

FACTORS INFLUENCING CUSTOMERS  
SATISFACTION IN ONLINE SHOPPING

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SEPTEMBER 2015

Factors Influencing Customers Satisfaction in Online  
Shopping

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A research project submitted in partial fulfillment of the  
requirement for the degree of

Master of Business Administration

Universiti Tunku Abdul Rahman

Faculty of Accountancy and Management

September 2015

Factors Influencing Customers Satisfaction in Online  
Shopping

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# CHAPTER 1

## RESEARCH OVERVIEW

### 1.0 Introduction

With the advent of the information age, the rapid development of science and technology, earth-shaking changes of people's lifestyle and consumer attitudes have also taken place. The application of technology on computer network and telecommunications to commercial field facilitate the emergence of e-commerce, which is a significant evolution. E-commerce has become the latest commodity trading model which provides the fast and convenient shopping channel and creates a new experience consumption for customers. Compared with traditional shopping way, e-commerce has the advantages of fastness, convenience, richness and cheapness. People can buy favorite products online without leaving home, so it is accepted and loved by more and more people. E-commerce leads the traditional business mode reformation and some new increasing area of economy, and has already become the new century retail trade to enhance the enterprise to synthesize the competitive power as an indispensable method.

Currently, e-commerce market has come into a golden time to develop in China. E-commerce sales reached RMB13 trillion, increased by 25 % in 2014, according to the data from the Ministry of Commerce(2014). During this period, the B2C

(business to consumer) model is becoming well-known and popular step by step. Not only the traditional manufacturing but also the rising retail and service industries regarding the e-commerce as a new business manner. Some top retail companies and brand producers are also looking for the opportunities to enter this attractive market in order to hold the front position in the fierce competition.

As a representative of B2C e-business model, online shopping became the rapid development of the people shopping as one of the main ways, which underscores the importance of customer satisfaction as a key factor in designing online retail outlet. Satisfaction is one of the most important consumer reactions in Internet shopping, such satisfaction result in the reflection of the capability to build up customer loyalty (Anderson and Srinivasan, 2003), enhancing word-of-mouth promotion (Bhattacharjee, 2001), hereby repeat buying (Reibstein, 2002) and expansion of the company's volume growth and boost profits (Reichheld and Schefer, 2000). However, different from traditional shopping, online shopping inevitably suffers from a number of disadvantages, for instance the purchasing merely based on the photos that might be distorted from the original one. Furthermore, there is much uncertainty in online shopping: if customer is unable to create real perception of the products, each kind of dissatisfaction would occur if the firm couldn't resolve the problem during customer shopping in time, this unpleasant experience will reduce the repurchase intention for potential customers. Based on this, analyzing the key factors that are affecting customer satisfaction in B2C model as well as providing the recommendations is useful for the development of e-commerce enterprises.

## **1.1 Background of study**

This research is aimed at discovering the determinants of customer satisfaction and its relationship with customer loyalty. In this research, customer satisfaction is the key factor both in traditional business and online business environment. Most

scholars considered that customer satisfaction has a positive impact on loyalty. In marketing science, loyal customers are those who are repeatedly buying with desire and taking activities from one product service, and studies have repeatedly indicated that highly satisfied consumers not only stay loyal longer with company but also talk favorably about the company and its products. It is crucial for business to take their customer satisfaction into account because this will retain customer loyalty, as well as attract potential customers (Guo et al.,2012).

In addition, e-commerce in China is in the period of rapid development, and its turnover has been increasing rapidly year by year. According to the official estimate of online retail sales released by China's Ministry of Commerce, China has become the largest online retail market in the world in 2013, transaction volume in 2013 exceeded 1.85 trillion yuan, accounting for 7.8 percent of total retail sales of social consumer goods. Besides, B2C transactions reached 1.2882 trillion yuan in 2014, accounting for 45.8% of total online-shopping transaction in China, and according to data from IResearch (2014), its market value increased 68.7%, which is much more rapid than C2C market growth rate. Meanwhile, Mckinsey Co (2014) reported that China has as many as 632 million internet users, and the number of online shopping consumers has reached 310 million. Chinese netizen is the one of most active online shoppers in Asian-Pacific region, and most online shopper monthly expense takes up 6%--25% in all expense. Online shoppers has purchased products or services online among which clothing and household were the most popular products (68.1%) followed by general merchandise (39.3%) and digital devices (38.6%), according to Nielsen(2014). It also reflected the e-commerce market huge development potential.

Meanwhile, with the increasing perfection of online shopping market, the advantage of B2C in commercial quality and service assurance becomes more and more clear, customers will have higher recognition on it. It is worth mentioning that Alibaba has been successfully listed in the U.S in 19<sup>th</sup> September 2014, the subsidiary

company--Tmall which is the biggest B2C shopping platform, with one day transactions reaching 57.1 billion RMB in 11<sup>th</sup> November 2014 by Alibaba Group (2014). It can be seen that B2C model will become main trend of online shopping development.

Whether a business can exist forever in the seriously competitive market, customer satisfaction is a key point. For this reason, how to improve customer satisfaction is a key element of faster and better development for online vendors? Online vendors should understand which determinants will influence customers' satisfaction in conducting e-commerce transaction, through which customers' satisfaction can be improved by retaining their loyalty towards the online vendors. In addition, online vendors also need to make better decisions on their marketing plan to attract and keep customers. Thus, the interest of this research is to analyze the factors that affect customers satisfaction as an important element in online transaction and have a positive impact on customer loyalty.

## **1.2 Problem statement**

From the previous discussion, it should be clear that customer satisfaction is crucial to B2C enterprise. The objective of this research is to find what are the factors affecting the customer satisfaction in online shopping activities and examine the relationship between customer satisfaction and customer loyalty.

Although shopping on internet has become commonplace in our life, satisfaction is quite challenging to define and it affects loyalty in online purchasing activities. Most satisfied customers normally have the intention to re-purchase the products if product performance meets their expectation (Syed & Norjaya, 2010). But Chinese customers have some features: they have low sense of security; they take higher purchasing risk because of fake commodities and deceptive advertising; sometimes, the buyer

sometimes is not the consumer; they are price-sensitive buyer; they are more cautious to make the buying decision (Lu, 2005). Therefore, an essential interpretation of the factors influencing customers' degree of satisfaction in online shopping activities is of great importance to online vendors. If online vendors can better understand their customers, they can present products or service more effectively and continuously improve them in order to strength their competitive advantages.

Satisfaction has been shown to be a driving force in online purchases and is therefore of critical interest to online marketers (Yoon, 2002). The research of market orientation and customer satisfaction showed that customer satisfaction and organizational performance were directly connected (Garver and Gagnon, 2002). Therefore, in the competitive e-commerce environment, online vendors need to understand how to meet the needs of customers. It will make them to keep their growth and market share (McKinney et al., 2002). But what determined customer satisfaction in online shopping? Szymanski & Hise (2000) first studies the preconditions of customers' satisfaction in online shopping activities. They examined factors affecting satisfaction of online shopping, which includes information quality, convenience and product provided, security and website design. Based on earlier research, Liu et al.,(2008) investigated the factors of customer satisfaction in e-commerce context in China, and they divided nine factors into three stages with information search stage including information quality, website design and merchandise attribute, purchase stage including transaction capabilities, response, security and payment and post-purchase stage including delivery and customer service. This research aims to identify factors that influence customer satisfaction towards online shopping in B2C model in China.

## **1.3 Research Objective**

### **1.3.1 General Objective**



To analyze the impact degree of factors which influence customer satisfaction and examine the relationship between customer satisfaction and customer loyalty in online shopping activities, especially amongst white collar and university students.

### **1.3.2 Specific Objective**

i. To examine the relationship between company reputation and customer satisfaction in internet shopping activities.

ii. To examine the relationship between website security and customer satisfaction in internet shopping activities.

iii. To examine the relationship between website design quality and customer satisfaction in internet shopping activities.

iv. To examine the relationship between service quality and customer satisfaction in internet shopping activities.

v. To examine the relationship between merchandise attribute and customer satisfaction in internet shopping activities.

vi. To examine the relationship between customer satisfaction and customer loyalty in internet shopping activities.

## **1.4 Research Questions**

The research questions were created and tested in this research in response to the research problems. There are:

- i. How does the company reputation influence on customer satisfaction in online shopping activities?
- ii. How does the website security influence on customer satisfaction in online shopping activities?
- iii. How does the website design quality influence on customer satisfaction in online shopping activities?
- iv. How does the service quality influence on customer satisfaction in online shopping activities?
- v. How does the merchandise attribute influence on customer satisfaction in online shopping activities?
- vi. How does the customer satisfaction influence on consumer loyalty in online shopping activities?

## **1.5 Hypotheses of the Study**

H1: There is a positive relationship between company reputation and customer satisfaction in online shopping activities.

H2: There is a positive relationship between website security and customer satisfaction in online shopping activities.

H3: There is a positive relationship between website design quality and customer satisfaction in online shopping activities.

H4: There is a positive relationship between service quality and customer satisfaction in online shopping activities.

H5: There is a positive relationship between merchandise attribute and customer satisfaction in online shopping activities.

H6: There is a positive relationship between customer satisfaction and customers loyalty in online shopping activities.

## **1.6 Significance of the Study**

In keen competitive environment, customer satisfaction has become the key factor for portal websites to successfully develop e-commerce. The aim of this study is to find out the factors that affect online customer satisfaction and loyalty in terms of company reputation, website security, website design quality, service quality and merchandise attribute. This study is an adaption and combination of several past researchers conducted in China's context.

The findings of this study will provide several insights to online vendors and help them discover and fix problems in order to make better decisions on their marketing strategic plan. Most importantly, the online marketers could avoid spending their valuable resources on online retail features that may not positively influence customer satisfaction and loyalty. This would give a huge advantage to the online retailers to promote long-term business growth by creating loyal customers. Furthermore, the study also provides knowledge of customer satisfaction in online shopping environment.

## **1.7 Chapter Layout**

## **Chapter One: Research Overview**

Chapter one has provided a broad overview of the research background in China e-commerce industry background, the concept and the importance of online customer satisfaction and potential customers' problems in online shopping. Meanwhile, this chapter includes research objectives, hypotheses, research questions and significance of the study.

## **Chapter Two: Literature Review**

Chapter two provides a comprehensive literature review of the determinants of online customer satisfaction and relationship between customer loyalty in internet shopping, theoretical basis for this study, supported by a discussion of studies and existing researches relevant to the constructs of interest in the model and their proposed relationship. Relevant theories and models are extracted for referencing for the purpose of this study. It is lastly followed by conceptual framework and the hypothesis development.

## **Chapter Three: Methodology**

Chapter three outlines the steps on how the research was carried out in terms of research design, data collection methods, sampling design, operational definitions of constructs, measurement scales and data analysis efforts which define this study.

## **Chapter Four: Data Analysis**

Chapter four reports the overall research findings and discusses the findings of the study by using tables, histograms and graphs to present the findings in a more effective way. Data analysis is conducted by using SPSS 19 software.

## **Chapter Five: Discussions, Conclusion and Implication**

The last chapter presents the discussion of the research findings, interpretation of findings and whether the hypotheses are supported by the data or not. Then, limitations and recommendations are discussed for future research.

### **1.8 Conclusion**

This chapter has briefly discussed the overview of online customer satisfaction in internet shopping activities, online customer loyalty and the potential growth of internet shopping in China. This is essential for online retailers to strengthen their competencies, understand what determinants affect the level of customer satisfaction in order to enhance and gain more market share under stiff competitive online retailers market environment. This study will focus on investigating the factors which influence customer satisfaction that will affect customer loyalty. Research problems, research questions and hypotheses have been identified and appropriate research method has been introduced to carry out the analysis of the data. An implication of this research for academics and practitioners will be discussed in Chapter 2.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

According to the Nielsen (2013) Global Online Survey on Internet shopping habits report, more than 85 percent of the world's online population has used the Internet to make a purchase--increasing the market for online shopping by 40 percent in the past two years. More than half of internet users around the world have made at least one purchase online during the past month. Furthermore, Kearney (2013) Global Retail E-Commerce Index ranks the top 30 countries in both developing and developed markets for their online market attractiveness. China occupies first place in the index. The Chinese e-commerce market is expected to grow at an annual rate of 25 percent over the next few years, from \$390 billion in 2014 to \$718 billion in 2017, according to a study released by Kearney (2014).

With the rapid growing of online retailing industry which has become globally competitive over the past ten years, how to attract customers and maintain existing customers to repeated purchase has become a more significant issue for online retailers than ever before (Johnson et al. 2008). Company should satisfy customers with their online shopping experience; otherwise they failed to purchase again (Kim and Stoel, 2004). Customer satisfaction regarding online shopping attach more

importance on customers' thought of the online experience compared with their expectation. Meanwhile, customer satisfaction is the result of experience in various kinds of purchasing stages: need something, search information about it, evaluate purchase alternatives, actual purchase decision, and post purchase behavior (Kotler & Keller, 2006).

The study on customer satisfaction started since the 1960s, foreign scholars began to pay attention to a new research area of marketing and analyze factors that impact customer satisfaction in order to supply theory for bringing forward the marketing tactics. Some scholars studied the relationship between economic benefit and customer satisfaction and found out there is either a positive or reverse correlation, some other scholars set up a customer satisfaction model and examine it by empirical method. Currently, numerous related books and papers have been published, which indicated that in market economy, companies have gradually recognized that customer satisfaction as an intangible asset, it greatly affects a company's survival and development. In fact, it can be improved both profits and competitiveness of the company.

In this chapter, relevant journals and articles from secondary sources are comprehensively reviewed in terms of which factors influence customer satisfaction. The main purpose is to identify important variable in the past research by comparing and contrasting different authors views on customer satisfaction. Through literature review, a solid foundation for developing the theoretical framework and hypothesis will be developed.

## **2.1 Review of Literature**

### **2.1.1 Online Customer Satisfaction**

Customer satisfaction has been widely conceptualized by many prior researchers. In general. The most widely accepted conceptualization of the customer satisfaction concept is the expectancy disconfirmation theory (McQuitty, Finn and Wiley, 2000). Oliver developed this theory and proposed that customer satisfaction degree is the consequence of the distinction between expectation and perception. Besides that, studies showed that customer satisfaction may have direct and indirect impact on business results. Satisfaction (positive disconfirmation) occurs when product or service is better than expected. On the other hand, a performance worse than expected results is dissatisfaction (negative disconfirmation). According to Khristianto, Kertahadi and Suyadi (2012), customer satisfaction is commonly viewed as a result of comparison between the consumption expectation and experience and customer satisfaction is achieved when the final deliverable (i.e., experience) meets or exceeds a customer's expectation. Meanwhile, satisfied customers are most likely to have the intention to repurchase if the service provider reached or exceeded their expectation (Alam&yasin, 2010). Satisfaction and loyalty are the key elements that determine the success of market concept implementation (Khristianto et al. 2012).

