

2008

# Are Chinese Online Consumers Different? An Investigation of Online Consumers' Repeat Purchase Intention in China

Hua Dai

*University of North Carolina at Greensboro, h\_dai@uncg.edu*

Ruth C. King

*University of North Carolina at Greensboro, rcking@uncg.edu*

Follow this and additional works at: <http://aisel.aisnet.org/amcis2008>

---

## Recommended Citation

Dai, Hua and King, Ruth C., "Are Chinese Online Consumers Different? An Investigation of Online Consumers' Repeat Purchase Intention in China" (2008). *AMCIS 2008 Proceedings*. 399.  
<http://aisel.aisnet.org/amcis2008/399>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2008 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Are Chinese Online Consumers Different? An Investigation of Online Consumer's Repeat Purchase Intention in China

**Hua Dai**

University of North Carolina at Greensboro  
[h\\_dai@uncg.edu](mailto:h_dai@uncg.edu)

**Ruth King**

University of North Carolina at Greensboro  
[rking@uncg.edu](mailto:rking@uncg.edu)

## ABSTRACT

Comparing with developed country, the eCommerce development in China is still in the early stage. So far no research has been devoted to investigating Chinese consumer's repeat purchase which is essential to help business maintain profitability and build long-term mutual relationships with their customers. Given the gap of knowledge of eCommerce development in China and the understanding of consumer's repeat purchase, the purpose of this study is to develop a research framework and empirically test the analytical framework to investigate consumers' repeat purchase intention to online shopping and its determinants. The analysis of data from 279 Chinese Consumers reveals four major antecedents of the consumer's repeat purchase: trust belief, risk belief, online shopping experience, and channel choice. This study specifically contributes to practitioners who are seeking to recruit and retain customers in Chinese marketplace specific information about the Chinese eCommerce users' repeat purchase.

## Keywords

China, eCommerce, repeat purchase, trust, risk, experience, channel choice

## INTRODUCTION

The impressive and consistent financial expansion has made China one of the largest and most attractive consumer markets in the world. While enjoying its rapid economic growth, China has also seen a significant expansion into internet. According to the China Internet Network Information Center (CNNIC), the number of Chinese Internet users had reached 162 million in June 2007 which is the second largest Internet population after the United States. However, compared with other developed countries, the eCommerce development in China is very immature and still in an early stage (Lu and Zhou, 2007). The Internet penetration rate in China is only 12.3%. Among these Internet users, only 25.5% Internet users have purchase online which is far behind the US online shopping population (76.3%) ([www.internetworldstats.com](http://www.internetworldstats.com)).

According to Martinsons (2002), business managers in China sought to learn from the experiences of dot-coms and eCommerce development in US and other developed countries, but very few initiatives have been successful to date. There are several voices pointing out that US eCommerce model may not be applicable to Chinese social context (Pang, 2000; Hong, 2000). Several problems have been identified as critical barriers of Chinese eCommerce development. Those obstacles include the lack of online shopping experiences, high risks concerns, the low level of social trust, legislative protection and regulations, and the poor technology infrastructure in rural areas (Chen and Ning, 2002; Lu and Zhou, 2007; Efendioglu and Yip, 2004). Those barriers encourage researchers and practitioners to consider deep level of reasoning for the slow development of eCommerce in China.

Based on the literature review, there is little eCommerce research in developing countries. In the context of China, several early endeavors have been put on the consumer initial acceptance of online shopping (Zhou et al, 2007; Lu and Zhou, 2007; Hynes et al, 2006). However, no research so far has been devoted to investigating Chinese consumer's repeat purchase behavior which is essential to help businesses maintain profitability and build long-term mutual relationships with their customers. Given such a gap of knowledge of eCommerce development in China and the understanding of consumer's repeat purchase, the purpose of this study is to develop a research framework and empirically test the analytical framework to investigate consumers' repeat purchase intention to online shopping and its determinants.

## LITERATURE REVIEW

Numerous research studies have been conducted to investigate the concerns and behavior of consumers' online purchase behavior in developed countries. According to Straub and Watson (2001), the fundamental problems for the eCommerce Business-to-Consumer (B2C) vendor are (1) generating sustainable profits by attracting visitors and (2) serving and retaining customers. Thus, there are two major research streams associated with these two fundamental problems. The first stream can be identified as the online shopping adoption research. The major portion of the endeavors has been made to investigate the antecedents of the online consumer purchase intention. The second stream can be categorized as the relationship development for customer retention in eCommerce.

As a central theory applied in the eCommerce adoption studies, the Technology Acceptance Model (TAM) (Davis et al, 1999) is commonly adopted to study user acceptance of online shopping which mainly focus on two constructs: perceived usefulness and perceived ease of use (Wu et al, 2003). From the TAM Model, various models were developed to examine user acceptance of on-line sites and their corresponding purchasing behavior (Chen et al., 2002; Torkzadeh and Dhillon, 2002; Koufaris, 2002). This stream of research is also reflected in several recent eCommerce studies in China (Hynes et al, 2006; Lu and Zhou, 2007; Teo and Liu, 2007)

### Trust-Risk Model and TAM

As complementary constructs to the TAM, trust belief and perceived risks are considered as a critical antecedent of the consumers' acceptance of online purchases since an e-vendor's website inseparably embodies an interaction between consumers and e-vendors (Gefen, 1997; Malhotra, 2004) "In essence, the trust-risk model holds that in the situation in which potential risks are present, trust play an important role in determining one's (Trusting/risk taking) behavior" (Malhotra et al, 2004, pg.341). This trust-risk model has been widely used in marketing and Information systems literature to explain consumer behavior in an exchange relationship with business vendor in an uncertain environment (Jarvenpaa and Tractinsky, 1999; McKnight et al, 1998; Malhotra et al, 2004)

