

A Study on Consumers' Attitude towards Online Shopping in China

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Abstract

Online shopping provides a good example of the business revolution. In China, e-commerce is currently experiencing a period of rapid development; the large number of Internet users provides a good foundation for the expansion of the online shopping market. In this study, perceived usability, perceived security, perceived privacy, perceived after-sales service, perceived marketing mix, and perceived reputation were used for analysis. This research was conducted by using the primary data source, and the survey method was employed in the research. This research found that there were relationships between the perceived usability, perceived security, perceived privacy, perceived after-sales service, perceived marketing mix, perceived reputation and consumers' attitude to adopting online shopping in China. However, only marketing mix and reputation were found to significantly influence consumers' attitude to adopt online shopping. The findings help us in understanding consumers' online purchase behaviour.

Keywords: Online shopping, consumer attitude, perceived usability, security, privacy, after-sales service, marketing mix, reputation.

1. Introduction

Online shopping has become a popular way for consumers. This new innovative pattern of shopping not only brings a great number and wide range of merchandise to consumers; it also offers a huge market and numerous business opportunities. In the past twenty years, we have witnessed the rapid development of the Internet and the geometric growth of the Internet users. Although the number of Asian Internet users was the highest in the world, the Internet penetration rate of Asia was lower than elsewhere. The penetration rate of Internet users in Asia was just higher than Africa, as at 30 June 2010, according to the Internet World Statistics (2010). The highest was North America with a penetration rate of 77.4%. We have been clearly feeling the tremendous change that was brought by the Internet, which has penetrated every corner of the world. From communication, education, and finance to entertainment, we can clearly see the application of the Internet. The Internet has resulted in a great revolution for every industry. The working efficiency, information transmission, and even cultural exchange have been unprecedentedly improved. Without doubt the Internet has influenced our lives deeply in which it plays an indispensable and irreplaceable role.

1.1 The Internet in China

The China Internet Network Information Center (CNNIC, 2010) published its 26th Statistical Report on Internet Development in China in July 2010. According to the report, the Internet users in China were 111 million in 2005 and the popularization rate was 8.5%. However, the number of Internet users increased to 420 million and the popularization rate was 31.8% in 2010. The report of the CNNIC (2010) also showed the portion of male and female Internet users, with the proportion of male to female among net citizens in China being 54.8:45.2. The percentage of male net citizens was nearly 10% larger than the female and the popularization of the Internet for females was relatively low. The report also clarified that the Internet users were apparently distinguished by youthfulness. The largest group of users was the 10-19 year old age group, which accounted for 35.8 percent of all users in 2010. The second largest group was the 20-29 year old age group, which accounted for 35.4 percent.

The group of 30-39 years old followed, which accounted for 19.6 percent. As a result, the main Internet users in China were young people whose age was between 10 to 30 years old. For the online hours, the report indicated that the average weekly online hours of net citizens had reached 19.8hours.

1.2 Online Shopping in China

In China, the number of online shopping users had risen to 142 million by June 2010; the utilization rate had increased to 33.8%, by 5.7%, and the increase in the rate of users for the half-year had reached 31.4% CNNIC (2010). Moreover, the volume of online shopping transactions in China rose to RMB523.1 billion (RM261 billion) in 2010. Among the numerous shopping websites for China, the market share of Taobao (www.taobao.com) accounted for 76.5% in 2009 making it the most popular shopping website. Its user penetration rate was 91% in 2009. The cities in China with the highest penetration rate for online shopping were Beijing and Shanghai. The potential users of online purchase in China are enormous. In 2009, 85.7% of net citizens had searched for information concerning merchandise through the Internet and 26% of them purchased products on the Internet. The degree of online consumers' satisfaction towards online shopping was high with 25% of them being 'satisfied very much' and 54.4% of them were 'satisfied'.

The government of China has paid considerable attention to stimulate the e-commerce development. It has formulated the Electronic Information Industry Restructuring and Revitalization Plan, Guidance for Promoting the Healthy Development of Online Shopping, and Provisions for Accelerating the E-commerce Development, which has provided strong policy support for the growth of e-commerce. In addition to the national level policies, many local governments also promulgated several policies and provided special funds for encouraging local e-commerce development. For example, the Provisions of the Shanghai Municipality on Promoting the Development of E-Commerce, Guangdong Province Electronic Transactions Ordinance, and Chengdu Municipality E-Commerce Development Plan (2009-2012).

