “No”. The respondents selected “No”, who will stop to answer the rest of questions. If they choose other two options, they will continue to answer the rest questions from Question 12.

Figure 12 shows that the attitude of inexpeired shopper who will start to purchase electronic product online (“yes, definitely”) do not differ significantly from the attitude of those inexperienced shopper who will probably start the purchase (“probably”), because these two groups voted each scale of attitude in a similar percentage. For instance, we can see that for each scale of attitude the percentage of “yes, definitely” group and “probably” group give or take no more than 10%, besides the scale of “don’t like it” which is about 14%. However, it is easy to see that “yes” group and “probably” group intensively voted the neutral attitude for electronic product online shopping. Therefore, we cannot affirm that inexpeired shopper who has strong intention to start to buying electronic product online will yield more positive attitude than inexperienced shopper who has less intention.

In conclusion, the shoppers have no previous experience of electronic product online shopping whose positive attitude cannot completely decide to form high buying intention, in turn, negative attitude is not necessarily to lead to a low buying intention. Consequently, inexperience shoppers’ attitudes don’t not affect their buying intention directly.
**Attitude of experienced shoppers**

Question 11 is concerning with general attitude towards online shopping electronic product. This question yield positive results. Over all, there were almost 67% of respondents have a positive attitude towards buying electronic products online, meanwhile, 26% of respondents held neutral opinion. There were only 6% respondents who do not like online purchasing electronic product. Therefore, the experienced shoppers have very positive attitude for electronic product online shopping. (See Figure 13 below)

![Figure 13. Attitude towards online shopping electronic product (Experienced shopper)](image)

**5.3.2 Online shopping intention**

**Buying intention of inexperience shoppers**

In figure 14, we can see that there are only 6% of inexperienced respondents who will definitely start purchasing (yes, definitely), and almost 42% of inexperienced shopper will probably buy the electronic product online. It is easy to see that there are 54% of respondents without experience of buying electronic products online who would not consider starting to buy it in the future at all. Thus, the respondents have not bought electronic product online, a nearly fifty-fifty chance they would consider to try to start to buy it.
In this section, we aim to examine if “intention to purchase”, “intention to spend more time at the online store” and “intention recommend the online store to others” these three terms can express experienced shoppers’ online buying intention toward electronic product. We used correlation function to respectively test the relationship between Question 9 and 5, Question 9 and 6, Question 9 and 10.

**Ho17:** There is no relationship between intention and spending more time on the internet

**Ho18:** There is no relationship between intention and frequency of shopping online

**Ho19:** There is no relationship between intention and recommend to others

The results are proved in Table 9 that the correlation are relative strong and significant at .038, .024 and .000 level respectively which indicate spending time at online store, frequency of online shopping and recommend to others have relationship with intention to continue to buy. Especially recommend to others has a very strong and positive relationship with intention. Therefore, the findings verified that if an experienced shopper spend more time at online store, has high frequency of shopping online and is highly willing to recommend commerce sites to others, which indicates the shopper has very strong intention to continue to buy electronic product online.
Table 9. Correlations between intention to continue to buy and spending time online, frequency of shopping online and recommend to others

<table>
<thead>
<tr>
<th></th>
<th>Will continue to buy electronic product online</th>
<th>Spending time on the internet</th>
<th>Frequency of shopping online</th>
<th>Recommend to others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will continue to buy</td>
<td>Pearson Correlation</td>
<td>.157*</td>
<td>.171*</td>
<td>.499*</td>
</tr>
<tr>
<td>electronic product online</td>
<td>Sig. (2-tailed)</td>
<td>.038</td>
<td>.024</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>175</td>
<td>175</td>
<td>175</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

As the correlation presented above, “recommendation to others” highly expresses a strong intention to continue to buy electronic product online, we go further to analyze to what extent the experienced shoppers would like to recommend commerce sites to others and to what extent they are willing to continue to buy electronic product online, furthermore, we can verify that “recommendation” and “willingness to continue” affect each other positively.

The following bar chart indicates the mean value for respondents’ willingness to continue to buy electronic product online and the likelihood to recommend commerce sites to others. It is obviously to see that the mean value for both of these two variables are 4.01 and 4.33, which are quite high, because the answers for both Question 9 and 10 are on 5-point Likert scale, respectively ranging from “definitely not continue to=1, definitely continue to =5” and “definitely will not recommend =1, and definitely will recommend=5”. Therefore, most of the respondents with experience of shopping online for electronic product have a positive evaluation, they would like to repeat to buy in a serious possibility, meanwhile, they would like to recommend the commerce sites to their friends.