Trust is defined by Mayer et al (1995) as the willingness to be vulnerable to the actions of another person or people. In the context of eCommerce, trust is even more important because of the less verifiable and less controllable business environment of the web (Gefen, 2002). Hoffman and Novak (1999) indicated that the primary reason many people have yet to shop online is due to the fundamental lack of trust. Great importance has been attached to trust by prior research. Jarvenpaa et al (2000) developed an empirical study to investigate both the antecedents and influences of the consumer trust in an online-store. The results of their studies indicated that both the perceived size and the perceived reputation of the seller organization plays significant role in evoking trust in the eyes of consumer. Similarly, McKnight et al (2002) developed a trust building model and demonstrated that vendor reputation, site quality and structural assurance of the web have significant impacts on consumer's trust. Pennington et al (2003) investigates the role of system trust in B2C transactions and find the online vendor reputation is an important antecedent of perceived trust. In the Chinese social context, Lu and Zhou (2007) did a similar study with Chinese students. Their results show that consumer's purchase intention is impacted by trust and perceived usefulness of an online store's website. Such trust is determined by perceived reputation, perceived security, and propensity to trust. As the common indicator, online vendor's reputation is chosen for this research as the major determinant of trust belief for Chinese online consumers.

On a flip side of trust, consumer perceived risk has gained wide discussion and led to various definitions. Bauer (1960) provided the first definition with two major components: uncertainty and the serious consequences of the purchase. Later, Dowling and Staelin (1994) defined risk belief as the consumer expectation that a high potential for loss is associated with the release of personal information to the firm. In the eCommerce context, Pavlou et al. (2007) empirically test the relationship of perceived uncertainty and consumer purchase intentions. Kim et al. (2007) found that risk, trust, and perceived benefit are three important factors affecting customers' willingness to purchase online.

Among the trust-risk literature on consumer shopping intention, a general concern has been put on consumer's information privacy concern (Smith et al, 1996). Websites usually require personal information from the consumer for the purposes such as membership, newsletter subscription, feedback forms, order forms, etc. Thus, a high degree of information privacy concerns are likely to be high on risks belief. Chellappa (2001) proposed that the guarantee of integrity on every aspect of the online transaction will be determined by the consumers' perception of risk to their privacy and security of information. There is a growing body of consumer-oriented internet research focusing on privacy and security related issues (Milne, 2002). Smith, et al. (1996) identified four factors namely collection, errors, secondary use and unauthorized access as the dimensions of an individual's concern for privacy and he also developed the instrument of Concern for Information Privacy – CFIP. Later, Stewart and Segars (2002) did an empirical examination of the Concern for Information Privacy instrument which shows the collection is a valid construct to measure people's privacy concern. Accordingly, Hynes et al. (2006)

examined the privacy concerns and its effect on eCommerce development in China and indicated that most consumers have strong concerns on privacy when they are shopping online.

### **Online Shopping Experience**

Consumer's prior shopping experience has been considered as another significant antecedent of their shopping intentions in prior retailing and eCommerce literature (Shaw and Ivens, 2005; Goldsmith et al 2002; Jarvenpaa and Todd, 1999; Vijayasarith et al, 2000; Mathwick et al, 2001; Novak et al, 2000). According to Shaw and Ivens(2005), consumer's experience is an interaction between an organization and customer; it is a blend of an organization's physical performance, the senses stimulated and emotions evoked, each intuitively measured against customer expectations across all moments of contact. In the eCommerce context, online shopping experiences relate to user-friendliness and the aesthetics of online shopping websites. The experiences include the time and effort required to use a website, interactivity, and the emotions and delight of shopping online. This study is the first to investigate the experience effects on Chinese consumers' intention to shop online.

### **Online Shopping Channel**

Many researchers and practitioners have recognized the emergence of on-line shopping as a new retail channel to consumers (Gupta et al, 2004; Poel and Leunis, 1999). In a time-constrained world, on-line stores allow consumers to shop from anyplace and anytime. Prior literature has identified relative advantages of online shopping channel which include time saving, convenience, flexibility, easy to order, trying something new, utility as communication channel, utility as distribution channel, avoiding collecting and transporting product, lower transaction cost, etc (Chang et al, 2005). Prior literature has only applied one or a mixture of these advantages as factors affecting consumer online shopping intentions, none has considered channel choice as a general construct which is likely to have significant impact on shopping intentions. In this study, we propose the channel choice as another antecedent of consumers repeat purchase intention in China.

### **Consumer Repeat Purchase Intention**

Keeping the customer repurchasing on product or service is essential to maintain the profitability of any business (Atcharyachanvanich et al, 2006). Current literature mainly focuses on consumers initial shopping intention, the factors affecting the repeat purchasing on the internet have rarely been explored. Marketing literature examined the consumer Repeat Purchase behavior in the long-term exchange relationship. Several antecedents have been identified in the exchange environment including satisfaction, perceived usefulness, perceived incentives, perceived value, and customer loyalty (Oliver, 1996; Shankar et al, 2003; Atcharyachanvanich et al, 2006). Based on eCommerce adoption, theory, trust-risk model, and consumer channel choice literature, this study applied a different set of the antecedents which include trust-risk factors, consumer online shopping experience and channel choice to investigate Chinese consumers' Repeat Purchase intentions.