As emotional satisfaction has been studied in research on the browsing experience but it is less evident in studies of electronic commerce (Chiou, 2004). In online shopping activities, customers must be satisfied with their online shopping experience before obtaining more products and service online. A lot of researches have been done to determine the antecedents of customer satisfaction in online shopping activities (Jun, Yang and Kim, 2004; Ballantine, 2005; Cappelli, Guglielmetti, Mattia, Merli and Renzi, 2011). It can be found that customers' attitude and belief regarding security concerns and convenience have significant influence on their purchase intention toward online shopping (Limayen et al., 2000). Shanker et al. (2003) had argued that service provided during and following the purchase is vital to online customers repeated purchases. Christian and France (2005) had confirmed that there are three factors influencing customer satisfaction in online shopping. They



are technology factors, including website security, ease of use website design and privacy; shopping factors, including convenience, trust and delivery in time; and product factors, including product value and customized product.

In addition, identifying the variables of customer satisfaction is significant as it acts as a benchmark of the business performance, and it also serves as guidelines for future improvement (Alam&yasin,2010). Guo et al.,(2012) have identified eight determinants of customers' satisfaction, which are website design, security, information quality, payment method, e-service quality, product quality, products variety and delivery services. Besides that, Mustafa (2011) presents user interface quality, information quality, perceived quality and perceived privacy for his framework. Luo and Homburg (2007) stated that customer satisfaction has positive influence on company profitability. According to these research results, customer satisfaction has an impact on repeated purchase intention which is the expression of customer loyalty.

Based on the research and analysis above, most scholars think that customer satisfaction is the customers' feeling about the extent to which they are satisfied that the stated or usually suggested compulsory needs or expectations have been meet. This paper used documentary study, questionnaire to analyze customer satisfaction from shopping on B2C website.

### **2.1.2 Customer Loyalty**

Loyal customers are those who are repeatedly buying with desire and taking activities from one product service. The high importance placed on online loyalty is because of the competitive nature of the online market and the ever-increasing number of online retailers. Anderson and Srinivasan (2003) defined e-loyalty is a customer's positive attitude and commitment to online vendors that lead to repeated purchase behavior.

Flavian Guinaliu, and Gurrea (2006) indicated loyal consumers are always willing to purchase from the same website but not switch to other websites. Tam (2012) also demonstrated that loyal consumers always word of mouth spread beneficial messages about their service quality and recommend new consumers to this company. The core of customer loyalty is that consumers are able to make efforts to persuade consumer into changing product or services and recommend online shoppers to others.

Earlier studies have provided experienced support for the relationship between customer satisfaction and customer loyalty in the B2C context (Devarajet al.2002, Tsaiet al.2006). Pavlou (2003) stated that satisfaction and trust are two important factors to determine patronage behaviour. Anderson, Cha, & Bryant (1996) had measured customer satisfaction and evaluated the relationship between customer satisfaction and loyalty. This statement is in line with Kassim and Ismail's (2009) study, which reveals that service quality and assurance by online retailers greatly influence customers' trust as well as their level of satisfaction. Thus, this condition would consequently result in an increase of customers' loyalty.

## **2.2 Determinants That Influences Online Customers' satisfaction**

There are several determinants considered as predictors of satisfaction online retailer as proposed by previous researchers which are company reputation, website security, website design quality, service quality and merchandise attribute.

### **2.2.1 Company Reputation**

Nowadays, company reputation is the major impact that can influence customer online satisfaction and loyalty. Company's reputation refers to the grasping of customers' impression toward on the company and how the company plays its role whether directly or indirectly to customers and how the company is concerned about

company's well-being (Hess, 2008). Due to the virtual nature of online shopping, the role of reputation seems more important than in traditional shopping environment. In the virtual online shopping environment, customers can not check the products directly before they purchase. They can only read the information about the products on the website and believe the product presentation of vendor. Thus, the reputation of online retailers has become a significant factor that affects customers' attitude in online shopping. The online company with good reputation will make customers feel credible and reliable (Hendrix 1999). The research of Houser and Wooders (2000), Dewan and Hsu (2001), Kalyanam and McIntyre (2001), McDonald and Slawson (2002), and Melnik and Aim (2002) have all indicated that a company's overall reputation has a positive and important influence on the customers' willingness to online shopping.

Helm et al.,(2010) also analyzed the relationship between corporate reputation and consumer satisfaction and declared corporate reputation as an antecedent of consumer satisfaction. Besides that, according to Hess (2008) company reputation is heavily related to customers' perceptions on company's credibility and how much it takes care of consumers' welfare. Koufaris and Hampton-Sosa (2004) also mentioned that most of the internet shoppers assume that large companies normally have a high reputation, sustainable and longer exist in today's competitive environment for online retailing industry.

Previous studies also suggested that a company with a good reputation tend to behave opportunistically to strengthen existing customer relationship and create loyal customers by continuously maintaining its reputation (Doney and Cannon, 1997; Figueiredo, 2000; Jarvenpaa et al., 2000). The studies also found that vendors who respond quickly to consumers concerns will further improve the quality of service (Pennington et al., 2003). Although good reputation of company is very difficult to gain compared to losing it. Therefore, it is important to maintain good reputation of

company since reputation can change over the period (Casalo et al., 2007). For the virtual nature of online shopping, customers are easy to find that they are not satisfied with some products purchased on the internet, so reputation is very important to the B2C company. If the company want to attract and retain the customer, they need to constantly improving the product and service quality to make customer have high satisfaction in order to improve company reputation.

### **2.2.2 Website Security**

Website security is defined as the ability of the website to protect personal information of customers from any unauthorized use of information disclosure during the electronic transaction Guo et al.,(2012). But as there are still many problems in website security, some customers worries of how personal data will be used, how secure the online site is, and whether or not the website should be trust. There exist many security problems which severely block the development of line trade.

Based on Bruskin (1998), 75% of online shoppers thought the security of credit card is an impedance in online shopping. This shows that the security of electronic payment is the key and bottleneck in e-commerce. Some researchers claimed the importance of personal privacy and security problems in online trading. Lim (2003) and Cheung and Lee (2000) also emphasized that risk is a key factor in determining the customers' attitude in e-commerce context. Dolatabadi and Ebrahimi (2010) identified consumers have a strong prior belief about perceived security of the website, as they expect that their personal information such as private information or monetary information will not be viewed, stored, used or manipulated by third parties during the online transaction. Besides that, earlier research (Elliot & Fowell, 2000; Szymanski & Hise, 2000), as consideration of security risk reduce, satisfaction with the service of online vendors is perceived to increase. Hence , the security of online vendor's website is positively related to consumers' online satisfaction by using

Internet (Guo et al 2012 and Liu, et al. 2008).

### **2.2.3 Website Design Quality**

Cyr (2008) stated that effective website design includes navigation capability or visual appeal of the website . Website design quality is important for online vendors (Than and Grandon, 2002). Customer satisfaction is connected with website design quality in e-commerce context (Cho and Park, 2001). Manes (1997) stated that good website design was contributed to good organization and easy to search information. Online shopping is considered to be pleasant and satisfactory to customers when the shopping websites are neat and easier to read and navigate (Pastrick, 1997). Liu et al.,(2008) found that a website with good design could lead to better customer impression and recognition and positive attitude toward the website and its goods.

Besides that, Hall & Hanna, (2004) and Vilnai-Yavets & Rafaeli, (2006) found that customers expected to find attractive design in a service place and they were more satisfied when the service environment was aesthetic rather than unaesthetic, regardless of the physical setting or the online setting. In the e-commerce context, the website design is a critical factor affecting consumer satisfaction towards online experience. Without tangible cues such as a real store front and product display, website aesthetics such as a well-organized layout and animated presentations showing the product in action is crucial in cognitive engagement and inducing positive associations with websites (Coker, 2013). Liang and Lai (2002) and Li and Zhang (2006) demonstrated that better electronic stores' characteristic such as lower price of product, better website design and positive reputation can stimulate consumers' shopping behavior in a specific electronic store.

### **2.2.4 Service Quality**

Santos (2003) demonstrated e-service quality can be defined as “overall customer assessment and judgments in relation to the excellence and the quality of e-service delivery in the virtual marketplace”. Guo et al.(2012) explain service quality as the level of assistance for online retailers in providing an efficient and effective purchasing and delivery of goods and customer services. Yang (2001) and Grewal (2000) found that service quality is a precondition in online environment for e-commerce business.” It is showed that service quality has become an important standard to measure shopping websites and an important part to business performance.

Besides that, the most frequently seen complaints about online transactions include refund and paying disputes, changing policies, faulty products, and dissatisfied customer service, customers are of low tolerance (Chen and Chang, 2003). According to an approximate estimate, on average, customers will only await eight seconds for feedback before system bailing out (Dellaert and Kahn, 1999). A common reason recommended for online shopping its convenience (Chen and Chang, 2003). Thus, it will increase the degree of customer satisfaction to improve the transaction processing capability of website, making sure completed operations of all online shopping and save the customer’s waiting time.

In addition, Liu et al.,(2008) found that rapid response time, safe and rapid delivery and higher level of customer service have a positive impact on customer satisfaction in online shopping. Zeithaml (2002) also stressed that company should lay emphasis on online service containing all cues and encounters that occurred before, during, and after the transaction. Indeed, if properly used, Internet can definitely be a almighty tool to increase whole service offered and to provide a variety of benefits to online customers, such as convenience of purchasing products or services, instantaneous check of the availability of product or service, easy selection of competitive prices, and make informed purchase decisions (Griff and Palmer, 1999).

### **2.2.5 Merchandise attribute**

Szymanski & Hise (2000) defined merchandise attributes as a factor relevant to the offer for online sale which is not contained in the website design and shopping convenience. To be specific, merchandise attribute is defined as product variety and product quality which reflect a reasonable price. So the characteristics of the merchandise attribute are evaluated as: (1) to provide a wide range of products (2) to provide exclusive and featured products, and (3) to provide seasonal products.

Szymanski and Hise (2000) indicate that customers may be attracted by wider range of products, and satisfaction will be more positive when online vendors provided more and better products. Although some scholars considered that price sensitivity may actually be lower online than offline (e.g., Degeratu et al., 2000; Lynch and Ariely, 2000; Shankar et al., 2001), the most frequently discussed reason for online shopping is price, and many early online sellers used price as bait to lure customers to their websites (Chen and Chang, 2003). In addition, the Chinese customers are sensitive to price (Lu, 2005). Jarvenpaa and Todd (1997) claim that due to the access to Internet and potential to search specialty goods and services, customers expect online vendors to offer a wider product variety.

In addition, minimizing product costs and maximizing product's quality are key factors in electronic commerce success (Keeney, 1999). Customer satisfaction are usually related to two basic properties, including the consumers' judgment of product quality (Ostrom&Iacobucci, 1995). It is suggested that products offering value not only have impact on customer's choice at the pre-purchase stage but also have effect on their satisfaction, willingness to recommend and return behavior at the stage of after purchase (Petrick & Backman, 2002). In contrast, if customers' expectations are not fulfilled, they will think that the product quality is bad and will be dissatisfied. (United Nations Industrial Development Organization 2006, 1). Zeithaml and Bitner

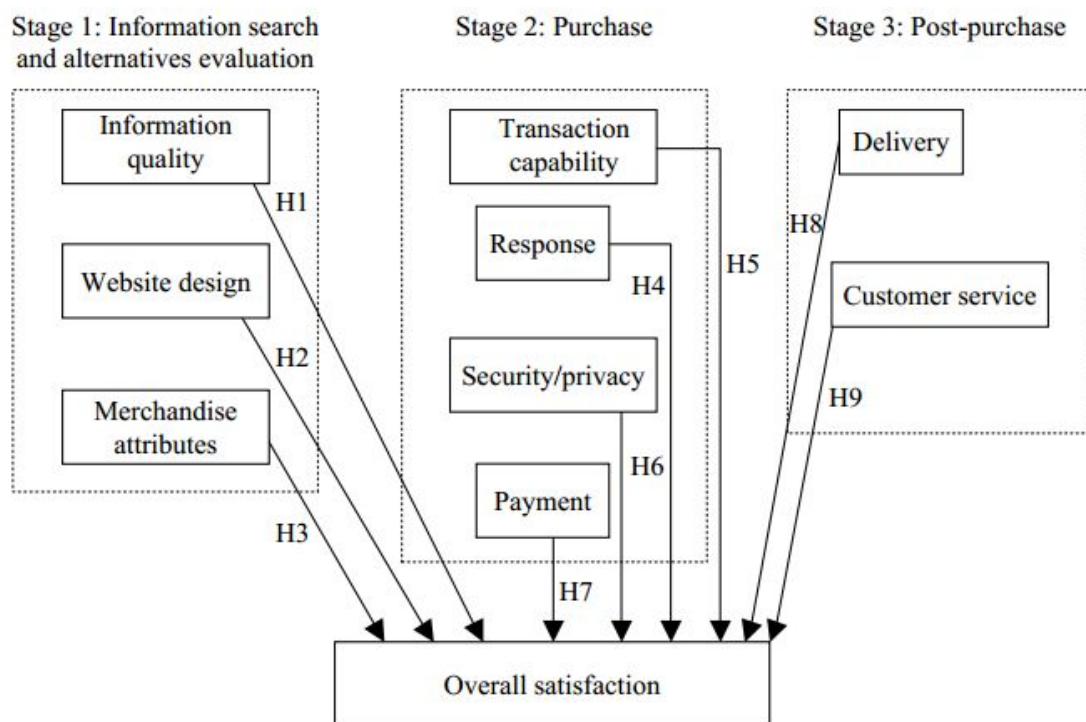
(1996) also pointed out that the perceived product quality will positively influence customer satisfaction. Besides that, commodity price is also a key factor, often understood under the situation of consumers' purchase decision (Dodds et al. 1991).

## 2.3 Review of Relevant Theoretical Models

With the development of customer satisfaction theory research, scholars and research institution build the customer satisfaction model based on its own national conditions, and use confirmative factor analysis to analyze correlation in these model.

### 2.3.1 Website design, merchandise attributes, security, service and customer satisfaction

Figure 2.1. The conceptual model of customer satisfaction proposed by Liu et al. (2008)



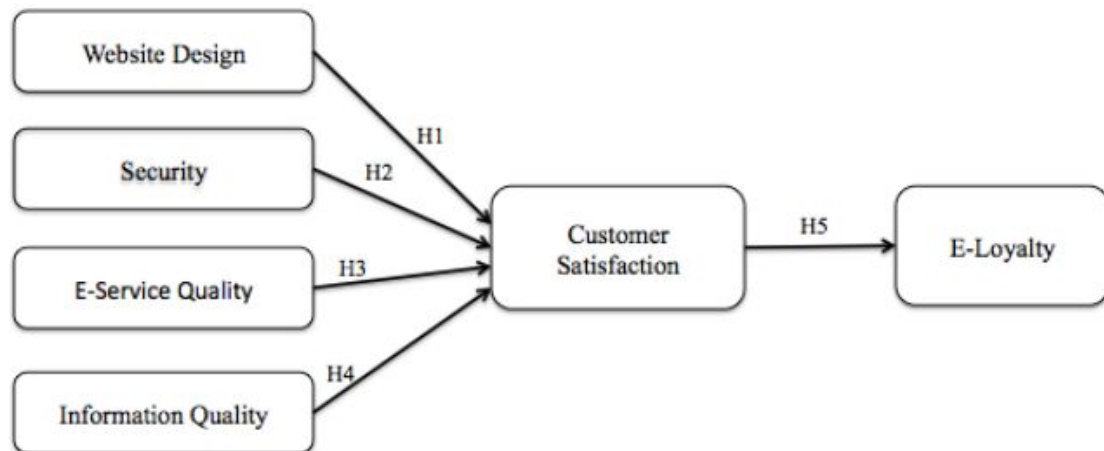
The development of the theoretical framework was adapted from Liu, et al.,(2008,



see Figure 2.1). This model above has investigated complete and systematic research of customer satisfaction. They combined the nine factors into three stages: information search stage, purchase stage and post-purchase stage to examine overall satisfaction. As shown in the figure, delivery and customer service were classified as post-purchase stage, because the two factors happened after customers received the product that they purchased from a website. Liu, et al.,(2008) indicated that these two factors mean delivery in time and decent after-sales service. These researchers confirmed that the other two stages are all best measured for customer satisfaction when they make purchases online. Besides, all the nine factor have positive impact on customer satisfaction.