Figure 15. Recommendation and willingness to continue
Online shopping intention and actual buying behavior

Question 5 and 6 is concerned with the respondents’ time spending on the internet and the frequency of shopping online. Through the analysis between Question 5 and 7, and Question 6 and 7, the significant objective is to figure out if these two variables would affect the shoppers’ buying behavior on electronic product online. Firstly, we can see the following two tables, Table 1 in Appendix 3 is to test if the relationship indeed exist between the time spending on the internet and the actual buying behavior for electronic product shopping online, the other Table 2 in Appendix 3 is to test if there is relationship existing between the frequency of shopping online for general products and shopping online for specific product—electronic product. The results tell us “online shopping electronic product” has strong correlation with both of these two variables (“Spending time on the internet” and “frequency of shopping general product online”). And “online shopping electronic product” also has significant relationships with those two variables (p<0.01). Apparently, “frequency of shopping product online” has much stronger relationship with “online shopping electronic product” (.338).

According to Figure 16 below, it shows the relationship between frequency of shopping online and actual buying behavior of electronic product shopping online. When comparing experienced shoppers and inexperienced shoppers for electronic shopping online, it can be seen that the inexperienced shoppers rate their frequency of shopping online lower than experienced shoppers, meanwhile, the inexperienced shoppers have similar percentage for each range of frequency of shopping online, however, experienced shoppers have prominent difference on each range, especially, once a month and 4-6 times a year centralizes almost 76% of shoppers, thus, the finding also indicates that more frequently shopping online would result in more likelihood to have actual buying behavior on electronic product online.

Figure 16. Frequency of shopping online and actual online buying behavior for electronic product online
Online shopping intention and Demographics

Through the analysis concerning buying intention and different aspects of demographics, the findings came out that gender is the only factor which affect the respondents’ buying intention, while the relationship of other factors like age, major and income and buying intention is not significant, in other words, age, major and income cannot decide the respondents’ buying intention in a high extent.

![Buying intention and Gender](image)

**Figure 17. Buying intention and gender**

Figure 17 above apparently presents that about 81% of male respondents who have experience of electronic product online shopping, and male respondents are almost 20% more than female respondents. Thus, it can be seen that male shoppers have more intention than female respondents to buy electronic products online.

### 5.3.3 The relationship between attitude and intention

In the previous section, we mentioned the customers’ attitude and intention towards online shopping electronic products. In this section, we will further investigate the relationship between customers’ attitude and intention.

**Inexperienced shoppers’ attitude and intention**

The following Table 10 presents correlation between the inexperienced shoppers’ intention to buy electronic product and their attitude toward electronic product online shopping. The null hypothesis is shown below:

*Ho20: There is no relationship between intention to start to buy and attitude.*
Apparently, the p-value is .598 which means these two factors have not significantly relationship. Ho20 is supported. Therefore, the finding proved again that the inexperienced shoppers’ intention cannot decide their attitude toward electronic product online shopping.

Table 10. Correlation between intention to start and attitude

<table>
<thead>
<tr>
<th></th>
<th>Intention to start</th>
<th>like</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to start</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.598</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>69</td>
<td>33</td>
</tr>
<tr>
<td>like</td>
<td>Pearson Correlation</td>
<td>-0.095</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.598</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>33</td>
<td>211</td>
</tr>
</tbody>
</table>

Experienced shoppers’ attitude and intention

Respondents who had experience of online shopping electronic product were asked to determine their level of continue to purchase electronic products online on a five point Likert scale. All together 82% of respondents will continue to purchase. 11% respondents held a neutral opinion and there are only 6% respondents would not continue to purchase electronic product online. (Figure 18 below)

![Figure 18. Extent to continue purchasing](image-url)
Since both respondents’ intention to continue purchasing attitude towards online shopping electronic product indicated very positive results. We want to explore whether there was a positive relationship between these two variables.

**Ho21: There is no relationship between intention to continue to buy and attitude**

Table 8 below indicates there is a strong the correlation (0.598) and significant (p<0.01) between intention to continue and attitude towards online buying electronic product. Thus we confirm that intention to continue purchasing and attitude towards online shopping electronic product have significantly and positively relationship.