## **RESEARCH FRAMEWORK AND HYPOTHESES**

In addition to the underlying logic that consumers make a repurchasing decision based on their perception of the trust and risk of Internet online shopping, consumer online shopping experience and channel choice also have impacts on consumers Repeat Purchase intention online. The consumer privacy concerns and the perceived vendor reputation also have indirect impacts on consumer Repeat Purchase intention which are mediated by trust and risk beliefs. Based on the above reasoning, we develop the following research model and hypotheses. The research model is shown in figure 1.

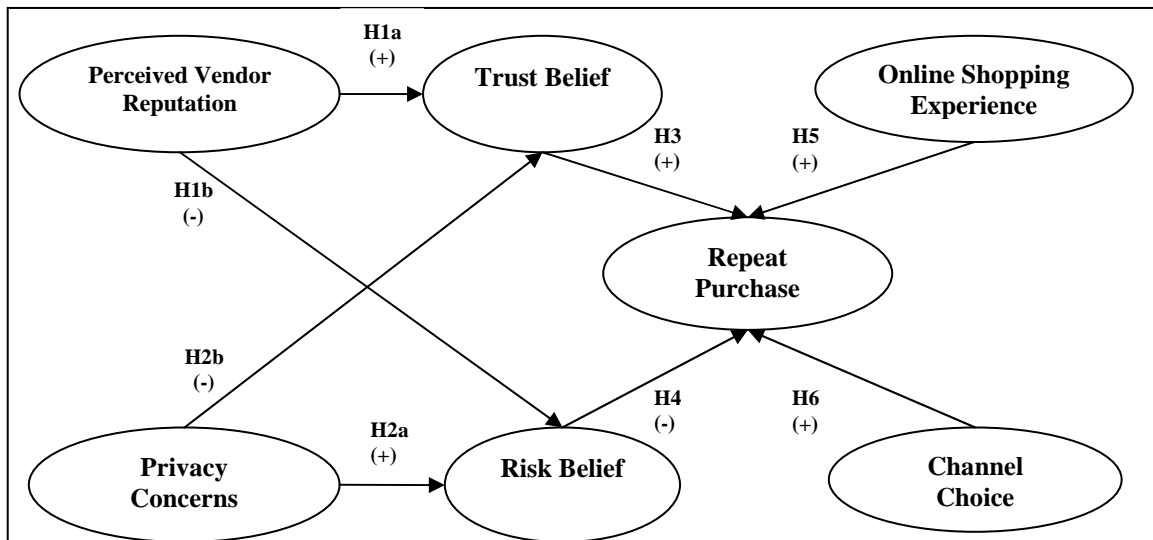


Figure 1: Proposed Research Model

H1a: Consumer's perceived vendor reputation has positive effect on trust belief in online purchases

H1b: Consumer's perceived vendor reputation has negative effect on risk belief in online purchases

H2a: Consumer's privacy concerns have negative effect on risk belief online purchases

H2b: Consumer's privacy concerns have positive effect on risk belief in online purchases

H3: Trust belief has positive effect on online consumers' repeat purchase intention

H4: Risk belief has negative effect on online consumers' repeat purchase intention

H5: Online shopping experiences have positive effect on online consumers' repeat purchase intention

H6: Channel choice has positive effect on online consumers' repeat purchase intention

## RESEARCH METHODOLOGY

### Measurement Development

This study applied a survey methodology in assessing and comparing the proposed comprehensive research model and the prior model in online purchase study. The development of the survey instrument followed Boudreau, et al. (2001) and Straub (1989). For the item creation, most measurement items for the principle constructs were adapted from existing measures and modified to fit the context of this research.

Measures of *trust belief* and *risk belief* were generated from existing literature on trust beliefs and risk beliefs of consumer online purchase (Jarvenpaa and Tractinsky 1999; Bhattacharjee, 2002; Malhotra et al, 2004; George; 2004; Pavlou et al, 2006; Kim et al, 2007). The trust beliefs capture vendors' honesty, competence, and integrity for online transactions. The risk beliefs were adapted from Jarvenpaa and Tractinsky (1999) and Malhotra et al (2004) to capture consumer perceptions on uncertainty and risks associated with online purchase. We adopted four items for both trust belief and risks belief.

The measurement of *perceived vendor reputation* were adapted from Jarvenpaa et al (2000) and Pennington et al (2003)'s research. Four items are selected in this study to fit in to our research context. The measurements used to measure *information collection*, *secondary use of information*, *errors*, and *unauthorized access* were replicated from prior studies on Concern for Information Privacy (Smith et al, 1996; Stewart and Segars', 2002; Malhotra et al, 2004; Pavlou et al 2007). Smith et al (1996) developed and validated the instrument of the concerns for information privacy with identifying above four primary dimensions of individuals' concerns about organizational information privacy practices. Total 15 items were developed to address the four dimensions of information privacy concerns.

The measures for *online shopping experience* were adopted from prior eCommerce research (Chang et al, 2005; Novak et al, 2000; Wolfenbarger and Gilly, 2001; Burke, 2002; Monsuwe' et al, 2004). The items from the studies were collected among which the same meaning items were merged. Finally, the study applied four items for experience construct in our research. The items for Channel Choice were developed from the eCommerce and marketing literature (Poel and Leunis, 1999;

Devaraj et al, 2002; Schoenbachler and Gorden, 2002). Devaraj et al (2002) investigated antecedents of B2C Channel satisfaction and preference with extending the Technology Acceptance Model. Schoenbachler and Gorden (2002) examined the impacts of perceived risks, marketing experience, motivation to buy from a Channel, product category, and web site design on channel buyer behavior. Four indicators were developed to fit in our research context based on above studies.