### 2.3.2 Website design, security, E-service quality, customer satisfaction and E-loyalty

Figure 2.2. The conceptual model of customer satisfaction and e-loyalty proposed by Izyan and Boon (2014)

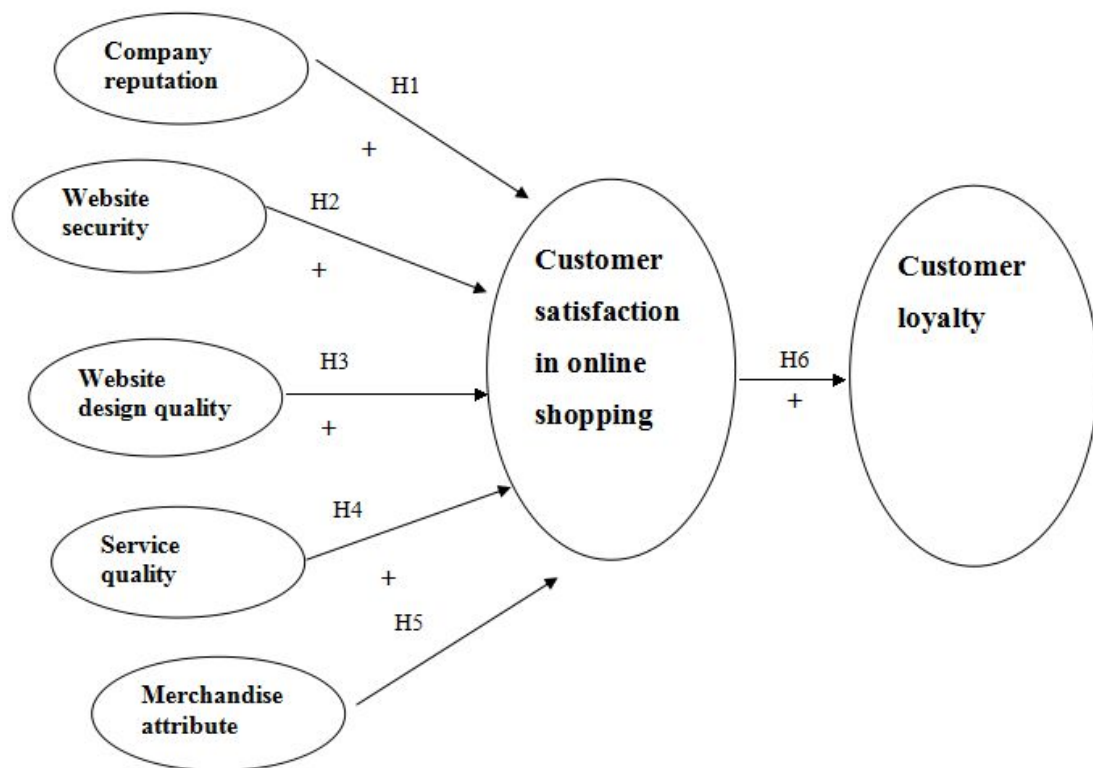


The research model suggested by Izyan and Boon (2014). This model is proposed to examine the effect of four satisfaction antecedents which are website design, security, e-service quality and information quality of customer online satisfaction in online shopping, furthermore, this model also examine the relationship between customer

satisfaction and e-loyalty in online shopping environment. Izyan and Boon(2014) also suggested that customers who have the higher degree of online satisfaction could lead to higher loyalty. In this study, only website design, security, e-service quality toward online satisfaction and online satisfaction towards loyalty are used for this model. Earlier studies have provided trial support for the relationship between customers’ satisfaction and loyalty in the B2C e-commerce context (Devarajet al.2002, Tsai et al.2007).

### 2.3.3 Proposed Conceptual Framework

Figure 2.3. Proposed Conceptual Framework



This conceptual framework represents the hypothesized effect of company reputation, website security, website design quality, service quality and merchandise attribute that will influence customer satisfaction in online shopping activities. The dependent variable, customer satisfaction in online shopping is of primary interest in

this study, company reputation, website security, website design quality, service quality and merchandise attribute are the independent variables to customer satisfaction in online shopping. The dependent variable and all the independent variables were discussed previously and the detailed research hypotheses will then be presented in the following part. The proposed model was derived from the review of theoretical model based on the research works of Izyan, et al.,(2014) which will serve as the basis for this research study, Liu, et al.,(2008) research as a support model.

## **2.4 Hypotheses Development**

Prior discussion has led to a brief examination of the existing literature and the development of the hypothesis in this research. The six hypotheses are:

H1: There is a positive relationship between company reputation and customer satisfaction in online shopping activities.

Martin and Camarero (2008) found that as a sign of commodity quality, company reputation plays a significant part in online sales under the circumstance of the non-presence of seller to advise the buyer and the inability to have a real look, view, touch and try-on of the products before purchase. It indicates that, online consumers are likely to purchase products and services from a good reputation and trustworthiness web vendor. A good reputation can be regarded as providing guarantee of ability, integrity and good will to online customers in order to increase trust, especially in the first transaction at online store (Ha and Stoel, 2009; Park and Stoel, 2005; Teo and Liu, 2007).

Besides that, Hess (2008) said that the intermediary company's reputation and satisfaction and relationship between the severities of failure contribute to maintain

willing to buy even after failure. Wiertz et al (2004) also claim that company reputation influences consumer satisfaction. Imran Ali et al (2012) stated that higher corporate reputation leads to higher level of customers satisfaction and loyalty. Meanwhile, Koufaris and Hampton-Sosa (2004) also mentioned that most of the internet shoppers assume that large companies normally have a high reputation, sustainable and longer exist in today's competitive environment for online retailing industry.

Research scholar has also emphasized on consumer satisfaction as one of the strongest determinant of consumer loyalty. Higher satisfaction level motivates consumers to adopt repetitive buying behavior and recommending others to do the same. Altogether, if corporation is having strong reputation among the consumers who are satisfied with service quality provided by the corporation, it would ultimately lead them to adopt loyal behavior to that company. Although building a positive reputation of online vendor is very difficult and requires lot of resources such as time, money and human resources to support but it has become an essential criterion for consumers in online shopping especially for first-time consumers.

H2: There is a positive relationship between website security and customer satisfaction in online shopping activities.

Security is considered an important factor that is taken seriously by the online customers (Mustafa, 2011). This is because, security and privacy issues play an important role in the online transaction or the website (Chellapa, 2002). Security can be divided into two parts: the first part is related to the data and transaction security; and the second part is regarding the authentication of the user (Guo et al., 2012). Chellapa (2002) focuses on issues of privacy and security in his research: about 61% of his respondents would continue with their transactions on the Internet if their privacy and personal information are safely protected.

Besides that, strong security property could increase the level of customer satisfaction. Christian and France (2005) identified that security as the key factor will influence customer satisfaction in e-commerce environment. In addition, online shopping customers perceive security as a standard feature amongst online retailers. It is an undoubtedly an important attribute for customer purchasing decision. However other features that influence the purchasing experience will have an impact on satisfaction (Schaupp & Belanger,2005). Therefore, B2C website need to establish safe electronic transaction system and improve the security of the transmission of network data in order to increase customer satisfaction.

H3: There is a positive relationship between website design quality and customer satisfaction in online shopping activities.

Alam et al. (2008) demonstrated that website design is one of the unique characteristics influencing online shopping context. Ho and Wu (1999) confirmed web page presentation and reliability are the most important factors that effect satisfaction in online shopping. The website quality impacts the online users' view of the website because it is the portal via which online deals are carried out (Ahn et al., 2007). Lee and Lin (2005) stated that the quality of web site design significantly impacts consumer satisfaction and service quality. In addition, Cyr (2008) also studied characteristics of design and culture, which are navigation design, information design and visual design, as the antecedents to website satisfaction, website trust, and e-loyalty in a sample of Germany, Canada and China. The findings also indicate that visual design, navigation design and information design all have positive effect on customer satisfaction.

H4: There is a positive relationship between service quality and customer satisfaction in online shopping activities.

Service quality has a direct impact on customer in keeping strong and loyal relationship with the online retailers. Online retailers with excellent service quality have the advantage of learning about their customer;s expectations. Thus improving their satisfaction (Khristianto et al, 2012). Christodoulides and Michaelidou (2011) state that online retailers that are able to provide and exchange information via formal or informal platform with the customers would most likely increase the customers' satisfaction and add value to the shopping experience. Wang and Huarng (2002) demonstrated that customers were satisfied with on-time deliveries which have a competitive price and with no hidden charges. Lee and Joshi (2007); Ahn et al. (2004); Ho (2004); Grewal et al (2004) and Shih (2004) confirmed that the performance of delivery has positive effect on customers' satisfaction. Wolfinbarger and Gilly (2003) demonstrated a positive correlation between dimensions of service quality and consumer satisfaction. Meanwhile, the results showed that e-service quality has a significant effect on consumers' satisfaction in online shopping (Jung-Hwan & Chungho, 2010).

H5: There is a positive relationship between merchandise attribute and customer satisfaction in online shopping activities.

In the Sproles and Kendall's Consumer Style Inventory (CSI) model, they emphasized the influence of product with high quality. In Christian and France's (2005) finding of product factor, quality is an inherent properties of a product and the potential standard of commodity or high quality service. Improving product quality will have a significant impact on increasing customer satisfaction.

Online retailers seem to be more successful by providing a wide variety of products and selections (Christian & France, 2005). Customers expect online vendors to provide a wide variety of product due to the access to the Internet and the convenience to search specialty products and services (Jarvenpaa & Todd, 1996).

Athanassopoulos et al (2001) demonstrated that product variety as an important factor influencing e-satisfaction. Cost saving and time are two major advantages of internet shopping. According to Liu et al.,(2008), variety of products plays an important role in the degree of consumers' satisfaction with their online purchase experiences. It is shown that wider products variety and low price will have significant effect on consumers' satisfaction in the online shopping context.

H6: There is a positive relationship between customer satisfaction and customer loyalty in online shopping activities.

Several researchers have tried to verify the relationship between customer satisfaction and loyalty in their studies (Woodside, Frey,& Daley, 1989; Cronin & Taylor, 1992; Oliver, 1999). The relationship seems like of intuition. Nevertheless, the relationship between customer satisfaction and loyalty has already been found to change greatly under different circumstances (Anderson & Srinivasan, 2003). Customer satisfaction is a necessary precondition for loyalty but is not enough on its own to result in repeated purchases or brand loyalty (Bloemer and Kasper, 1995). Caruana (2002) examined the customer satisfaction as a mediate role in the relationship of service quality with customer loyalty in the traditional shopping context. In the environment of online shopping, Yang et al. (2009) investigated the intermediate role of consumer satisfaction in the relationship of consumer satisfaction antecedents with the online shopping loyalty and this study found that satisfaction mediates its antecedents. Izyan et al (2014) and Maria et al (2012) also stated the customer satisfaction as a mediator factor has positive relationship with e-loyalty.

## **2.5 Conclusion**

Overall, Chapter 2 has discussed some related issues and has provide a detailed review of literature's background in order to better understand of the current research.

E-commerce in China is a huge and appealing market that every online retailer would like to capture the business opportunities. However, in the current competitive market, the degree of China customer satisfaction on online retailers is low. Meanwhile, customer switching barrier is low, therefore, it is challenging for online retailers to attract new customers and even tougher to retain their existing customers. Thus, it is vital important for Chinese online vendors to have a better understanding about what factors that affect the online customer satisfaction and how to improve on that in order to compete with international online retailers. The following chapter elaborates the details of the research method that will be carried out in this study.



## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter aims to delineates the research methodologies, including research design,data collection methods, sampling design, research instruments, construct measurements, origin and measurement of constructs, data processing and data analysis. According to Hair, Bush and Ortinau (2006), the research design serves as a master plan of the methods to use to collect and analyze the data. By evaluating and choosing the correct research design, the researchers are able to develop related research methodologies. In this chapter, the details of methodologies will be discussed and the function to help researchers in answering the research questions on how the company reputation, website security, website design quality, service quality, merchandise attribute influence the customer satisfaction on internet shopping activities and their loyalty in the China e-commerce context. This study utilized surveys intended to assess the relationship between customer satisfaction and customer loyalty in China e-commerce environment.

#### **3.1 Research Design**

Research design is an executing plan for a researcher to follow accordingly the procedures and method of collecting data for analysis (Burn& Bush, 1995; Churchill,

1996; Zikmund;1997). The research aims to provide an understanding of how online customer satisfaction in internet shopping activities was affected by constructs like company reputation, website security, website design quality, service quality and merchandise attribute. Meanwhile, how customer loyalty was affected by customer satisfaction. In addition, the research design can be divided into three categories which are exploratory, descriptive and causal (Malhotra and Peterson, 2006). Descriptive research and causal research were used in this study to provide the prior knowledge of the e-commerce market characteristics of the customer satisfaction and customer loyalty towards online shopping. Besides that, causal study method was being used to examine the relationships between customers' like company reputation, website security, website design quality, service quality, merchandise attribute toward the customer satisfaction and customer loyalty in internet shopping activities. According to Zikmund (2003) descriptive research is used to analysis the respondents characteristics and causal research is to identify cause effect between research problem and the variable in this study.

## **3.2 Data Collection Method**

Data collection is the systematic gathering of data for a particular purpose. A research can be started by selecting quantitative or qualitative approach (Neuman, 2006). Data collection method applied in this study is primary and secondary data. Because of time and money constraints, the primary data source for the research is mainly obtained through questionnaire, while in the secondary data collection, journal, internet, text book, media publications, electronic library database and article were used. In this study, samples are randomly generated from target population, so this research is adopting network questionnaire survey.

### **3.2.1 Primary Data**

Primary data used to collect for the problem of specific research at hand are procedures that best match the research problem. This study will adopt primary data collection and the most source of primary data is collected from network questionnaire since network questionnaire is convenience, economical and time saving. In this study, 200 network questionnaires were distributed to online shoppers in China. It is important to have a clear and organized structure of questionnaire to make all the respondents to answer it more easily in the shorter time. Although primary data are more expensive compared with secondary data, they can provide the updated information about the opinions of the current respondents.