1.3 Research Questions

In the previous section, the issues of online shopping were demonstrated. As the whole process of online purchase is through the Internet, in the virtual environment, there are many uncertain factors that are difficult for online consumers to control, such as online security, privacy protection, and after-sales service. Some people believe that these problems could directly influence their attitude in adopting online shopping. Many people believe that it is too complicated to process online shopping and that it is impossible to physically check the quality of the merchandise. Moreover, fraud has also become a serious issue that has beset e-consumers. Thus, the research questions of this study are shown as follows:

- i. What is the level of consumers' attitude towards online shopping?
- ii. What are the factors that could influence consumers' attitude to adopting online shopping in China?

1.4 Purpose and Significance of the Study

The main purpose of this study is to identify the consumers' attitude towards online shopping in China. In this study, the drivers that contribute to influence the consumers' online purchasing will be examined. The objectives of this research are:

- i. To examine the level of consumers' attitude towards online shopping.
- ii. To investigate the factors that could influence the consumers' attitude to adopting online shopping in China.

1.5 Scope of the Study

The study focused on three major cities in China namely Beijing, Shanghai, and Fuzhou. The three cities were selected due to the higher Internet penetration rate. According to the China Internet Network Information Centre (CNNIC, 2010), the Internet penetration rates of these three cities were all higher than the average rate of 28.9% with Beijing, Shanghai, Fuzhou having 65.1%, 62.1%, and 45.2% rates respectively in 2009.

2 Consumers' Attitude on Online Shopping

2.1 Definition

Consumers' attitude is a directly influenced factor that affects the consumers' buying willingness. Fishbein and Ajzen (1975) describe attitude towards a behaviour as a person's evaluation of a specified behaviour involving an object or outcome. For example, a person may hate to use a computer to play an online game where using the computer to play the online game is the behaviour and the individual's feeling is the attitude.

Attitude towards a behaviour has been found to be strongly related to a particular behaviour (Ajzen and Fishbein, 1980). There is a model of attitudes and shopping intention towards online shopping that was developed by Jarvenpaa and Todd (1997). This model includes numerous indicators that can be categorized into four classifications: the value of the product, the shopping experience, the quality of service provided by e-shop and the risk perceptions of online retail shopping. Vellido, Lisboa and Meehan (2000) summarized quite a few factors relating to consumers' perception of online shopping. The factors of risk perception of users, convenience of online shopping, control over, affordability of goods, ease of use of the shopping site, and customer service were included.

2.2 Factors Affecting Consumers' Online Shopping Attitude

Previous studies have summarized several significant factors that could influence consumers' attitude towards online shopping, such as usability, security, privacy, after-sales service, marketing mix, and reputation.

2.2.1 Perceived Usability

Usability refers to the extent to which a website facilitates users to utilize its functions easily and appropriately (Calisir, Bayraktaroglu, Gumussoy, Topcu, and Mutlu, 2009). Web usability can be defined as making the design simple enough so that customers, who by nature tend to be goal-driven, can accomplish their task as quickly and painlessly as possible (www.webcredible.com). Online shopping is based on the Internet and the website is the basic platform of online transaction. Therefore, website usability has a significant impact on online consumers' perceptions and e-shop success. Numerous previous researchers have summarized several factors as a benchmark to measure the usability of websites, such as ease of use, response time, navigation, interaction, design, convenience, learnability, efficiency, site findability and accessibility.

2.2.2 Perceived Security

Salisbury, Pearson, Pearson and Miller (2001) defined perceived security on the Web as "the extent to which one believes that the World Wide Web is secure for transmitting sensitive information". According to their studies, they believed that purchase intention online was influenced by the security of e-transactions. They also found that perceived security was positively associated with online purchase intention. A similar finding from the research of Elliot and Fowell (2000) showed that the consumers' perception of security-related issues was one of the most important factors in purchasing from a website. As a result, security has become one of the most important reasons that cause consumers to hesitate or fear using e-purchase and it has played a dominant role in influencing their attitude towards online shopping.