<table>
<thead>
<tr>
<th>Table 11. Correlation between intention to continue to buy and attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlations</strong></td>
</tr>
<tr>
<td>Intention to continue to buy electronic product online</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Furthermore, to test whether the assumption of better attitude would yield more intention of continue online shopping electronic products, a chart was constructed and it is visible that respondents with better attitude will have more intention of continue online shopping electronic products than who has negative attitude. (Figure 19) Hence, attitude toward the internet shopping electronic product is positively related to internet shopping electronic product intention.

**Figure 19. Better attitude can yield more intention of continue purchasing**

Count

Count

0 10 20 30 40 50

do not like at all do not like it neutral like it like it very much
da

Attitude
5.4 Compare findings with theory in literature review

![Diagram showing the research model: online shopping behavior for electronic product]

**Attitude towards online shopping**

- Transaction Security
- Vender’s reliability and credibility
- Customer privacy
- Communication channels
- Ease of return and refund
- Delivery Channels
- Product Price
- Product Quality
- Product Variety
- Product Availability
- Useful web content
- Easy to navigate
- Fun experience
- Web Appearance
- Multimedia
- Shopping experience

Figure 20. Test result for the research model: online shopping behavior for electronic product
The first research question is concerning with the factors that highly affect customers’ attitude towards purchasing electronic product via Internet. In the literature review part, we summarized five main factors in customer-oriented aspects and technology-oriented aspects. These main factors are trust, shopping experience, product perception, service perception and web quality. Each main factor has some sub factors. (Table 1) According to our research, all these main factors have highly affects customers’ attitude towards online shopping electronic product. However, not all the sub factors can influence customers’ attitude. Figure 20 above demonstrates the results of testing the model.

First, we will start with “trust”, as Kim, Song, Braynow and Rao illustrated (2001), transaction security, customer privacy, vendor’s reputation and capability are the sub factors under trust. Among these elements, customers value transaction security the most. When it comes to the factor influences customers’ attitude, however, only transaction security has significant relationship (p<.001) with attitude. The finding consists with the theory from Kim, Song, Braynow and Rao (2001), because in their research they also emphasized the importance of transaction security to customers. Similarly, product quality and product price, as the division of product perception, are the only factors that can influence customers’ attitude with significant correlation (p< .001). In the research of Liang & Huang (1998) and Lowengart & Tractinskky (2001), they also claim that product quality and product price as main product features impact the customers’ attitude and online shopping behavior. Meanwhile, satisfaction, i.e. shopping experience, also has a significant relationship with attitude, this finding corresponds with the theory of Wolfinbarger & Gilly (2001). From technology perspective, useful web content, web appearance, ease of return and refunds, and delivery channel are all tested have significant relationship with customers’ attitude. It is also worth to mention that customer value these factors as the most important factor when online shopping electronic product. In Ranganathan and Ganapathy’ research (2002), they also illustrated that these four factors we mentioned above have highly affect to the customers’ emotion and motivation towards online shopping.

The second research question is “How does customers’ attitude towards online shopping electronic products influence their intention of starting/continue to buy electronic products online?” In order to answer the research question, we will draw the conclusion from two aspects. One is from the people who have the experience of online purchasing electronic product, i.e. experienced shopper; the other is from the people who don’t have the experience, i.e. inexperienced shopper.

Firstly, the findings show that the inexperienced shoppers’ attitudes to electronic product online shopping have nothing to do with their buying intention and final actual buying behavior. In other words, even though the inexperienced shoppers have very strong online buying intention to electronic product, they could still only have neutral or even negative attitudes to it, in turn, even if the inexperienced shoppers have weak buying intention, they could have positive attitude for electronic product online shopping. Therefore, for inexperienced shoppers, their attitudes cannot decide their buying intention and to bring out the final actual buying behavior. In contrast, the experienced shoppers’ attitudes towards online shopping electronic product significantly affect the buying intention and final actual buying behavior, furthermore, a positive attitude lead to a strong willingness to continue to buy electronic product online, this finding corresponds with the theory of planned behavior model (TPB) (Azjen 1991, p.180), because attitude as an important determinant to affect intention.
Secondly, the result indicates the buying intention of experienced shoppers are quite strong, because the willingness of continuing to buying electronic products online for these experienced shoppers highly reflect their buying intention, more than half the respondents said they definitely would like to continue to purchase in the future. What’s more, they greatly would like to recommend the commerce sites to their friends. What’s more, through the findings we found that no matter whom the experienced shopper or inexperienced shoppers, their buying intention has no relationship with the time spending on the internet, however, has a significant relationship with the frequency of general shopping online. Go further and explain that a shopper whether who has or has not experienced of electronic product online shopping, as long as he /she has a very high frequency of shopping online, no matter what he or she purchases, the shopper will has higher possibility to buy electronic product online than others who doesn’t often buying any product online. Compared with the theoretical part refers to Whitlark, Geurts & Swenson’ research (1993) , they claimed that spending more time at online store, intention to purchase online and intention to recommend the online store to friends can be used to express high buying intention, however, our research reject that spending more time online can lead to high online buying intention, while our finding support with other two theoretical points that intention purchase online can lead to high online shopping intention toward electronic product, and highly recommend to others the online stores can also lead to high intention to buying electronic product online.