### **3.2.2 Secondary Data**

Secondary data is comprised of information already existing somewhere, having been gathered for another aim (Kolter et al., 2004). The present researchers should evaluate the secondary data cautiously to make sure that it is relevant, exact, present and fair. But due to some problems of secondary data, the data may be outdated or may not completely meet the requirement of the research since it was originally collected for another purpose. Secondary data can mostly be obtained and inexpensive compared to primary data.

### **3.3 Sample Design**

The purpose of research is to find the factors which impact on customer satisfaction in internet shopping. The determinants (independent variables) include company reputation, website security, website design quality, service quality and merchandise attribute. Hair et al. (2006) defines independent variables as “an attribute or elements of an object, idea or event whose measurement scales values are directly manipulate by the researcher”. In contrast, the level of online customer satisfaction is the dependent variable. Hair et al. (2006) defines dependent variables as a singular

attribute or element that is the measured outcome or effect change on specific test subjects that is derived from manipulating the independent variables.

### **3.3.1 Target Population**

The specific population elements relevant to the research group is named as target population (Zikmuand, 2003). The main subjects for this research are the users who have done online purchases in past shoppers due to limited resources such as budget and time. The eligible respondents for this research will be adults who are 18 years old and above. The reasons for choosing this area of target population are less time-consuming in order to get more accurate results and reach high speed of data collection. Due to the fact that networks users mainly focus on young groups, the subject of this paper is the university student and company's withe-collar. Meanwhile, this study's respondents came from China.

### **3.3.2 Sampling Elements**

In this research ,the respondents must be met the requirement that who have done online purchases within past three months from any websites. The online purchases include books, electronic goods, cosmetics, clothes, accessories and others. Sampling location for this study is China, respondents should have purchased a product online from well-known B2C website, such as Alibaba, TaoBao, Amazon, the purchases at least once in the past three months are identified as the respondents were randomly selected to ensure the accuracy of this study. All the respondents were required to answer all the questions of the network questionnaire.

### **3.3.3 Sampling Techniques**

Probability sampling and non probability sampling are two types of sampling

techniques (Churchill, Jr. and Iacoucci, 2005). The samples selected for this study are on a non-probability sampling basis. In this study, judgment sampling is selected as main sampling procedure which is based on research objective. The researcher believes that the respondents represent the population of interest (Malhotra and Peterson, 2006).

### **3.3.4 Sample Size**

Factors that effecting sample size are financial budget, data analysis techniques to be used and sampling frame access (Malhotra 1999). This study has gathered 200 potential respondents who did online purchases in the past three months. Before the formal survey was conducted, an adequate pilot test of 30 samples was conducted to examine the validity and accurate of questionnaire.

## **3.4 Research Instrument**

The research instrument of this research is personal self-administered questionnaire. Aaker,et al.(2007) referred to self administered questionnaire as a questionnaire finished by the respondents without the help or accompany of an interviewer.

### **3.4.1 Questionnaire Design**

The structured questionnaire is designed in English and Chinese which consists of three sections. The questionnaire design include the basic information of respondents and the introduction of a questionnaire. In section A, respondents were asked to fill in general information of their online shopping, such as how many times they purchased products from B2C website in last three months. Multiple choice questions were used in this section. Section B is intended to investigate perceptions and views of respondents about the factors affect their satisfaction in online shopping. In this

section, there were five sub-categories which were entitled according to the independent variables including company reputation, website security, website design quality, service quality and merchandise attribute. In measuring the constructs, five-point Likert scale anchored by: 1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree and 5 = strongly disagree was used in the questionnaire with adoption from different sources of the existing literature. Questions that used to measure various constructs were adapted from Liu et al. (2008) and CAPTEC, an industrial computer system provider. Section C is used to collect respondents' profile such as age, income level, education level, and gender.

### **3.4.2 Pilot Test**

Pilot tests are adopted to assess how a set of people from the survey subjects respond to the questionnaire. A pilot test involves completing a run of the survey on a small sized and representative sample of respondents so as to reveal questionnaire faults before the real survey is launched (Burns and Bush, 2003). For a pilot test, surveyors usually liaise with a large number of people so that potential differences within and across groups in the subjects can be analyzed. Before the questionnaire is applied, a pilot test will be done to evaluate the accuracy and consistency of the questionnaire design. A small group of 30 respondents have been selected to complete the questionnaire. After the pilot test was done, the researchers will run a reliability test to check the accuracy and reliability of the data collected. The respondents who have done the pilot test will not be considered in the main study.

## **3.5 Construct measurement**

### **3.5.1 Origin of Construct**

Table 3.1 shows the origin and measurements for each construct used in this study.

Items	Construct Measurement	Cronbach Alpha	Source
Company reputation	1. The website has a good reputation compared to other rival websites	0.785	Houshang (2013)
	2. The website is trustworthy and honest.		
	3. The website is concerned about customer's welfare.		
	4. The website has a good ability to deal with perceived risks		
Website security	1. The website has safety payment system.	0.829	Liu et al.,(2008)
	2. I feel secure giving out credit card information at this site.		
	3. The website ensures the safe transmission of customers' information.		
	4. I feel secure giving out credit card information at this site.		

	5. I think the website respects the user rights when obtaining personal information.		
Website design quality	1.The website has beautiful and attractive design,uses good color combinations	0.878	Liu et al.,(2008)
	2.This is a fully functional website, all of its linked pages work well		
	3.The organization of the content on the website leads me easily to find the information i need		
	4. I like the layout of this website		
	5. I found it easy to move around in this website		
Service quality	1.The company is ready and willing to respond to customer needs	0.886	Liu et al.,(2008)



	<p>2 The products sent by the website are well packaged and delivered in time</p> <p>3 When I use the website, it takes little waiting time for the website to respond after my actions</p> <p>4. The customer service in this website is good, staff can be able to handle customer issues in a timely manner</p> <p>5. Inquiries are answered promptly.</p>		
Merchandise attribute	<p>1. The general pricing of the website's goods is relatively lower than that of the stores</p> <p>2. This website merchandise is complete , most of the goods I need can be found at this site</p> <p>3. This website promises that the goods sold are of good quality</p>	0.908	Liu et al.,(2008)

	4 There are more choices for goods of a particular type at this site		
	5 The product range of this website is complete		
Customer satisfaction	1. My choice to purchase from this website was a wise one	0.826	Liu et al.,(2008)
	2.I have truly enjoyed purchasing from this website		
	3. I am satisfied with my most recent decision to purchase from this website		
	4.If I had to do it over again, I'd make my most recent online purchase at this website		
	5. When I purchased from this website, I am never disappointed.		
Customer loyalty	1. I think I am the loyal customer of this website	0.75	Izyan. Boon(2014)
	2. I would recommend this website to friends		
	3. When I need to		

	purchase goods, the first thought is this website.		
	4. Although another website have same products, I still purchase from this website.		
	5. Even the price of product is a little higher than other website, I still like to buy from this website.		

Source: Developed for the research

### 3.5 Data Scale of Measurement

The questionnaire consists of three sections: section A have three questions which are designed with a combination of nominal scale and ordinal scale. Nominal scale is used to measure the respondents' general information. Ordinal scale is used in question three to identify the respondents' expenditure in a month in online shopping. Section B, interval scale is being used to measure respondent's opinions about consumer satisfaction of online shopping. Independent variables include company reputation, website security, website design quality, service quality and merchandise attribute in online shopping activities are measure on five-point Likert Scale ranged from strongly disagree to strongly agree, refer to Table 3.2

Table 3.2 Summary of Likert Scale Used to Measure Variables

variables	Likert Scale
Independent variables	1 = Strongly disagree
Company reputation	2 = Disagree
Website security	3 = Neutral
Website design quality	4 = Agree
Service quality	5 = Strongly agree
Merchandise attribute	
Dependent variable	
Customer satisfaction and customer loyalty in online shopping activities	

Section C consists of five questions. The questions are designed with nominal scale and ratio scale of measurement. All the questions in this section are classified as the nominal scale except question two (age) and seven (monthly income) which are identified as a ratio measurement. This section is used to further determine the target population's personal information to assist with responses analysis.

### **3.6 Data Analysis Method**

Cooper and Schindler (2006) defined data analysis as the process of editing and minimizing accumulated data to a manageable size which it is easy to look for patterns in developing summaries and adopting statistical techniques.

#### **3.6.1 Descriptive Analysis**

Descriptive statistics is the subject of quantitatively representing the main characteristics of collecting information. According to Burns and Bush (2003), descriptive analysis is adopted to summarize and describe the sample characteristic of the representative respondent and disclosing the ordinary pattern of response. Parametric statistic such as measures of mean, standard deviation and variance will be used to portray the essential characteristics of the interval data. Non parametric statistic such as the simple arithmetic mean, median and mode will be applied to graphically depict non-interval data.

### **3.6.2 Scale Measurement**

The reliability of the measurement will be tested in scale measurement. According to Malhotra et al.,(2006), reliability means the degree to which a scale generates consistent results if making repeated measurements on the characteristic. Reliability thus relates to the accuracy and precision of a measurement procedure, and reliability involves the credibility of the research findings.

#### **3.6.2.1 Reliability Test**

Reliability test is adopted to test the consistency and stability by which the research instrument measures the construct (Malhotra et al.,2006). Cronbach's alpha is a reliability coefficient that measures inter-item reliability or the degree of internal consistency/homogeneity between variables measuring one construct/concept i.e. the degree to which different items measuring the same variable attain consistent results. This coefficient varies from 0 to 1 and a value of 0.6 or less generally indicates unsatisfactory internal consistency reliability (Malhotra, 2004).

### **3.6.3 Inferential Analysis**

According to Burns and Bush (2006), inferential analysis is adopted to produce conclusions about the respondents' features based on information contained in the data matrix provided by the sample. We can make conclusions about the populations from which the samples were chosen by applying inferential statistics. A random distribution is adopted in this research in order to establish the representativeness of the smaller sample population. In addition, SPSS software was applied to conduct the following types of inferential analysis.

- i) Pearson Correlation Analysis
- ii) Multiple Regression Analysis

### **3.6.3.1 Pearson's Correlation Analysis**

Pearson's correlation coefficient is used to measure the degree of linear association between two variables (Hair et al., 2006). Pearson's correlation coefficient between two variables is defined as the co-variance of the two variables divided by the product of their standard deviations. The form of the definition involves a "product moment", that is, the mean (the first moment about the origin) of the product of the mean-adjusted random variables; hence the modifier product-moment in the name.

### **3.6.3.2 Multiple Regression Analysis**

Multiple regression is a flexible method of data analysis that may be appropriate whenever a quantitative variable (the criterion or dependent variable) is to be examined in relationship to any other factors (expressed as independent or predictor variables). Relationships may be nonlinear, independent variables may be quantitative or qualitative, and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Cohen, Cohen, West, & Aiken, 2003).

Multiple Regression Equation :

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k$$

$$CS = \beta_0 + \beta_1(CR) + \beta_2(WS) + \beta_3(WDQ) + \beta_4(SQ) + \beta_5(MA)$$

CS – Customer Satisfaction

CR– Company Reputation

WS– Website Security

WDQ– Website Design Quality

SQ– Service Quality

MA–Merchandise Attribute

$$CL = \beta_0 + \beta_1(CS)$$

CL – Customer Loyalty

CS – Customer Satisfaction

### 3.7 Conclusion

Chapter 3 discusses the types of research methodologies used in conducting the research study. Descriptive and quantitative methods are used for research design in order to clarify market phenomenon and collect numerical and measurable data. Primary data were collected through questionnaire distribution. Hypothesis regarding the effect of the different independent constructs in consumer retention were tested through analysis of survey data obtained from eligible general public subjects. Proper sampling strategy and data analysis strategy were carried out to reach accuracy of information gathering and analysis procedures.

## **CHAPTER 4**

### **RESEARCH RESULT**

#### **4.0 Introduction**

This chapter is aimed at presenting, analyzing and interpreting the result of the research findings. This chapter reported the research results of questionnaire survey distributed to online consumer in China based on Statistical Package Social Science Version (SPSS) 19.0. Besides that, in order to analyze the relationship between company reputation, website security, website design quality, service quality and merchandise attribute, customer satisfaction and customer loyalty for online shopping activities. The analysis techniques include such as descriptive analysis, reliability analysis, pearson correlation, multiple linear regression and simple linear regression are presented. The survey populations are online shoppers in China, 200 samples were collected.

#### **4.1 Descriptive Analysis**

Descriptive analysis is used to describe the sample characteristic of the typical respondents and disclose the general pattern of responses (Burns and Bush, 2003).



The following sections present the descriptive analysis for this research.

#### **4.1.1 Respondent Demographic Profile**

The information of respondents' demographic profile was in the Section C of the questionnaire. The respondents' demographic profile include gender, age group, education level, income level and occupation. The details of the respondents' demographic profile were shown in Table 4.1.

In total samples, the sample size is comprised of 86 male respondents and 114 female respondents, accounting for 43 percent and 57 percent of total respondents respectively. Females are more than males, and the main reason for which is that females tend to go shopping more frequently than males. The questionnaires were allocated to target respondents in China. According to the data collected, there is only one person in both age group of below 18 years old (0.5 percent) and above 35 years old (0.5 percent), followed by age group of 19-25 years old (29.5 percent), age group of 31-35 years old (13 percent). And the majority of respondents fall into the age group of 26-30 years old (56.5 percent), more than half in all respondents. That is mainly because the online shopping consumes are mostly young consumers, who have a stable income and are willing to accept and try new things. They were more likely to choose online shopping as their consumption pattern.

Base on the education level survey, majority of the respondents are bachelor degree holders with 117 respondents which account for 58.5 percent, followed by diploma holders with 26 percent (52 respondents), master degree holders with 12 percent (24 respondents), PhD holders with 3 percent (6 respondents), only 1 respondent (0.5 percent) is of secondary school and no one is pre-university holders. This could be related to people's understanding of things and corresponding experience obtained. With the improvement of education, people are having more thorough understanding

of things and enriching experience, with online shopping also gradually increasing. Based on the income level survey, 50 percent of the respondents earn between RM 2,000 to RM 3,000, 19.5 percent of respondents earn between RM 3,001 and RM 4,000, 14 percent of respondents earn below RM 2,000(due to those respondents are students) and 8 percent of respondents earn between RM 4,001 and RM 5,000. Additionally, there are only 17 respondents or 8.5 percent who earn more than RM 5,001. From these data, the major consumer group of online shopping are young people with economic foundation. They has economic condition and strength to purchase product or service from B2C website.

In addition, due to the limitation of respondents, professional or technical expertise has the highest rate in performing online purchase activities which is 25.5 percent, 51 respondents, followed by others such as private business owners, consultants (21.5 percent, 43 respondents), office administration and student (16.5 percent, 33 respondents and 15.5 percent, 31 respondents), the least is managerial level and clerical work which is 11 percent (22 respondents) and 10 percent (20 respondents).