### Data Collection

An English version of the questionnaire was first developed based on the research model and exhaustive literature review. The survey instrument was pilot tested on 62 experienced eCommerce consumers. The aim of the pilot survey was to test the feasibility of the instrument and gain qualitative feedback from the respondents. Based on this feedback, changes were made to improve the layout of the survey form and the phrasing of some survey questions. Later, the questionnaire was translated into Mandarin Chinese version. This Chinese version of questionnaire was also pretested with a group of fifteen Chinese native speakers. Based on their feedback, the revised survey, in Chinese, was distributed in several big cities in China where eCommerce is largely diffused and promoted by vendors. 400 questionnaires were distributed through email, out of which 355 responses were collected. Respondents included college and graduate students, employees of companies and government organizations. This generated an 88.75 % response rate. 76 incomplete questionnaires were dropped later in data analysis due to the inadequate information provided yielding 279 useable responses in our final data analysis. Among these respondents, 45.2 percent were male and 54.8 percent were female. 97.5 percent of respondents are between the ages of 18 to 37. About 99 percent people have the education above college level. More than 71 percent of the respondents have the Internet experience over five years. Detailed descriptive statistics relating to the respondents' demographics are shown in Table 1.

Measure	Value	Frequency	Percentage
<b>Gender</b>	Male	126	45.2%
	Female	153	54.8%
<b>Age</b>	18-27	272	97.5%
	28-37	5	1.8%
	38-47	2	0.7%
	>48	0	0.0%
<b>Education</b>	Some School	2	0.7%
	Some college	73	26.2%
	Bachelor	163	58.4%
	Master	34	12.2%
	PHD	7	2.5%
<b>Internet Experience</b>	<5year	80	28.7%
	5-10 years	195	69.9%
	>10 years	4	1.4%
<b>Degree on Internet purchase per month</b>	0	1	0.4%
	< \$50	73	26.2%
	\$50--\$100	136	48.7%
	\$101--\$250	49	17.6%
	\$251--\$500	6	2.2%
	\$501--\$1000	5	1.8%
	\$1000--\$2000	4	1.4%
	>\$2000	5	1.8%

**Table 1: Descriptive Statistics of Respondents Characteristics**

### Survey Results

The structural equation modeling (SEM) approach was used to analyze the data for both the measurement model and structural model in this study. SEM is a statistical methodology that takes a confirmatory approach to the analysis of structured casual relationships (Byrne, 1998). The software we use is PLS-Graph. Partial Least Squares (PLS) was chosen because PLS uses a component based approach to estimation and places minimal restrictions on measurement scales, sample size, and residual distributions (Chin et al. 2003).

### Descriptive statistics

We factor analyzed the 279 usable responses. Those items loaded less than 0.50 or cross-loaded were discarded. This analysis resulted in seven factors viewed as our independent variables: *perceived vendor reputation*, *privacy concerns*, *trust belief*, *risk belief*, *online shopping experience*, *channel choice*, and *online consumer's repeat purchase intention*. Table 2 shows the descriptive statistics, average variance extracted and the correlations matrix of these factors:

	Mean	Std. Deviation	Vendor reputation	Privacy concern	Risk belief	Trust belief	Online shopping experience	Channel Choice	Repeat purchase intention
Vendor reputation	5.4052	.89018	0.743						
Privacy concern	5.8510	.85083	.290(**)	0.714					
Risk belief	5.4122	1.02213	-.008	.569(**)	0.892				
Trust belief	5.4682	.89603	.258(**)	.618(**)	.333(**)	0.728			
Online shopping experience	4.7500	1.27369	.513(**)	.205(**)	-.046	.192(**)	0.870		
Channel Choice	4.3935	1.04938	.476(**)	.143(*)	-.191(**)	.122(*)	.634(**)	0.750	
Repeat purchase intention	4.7539	.77884	.262(**)	.043	-.077	.233(**)	.312(**)	.222(**)	0.720

Note: \*\* denote correlation is significant at the 0.01 level; \* denote correlation is significant at the 0.05 level; The diagonal elements represents the square root of AVE

**Table 2: Descriptive statistics, correlations, and average variance extracted**

### Measurement Model

Measure reliability was assessed using internal consistency scores, calculated by the composite reliability scores (Werts et al. 1974). Internal consistencies of all variables are considered acceptable since they exceed .70. According to Chin (1998), PLS analysis is also able to test Convergent validity and Discriminant Validity. There are two general rules that have been followed by prior eCommerce research "1) Loadings are much higher on their hypothesized factor than on other factors (own-loadings are higher than cross-loadings), and 2) when the square root of each construct's average variance extracted (AVE) is larger than its correlations with other constructs" (Pavlou and Fygenson, 2006,pg.129; Chin, 2003). All the result of reliability test for each construct as well as the items and factor loadings for the measurement model are shown in Table 3.