Concerning the last research question, we would like to give some suggestions to online retailers. First of all, drawbacks do exist in online shopping process indeed, through our analysis we found out that comprehensively perceiving customer oriented and technology-oriented factors can help the online retailers to highly overcome the drawbacks. In a fierce e-commerce competition, how to improve all aspects of functions of online store and attract more customers is the most important for the online retailers. In order to raise effectively positive customers’ attitude toward electronic product online shopping, the online retailers should take some important factors into account. Firstly, in customer-oriented part, transaction security is an effective factor to make the customers more trust the electronic product online shopping. Thus, the online retailers should make effort to transaction security process. Product quality and price as other two included in customer-oriented part draws customers’ attention as well, customers’ positive attitude results from high product quality with low price largely. The guarantee of product quality can highly enhance the customers’ positive attitude toward electronic product online shopping. Only pay attention on customer-oriented part is not enough, technology-oriented factor as same as important with customer-oriented part. The ease of return and refund to customer, delivery system, website appearance, web content are the most important technology factors that highly affect customers’ attitude. All of these four factors are included in technology-oriented, as online retailers, they should improve the technology aspect on their online stores, just like what we mentioned, service technology aspect refers to the ease of return and refund, and delivery system, web quality technology aspect refers to the design of web appearance and web content. For more detailed statement, we will illustrate in the implications part of Chapter 6.2.

Last but not the least, through discussing and answering research question, an updated and modified model for online shopping electronic product is presented below (Figure 21):
Figure 21. Modified model of online shopping behavior for electronic product
CHAPTER 6: CONCLUSIONS

In this chapter, we will try to answer the purpose and the research question of this thesis. We will begin with presenting general conclusion and implication. Further, recommendations concerning the future will be provided. Finally, a general evaluation on how well we managed to answer to the research and sub questions.

6.1 General Conclusion

With the blooming of online shopping activities, the electronic product online market takes a high percent of individuals shopping on it. Understand the customers’ online shopping behavior for electronic product field, improving the important specific factors influencing the electronic product online shopping and overcoming the potential drawbacks will help the online retailers become more competitive. Therefore, our study is to investigate the specific factors affecting customers’ online shopping attitude to electronic product and figure out the relationship between the buying attitude and intention among the experienced and inexperienced shoppers. We believed that our findings can offer the online electronic product retailers a detailed picture about how to make effective efforts on specific factors to lead the customers to have positive attitudes toward electronic product online shopping and form strong buying intention toward electronic product.

This research was undertaken with the purpose of identifying and getting insight into what main specific factors influence customers’ attitudes toward electronic product online shopping, and how the customers’ attitude affect their online buying intention towards electronic product. Through the test of the research model we created, we gained the findings that in the customer-oriented factors ‘transaction security’, ‘product quality’, ‘product price’ are the main specific factors influence customers’ attitudes toward electronic product online shopping; while in the technology-oriented factors ‘ease of return and refund’, ‘delivery channels’, ‘useful web content’, and ‘website appearance’ are the main specific factors influence customers’ attitudes toward electronic product online shopping.

Concerning with the relationship between attitude and buying intention, firstly, our findings showed that for inexperienced shoppers, their attitudes cannot decide their buying intention and to bring out the final actual buying behavior. In contrast, the experienced shoppers’ attitudes towards online shopping electronic product significantly affect the buying intention and final actual buying behavior, furthermore, a positive attitude lead to a strong willingness to continue to buy electronic product online. Secondly, the result indicates the buying intention of experienced shoppers are quite strong, because the willingness of continuing to buying electronic products online for these experienced shoppers highly reflect their buying intention, more than half the respondents said they definitely would like to continue to purchase in the future. What’s more, they greatly would like to recommend the commerce sites to their friends.
6.2 Implications

According to the description of the research findings for customer oriented and technology-oriented factors, and the relationship between customers’ attitude and online buying intention, the answers of three research questions as good considerations and suggestions can be taken by online retailers in order to understand better their existing and potential customers, meanwhile, through reviewing our research findings, the online retailers can get to know which specific factors can highly affect customers’ attitude and how to take advantage of the specific factors to gain customers’ positive attitude toward electronic product online, then reach the goal of increasing sales of online store.