2.2.3 Perceived Privacy

In respect of the definition of privacy, personal information is always of great concern. A general definition of personal information is "data not otherwise available via public sources" (Beatty, 1996). Online privacy concerns often arise through a website operator's collection and dissemination of personally identifiable information about an individual consumer who has visited a particular website (Hatch, 2000). Smith et al. (1996) identified four factors of online privacy: unauthorized secondary use of personal information, improper access of digitally stored personal information, collection of personal information, and errors in collected personal information. Metzger and Docter (2003) considered online privacy concerns to include anonymity, intrusion, surveillance, and autonomy. In sum, there are many factors that are hard to control in protecting consumers' privacy in the virtual environment. Thus, in comparing with traditional offline privacy, online privacy is more difficult to protect. That is the reason why many consumers still refuse to accept online shopping.

2.2.4 Perceived After-sales Service Quality

The definition of 'After-sales Service' is the delivery service for sending products to a customer after payment, technical support after sales, etc. (Cao and Gruca, 2004). Sparks and Legault (1993) summarized two types of services after the sale: anticipated services and unanticipated services. Anticipated services are those that the customer plans for, such as installation, training, written instructions, maintenance, and upgrading. The maintenance of the sold-out products such as repairs, returns, and replacements are the service that is categorized as unanticipated service (Sparks and Legault, 1993). Posselt and Gerstner (2005) assessed the impact of the pre-sale and post-sale stages on online satisfaction.

2.2.5 Perceived Marketing Mix

McCarthy (2002) classified marketing activities as marketing-mix tools of four broad kinds, which they called the 4Ps of marketing: product, price, promotion and place.

While the value and current standing of the mix as a marketing toolkit is frequently disputed, marketing practitioners widely deem the 4Ps as the tools that can influence the consumers' behaviour and the final outcome of the buyer-seller interaction (Dixon and Blois, 1983; Gronroos, 1994; Gummesson, 1997; Goldsmith, 1999; Kotler and Armstrong, 2001; Kotler, 2003; Brassington and Pettitt, 2003). Constantinides (2002) summarized that online buyer's behaviour of purchasing merchandise and services in e-shops can be influenced by the marketing mix of online vendors.

2.2.6 Perceived Reputation

The concept of reputation has been looked at from many different perspectives, such as Applied Economics (Shapiro, 1983) or Strategic Management (Fombrum and Shanley, 1990). Brand equity or vendor's trustworthiness is always allied with the idea of reputation from a marketing standpoint (Aaker, 1996; Herbig and Milewicz, 1993; Hyde and Gosschalk, 2005). The role of reputation in the virtual environment is more important than the traditional market environment. In the virtual environment, consumers cannot directly examine the goods before they purchase. They can only obtain the information about the product from the website and trust the product description of vendor. Therefore, the reputation of online vendor has become a significant factor that influences consumers' attitude towards online shopping. 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 shown that a seller's overall reputation often has a positive and statistically significant impact on the consumers' willingness to adopt online purchase.

3 Methodology

3.1 Research Model and Hypotheses Development

Several studies have found that usability is an important element in determining e-store success. If a user finds a site difficult to use (usability), then, typically, they will not "stick around" to determine if the content (usefulness) meets their requirements (Pearson, Pearson and Green 2007). Greater usability could provide a comfortable environment that pleases consumers and makes them willing to shop online. Indeed, website usability helps to make information clear, enhances communication and interaction between the parties, simplifies the transaction process, and allows users to find what they are looking for at any given moment in a simple manner (Corritore, Kracher, and Wiedenbeck, 2003). Therefore, in this study, perceived usability and attitude to adopting online shopping are deemed to be positively correlated.

H1: Perceived usability has a significant positive impact on the consumers' attitude to adopt online purchase.

Security in online shopping is always a critical issue as online shopping is based on the Internet and computer viruses and hacking may happen during online transactions. Computer viruses and hacking on the Internet may affect the consumers' attitude and lead them to believe that shopping online is unsafe. If consumers doubt the security of an e-shop website, they may not purchase things online. Thus, in this study, perceived security and attitude of adopting online shopping are deemed to be positively correlated.

H2: Perceived online security has a significant positive impact on the consumers' attitude to adopt online purchase.

Online privacy has become one of the most important reasons that causes consumers to hesitate adopting e-purchase. Consumers are worried that the private information may be abused or stolen after shopping online. People who are worried about online privacy are more likely to decide not to purchase products and services online for privacy reasons (Zviran, 2008). Therefore, in this study, perceived privacy and attitude of adopting online shopping are deemed to be positively correlated.