Items For Principal Construct	Reliability	Factor Loading	T-Value
<b>Perceived Vendor Reputation</b>			
I only purchase items from reputable online vendors or companies.		0.844	81.875
Before I purchase anything from the online vendors, I will research to find out whether this online vendor is trustworthy.		0.673	9.250
I only purchase items from online vendors with whom I had good experience.	0.830	0.803	13.382
I only purchase items from online vendors with whom my friends had good experience.		0.633	6.784
<b>Privacy concerns</b>			
➤ <b>Collection</b>			
It usually bothers me when online companies ask me for personal information		0.570	8.902
When online companies ask me for personal information, I sometimes think twice before providing it.	0.939	0.549	10.337

It bothers me to give personal information to so many online companies		0.567	10.731
I am concerned that online companies are collecting too much personal information about me		0.584	10.298
<b>➤ Errors</b>			
All the personal information in computer database should be double-checked for accuracy – no matter how much this costs		0.634	14.327
Online companies should take more steps to make sure that the personal information in their files is accurate.		0.680	13.549
Online companies should have better procedures to correct errors in personal information.		0.702	16.603
Online companies should devote more time and effort to verifying the accuracy of the personal information in their databases.		0.651	15.587
<b>➤ Unauthorized Secondary Use</b>			
Online companies should not use personal information for any purpose unless it has been authorized by the individuals who provided the information.		0.813	29.331
When people give personal information to an online company for some reason, the company should never use the information for any other reason.		0.826	25.680
Online companies should never sell the personal information in their computer databases to other companies.		0.821	26.571
Online companies should never share personal information with other companies unless it has been authorized by the individuals who provided the information.		0.796	27.194
<b>➤ Improper Access</b>			
Online companies should devote more time and effort to preventing unauthorized access to personal information.		0.797	21.249
Computer databases that contain personal information should be protected from unauthorized access – no matter how much it costs.		0.832	29.622
Online companies should take more steps to make sure that unauthorized people cannot access personal information in their computers		0.789	20.593
<b>Risk Beliefs</b>			
In general, it would be risky to give my personal information to online companies.	0.939	0.856	36.591
There would be high potential for loss associated with giving my personal information to online firms.		0.915	64.357
There would be too much uncertainty associated with giving my personal information to online companies.		0.923	74.902
Providing online firms with my personal information would involve many unexpected problems.		0.872	42.335
<b>Trusting Beliefs</b>			
Online companies would tell the truth and fulfill promises related to my personal information provided by me.	0.830	0.925	91.439
Online companies are always honest with customers when it comes to using my personal information.		0.906	83.169
<b>Experience</b>			
I have had very good experience with my previous online shopping.	0.925	0.778	20.880
I have received all the items I purchased online without major problems.		0.926	110.052
Shopping online has been a successful experience for me.		0.927	104.200
My prior experience with online shopping has been very positive.		0.842	27.826



Channel			
Online shopping saves me a lot of time.	0.817	0.829	29.147
Online shopping is convenient.		0.919	58.506
I can get what I want from shopping online.		0.816	29.484
<b>Repeat Purchase Intention</b>			
I am going to use the website I purchased goods/services again in next six months	0.754	0.88	18.63
I am going to use the website I used to conduct sales transactions again in next six months		0.70	7.34

Table 3: Factor Loadings for the Measurement Model and Reliability for Principal Component Construct

As shown in both Table 2 and Table 3, all items loaded well on their respective factors. The square roots of all AVEs are above 0.7 which are much larger than all the cross-correlations. Above tests demonstrated that all measures in this study have adequate convergent and discriminant validity.

**The Structural Model**

The PLS path coefficients are shown in figure 2. The item loadings of each construct are omitted for a clear exposition.

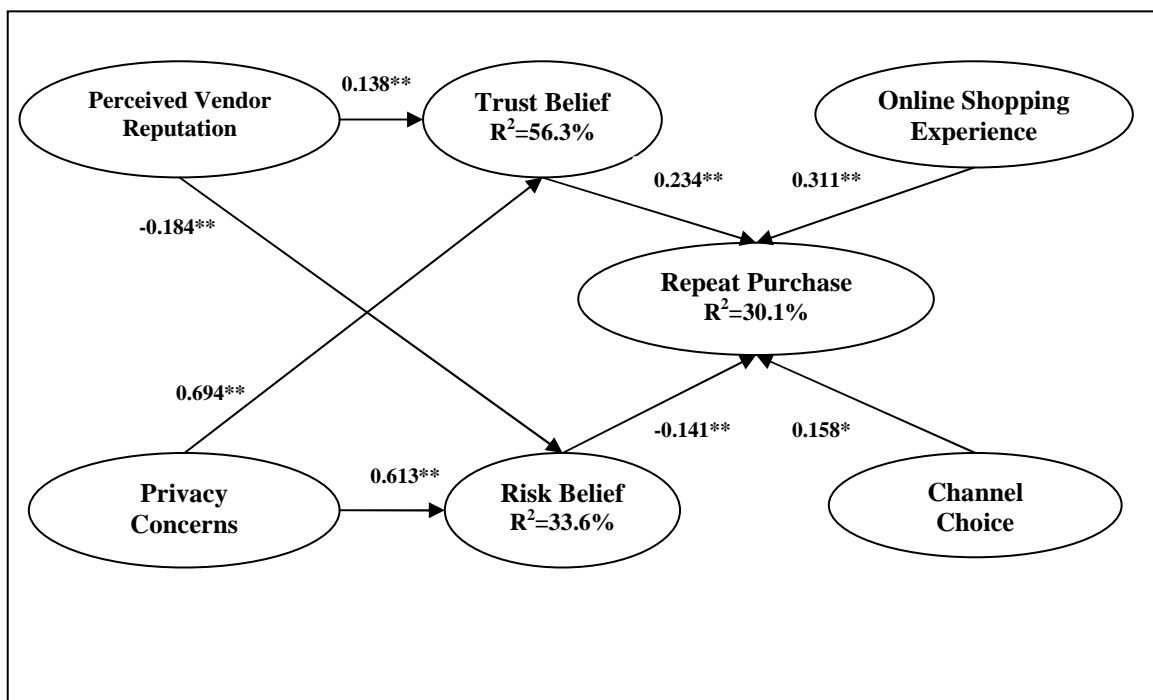


Figure 2: PLS results of structural model  
 Note: N=279. \* Significant at the 0.1 level, \*\* Significant at the 0.01 level