Table 4.1 Respondent Demographic Profile

profile		frequency	Percent	Valid Percent	Cum Percent
Gender	Male	86	43%	43%	43%
	Female	114	57%	57%	100%
Age	Below 18 years old	1	0.5%	0.5%	0.5%
	19-25 years old	59	29.5%	29.5%	30%
	26-30years old	113	56.5%	56.5%	86.5%
	31-35years old	26	13%	13%	99.5%
	Above 35 years old	1	0.5%	0.5%	100%

Educational level	Secondary School	1	0.5%	0.5%	0.5%
	Pre-University	0	0	0	0
	Diploma	52	26%	26%	26%
	Bachelor's Degree	117	58.5%	58.5%	85%
	Master's Degree	24	12%	12%	97%
	Doctorate Degree	6	3%	3%	100%
Income level	Below RMB4000	28	14%	14%	14%
	RMB4001 to RMB6000	100	50%	50%	64%
	RMB6001 to RMB8000	39	19.5%	19.5%	83.5%
	RMB8001 to RMB10000	16	8%	8%	91.5%
	RMB10000 and above	17	8.5%	8.5%	100%
Occupation	Student	31	15.5%	15.5%	15.5%
	Office Administration	33	16.5%	16.5%	32%
	Clerical work	20	10%	10%	42%
	Professional/ Technical expertise	51	25.5%	25.5%	67.5%
	Managerial level	22	11%	11%	78.5%
	Others	43	21.5%	21.5%	100%

#### 4.1.2 Respondents General Information

Based on Table 4.2, the general information in the section A of questionnaire is regard with investigating the customers' buying habits and expenditure: purchase frequency in last 3 months and purchase spending per month on average. In this survey, the respondents are network users from China who have online shopping experience. There are 205 questionnaires issued altogether, however the ultimate sample size for the research is 200 because 5 respondents haven't purchase online in last three months.

Due to the rapid development of e-commerce industry, online shopping has been more and more acceptable to many consumers with its advantages. Table 4.2 showed

that 84 respondents have 7 times or more shopping trips in last 3 months, accounting for 42 percent in total respondents, followed by 60 respondents having 1-3 times and 56 respondents with 4-6 times (30 percent, 28 percent).

In purchase spending survey, 68 respondents spent RM251 and RM500 for purchasing online per month, accounting for 34 percent, followed by RM101 and RM250 category with 30.5 percent( 61 respondents), below RM100 with 15 percent ( 30 respondents), RM501 and RM750 category with 11 percent( 22respondents), above RM750 category with 9.5 percent ( 19 respondents).

Based on this survey, from purchase frequency and purchase spending, it showed that online shopping has already become the main means of shopping with customers' purchase spending increasing and purchase products being varied, which makes people's life extremely convenient.

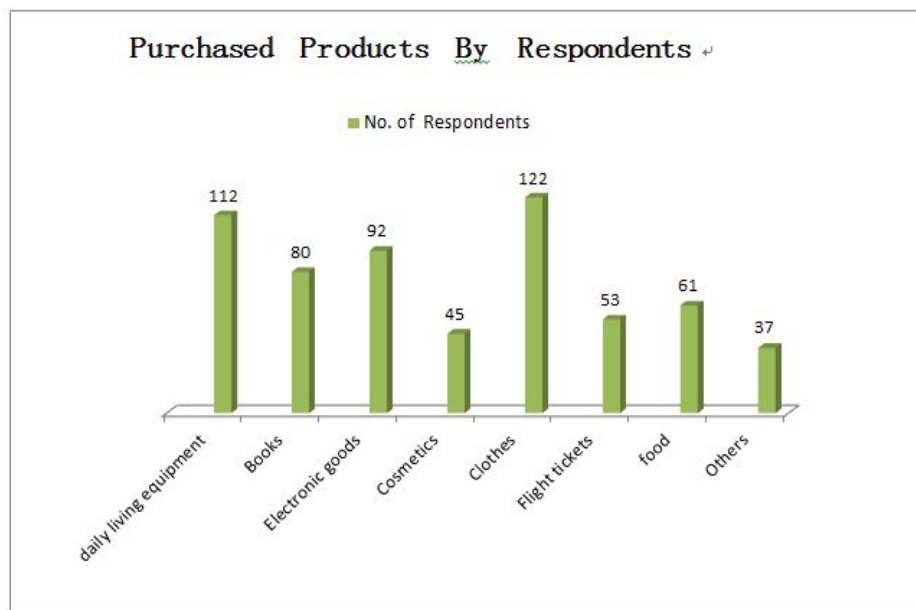
Table 4.2 Respondents' General Information

Descriptions	Types	Frequency	Percent	Valid Percent	Cum. Percent
Purchase frequency	None	0	0	0	0
	1-3 times	60	30%	30%	30%
	4-6 times	56	28%	28%	58%
	7 times or more	84	42%	42%	100%
Purchase spending	Below RMB200	30	15%	15%	15%
	RMB201 and RMB500	61	30.5%	30.5%	45.5%
	RMB501 and RMB1000	68	34%	34%	79.5%
	RMB1001 and RMB1500	22	11%	11%	90.5%
	Above RMB1500	19	9.5%	9.5%	100%

#### 4.1.3 Purchased Products by Respondents

In Figure 4.1, purchase products survey which is of multiple options, products consumed the most by customers were clothes and daily living equipment, with 122 respondents and 112 respondents, followed by electronic goods and books accounting for 92 respondents and 80 respondents, food with 61 respondents, flight tickets with 53 respondents, cosmetics with 45 respondents, others with 37 respondents.

Figure 4.1 Purchased Products by Respondents



#### 4.1.4 Cross-Over Analysis

Based on Table 4.3, 4.4 and 4.5, it is showed the shopping style difference of male and female. For purchase frequency, more than half women purchased more than 7 times in last three months. And as for purchase spending, women purchase spending in high expenditure are more than men. For product purchased, female has more varieties of products than that of male, especially for cosmetics, clothes and daily living equipment. The main products bought by male are electronic goods and books. So young female is main force of online shopping.

Table 4.3 Cross-Over Analysis of Purchase Frequency

		purchase frequency			Total
		1-3 times	4-6 times	7 times or more	
Gender	male	30	23	33	86
	percent	34.9%	26.7%	38.4%	100.0%
	female	30	33	51	114
	percent	26.3%	28.9%	44.7%	100.0%

Table 4.4 Cross-Over Analysis of Purchase Spending

		purchase spending					Total
		Below RMB200	RMB201 and RMB500	RMB501 and RMB1000	RMB1001 and RMB1500	Above RMB1500	
Gender	male	16	27	33	4	6	86
	percent	18.6%	31.4%	38.4%	4.7%	7.0%	100.0%
	female	14	34	35	18	13	114
	percent	12.3%	29.8%	30.7%	15.8%	11.4%	100.0%

Table 4.5 Cross-Over Analysis of Purchase Product

		purchase products							Total	
		Flight tickets	food	Books	Electronic goods	Cosmetics	Clothes	daily living equipment		Others
Gender	male	17	31	34	58	9	40	46	13	86
	female	36	31	47	34	36	83	66	24	114
Total		53	62	81	92	45	123	112	37	200

#### 4.1.5 Descriptive Statistic of All Variables

The information in the section B of the questionnaire is related to various constructs that play an important role as determinants of the customer satisfaction in online

shopping activities under company reputation, website security, website design quality, service quality and merchandise attribute. We will discuss the results of descriptive analysis of this research in the following part.

Table 4.6 Descriptive Statistic of All Variables

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
company reputation	2	5	3.77	0.630	-0.251	0.839
Website security	2	5	3.74	0.657	-0.043	-0.165
Website design quality	2	5	3.792	0.5585	-0.642	1.329
Service quality	2	5	3.73	0.698	-0.286	-0.016
Merchandise attribute	2	5	3.866	0.5647	-0.284	0.845
Customer satisfaction	2	5	3.615	0.5549	0.341	0.287
Customer loyalty	2	5	3.658	0.6024	-0.31	0.083

Table 4.6 showed that “merchandise attribute” (mean=3.866) with the highest mean mark among the five variables. Followed by “website design quality”(mean=3.792). “company reputation”(mean=3.77), “website security”(mean=3.74). “service quality” (mean=3.73), “customer loyalty”(mean=3.658), “customer satisfaction” (mean=3.615) with the lowest mean mark among the five variables. Standard deviation is used to

reflect the degree of data discretization.

## 4.2 Scale Measurement

In this research, reliability test was used to test reliability and validity of the questionnaire data.

### 4.2.1 Reliability Test

Reliability test was conducted on seven constructs examining the consistency reliability of the factors in constructs by adopting Cronbach's Alpha and they were summarized in Table 4.7. In general, Cronbach's alpha coefficients should be above 0.7 at a minimum in order to be considered as a good strength of association (Heppner and Heppner, 2004).

Table 4.7 Reliability of the Constructs

Constructs	Cronbach's Alpha
Company reputation	0.857
Website security	0.869
Website design quality	0.826
Service quality	0.826
Merchandise attribute	0.822
Customer Satisfaction	0.745
Customer Loyalty	0.836

With the information in Table 4.7, company reputation is 0.857, website security is 0.869, website design quality is 0.826, service quality is 0.826, merchandise attribute is 0.822, customer satisfaction is 0.745 and customer loyalty is 0.836. In conclusion, all of variable's Cronbach Alpha is above 0.7. The result demonstrated that this



research model and questionnaire has favorable reliability and internal consistency, which is suitable for future research.

#### 4.2.2 Factor Analysis

The factor analysis may provide the credit and affection certification to raise the reliability and credibility of theory model. Based on the Table 4.8, KMO is used for test the correlation between variables. In general, the value of KMO above 0.9 is the best result and above 0.7 can be accepted, while if it is below 0.5, it would not be suitable for factor analysis. In the following result, all of these factors' KOM value were above 0.7. Thus, there is a significant correlation between each variable.

Furthermore, based on the principal components analysis and VARIMIX procedure in orthogonal rotation that were adopted in the factor analysis, the results showed that the Eigenvalues for all the constructs were more than 1.0 from the lowest of 2.541 (customer satisfaction) to the highest of 3.532 (service quality). All the factors in Table 4.8 were more than 0.50 and were convergent validity. That is all the factors were distribute according to the different construct in terms of discriminant validity. Thus, the factors were not overlapping and supported respective constructs.

Table 4.8 Factor Analysis Result

Number of factors	Factor's Name	Variables	Factors loading	Eigene value	Reliability	KaiserMeyerOlkin (KMO)
F1	Company reputation	The website has a good reputation compared to other rival websites.	0.837	2.811	0.857	0.758
		The website is trustworthy and honest.	0.866			

		The website is concerned about customer's welfare.	0.856			
		The website has a good ability to deal with perceived risks	0.791			
F2	Website security	The website has safety payment system.	0.820	3.321	0.869	0.792
		I feel safe in my transaction when I purchasing on the website.	0.842			
		The website ensures the safe transmission of customers' information.	0.811			
		I feel secure giving out credit card information at this site.	0.801			
		I think the website respects the user rights when obtaining personal information.	0.801			
F3	Website design quality	The website has beautiful and attractive design,uses good color combinations	0.731	2.985	0.826	0.783
		This is a fully functional website, all of its linked pages work well	0.829			
		The organization of the content on the website leads me easily to find the	0.746			

		information i need				
		I like the layout of this website	0.773			
		I found it easy to move around in this website	0.781			
F4	Service quality	The company is ready and willing to respond to customer needs	0.794	3.532	0.826	0.871
		The products sent by the website are well packaged and delivered in time	0.784			
		When I use the website, it takes little waiting time for the website to respond after my actions	0.878			
		The customer service in this website is good, staff can be able to handle customer issues in a timely manner	0.880			
		Inquiries are answered promptly.	0.861			
F5	Merchandise attribute	The general pricing of the website's goods is relatively lower than that of the stores	0.695	3.030	0.822	0.803
		This website merchandise is complete , most of the goods I need can be found	0.834			

		at this site				
		This website promises that the goods sold are of good quality	0.683			
		There are more choices for goods of a particular type at this site	0.850			
		The product range of this website is complete	0.813			
F6	Satisfaction	My choice to purchase from this website was a wise one	0.735	2.541	0.745	0.753
		I have truly enjoyed purchasing from this website	0.693			
		I am satisfied with my most recent decision to purchase from this website	0.739			
		If I had to do it over again, I'd make my most recent online purchase at this website	0.711			
		When I purchased from this website, I am never disappointed.	0.684			
F7	Loyalty	I think I am the loyal customer of this website	0.779	3.081	0.836	0.806
		I would recommend this website to friends	0.741			

		When I need to purchase goods, the first thought is this website.	0.818			
		Although another website have same products, I still purchase from this website.	0.860			
		Even the price of product is a little higher than other website, I still like to buy from this website.	0.718			

### 4.3 Inferential Analysis

#### 4.3.1 Pearson Correlation Analysis

Pearson correlation analysis is to measure the degree of linear association between two variables (Hair et al., 2006). If the correlation coefficient between variables is greater than 0, the two variables were positive correlation. Conversely, the two variables were negative correlation.

Based on Table 4.9, it is showed that all variables have positive correlation relationship with customer satisfaction. Moreover, the value of all the variables are not exceeding the value of 0.75 which means all the variables are distinct and not overlapping with each other. The 2-tailed significance were 0.000 ( $p < 0.01$ ) between all the independent variables and dependent variable.

Table 4.9 Pearson Correlation Analysis

Pearson Correlation		Satisfaction	company reputation	Website security	Website design quality	Service quality	Merchandise attribute
Satisfaction	Pearson Correlation	1.000	0.486	0.551	0.547	0.584	0.601
	Sig.(2-taild)		0.000	0.000	0.000	0.000	0.000
Company reputation	Pearson Correlation	0.486	1.000	0.741	0.541	0.654	0.618
	Sig.(2-taild)	0.000		0.000	0.000	0.000	0.000
Website security	Pearson Correlation	0.551	0.741	1.000	0.534	0.655	0.683
	Sig.(2-taild)	0.000	0.000		0.000	0.000	0.000
Website design quality	Pearson Correlation	0.547	0.541	0.534	1.000	0.639	0.627
	Sig.(2-taild)	0.000	0.000	0.000		0.000	0.000
Service quality	Pearson Correlation	0.584	0.654	0.655	0.639	1.000	0.705
	Sig.(2-taild)	0.000	0.000	0.000	0.000		0.000
Merchandise attribute	Pearson Correlation	0.601	0.618	0.683	0.627	0.705	1.000
	Sig.(2-taild)	0.000	0.000	0.000	0.000	0.000	

### 4.3.2 Multiple Regression Analysis

The objective of multiple regression analysis is to predict the single dependent variable by a set of independent variables (Heppner and Heppner, 2004). Multiple regression analysis is used to test dependency relation between variables. Through the independent variables regression analysis, the correctness of assumptions of the six hypotheses mentioned in chapter 2 is verified.