Based on our research findings, among customer-oriented factors, transaction security comes to the first element to be considered when the shoppers choose online shopping for electronic product. Since the transaction process is complex which involves before, during, and after stages, the online retailers should guarantee to provide customers a safe and accurate transaction, including the product selection with correct color, size and type should correspond to customers’ required, the contact information should be right, finally money and personal information transaction must be under a security monitor. Product quality and price are the most important factors concerning to product perception that customers really care about. The online retailers should try their best to avoid the intangible drawbacks of online shopping through offering high quality products with reasonable or even competitive price to raise their credibility in customers’ minds.

For technology-oriented factors, the online retailers should guarantee the ease of return and refund to customers, to make the money can return to customers’ accounts online securely and rapidly, thus, a good customer feedback and money return online system should be integrated. What’s more, product return is very easy to conduct in a traditional store, but not very easy for online store, the online retailers should ensure the delivery system can fix this kind of returning problem, the most important is to give customers impression that the return product online is as convenient and fast. In addition, a good website is also a plus point for an online store, especially the construction of web design should rapidly guide the customers to get what they want to buy, and the web content about the product description should be clear, detailed and credible. Final point should be enhanced is communication way between customers and online retailers, either through email or telephone, the retailers should be available at anytime during the working time, and the communication should be effective to solve the problems the customers have. All of these suggestions are gained from our research findings, the online retailers should consider to take them in account and apply them into their online store, which will make the online store more competitive among a plenty of competitors.

6.3 Recommendations of future research

The outcomes of the research offer the influencing factors that highly affect the electronic online shopping, but the research was conducted only in Umeå University, the sample is also only focused on university students. Thus, the research concentrate on
a narrow target group and area, the further research should take wider places and more
general samples. What’s more, even though our research also consider the demographic
factors, our sample is limited who has similar demographic which is a kind of biases
and not convincible to completely explain the effect of demographics toward the
electronic product online shopping. The further research should take diversity
population sample into the account. This research is related to online shopping, but it
specified to electronic product field, even if the further research will be focused on other
fields, it also can take our research as a basis.

6.4 Evaluation of study

The topic of the work is challenging, and the research questions and sub questions have
been well defined. In this thesis project, we have demonstrated independent skills for
research. The subject and explored is as discussed in the methodology chapter
characterized by quantitative research and hence carries with certain difficulties with
regards to generalization for instance. In order to overcome the difficulties, we read a lot
of literatures and previous thesis, as well ask for our supervisor’s help. Finally, we
managed to finish the thesis. On a personal level thanks must be given to all the friends
that have given motivation when we wrote the thesis. It has been a very interesting
study to conduct and hopefully it will also be compelling to read.
Reference

Books


Articles

Ahmad, S., (2002). Service failures and customer defection: a closer look at online shopping experiences. 12(1), 19-29


**Internet sources**


Appendix

Appendix 1. Factors influence trust

![Factors influence trust (1st)](chart1)

![Factors influence trust (2nd)](chart2)

![Factors influence trust (3rd)](chart3)
Appendix 2. Factors influence product perception
Appendix 3: Correlation between actual buying behavior and time spending and frequency of shopping online

Table 1. Correlation of time spending on the internet and online shopping for electronic product

<table>
<thead>
<tr>
<th></th>
<th>Online shopping electronic product</th>
<th>Spending time on the internet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online shopping electronic product</td>
<td>Pearson Correlation: 1,183**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed): .004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N: 248</td>
<td></td>
</tr>
</tbody>
</table>

| Spending time on the internet | Pearson Correlation: -.183** | 1 |
|                              | Sig. (2-tailed): .004          |   |
|                              | N: 248                          |   |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2. Correlation of frequency of shopping online for general products and online shopping for electronic product.