H3: Perceived online privacy has a significant positive impact on the consumers' attitude to adopt online purchase.

Online consumers also pay more attention to the after-sales quality provided by the vendor. Online shopping is conducted in a virtual environment; consumers cannot check the merchandise in advance as they can for goods purchased from bricks-and-mortar shops. Hence, it is essential for online vendors to provide after-sales service so that consumers can purchase goods online without any anxiety. As a result, in this study, perceived after-sales service quality and attitude of adopting online shopping are deemed to be positively correlated.

H4: Perceived after-sales service quality has a significant positive impact on the consumers' attitude to adopt online purchase.

Marketing mix has become an important tool that online vendors use to attract consumers and influences consumers' purchase behaviour. Marketing mix is a useful strategy, which has been effectively utilized in the traditional business environment. Competitive price, attractive promotion, and high-quality product could influence a consumers' decision to purchase. Hence, in this study, marketing mix and attitude to adopting online shopping are positively correlated.

H5: Perceived marketing mix has a significant positive impact on the consumers' attitude to adopt online purchase.

Many researchers have revealed that vendor's reputation could impact on consumers' attitude towards the vendor and the decision to purchase. Consumers prefer to choose vendors with good reputation. Many consumers believe that sellers with a good reputation could provide high quality products and service and fulfil their commitments effectively. Whereas, vendors with a poor reputation will increase the consumers' risk of online shopping and negatively influence the consumers' readiness to purchase goods online. Therefore, in this study, perceived reputation and attitude of adopting online shopping are deemed to be positively correlated.

H6: Perceived sellers' reputation has a significant positive impact on the consumers' attitude to adopt online purchase.

3.2 Questionnaire Development and Measurement

The questionnaire was divided into two parts. Part A was intended to identify the consumers' attitude to online shopping. Part A included thirty-one questions, which were separated into seven categories in terms of the independent variables and dependent variable. The respondents were required to provide their rating on their perception using a five-point Likert Scale measurement that ranged from 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree. Part B was proposed to collect the respondents' demographic information such as gender, marital status, age, level of education, occupation, monthly income level, and the location of the respondent. A total of seven questions were included in this part.

3.3 Samples and Data Collection Procedures

The non-probability sampling technique was used for conducting the sampling process and the snowball sampling technique was used in this research. In order to avoid respondents' misunderstanding, the questionnaire for this study was translated into Chinese. In this study, the questionnaire was distributed via e-mail to three cities in China. The target respondents of this survey were adults whose age was above twenty years and those who had experience of online shopping. When the questionnaire was completed, the respondents returned it by e-mail. Before the questionnaire was distributed, the research ethics clearance form had been submitted and approved by the Faculty Research Ethics Committee. The total number of people who received a questionnaire were approximately 428 and 405 questionnaires were returned; the number of respondents from Beijing, Shanghai, and Fuzhou were 149, 135, and 121, respectively.

4 Research Findings

A total of 405 questionnaires were used for analysis. Table 1 shows the demographic profile of the respondents. Among the respondents, 36.8% of them come from Beijing, 33.3% of them are from Shanghai and 29.9% of them are from Fuzhou. The item for gender shows us that there are 238 males and 167 females. According to marital status, 74.8% are single and 25.2% are married. Moreover, for age group, 89.6% of respondents are aged between 20 and 29 years and 8.9% of them are between 30 and 39 years.

Table 1 also indicates that 78.3% of respondents hold a Bachelor degree and 12.8% of them are tertiary education. In the occupation item, 50.9% of respondents are staff and 28.9% of them are students. This is similar to the result of the online shopping report of the CNNIC (2009) in that the first large group of online shopping users was staff and the second comprised students; 7.9% of respondents' occupations are others including civil servants and sailors. Those whose monthly income is below RMB1,000 are the students with 28.9% and 23.5% of respondents are earning between RMB2,000 and RMB 3,000, which is about RM1,000 to RM1,500.