Table 4.10 Coefficients of Independent Variables (stepwise)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.331	0.218		6.105	0.000
	Merchandise attribute	0.591	0.056	0.601	10.585	0.000
2	(Constant)	1.242	0.211		5.889	0.000
	Merchandise attribute	0.370	0.076	0.377	4.892	0.000
	Service quality	0.253	0.061	0.318	4.129	0.000
3	(Constant)	0.983	0.228		4.314	0.000
	Merchandise attribute	0.300	0.079	0.306	3.816	0.000
	Service quality	0.189	0.064	0.238	2.940	0.004
	Website design quality	0.202	0.073	0.203	2.752	0.006
4	(Constant)	0.921	0.228		4.047	0.000
	Merchandise attribute	0.234	0.084	0.238	2.777	0.006
	Service quality	0.148	0.067	0.186	2.217	0.028
	Website design quality	0.190	0.073	0.191	2.608	0.010
	Website security	0.138	0.066	0.164	2.109	0.036

Dependent Variable: customer satisfaction

Based on the coefficients table, four independent variables' P value below 0.05 are identified, namely website security, website design quality, service quality and merchandise attribute. It is further indicated that those four variables have positive correlation toward customer satisfaction. The merchandise attribute scored the highest mark of Standardised Coefficients Beta value ( $\beta = 0.238$ ), which indicates that merchandise attribute has the most powerful influence on customer satisfaction. Followed by website design quality ( $\beta = 0.191$ ), service quality ( $\beta = 0.186$ ), website security ( $\beta = 0.164$ ). Thus, the relationship between customer satisfaction and four independent variables can be demonstrated by developing the equations:

Customer Satisfaction=0.921+0.234 Merchandise Attribute+0.190 Website Design Quality+0.148 Service Quality+0.138 Website Security

Table 4.11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.601 <sup>a</sup>	0.361	0.358	0.4446
2	0.642 <sup>b</sup>	0.412	0.406	0.4276
3	0.659 <sup>c</sup>	0.434	0.425	0.4206
4	0.668 <sup>d</sup>	0.447	0.435	0.4170

a. Predictors: (Constant), Merchandise attribute

b. Predictors: (Constant), Merchandise attribute, Service quality

c. Predictors: (Constant), Merchandise attribute, Service quality, Website design quality

d. Predictors: (Constant), Merchandise attribute, Service quality, Website design quality, Website security

e. Dependent Variable: Satisfaction

In conclusion, the change of customer satisfaction is explained 44.7% by all the independent variables, including merchandise attribute, service quality, website design quality, website security.

Table 4.12 Excluded Variable of Company Reputation

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
					Tolerance	
4	company reputation	-0.020 <sup>d</sup>	-0.238	0.812	-0.017	0.394

Dependent Variable: Satisfaction

### 4.3.3 Multicollinearity Analysis



High levels of collinearity increase the probability that a good predictor of the outcome will be found insignificant and rejected from the model (Hair et. al., 2003). A good predictor of the outcome will be found insignificant and rejected from the model when the level of collinearity is high (Hair et. al.,2003). Therefore, collinearity analysis will show the problem of multicollinearity in the form of Variance Inflation Factor (VIF) and Tolerance Value. According to Hair et. al., (2003), the maximum acceptable VIF value would be 5.0, thus if VIF value higher than 5.0 would indicate a problem with multicollinearity. Meanwhile,“If the tolerance value is smaller than 0.10, it was indicates a problem of multicollinearity”(Hair et. al., 2003).

Table 4.13 Multicollinearity Analysis

Construct	Tolerance Value	VIF
Company reputation	0.394	2.540
Website security	0.360	2.781
Website design quality	0.521	1.920
Service quality	0.382	2.618
Merchandise attribute	0.386	2.593

Based on the Table 4.13, the values of Variance Inflation Factor (VIF) for all the variables were less than 5.0 and the range of Tolerance Value was between 0.360 and 0.521. The finding indicated that the problem of multicollinearity was not significant in this research.

Table 4.14 ANOVA of Independent Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.142	1	22.142	112.033	.000 <sup>a</sup>
	Residual	39.133	198	.198		
	Total	61.275	199			
2	Regression	25.258	2	12.629	69.078	.000 <sup>b</sup>
	Residual	36.017	197	.183		

	Total	61.275	199			
3	Regression	26.599	3	8.866	50.114	.000 <sup>e</sup>
	Residual	34.676	196	.177		
	Total	61.275	199			
4	Regression	27.372	4	6.843	39.358	.000 <sup>d</sup>
	Residual	33.903	195	.174		
	Total	61.275	199			

a. Predictors: (Constant), Merchandise attribute

b. Predictors: (Constant), Merchandise attribute, Service quality

c. Predictors: (Constant), Merchandise attribute, Service quality, Website design quality

d. Predictors: (Constant), Merchandise attribute, Service quality, Website design quality, Website security

e. Dependent Variable: Satisfaction

Based on the ANOVA table, analysis of variance revealed significant differences between the variables ( $p < 0.01$ ).

#### 4.3.4 Normality Test

As for the normality test, histogram with normal curve, P-P plot and scatter plot diagram will be used to show the normal distribution of the sample and identify the possible relationship between variables and indicate outliers, the four assumptions were included linearity assumption, independence assumption, equal variance assumption and normality assumptions. It is important to ensure that the distribution of the respondents is normally distributed before conducting any statistical analysis test and analysis.

Figure 4.2 Histogram of customer satisfaction

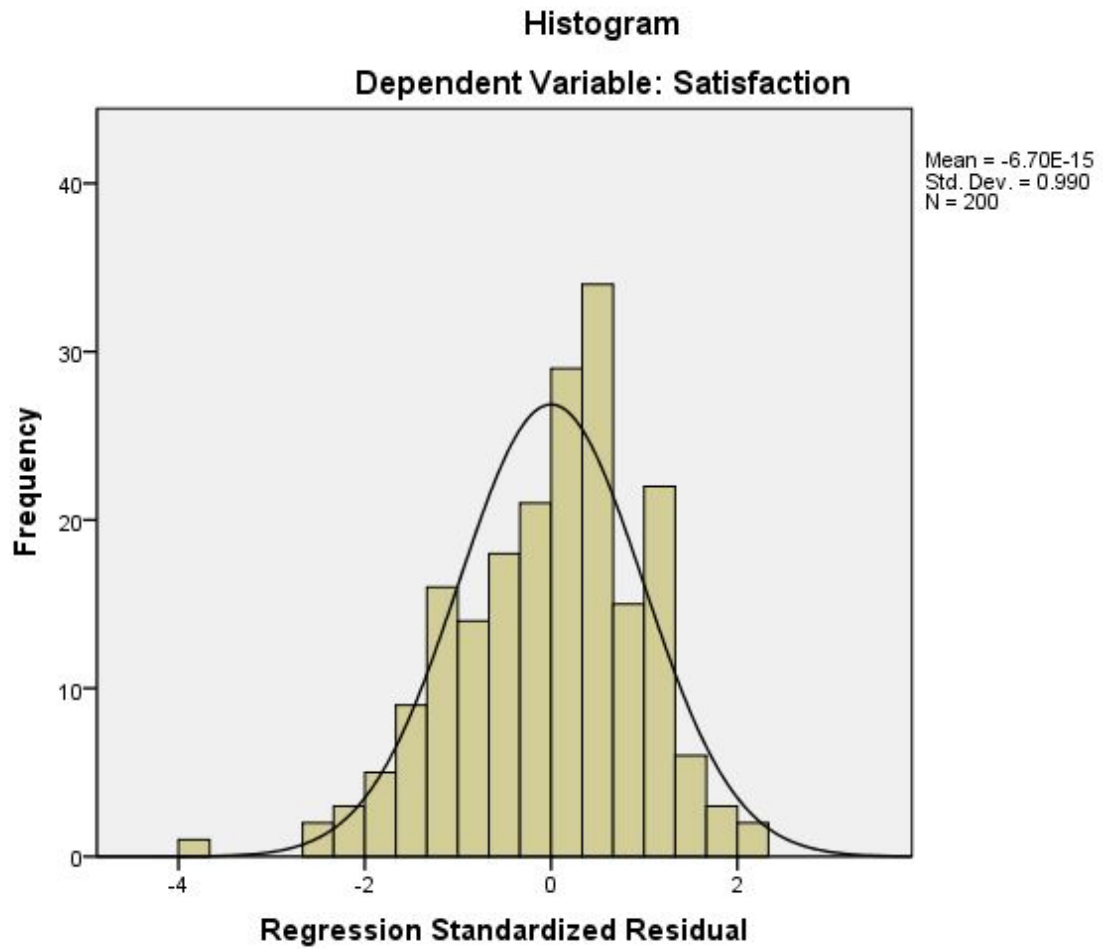


Figure 4.3 Normal P-P plot of customer satisfaction

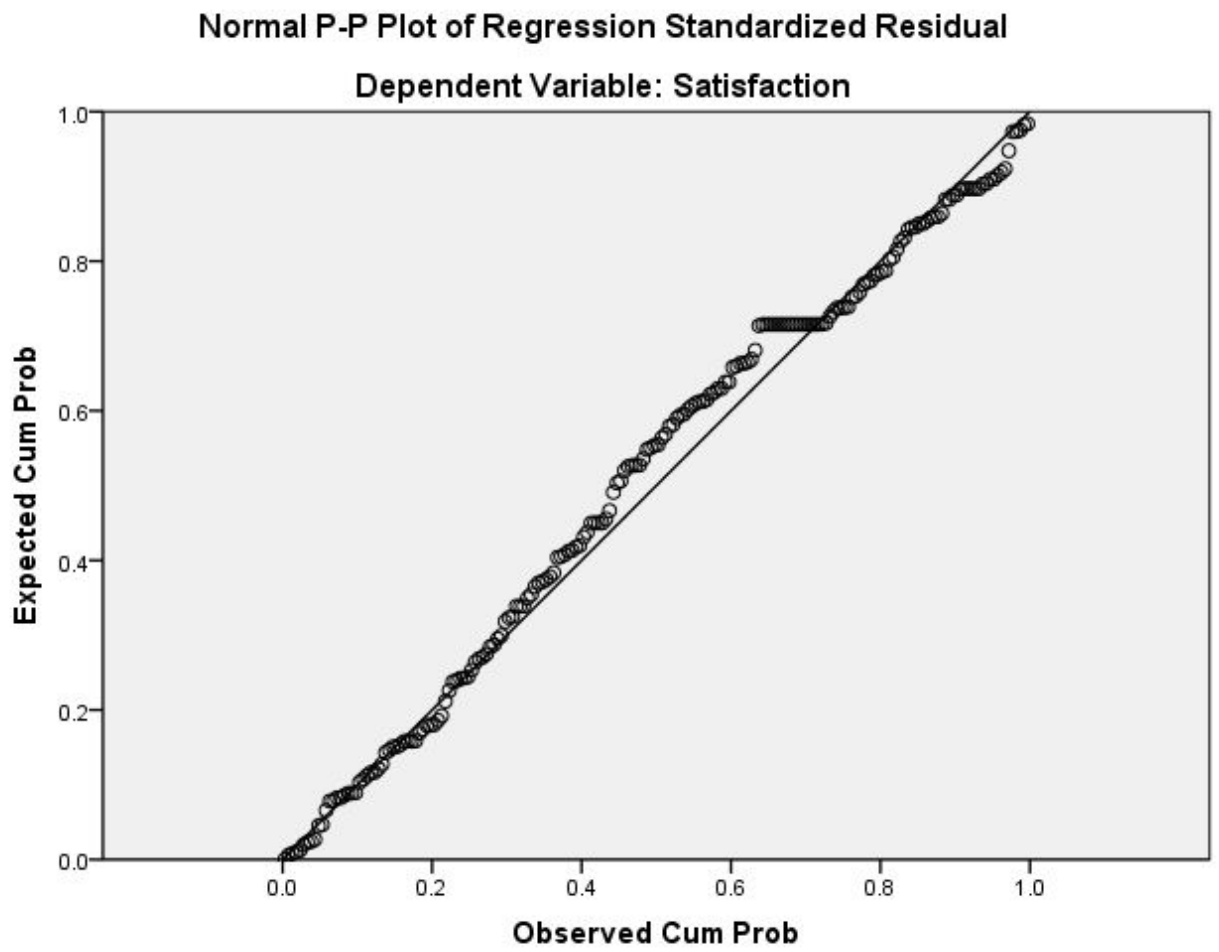
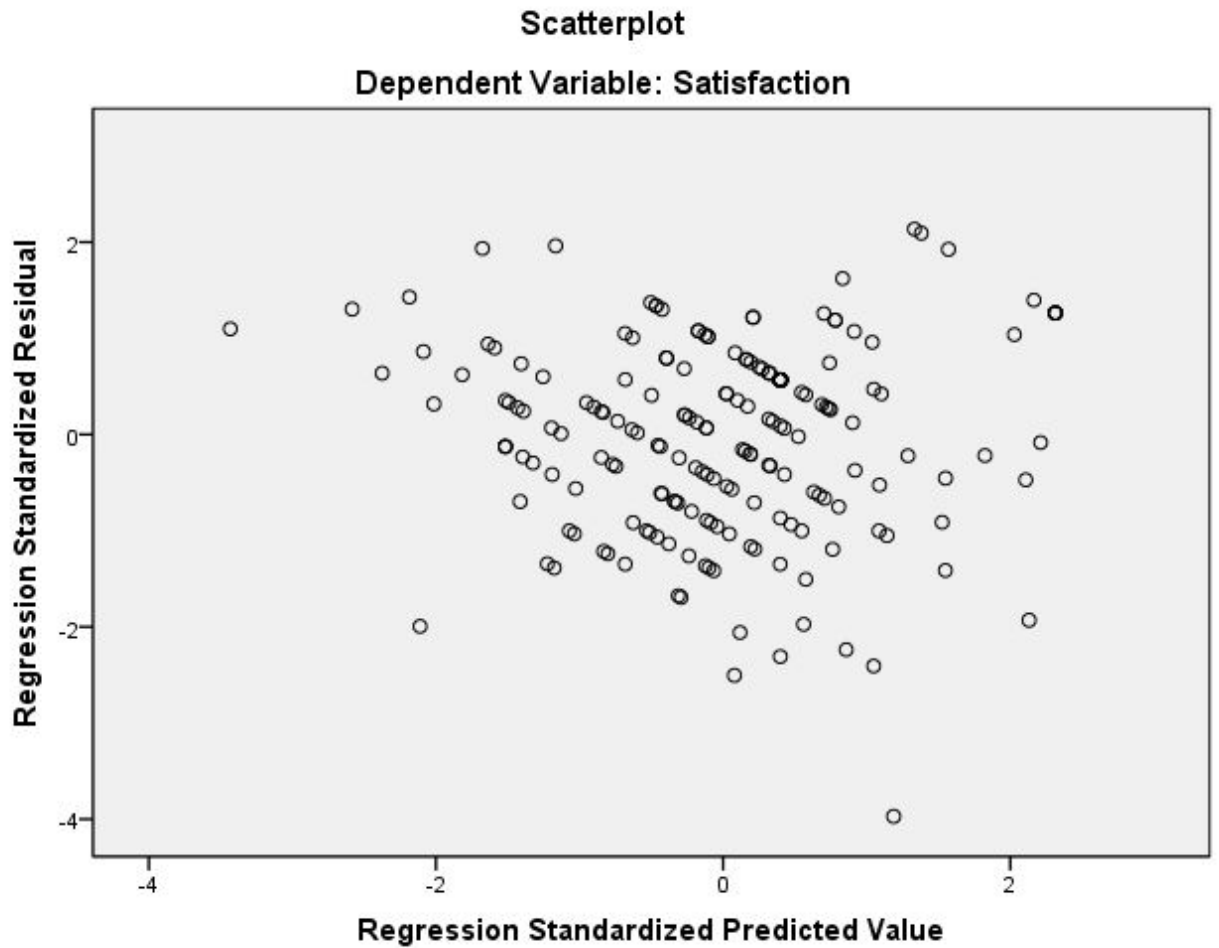


Figure 4.4 Scatter Plot Diagram of customer satisfaction



Based on Figure 4.2, the histogram above revealed a normally distribution of the sample data indicating that the data are normally distributed. Besides that, based on Figure 4.3, the points has slightly deviated from normality straight line from 0.4 to 0.8. this suggests there is a minor deviation from normality. But beyond that, almost points were closed to the line which showed that the points of P-P Plot fitted normal distribution. In Figure 4.4, the scatter plot shown here meets the independence assumptions whereby there is no pattern.