The summary of hypotheses tests and results are displayed in table 4. Perceived vendor reputation has the significant effect on consumer's trust belief and negative effects on consumer' risk belief. The privacy concerns have very strong effects on both trust belief and risk belief. Unexpectedly, the privacy concerns have the positive effects on consumer' trust belief which is opposite to results demonstrated in prior literature (Malhotra et al, 2004). The perceived vendor reputation and privacy concerns together explained 56.3% variance of trust belief and 33.6% variance of risk belief.

The four antecedents of consumer repeat purchase intention are able to explain 30.1% variance in our sample. In consistent with prior literature, the trust belief has positive impact on consumer's repeat purchase intention (p<0.01) while the risk belief has the negative effect on consumer's repeat purchase intention (p<0.01). Consumer's online shopping experience is significantly associated with the repeat purchase intention (P<0.001). The influential effect of consumer channel choice on

their repeat purchase intention is moderate since the p-value is at  $p < 0.1$  level. The reason of this result could be explained by the early stage of eCommerce development and low level familiarity of the online shopping in China.

Table 4 summary of hypotheses tests:

Hypothesis	Path Descriptions	Hypothesized direction	Path coefficients	T-statistic	Support?
H1a	Perceived vendor reputation → Trust Belief	(+)	0.138	2.820	Yes
H1b	Perceived vendor reputation → Risk Belief	(-)	-0.184	2.437	Yes
H2a	Privacy concerns → Trust Belief	(-)	0.694	10.458	No
H2b	Privacy Concerns → Risk Belief	(+)	0.613	12.000	Yes
H3	Trust Belief → Repeat purchase	(+)	0.234	23.120	Yes
H4	Risk Belief → Repeat purchase	(-)	-0.141	2.211	Yes
H5	Online Shopping Experience → Repeat purchase	(+)	0.311	4.203	Yes
H6	Channel Choice → Repeat purchase	(+)	0.158	1.743	Yes

Table 4: Summary of hypotheses tests and results

## DISCUSSION AND CONCLUSION

This paper aims to shed light on the phenomenon of Chinese consumer repeat purchase in online shopping environment with extending trust-risk model from traditional eCommerce research in developed countries. The study draws upon theories from information systems, retailing, marketing, social psychology, and culture to empirically test a comprehensive model that explains online consumers' repeat purchase intention in Chinese social context.

Prior studies on online shopping are mostly conducted in developed countries especially in United States. Little attention has paid to Chinese online consumers. This study developed an analytical model of online consumer repeat purchase. The proposed research model has been validated by a large sample of Chinese online consumers. The result of our study identified major antecedents of Chinese consumer's repeat purchase intention including trust belief, risk belief, online shopping experience, and channel choice. The trust-risk model developed in US context (Moholtra et al, 2004; Jarvenpaa et al, 2000) is supported by the results of our study. Perceived vendor reputation is an important factor determining their trust belief and risk belief. This is also reflected by CNNIC 2006 report that reputation is the first concern among many factors possibly influencing Chinese online consumer's shopping decision. Therefore, the online vendors must make great efforts to improve their reputation in order to gain consumer's trust.

Privacy concerns are another critical factor that has significant effects on Chinese consumers' trust and risk belief. When purchasing online, customer are always asked to fill out a long form that usually requires personal information including name, birthday, address, credit card information, phone number, etc. Consumers worry about how personal data is used by business (Udo, 2001). In fact, Chinese government has taken several effective measures to deal with the privacy, security and legislation issues in eCommerce transaction (Lu and Zhou, 2007). The first law on eCommerce in China—Electronic Signature law was implemented on April 1, 2005 to protect transaction security. However, - Chinese individual privacy law is still incomplete. This requires both government and business practitioners to make efforts to assure the customer's private information to be effectively protected in eCommerce activities.

Our study also adds two important antecedents of consumer's repeat purchase intention. It has been indicated by Ivens and Shaw (2005) that great customer experiences are a source of long term competitive advantages and created by consistently exceeding customer's physical participation and emotional expectations. The physical participation relates to consumer's skill to shop online and the emotion expectation captures the hedonic dimension of online shopping activities and can be measured as the extent to which consumers find that to be enjoyable, fun and pleasant to use. Therefore, online vendors must

improve the online shopping environment and shopping process to provide consumer an enjoyable and pleasant experience in order to attract their customers to come back for a repeat purchase.

The consumer channel choice is shown as a moderate factor in our model. In fact, compared to other shopping medium online shopping provides consumer a great degree of convenience those motivated customers conduct repeat purchase. Today, consumers have gained more flexibility and empowerment with using online channel in which they could compare various prices for the product and conduct the purchase at anytime and anywhere (Loewe & Bonchek, 1999). In China, the eCommerce development is still in the early stage, consumers are more familiar of traditional offline shopping. This requires the business vendors to create more convenient and secure online shopping channel to help customers establish the comfortable experience of online purchase.