Demographic Profile Respondents

Variable	Frequency	Percentage (%)
Number of Respondents in Each City		
Beijing	149	36.8
Shanghai	135	33.3
Fuzhou	121	29.9
Gender		
Male	238	58.8
Female	167	41.2
Marital Status		
Single	303	74.8
Married	102	25.2
Age		
20-29	363	89.6
30-39	36	8.9
40-49	6	1.5
50&above	0	0
Education		
High school	10	2.5
Tertiary education	52	12.8
Bachelor degree	317	78.3
Postgraduate	25	6.2
PHD	1	.2
Occupation		
Manager	11	2.7
Executive	20	4.9
Staff	206	50.9
Professional	1	.2
Teacher	18	4.4
Student	117	28.9
Others	32	7.9
Income		
Below RMB1000	117	28.9
RMB1000-RMB2000	79	19.5
RMB2000-RMB3000	95	23.5
RMB3000-RMB4000	55	13.6
RMB4000-RMB5000	25	6.2
Above RMB5000	34	8.4

Table 1: Demographic Profile of Respondents

4.1 Multiple Regression Analysis

The purpose of multiple regression analysis is to investigate the relationship between the independent variables and the dependent variable.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.459 ^a	.210	.199	1.91474	.210	17.683	6	398	.000

a. Predictors: (Constant), reputation, security, aftersale_service, usability, marketing_mix, privacy

b. Dependent Variable: attitude

Table 2: Regression Analysis Result between IV and DV

From Table 2, we can see that the value of R equals 0.459 and the value of R square is equivalent to 0.21, which means that 21% of the variance in the dependent variable of attitude can be accounted for by a variation in the independent variables. As $F(6, 398) = 17.683$, $p < .05$, this model is significant. In addition, Table 3 is the result of ANOVA, which shows the value of $F(6, 398) = 17.683$ and it is significant at $p < 0.05$. As a result, overall, the regression model is deemed to accurately predict consumers' attitude towards online shopping.

ANOVA^b

Model		Sum of Squares		Mean Square	F	Sig.
1	Regression	388.979	6	64.830	17.683	.000 ^a
	Residual	1459.159	398	3.666		
	Total	1848.138	404			

a. Predictors: (Constant), reputation, security, aftersale_service, usability, marketing_mix, privacy

b. Dependent Variable: attitude

Table 3: ANOVA Summary

From Table 4, we can see that marketing mix and reputation have a significant ($p < 0.05$) relationship with the dependent variable of attitude to adopt online shopping; simultaneously, the other independent variables have no significant ($p > 0.05$) relationship with attitude. We can see that the Beta values of marketing mix and reputation are 0.203 and 0.230, respectively.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	5.218	1.308		3.990	.000		
usability	.074	.051	.082	1.465	.144	.636	1.572
security	.028	.081	.021	.351	.726	.541	1.848
privacy	.051	.081	.039	.628	.530	.516	1.940
aftersale_service	-.122	.068	-.106	-1.791	.074	.568	1.759
marketing_mix	.203	.052	.236	3.898	.000	.541	1.848
reputation	.230	.053	.255	4.312	.000	.569	1.758

a. Dependent Variable: attitude

Table 4: Summary of Regression Coefficients

Thus, the regression equation of this study is: $Y = 5.218 + 0.203X_1 + 0.230X_2$. The regression equation indicates that marketing mix and reputation are positively related with consumers' attitude to adopting online shopping. Moreover, in Table 4, the collinearity statistics reveal that the tolerances of all the independent variables are greater than 0.1 and that the Variance Inflation Factors (VIF) are all less than 10. The tolerance shows the amount of correlation between the predictor and all the other remaining predictors. Variance inflation factors reflect the degree to which the standard error of the predictor was increased due to the predictor's correlation with the other predictors in the model. As the tolerance value < 0.1 or the VIF value > 10 is an indication of collinearity, there is not collinearity in the model of this study as can be seen in the result shown in Table 4. The hypotheses were further analysed based on multiple regression analysis and presented as follows:

H1: Perceived usability has a significant positive impact on the consumers' attitude to adopt online purchase. Table 4 shows that the p-value ($= 0.144$) of usability is greater than 0.05. Thus, H1 is not supported by the result, thus there is no significant relationship between perceived usability and consumers' attitude to adopt online purchase.

H2: Perceived online security has a significant positive impact on the consumers' attitude to adopt online purchase. The p-value ($= 0.726$) of security is larger than 0.05, therefore, H2 is also not supported by the result.

As a result, there is no significant relationship between perceived security and consumers' attitude to adopt online purchase.