#### 4.3.5 Simple Regression Analysis

The simple regression is to examine the effect of one predictor on one criterion

(Heppner and Heppner, 2004).

Table 4.15 Simple Linear Regression Analysis of Customer Loyalty

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.978	0.206		4.746	0.000
	Satisfaction	0.741	0.056	0.683	13.155	0.000

a. Dependent Variable: customer loyalty

Based on table 4.15, the simple linear regression equation was formed:

$$\text{Customer Loyalty} = 0.978 + 0.741 \text{ Customer Satisfaction}$$

In conclusion, values of unstandardized coefficient B of Customer Satisfaction is 0.741 which is powerful influence customer loyalty.

Table 4.16 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.683 <sup>a</sup>	0.466	0.464	0.4411

a. Predictors: (Constant), Satisfaction

In conclusion, the value of R Square is 0.466, so 46.6% can explain the model of independent variable of customer satisfaction.

### 4.3.6 Hypothesis Testing Analysis Results

#### First Hypotheses

H1: There is a positive relationship between company reputation and customer satisfaction in online shopping activities.

According to Table 4.12, the significant value of company reputation is 0.812, which

is greater than p value of 0.05. Thus, H1 is rejected. There is no significant relationship between company reputation and customer satisfaction in online shopping activities.

### **Second Hypotheses**

H2: There is a positive relationship between website security and customer satisfaction in online shopping activities.

Based on Table 4.10, the significant value of website security is 0.036, which is less than P value of 0.05. Thus, H2 is supported, which proves that website security is significantly influencing customer satisfaction towards online shopping activities.

### **Third Hypotheses**

H3: There is a positive relationship between website design quality and customer satisfaction in online shopping activities.

Based on Table 4.10, the significant value of website design quality is 0.010, which is less than P value of 0.05. Thus, H3 is supported, which proves that website design quality is significantly influencing customer satisfaction towards online shopping activities.

### **Forth Hypotheses**

H4: There is a positive relationship between service quality and customer satisfaction in online shopping activities.

Based on Table 4.10, the significant value of service quality is 0.028, which is less

than P value of 0.05. Thus, H4 is supported, which proves that service quality is significantly influencing customer satisfaction towards online shopping activities.

### **Fifth Hypotheses**

H5: There is a positive relationship between merchandise attribute and customer satisfaction in online shopping activities.

Based on Table 4.10, the significant value of merchandise attribute is 0.006, which is less than P value of 0.05. Thus, H5 is supported, which proves that merchandise attribute is significantly influencing customer satisfaction towards online shopping activities.

### **Sixth Hypotheses**

H6: There is a positive relationship between customer satisfaction and customer loyalty in online shopping activities.

Based on Table 4.15, the significant value of customer satisfaction is 0.000, which is less than P value of 0.05. Thus, H6 is supported, which proves that customer satisfaction is significantly influencing customer loyalty towards online shopping activities.

## **4.4 Conclusion**

In this chapter, the details of quantitative analysis was explained. The five hypotheses were supported except one variable which is company reputation. It seems that merchandise attribute have the most important influences on customer satisfaction toward online shopping activities. However, company reputation has little influence



on customer satisfaction. These results will be further discussed in the next chapter to stand for scrutiny regarding causal and effects.

## **CHAPTER 5**

### **SUMMARY AND CONCLUSIONS**

#### **5.0 Introduction**

The chapter 4 has analyzed the data and processed for the results of the survey data. This chapter will discuss the quantitative results, the conclusion are based on the research of study. This findings not only benefits to further development for B2C company, but also has the reference value to the marketing strategy of those companies in e-commerce industry. Besides that, this chapter also discuss the limitations and put forward some recommendations for future research.

#### **5.1 Summary of Statistical Analysis**

The current chapter, showing the summarize of the statistical analysis result. The results of this study will be divided into three parts, which are descriptive analysis, pearson correlation analysis and multiple liner regression analysis.

##### **5.1.1 Descriptive Analysis**

Based on the result of respondents' demographic profile, it is showed that majority respondents are female, which account for 57 percent (114 persons) of total

respondents and males account for 43 percent (86 persons). The gender ratio demonstrated that females are more likely to take a shopping. In the age range, more than half respondents in 26-30 years old (56.5 percent). At that age, most people already have work with stable income, therefore they are main purchasers in total respondents. The second majority of respondents in 19-25 years old (29.5 percent), most of respondents in this age group are university students, because they open minded and like to try to accept new things. They have strong buying power. Beyond that, 26 respondents in 31-35 years old (13 percent) and only one person in both age group of below 18 years old (0.5 percent) and above 35 years old (0.5 percent). In the education level, majority of the respondents are of the Bachelor degree, which consists of 117 respondents (58.5%), other respondents had the diploma, master degree and PHD. Due to the special occupation of respondents, they generally have a high education level. In this investigation, because of the restriction on age and education level, half percent respondents income level is RM2001 to RM3000.

Based on respondents general information, all respondents have purchased product or service from website in last 3 months, and most of respondents(42%, 84 person) at least purchased 7 times or more from website. Because female is more than male, the most products purchased are clothes and daily living equipment, which account for 20.3% and 18.5%. Besides, most type of products purchased by female were more than male, except electronic goods. The highest annual spending group is RM251 and RM500, accounting for 34% (68 respondents). There are 19 respondents (9.5%) in the group of expenditure above RM750.

### **5.1.2 Scale Measurement**

Scale measurement is adapted to analysis on the construct variable's internal reliability. In the seven constructs measured, the variable of Website security with the highest Cronbach's alpha which valued is 0.869. Followed by company reputation

with Cronbach's alpha value is 0.857, and customer loyalty with Cronbach's alpha value is 0.836. Both of website design quality and design quality scored Cronbach's alpha value is 0.826. Merchandise attribute with Cronbach's alpha 0.822. Customer satisfaction with lowest Cronbach's alpha 0.745. In summary, all variable's Cronbach Alpha is greater than 0.7 which indicated have high reliability.

### **5.1.3 Pearson Correlation Analysis**

Pearson correlation coefficient analysis was used to test the correlation between each variable. The result showed that company reputation, website security, website design quality, service quality, merchandise attribute are significantly positive correlated with customer satisfaction toward online shopping activities. Website security has the strongest correlation with other variable which r-value is 0.705,  $p < 0.01$ . Meanwhile, company reputation has the weakest correlation with customer satisfaction which r-value is 0.486,  $p < 0.01$ .

### **5.1.4 Multiple Regression Analysis**

Based on this research, there are four variables' P value below 0.05, which are website security, website design quality, service quality and merchandise attribute. It indicated that they have positive effect toward customer satisfaction. The value of R Square is 0.447 (Table 4.11) which means that 44.7 percent variance can be explained by the four independent variables. The regression equation is show as follow:

$$\text{Customer Satisfaction} = 0.921 + 0.234 \text{ Merchandise Attribute} + 0.190 \text{ Website Design Quality} + 0.148 \text{ Service Quality} + 0.138 \text{ Website Security}$$

With the information of the linear equation, it can be seen that there are significantly positive relationship between the four variables. Meanwhile, the result showed that

only four variables which are supported with the significance level are below 0.05. Thus, H2, H3, H4, H5 were supported in this study.

### 5.1.5 Simple Regression Analysis

Based on this research, simple regression was used to test the correlation between customer satisfaction and customer loyalty. The result showed that customer satisfaction has positive effect toward customer loyalty which indicated that P value less than 0.05. The R Square is 0.466 which means that 46.6 percent can be explained by one independent variables the regression equation is show as follow:

$$\text{Customer Loyalty} = 0.978 + 0.741 \text{ Customer Satisfaction}$$

Based on the simple regression analysis, it showed that there are significant positive relationship between customer satisfaction and customer loyalty. This hypothesis was supported with the significance level below 0.05. Thus, H6 was supported.

## 5.2 Discussions of Findings

The objective of this research study focuses on the relationship between the influencing factors of customer satisfaction toward customer loyalty in online shopping activities. Table 5.1 showed the summary hypotheses testing results.

Table 5.1 Summary of Hypotheses Testing result

Hypotheses	Values	Determination
H1: There is a positive relationship between company reputation and customer satisfaction in online shopping activities.	p = 0.812 (p>0.05)  $\beta = -0.020$	Rejected

H2: There is a positive relationship between website security and customer satisfaction in online shopping activities.	p =0.036 (p<0.05)  $\beta = 0.164$	Supported
H3: There is a positive relationship between website design quality and customer satisfaction in online shopping activities.	p =0.010 (p<0.05)  $\beta = 0.191$	Supported
H4: There is a positive relationship between service quality and customer satisfaction in online shopping activities.	p =0.028 (p<0.05)  $\beta = 0.186$	Supported
H5: There is a positive relationship between merchandise attribute and customer satisfaction in online shopping activities.	p =0.006 (p<0.05)  $\beta = 0.238$	Supported
H6: There is a positive relationship between customer satisfaction and customer loyalty in online shopping activities.	p =0.000 (p<0.05)  $\beta =0.741$	Supported

### 5.2.1 First hypothesis

**Research Objective 1:** To examine the relationship between company reputation and customer satisfaction in online shopping activities.

H1: There is a positive relationship between company reputation and customer satisfaction in online shopping activities.

Based on Table 5.1, the result showed that company reputation has no significant influence toward customer satisfaction. Because the significant value is 0.812 which is above 0.05. Obviously, this hypothesis is invalid, so H1 is rejected. Earlier research from Byougho et al.(2007) who indicated a positive relationship between company reputation and customers satisfaction, Chai et al., (2010) also advised that online vendors should focus on building reputation which will continuously enable to buy from online vendor. This means that if online website is famous and has good reputation, it can increase their confidence in online website and they are more willing to participate in online purchasing activities very often. But according to Dolatabadi and Ebrahimi (2010); Teo and Liu (2007), they argued that company's reputation is the positive related to the customer satisfaction to participate in online activities.

For the findings of this research, company reputation is not significant toward customer satisfaction. This is caused by online shoppers thinking that website security, service quality and other factors are much more important than company reputation related customer satisfaction. Due to the development and gradual perfection of e-commerce, some companies already have become public, and some companies advertisement dotted the streets. Smaller company was difficult to survive in this fiercely competitive industry. The vast majority of online shopping websites are known very well by customers. Every well-known shopping website is paying more attention to the product and service and other aspects and trying their utmost to present the best in order to attract more customers. So company reputation dose not

contribute more to customer satisfaction than other factors. Just because of this, company reputation appears unimportant, and customers prefer to focus on experience of online shopping process. Hence, online shoppers may not care much about the company reputation of online website.

### **5.2.2 Second hypothesis**

**Research Objective 2:** To examine the relationship between website security and customer satisfaction in online shopping activities.

H2: There is a positive relationship between website security and customer satisfaction in online shopping activities.

With the information in Table 5.1, it is showed that website security has a significant positive influence towards customer satisfaction with  $\beta=0.164$ ,  $p<0.05$ . The analysis result shown that the significance value of website security is 0.036. Thus, it is demonstrated that website security had a significant positive relationship towards customer satisfaction in online shopping activities. Due to online payment is not always so safe for customers to pay online as hackers might steal the user name and password. The security issue may influence their attitude towards engagement with online purchase activities. They worried that personal information and transaction information will be disclosed to third parties. This important issue of e-commerce is to ensure website security and safety for transaction. Liu et al.(2008) stated that online vendors should create a safe shopping environment for customers. The secure website could protect transaction safety and indicates whether the current site is a known phishing site, a suspected fraud or a valid site. Some online websites has carried out pay on delivery, eliminating the worry. Besides, Christianet al.(2005) also claimed the significance of the privacy protection and main ways to prevent privacy leaks in the website. Therefore, customers are more willing to purchase online by



decreasing their worries about the possible risk in online transaction. Thus, the second research objective is fulfilled and H3 is supported as well.

### **5.2.3 Third hypothesis**

**Research Objective 3:** To examine the relationship between website design quality and customer satisfaction in online shopping activities.

H3: There is a positive relationship between website design quality and customer satisfaction in online shopping activities.

Based on Table 5.1, it is showed that website design quality has a significant positive influence towards customers satisfaction with  $\beta=0.191$ ,  $p<0.05$ . The analysis result shown that the significance value of website security is 0.010. Thus, it is demonstrated that website design quality had a significant positive relationship towards customer satisfaction in online shopping activities. Liu et al. (2008) found that attractive website design could make customers enjoyable online shopping. The website with attractive design, user-friendliness, multiple functions, clearly defined sections and stable operation will be a feast for customer and attract more customers to purchase products online as well as increase customers' satisfaction. Because the fully functional website could reduce the time of online information search in order to make online shopping more convenient. Therefore, the third objective has been achieved and H3 is supported as well.

### **5.2.4 Fourth hypothesis**

**Research Objective 4:** To examine the relationship between service quality and customer satisfaction in online shopping activities.

H4: There is a positive relationship between service quality and customer satisfaction in online shopping activities.

Based on Table 5.1, it is showed that website design quality has a significant positive influence towards customer satisfaction with  $\beta = 0.186$ ,  $p < 0.05$ . The analysis result shown that the significance value of website security is 0.028. Thus, it is demonstrated that service quality had a significant positive relationship towards customer satisfaction in online shopping activities. The development of e-commerce has changed enterprise's traditional marketing method and consumers' shopping way, have offered more thoughtful and more humanized service to the mass of network users. For the virtual nature of online shopping, customers focus more on the service quality experience. This is because good service could reducing worries and give customers a sense of pleasure. Online service include many aspects, such as online customer service, packaged and delivery. Guo et al.(2012) found that delivery and transaction capability are significantly related to customer satisfaction. Maria et al.(2012) stated that customer were satisfied with customer service, which ultimately gets them to buy more products. So majority of the shopping websites pay more attention to the details of service quality in order to improve the customer satisfaction and loyalty to keep sustaining competitive advantages. Therefore, the fourth objective has been achieved and H4 is supported as well.

### **5.2.5 Fifth hypothesis**

**Research Objective 5:** To examine the relationship between merchandise attribute and customer satisfaction in online shopping activities.

H5: There is a positive relationship between merchandise attribute and customer satisfaction in online shopping activities.