Our study contributes to the practitioners by identifying several major factors affecting online consumer repeat purchase intention in China. In addition, this study provides companies and web vendors who are seeking to recruit and retain customers in Chinese marketplace specific information about the Chinese eCommerce users' repeat purchase intention. It also informs managers' decisions on delivering enjoyable and pleasant experiences and promoting the eCommerce as a more convenient shopping channel for the Chinese consumer.

For academics, this study contributes to the literature on repeat purchase in eCommerce by identifying major antecedents of the repeat purchase intention. In addition, this study also validated the trust-risk model with a large sample of Chinese consumers. This study also contributes to eCommerce research in context of other developing countries.

This study also suggests some future research directions. One of our research agenda will expand current study to conduct a close-up analysis of the factors affecting the customer's Repeat Purchase intention and long-term exchange relationship between vendors and Chinese consumers. Another interesting work could be done in a cross-cultural context to find out the cultural effects on online purchase.

## REFERENCES

1. Atcharyachanvanich, K., Okada, H. and Sonehara, N.: What Keeps Online Customers Repurchasing through the Internet?, *ACM SIGecom Exchanges*, Vol.6, No.2, pp.47-57 (2006).
2. Bauer, Raymond A. (1960) 'Consumer behavior as risk taking', in Robert Hancock (ed.),
3. Bhattacharjee, A., "Individual Trust in Online Firms: Scale Development and Initial Test," *Journal of Management Information Systems*, Vol. 19, No. 1:211-241, Summer 2002
4. Burke, R. R. (2002). Technology and the customer interface: what consumers want in the physical and virtual store. *Journal of the Academy of Marketing Science*, 30(4), 411-432
5. Byrne, B. M. (1998). Structural equation modeling with lisrel, prelis, and simplis, basic concepts, applications, and programming. Mahwah, New Jersey, Lawrence Erlbaum Associates Inc
6. Chang, M., W. Cheung, and V. Lai, " Literature derived models for the adoption of online shopping," *Information & Management*, 42, 543-59, 2004
7. Chellappa, R.K., " Consumers' Trust in Electronic Commerce Transactions: The Role of Perceived Privacy and Perceived Security," under submission
8. Chen, L.-d., Gillenson, M.L. and Sherrell, D.L. (2002). Enticing Online Consumers: An extended technology acceptance perspective, *Information and Management* 39(8): 705.
9. Chen, S., and J. Ning. 2002. Constraints on Ecommerce in Less Developed Countries: The Case Of China. *Electronic Commerce Research* 2 (1-2):31-42
10. Chin, W. W. "Issues and Opinion on Structural Equation Modeling," *MIS Quarterly* (22:1), 1998, pp. 7-16.

11. Chin, W. W., Marcolin, B. L., and Newsted, P. R. "A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and an Electronic Mail Emotion/Adoption Study," *Information Systems Research* (14:2), 2003, pp. 189-217.
12. CNNIC (2007): 20th Statistical Survey Report on the Internet Development in China, China Internet Network Information Center. <http://www.cnnic.net.cn>
13. D.D. Schoenbachler and G.L. Gordon, "Multi-channel shopping: understanding what drives channel choice," *Journal of Consumer Marketing*, vol. 19, no. 1, pp. 42-53, 2002.
14. Davis, F. Baozzi, R., and Warshaw, P. (1999) Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology. *MIS Quarterly* (13:3), pp. 319-340.
15. Devaraj, S., Fan, M. and Kohli, R. "Antecedents of b2C channel satisfaction and preference: Validation e-Commerce metrics," *Information Systems Research*, vol. 13, no. 3, pp. 316-333, 2002.
16. Dowling, G. R., R. Staelin. 1994. A model of perceived risk and intended risk-handling activity. *J. Consumer Res.* 21(June), 119–134.
17. Dynamic marketing for a changing world, 389-398. Chicago: American Marketing Association
18. Efendioglu, A.M. and Yip, V.F. "Chinese culture and e-commerce: an exploratory study." *Interacting with Computers*, 16, 1 (2004), 45-62.
19. Gefen, D. "Reflections on the Dimensions of Trust and Trustworthiness among Online Consumers," *DataBase* (33:3), 2002, pp. 38-53.
20. Gefen, D., Karahanna, E., and Straub, D. W. "Trust and TAM in Online Shopping: An Integrated Model," *MIS Quarterly* (27:1), 2003, pp. 51-90.
21. George, J. "Influences on the Intent to Make Internet Purchases," *Internet Research* (12:2), 2002, pp. 165-180.
22. Gupta, A. An Empirical Study of Consumer Switching from Traditional to Electronic Channels: A Purchase-Decision Process Perspective / A.Gupta, B.Su, Z.Walter // *International Journal of Electronic Commerce*, Vol. 8, No 03, 2004, p. 131 – 149
23. Hoffman, D. L., T. P. Novak, M. Peralta. 1999. Building consumer trust online. *Comm. ACM* 42(4) 80–85
24. Hynes, N; Gurau, C., and Chan (2006), "Consumer Trust and its effect on sustainable e-commerce development in China", *World Review of Entrepreneurship, Management and Sust. Development*, (2:1-2), 23-35
25. Jarvenpaa, S. L., N. Tractinsky. 1999. Consumer trust in an internet store: A cross-cultural validation. *J. Comput.-Mediated Comm.*5(2),
26. Jarvenpaa, S. L., Tractinsky, N., and Vitale, M. "Consumer Trust in an Internet Store," *Information Technology and Management* (1:12), 2000, pp. 45-71.
27. K.C. Wong, Multinationals frustrated by e-commerce, China Business Online, posted on 17 November 2000, available online at <http://www.chinabusiness.com/articles/November/Wong2.htm> .
28. Kim, D, "Self-Perception-Based Versus Transference-Based Trust Determinants in Computer-Mediated Transactions: A Cross-Cultural Comparison Study", Working Paper
29. Koufaris, M. (2002). Applying the Technology Acceptance Model and Flow Theory to online Consumer Behavior, *Information Systems Research* 13(2): 205.