H3: Perceived online privacy has a significant positive impact on the consumers' attitude to adopt online purchase. According to Table 4, the p-value ($=0.530$) of privacy is greater than 0.05 as well. Therefore, H3 is not supported. There is no significant relationship between perceived privacy and consumers' attitude to adopt online purchase.

H4: Perceived after-sales service quality has a significant positive impact on the consumers' attitude to adopt online purchase. H4 is not supported by the result, because the p-value of after-sales service equates to 0.74, which is greater than 0.05.

H5: Perceived marketing mix has a significant positive impact on the consumers' attitude to adopt online purchase. From Table 4, we can see that the p-value (0.000) of marketing mix is less than 0.05. It is supported by the result. Therefore, the perceived marketing mix has a significant positive impact on the consumers' attitude to adopt online purchase.

H6: Perceived seller's reputation has a significant positive impact on the consumers' attitude to adopt online purchase. The finding supports H6, because the p-value (0.000) of reputation is less than 0.05. There is a positive relationship between perceived sellers' reputation and consumers' attitude to adopt online purchase.

4.2 Consumers' Attitude towards Online Shopping in China

In the questionnaire, there were four questions to measure the consumers' attitude towards online shopping. Table 5 illustrates the scores of consumers' attitude towards online shopping. The attitude scores of 16 and 20 means that the respondent agrees and strongly agrees with all four questions of attitude, likewise, 12 means that the respondent is neutral for all four questions. We can conclude that 49.88% of the respondents have a good attitude towards online shopping and 49.38% of them have a moderate attitude towards online shopping; only 0.74% of them have a negative attitude.

	Attitude Rank	Attitude Score	Frequency	Percent
Consumers' attitude towards online shopping	High	20.00	22	5.43
		19.00	13	3.21
		18.00	32	7.90
		17.00	37	9.14
		16.00	98	24.20
		Total	202	49.88
	Moderate	15.00	54	13.33
		14.00	68	16.79
		13.00	42	10.37
		12.00	36	8.89
		Total	200	49.38
	Low	11.00	2	.49
		10.00	1	.25
		Total	3	.74

Table 5: Score of Consumers' Attitude

5 Conclusion and Discussion

From the results shown in section 4, we can summarize that the independent variables of marketing mix and reputation have a greater influence on consumers' attitude towards online shopping than the other independent variables. This means that the online consumers care more about marketing mix and the reputation of the e-vendor when making online purchases. The local culture and reality are the essential elements that determine the attitudes and behaviours of local people. In China, the marketing mix and seller's reputation have a significant positive impact on the consumers' attitude towards adopting online purchase. It is important for sellers to pay more attention to product variety, quality, design, features and their reputation, when they expand their business through the Internet in China.

McCarthy (2002) classified the four Ps of marketing mix as product, price, promotion and place. The product includes product variety, quality, design, features, brand name, packaging, size and so on. The price includes list price, discounts, allowances, payment period, and credit terms. According to the China Online Shopping Market Research Report of CNNIC (2009), the low quality of merchandise was the main reason that caused online consumers' dissatisfaction. In the group of online consumers who had a dissatisfied online shopping experience, 52.3% of consumers received merchandise that was different from the pictures the online sellers provided; 25% of them obtained fake products; 21.2% of them got poor quality products. What is more, only 50.9% of online shopping users believed that they could purchase good quality products in online shops; 49.1% of them worried about the quality of products that negatively impacted on e-consumers' purchase enthusiasm. However, the report indicated that online consumers had a high degree of satisfaction concerning the price with 64.2% of e-buyers satisfied with the cheap price of goods. Therefore, the marketing mix is an important factor, which can influence consumers' attitude to adopting online purchase in China.