Based on Table 5.1, it is showed that merchandise attribute has a significant positive influence towards customer satisfaction with  $\beta = 0.238$ ,  $p < 0.05$ . The analysis result shown that the significance value of merchandise attribute is 0.006. Thus, it is demonstrated that service quality had a significant positive relationship towards customer satisfaction in online shopping activities. Compared with traditional shopping, customers were more concerned about the product quality, cost performance and price in online shopping. The biggest advantage of online shopping is low price, which is lower than that in real shops. Besides that, online store merchandise is of great variety, such as TaoBao website which is like a hypermarket. Online shoppers could purchase anything they wanted from this website. When the customers considered that products provided by shopping website has high performance price ratio, they will have high satisfaction towards online shopping activities. Liu et al.(2008) demonstrated that online vendors provide a wide variety of products and with low price is significantly related to customer satisfaction. Hasina et al.(2011) stated that quality is the totality of features and characteristics of a product that bears on its ability to satisfy customers' needs. Thus, they will repeat purchase from this website, or word-of-mouth promotion to other people to recommend them to consume on this website, indirectly influencing customer loyalty. Thus, the fifth objective has been achieved and H5 is supported as well.

### **5.2.6 Sixth hypothesis**

**Research Objective 6:** To examine the relationship between customer satisfaction and customer loyalty in online shopping activities.

H6: There is a positive relationship between customer satisfaction and customer loyalty in online shopping activities.

Based on Table 5.1, it is showed that customer satisfaction has a significant positive

influence towards customer loyalty with  $\beta = 0.741$ ,  $p < 0.05$ . The analysis result shown that the significance value of merchandise attribute is 0.000. Thus, it is demonstrated that service quality had a significant positive relationship towards customer satisfaction in online shopping activities. Izyan Hizza Bt (2014) stated that when customer are satisfied with shopping experience, they are willing to repeat purchase from the same online vendors in order to enjoy the same experience again. This implied that customers' satisfaction is very important to customer loyalty, especially to the attitude loyalty. Because customer with high level of satisfaction may increase repeat purchase. In addition, customer will talk favorably about this shopping website and its products to other person. This is important for customer retention and profitability. Customer satisfaction and customer loyalty which are two areas that ultimately impact profits of company. Thus, the sixth objective has been achieved and H6 is supported as well.

## **5.3 Implications of the Study**

### **5.3.1 Company Reputation**

This study concluded that company reputation has no significant influence on customer satisfaction. Compared with other factors, customers may have a lower recognition of company reputation because their consumption experience is affected by service and products value directly. However, a good reputation of company was built up by providing good products, perfecting customer service, and guaranteeing for protect privacy of customer and logistic. Although it is not direct influence of customer satisfaction, this finding also indicated that if online vendors want to attract and retain customers, they need to constantly improve the product value and service quality in order to make customer has high satisfaction after purchase, enhancing reputation.

### **5.3.2 Website Security**

The B2C online shopping market has been growing sharply in recently years, however, the security of shopping at network has been the main concern that a lot of people have worried about all the time. They mostly worried about being malicious invasion of privacy and theft of bank account number and password. Although the existing credit evaluation system ensures the net trading safety to a certain extent and promotes the willing of shopping online, but it still exists obvious deficiency. Therefore, how to protect the security of information of online transaction from obtaining, embezzling, tampering and destroying illegally has become the common and serious problem concerned. This finding indicated that e-commerce website should create a safe shopping environment for customers, some B2C websites has carried out pay on delivery which is eliminating customers' worry completely. Besides that, it is necessary to draw on the successful experience of foreign countries and formulate e-commerce law in order to construction of a sound security network environment so that the legitimate rights and interests of customers the protection they deserve are provided.

### **5.3.3 Website Design Quality**

This study found that website design quality has positive effect on customer satisfaction. Because the web page is the first impression when customers are willing to purchase online. The fully functioned website is very important to customer. First, company should design friendly web-interface, add some personalized tips in order to make the process of online shopping faster and easier, and avoid operation error for customers. Second, the web page should be designed according to different types of main products so as to make it vivid, unique and simple. It is known that comfortable and attractive website outlook could give people a visual enjoyment. Besides that, various retrieval model shall be provided for customers, such as search “price high to

low”, which could lead customers easily to find the information they need. In addition, due to the huge number of online shoppers, some B2C websites need to provide good web server in order to create a professional, stable, and fast browsing environment for customers.

#### **5.3.4 Service Quality**

This study found that service quality is very important to customer satisfaction. In the virtual online shopping environment, customers tend to compare between product prices, and for products of the same price, the service quality brings the added competitive advantage for products. So B2C company could provide diversified service, such as personalized service, which will promote the timely communication between company and customers. On the one hand it could make customer know more about the information of products and service provided by company, and on the other hand, company could better understand the customer’s real demand. Diversified service also build a good working relationship between customers and company. Besides that, B2C companies also need to enhance after-sales service, the majority of online vendors have carried out “no reason to return in seven days”, which is provided perfect after-sale protection for customers. The B2C websites should increase the interaction between customers and the degree of personal service, perfect after-sale service and logistics system, impact the service quality perception of customers and finally affect the degree of customer satisfaction.

#### **5.3.5 Merchandise Attribute**

In this study, merchandise attribute is the strongest factor which influences customer satisfaction. For customers, the most attractive part of online shopping is the low price and variety of products. It is to be mentioned that TaoBao website is the most popular online marketplace in China since it has a wide range of products with

relatively lower price and higher cost performance, through which customer can buy anything and it has become the first choice of online shoppers. But while customers are enjoying convenience of online shopping, incidences of fake products also happened in some famous B2C websites in recently years. It did not only damage the benefits of customers, but also significantly reduced the reputation of the well-known B2C websites. Product quality is the root for the survival and development of companies and the strategic resource to support the companies' sustainable development. So company should strictly control quality of products in order to guarantee that the products can meet customers' requirement. More importantly, practices must be carried out stamp out fakes. Besides that, companies should establish refunds or exchanges rule to ease customers' worries. Then customers will buy with confidence and enjoy shopping, which will increase their satisfaction.

### **5.3.6 Customer Loyalty**

In this finding, customers' satisfaction plays an important role as a mediator between the determinants factors of satisfaction and customer loyalty. Customer satisfaction is the basis of building long-term buyer-seller relationship, and customer loyalty is the key ways for company's payoff and development. For maintaining customer loyalty, companies also need to focus on service quality and product value which are directly related to customer satisfaction such as personal service. For instance, if a company meets individual requirements and shopping experience, it will greatly contribute to build customer loyalty, because the one-to-one relationship could make customer take seriously in order to repeat purchase on this website. Besides, company should carry out the membership price with discount for repeated customers, make customer enjoy privileges. In addition, make sure to handle customers' complaints and suggestions positively and make proper compensation for them. These are all good ways to maintain customer loyalty.

## **5.4 Limitations**

Due to the limitations of research level, there still exists some shortcomings in this study, mainly included as following aspects.

First, this research focuses on the comprehensive websites of B2C e-commerce, such as Alibaba, Amazon, TaoBao, but does not involve the official websites, such as Airasia, Apple Inc website on which only the products of their own companies are sold. So this research did not study on the classification of the various types of shopping websites. Therefore, this research can not provide some management suggestions aiming at particular type of website.

Second, the size and amount of the sample used for this research is another potential limitation of this finding. This sample collected is of small size with 200 online customers, therefore, the data collected is unlikely to represent the larger population. The 200 respondents of this research are mainly university students and white-collar workers, and the majority of them are in 26-30 age group who have high education level. Thus, this research lacks data in other scope. The limitation of sample size renders this study unable to represent all online shoppers.

Third, this study only examined the effect of five variables that influenced the relationship between customer satisfaction and customer loyalty in B2C model. But it did not study the relationship between these five factors in depth. In addition, this research project focuses on customer online shopping rather than online purchasing, so it did not discuss other related purchasing factors, such as purchase intention, perceived risk and brand recognition in shopping process.

## **5.5 Recommendations for Future Research**



Based on the limitations on our research, some recommendations have been made for researchers who might conduct the research in the future.

Firstly, future research could expand the scope of the study on official websites of B2C e-commerce, such as Airasia, Apple Inc website, and compare the differences of customer purchase intention between these two types websites. By studying influential factors in official websites in order to deeply understand customer satisfaction in e-commerce context, and examine whether the research model of this study is applicable to some official websites.

Secondly, the number of sample size should be enlarged so as to arise the data and result of more accuracy. Besides that, it is recommended to have more balance representation among age ranges and occupation ranges for upcoming studies, and obtain a more comprehensive finding as well by equally distributing and collecting the research data around the places of the country from different provinces.

Thirdly, future research should measure more variables in order to get a better determination of factors influencing customer satisfaction and customer loyalty to participate in online shopping activities, such as online purchasing related factors, purchase intention, perceived risk and brand recognition variables which are the possible determinants that can be included in future research. In addition, it can help online retailers to increase their understanding towards the perception of online customer satisfaction and customer loyalty.

Fourthly, future studies should examine the effect of possible variables such as gender, income level and age on satisfaction of customers. Therefore, analyzing the differences between respondents' demographic profiles would help to provide a better description of the characteristic of the target population more comprehensively towards on the perception of online shopping.

## **5.6 Conclusion**

This study evaluated the influence factors of customer satisfaction in online shopping. After completing this research, it turned out that the literature is supported by the findings and research done. However, this study has proven that all the gathered data and information are reliable. Besides that, not all independent variables have a significant relationship with the dependent variables. There are only four independent variables which include the website security, website design quality, service quality and merchandise attribute are supporting the dependent variable, online customer satisfaction in B2C model. Company reputation has failed to support the dependent variables. Besides, merchandise attribute seems to have the strongest impact on the overall customer satisfaction in online shopping activities among the five variables. Satisfaction as a mediator which is an important determinant to online customer loyalty. In addition, the research has been able to clarify the roles of the determination of the factors affecting satisfaction and online satisfaction in the shaping of online loyalty among online customers in China. Consequently, from the managerial perspective, understanding the factors of satisfaction is essential for better understanding of online customer needs and maintaining customer loyalty.

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# **APPENDICES**

## **Appendix A**

### **Research Questionnaire**



**UNIVERSITI TUNKU ABDUL RAHMAN (UTAR)  
FACULTY OF ACCOUNTANCY AND MANAGEMENT (FAM)  
MASTER OF BUSINESS ADMINISTRATION**

**An analysis about the influencing factors of online shopping customer satisfaction and its relationship with customer loyalty in B2C model**

Dear Respondent:

Thank you for spending your time to complete this questionnaire. I am a master student of Universiti Tunku Abdul Rahman (UTAR) majoring in business administration. As part of my studies, I am conducting a research project titled "An analysis about the influencing factors of online shopping customer satisfaction in Business to Customer Website" You are invited to take part in this research project, Your participation is highly

appreciated and survey result play an important role in the research.

This is an anonymous survey, please answer all the questions conscientiously. All the information collected from this survey will be kept private and confidential.

If there is any enquiry about the questionnaire, please kindly contact me at:

<b>Name</b>	<b>Student ID</b>	<b>Contact Number</b>
Yuan Bing	13UKM06690	0176891121

## **Section A: General Information**

1. How many times have you purchased items from any B2C website in last 6 months?

- None    1-3 times    4-6 times    7 times or more

2. What do you usually purchase online? (You may choose more than one option)

- Flight tickets 1 food 2 Books 3 Electronic goods 4 Cosmetics 5    Clothes 6  
daily living equipment 7 Others8 (Please specify: \_\_\_\_\_)

3. On average, how much do you spend on online shopping every month?

- Below RM100 (RMB 500 )  
RM101 and RM250 (RMB 500 --RMB 1000)  
RM251 and RM500 (RMB 1000--RMB 1500)  
RM501 and RM750 (RMB 1500--RMB 2000)  
Above RM750 (RMB 2000 )

**Section B: Factors that influence customer satisfaction in online shopping activities**

Please mark the answers that most apply to you of each of the following statements. The answer being represented by 1-strongly disagrees, 2-disagree, 3-neutral, 4-agree and 5- strongly agree.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<b>Company reputation</b>					
1. The website has a good reputation compared to other rival websites.	1	2	3	4	5



2. The website is trustworthy and honest.	1	2	3	4	5
3. The website is concerned about customer's welfare.	1	2	3	4	5
4. The website has a good ability to deal with perceived risks	1	2	3	4	5
<b>Website security</b>					
1. The website has safety payment system.	1	2	3	4	5
2. I feel safe in my transaction when I purchasing on the website.	1	2	3	4	5
3. The website ensures the safe transmission of customers' information.	1	2	3	4	5
4. I feel secure giving out credit card information at this site.	1	2	3	4	5
5. I think the website respects the user rights when obtaining personal information.	1	2	3	4	5
<b>Website design quality</b>					
1. The website has beautiful and attractive design,uses good color combinations	1	2	3	4	5
2. This is a fully functional website, all of its linked pages work well	1	2	3	4	5
3. The organization of the content on	1	2	3	4	5

the website leads me easily to find the information i need					
4. I like the layout of this website	1	2	3	4	5
5. I found it easy to move around in this website	1	2	3	4	5
<b>Service quality</b>					
1.The company is ready and willing to respond to customer needs	1	2	3	4	5
2 The products sent by the website are well packaged and delivered in time	1	2	3	4	5
3 When I use the website, it takes little waiting time for the website to respond after my actions	1	2	3	4	5
4. The customer service in this website is good, staff can be able to handle customer issues in a timely manner	1	2	3	4	5
5. Inquiries are answered promptly.	1	2	3	4	5
<b>Merchandise attribute</b>					
1. The general pricing of the website's goods is relatively lower than that of the stores	1	2	3	4	5
2. This website merchandise is complete , most of the goods I need can be found at this site	1	2	3	4	5

3. This website promises that the goods sold are of good quality	1	2	3	4	5
4 There are more choices for goods of a particular type at this site	1	2	3	4	5
5 The product range of this website is complete	1	2	3	4	5
<b>Satisfaction</b>					
1. My choice to purchase from this website was a wise one	1	2	3	4	5
2. I have truly enjoyed purchasing from this website	1	2	3	4	5
3. I am satisfied with my most recent decision to purchase from this website	1	2	3	4	5
4. If I had to do it over again, I'd make my most recent online purchase at this website	1	2	3	4	5
5. When I purchased from this website, I am never disappointed.	1	2	3	4	5
<b>Loyalty</b>					
1. I think I am the loyal customer of this website	1	2	3	4	5
2. I would recommend this website to friends	1	2	3	4	5
3. When I need to purchase goods, the first thought is this website.	1	2	3	4	5

4. Although another website have same products, I still purchase from this website.	1	2	3	4	5
5. Even the price of product is a little higher than other website, I still like to buy from this website.	1	2	3	4	5

### Section C: Demographic Information

(Please tick on the appropriate box or write the correct answer)

1. Gender

Male       Female

2. Age

- Below 18 years old
- 19-25 years old
- 26-30 years old
- 31-35 years old
- Above 35 years old

3. Education Level

- Secondary School       Pre-University
- Diploma       Bachelor's Degree
- Master's Degree       Doctorate Degree

4. Income Level (per month)

- Below RM2000       RM4001 to RM5000
- RM2001 to RM3000       RM5001 and above
- RM3001 to RM4000

5. Occupation

- Student
- Office Administration
- Clerical work
- Professional/ Technical expertise
- Managerial level
- Others (Please specify: \_\_\_\_\_ )

Thank you for your time and co-operation