<table>
<thead>
<tr>
<th></th>
<th>Frequency of shopping online for general product</th>
<th>Online shopping for electronic product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of shopping online for general product</td>
<td>Pearson Correlation: 1</td>
<td>.338**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed): .000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N: 248</td>
<td>248</td>
</tr>
</tbody>
</table>

| Online shopping for electronic product | Pearson Correlation: .338** | 1 |
|                                       | Sig. (2-tailed): .000          |   |
|                                       | N: 248                          | 248                                  |

**. Correlation is significant at the 0.01 level (2-tailed).
Appendix 4: Correlation between intention to continue purchasing and satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Intention to continue purchasing</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention to continue</td>
<td>Pearson Correlation</td>
<td></td>
</tr>
<tr>
<td>purchasing</td>
<td>Sig. (2-tailed)</td>
<td>.523**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>175</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Pearson Correlation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>174</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
Appendix 5. Questionnaire

Online Purchasing Electronic Product Survey
This is a research for a Master’s thesis. The purpose of this survey is to identify and get insight into what main factors online customer takes into consideration when purchasing electronic product online. Therefore, we kindly ask you to put a tick in the box that corresponds to your answer.

General information

1. Your gender is:
   - Male
   - Female

2. Your age is:
   - 20 and below
   - 21-25
   - 26-30
   - 30-35
   - 36-40
   - 41 and above

3. How much is your monthly income? (Average in past 6 months)
   - ≤5000 SEK
   - 5001-10000 SEK
   - 10001-15000 SEK
   - 15001-20000 SEK
   - 20001-25000 SEK
   - > 25000 SEK

4. What do you study?
   - Humanity
   - Medicine/ Health
   - Social science
   - Tech & Science

Online shopping

5. How long do you usually spend on the internet per week?
   - ≤20 hrs a week
   - 21-30 hrs a week
   - 31-40 hrs a week
6. How often do you shopping products online?
   - □ 41-50 hrs a week
   - □ >50 hrs a week

7. Have you bought electronic product online?
   - □ Yes (Please go to Question9)
   - □ No

8. Do you want to start purchasing electronic product online?
   - □ Yes, definitely (please go to Question 12)
   - □ Probably (please go to Question 12)
   - □ No (You may stop here, thanks for your time!)

9. How likely will you continue to purchase electronic product online? (Definitely not continue to=1; Definitely continue to=5)

   1 2 3 4 5
   □ □ □ □ □

10. How likely are you to recommend an e-commerce site (online shop) to your friends? (Definitely will not recommend=1; Definitely will recommend=5)

    1 2 3 4 5
    □ □ □ □ □

11. How satisfied are you with your previous experience towards online purchasing electronic product? (Not satisfied at all=1; Very satisfied=5)

    1 2 3 4 5
    □ □ □ □ □

12. How do/would you like buying electronic product online? (Do not like it at all=1; Like it very much=5)

    1 2 3 4 5
    □ □ □ □ □

13. How will the following factors influence your trust if buying electronic product

   □ □ □ □ □
online? Please rank them according to their importance. (The most important=1; The least important=3)

Transaction security___
Customers’ privacy___
Vendors’ reliability and capability___

14. How will the following factors influence your product perception if buying electronic product online? Please rank them according to their importance. (The most important=1; The least important=4)

Product price ___
Product quality ___
Product variety___
Product availability___

15. To what extent will the following factors influence your service perception if buying electronic product online? (Not important at all=1; Very important=5)

Customer communication channels (Email, telephone, Messenger, etc.)
Ease of return and refunds
Delivery channels

16. What is your favorite way of communicating with online retailer if you have some questions concerning the transaction?

☐ Email
☐ Telephone
☐ Messenger
☐ I don’t know
☐ Others, please specify_______________

17. To what extent will the following factors influence your choice of a website if purchasing electronic product online? (Not important at all=1; Very important=5)

Easy to navigate
Useful web content
It is a fun experience
Multimedia(Video, picture, flash, etc.)
18. Which of the following services will you use to settle the payment if purchasing shopping electronic products online (*tick the top 3)?

- PayPal
- Invoice
- Internet bank
- Credit/ Debit card
- Cash on delivery
- Home delivery
- Partial payment/account (Delbetalning/ Konto)

19. Which website will you usually go to if purchasing electronic product online (*tick the top 3)?

- Ebay
- OnOff
- Elgiganten
- Komplett
- Webhallen
- Dustin home
- MediaMarkt
- I don’t know
- Others, please specify__________________

Thanks for your time!