Several researches have revealed that the reputation of the seller often has a positive and statistically significant impact on the consumers' willingness to adopt online purchase (Houser and Wooders 2000, Dewan and Hsu 2001, Kalyanam and McIntyre 2001, McDonald and Slawson 2002, Melnik and Aim 2002). On the Internet, the reputation mechanisms have become an important system to help build reputation. By recording good and bad deeds, reputation systems build a meaningful history of the seller, which can influence future transactions allowing potential consumers to decide whether to trust a seller (Kollock, 1999, Resnick and Zeckhauser 2002). The Online Shopping Market Research Report of CNNIC (2009) also supported the view of Kollock (1999) and Resnick and Zeckhauser (2002). In terms of the CNNIC (2009) report, 41.1% of online buyers looked at the comments of previous purchasers before buying each product; 26% of them viewed the comments before buying most products; only 17.9% of them would not examine the comments. Moreover, the report also shows that the previous consumers' comments have become the most important factor influencing the online consumers' decision making; 43.3% of online consumers said that they would pay more attention to the comments before making any purchases; 34.7% of them would consider their relatives and friends' suggestions. Hence, the seller's reputation is another important factor that could influence consumers' attitude of adopting online shopping. In this study, the usability of online shopping websites does not influence consumers' attitude in China. According to the report of the CNNIC (2009), up to 79.2% of online consumers were satisfied with the usability of online shopping websites in 2009. That is the reason why the usability of e-shop websites cannot become a factor that influences the consumers' attitude.

With the development and application of high technology, the security of online shopping environment has improved in China. For example, the CNNIC provided the site certificate service that the online shopping website can receive high technology support to prevent viruses and protect the shopping process. Moreover, the banks in China also provide digital certificates for consumers to enhance the security of transfers. However, most online sellers provide a cash on delivery service. When consumers receive the products, they can pay to the postman directly thereby avoiding transferring money through the Internet. Finally, there is a separate department of cyber police to fight against online crimes in China. All of the above have contributed to the reduction of consumers' worries about the security of online shopping. The CNNIC (2009) has reported that 80.4% of online consumers were satisfied with the security of online payment. Thus, the security of online shopping has not become an important factor impacting on consumers' attitude in this study.

The lack of legislation was the reason that online consumers' awareness of privacy protection was weak in China (Zhang 2010). In the process of traditional shopping, the seller does not require consumers to provide their personal information, such as name, address, and mobile phone number. The consumers' right to privacy has not been protected by the consumer protection law of China. Chinese consumers lack the awareness of protecting their online privacy. Hence, privacy is not an important factor that impacts on consumers' attitude in this study. In China, the e-store website is operated by e-commerce companies, such as Taobao, which plays the important role of intermediary between sellers and buyers in the process of online shopping. All of the after-sales services have to be provided before sellers receive payment. If the product is different from the information the vendor provides, the consumers have the right to return the product and ask the e-commerce company to refund the money before it is transferred into the sellers' account. The vendor will receive the payment only when the consumer is satisfied with the products or services and agrees to transfer the money to the seller's account. As a result, the after-sales service is not an important factor that impacts on consumers' attitude in this study.

5.1 Limitations of the Study

This study only focused on three cities in China – Beijing, Shanghai, and Fuzhou. There were 405 questionnaires collected. The total number of online shopping users reached 142 million by June 2010. Thus, the results of this study are not able to completely reflect the attitudes of all the Chinese online consumers.

5.2 Suggestions for Future Research

The sample size of this study might not be able to completely reflect every online purchaser's attitude for the whole of China. Future studies can expand the sample collection to different provinces or parts of China. In addition, it is strongly recommended that future study can obtain a larger sampling size and that the analysis should be based on more accurate data. Therefore, the results will be closer to the thinking of consumers.

Future research can be extended further to study the marketing mix and reputation. For example, future studies could reveal the types of marketing mix that could impress e-consumers in the virtual environment and impact on their purchase intention effectively, and disclose the ways for e-sellers to build and improve their reputation efficiently and achieve the aim of online customer satisfaction.

5.3 Implications

The findings of this research have confirmed that the perceived marketing mix and perceived reputation could impact on the consumers' attitude of adopting online shopping. Through the findings of this research, online retailers could better realize online consumers' expectations and the determinants of consumers' behaviour. By understanding the key drivers that could impact on online consumers' attitude towards online shopping, online retailers would be able to formulate and implement their e-business strategy efficiently and effectively and possess stronger competitive advantage. For example, online vendors should pay more attention to applying the marketing mix of high product quality, lower price, discount, free delivery fee, or free gift and do their best to build, enhance, and maintain their good reputation. Hosting companies such as Taobao could establish their own business strategy to satisfy the requirements of both consumers and retailers. For example, the hosting company may utilize a high information technology strategy to improve the functionalities of the online shopping website platform that assists online vendors in organizing the marketing mix of the promotional activities or enhances the reputation mechanisms and finally achieves both online seller and consumer satisfaction.

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