30. Loewe, P.; and Boncheck, M. The retail revolution, *Management Review*, 88:4 (1999), 38-44.
31. Lu, Y. and Zhou, T, (2007) "A Research of Consumers' Initial Trust in Online Stores in China", *Journal of Research and Practice in Information Technology*, Vol. 39, No. 3, 167-180
32. Malhotra, N. K., Kim, S. S. and Agarwal, J. (2004) Internet users' Information privacy concerns (IUIPC): The construct, the scale and a causal model. *Information Systems Research*, 15, p.336-355.
33. Martinsons, Maris G. (2002): Electronic Commerce in China: Emerging Success Stories. In: *Information & Management*, Vol. 39, pp. 571-579.
34. Mathwick, C., N. Malhotra, and E. Rigdon. 2000. "Experiential Value: Conceptualization, Measurement, and Application in the Catalog and Internet Shopping." *Journal of Retailing*, 77: 39-56.
35. Mayer, R. C., J. H. Davis, F. D. Schoorman. 1995. An integrative model of organizational trust. *Acad. Management Rev.* 20(3) 709-734
36. Mcknight, D.H., Cummings, L.L. And Chervany, N.L. (1998): Initial trust formation in new organizational relationships. *Academy of Management Review* 23(3): 473-490.
37. Milne, G. R., "Privacy and Ethical Issues in Database/Interactive Marketing and Public Policy: A Research Framework and Overview of the Special Issue." *Journal of Public Policy & Marketing*, 19, spring 2000, 1-6.
38. Monsuwe, T. P. Y., Dellaert, B. G. C., & de Ruyter, K. (2004). What drives consumers to shop online? *International Journal of Service Industry Management*, 15(1), 102-121
39. Novak, Thomas P., Donna L. Hoffman, and Yiu-Fai Yung (2000), "Measuring the Customer Experience in Online Environments: A Structural Modeling Approach," *Marketing Science*, 19 (1), 22-42
40. Oliver, R. L. 1996. *Satisfaction: A Behavioral Perspective on the Consumer*. McGraw-Hill, New York.
41. Pang, L. Here be dragons: the perils of mapping e-business, Gorilla Asia, Posted on 30 October 2000, available online at <http://gorillasia.com/features/rr-ragons30oct00pang.htm>.
42. Pavlou, P. A., and Fygenson, M. "Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior," *MIS Quarterly* (30:1), 2006, 115-143.
43. Pavlou, P. A., Liang, H., and Xue, Y. (2007) "Understanding and Mitigating Uncertainty in Online Exchange Relationships: A Principal-Agent Perspective", *MIS Quarterly*, vol. 31, no. 1, 105-136.
44. Pennington, R., Wilcox, H.D. and Grover, V. The role of system trust in business-to-consumer transactions. *Journal of Management Information Systems*, 20, 3, (2003), 197-226.
45. Shankar, V., Smith, A. K. And Rangaswamy, A. 2003. Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing* 20, 153-175.
46. Shaw, C. and J. Ivens (2002), *Building Great Customer Experiences*. New York: Macmillan.
47. Smith, J.H., Milberg, S.J. and Burke, S.J. "Information Privacy: Measuring Individuals' Concerns About Corporate Practices," *MIS Quarterly* (20:2), 1996, pp. 167-196.
48. Stewart, K.A. and Segars, A.H. "An Empirical Examination of the Concern for Information Privacy Instrument," *Information Systems Research* (13:1), 2002, pp. 36-49

49. Straub, D.W., and Watson, R.T. "Transformational Issues in Researching IS and Net- Enabled Organizations," *Information Systems Research* (12:4) 2001, pp 337-345
50. Teo, T. S. H. and Liu, J. (2007) "Consumer trust in e-commerce in the United States, Singapore and China", *Omega - The International Journal of Management Science*, vol.35, no. 1, 22- 38.
51. Torkzadeh, G. and Dhillon, G. (2002). Measuring Factors That Influence the Success of Internet Commerce, *Information Systems Research* 13(2): 187.
52. Udo, G.J., 'Privacy and Security Concerns as Major Barriers for E-commerce: A Survey Study', *Information Management & Computer Security*, (9:4), 2001, pp. 165- 174
53. Van Den Poel, D. And Leunis, J. (1999) "Consumer Acceptance of the Internet as a Channel of Distribution" *Journal of Business Research*, Vol. 45, 249-256
54. Vijayasarathy, L.R. and J.M. Jones. 2000. "Print and Internet Catalog Shopping: Assessing Attitudes and Intentions." *Internet Research*, 10(3): 191-202
55. Wareham, J., Zheng, J.G., Straub, D., 2005, "Critical themes in electronic commerce research: a meta-analysis", *Journal of Information Technology*, Vol. 20, No. 1, pp. 1-19.
56. Werts, C. E., Linn, R. L., and Jöreskog, K. G. "Interclass Reliability Estimates: Testing Structural Assumptions," *Education and Psychological Measurement* (34:1), 1974, pp. 25-33.
57. Wolfenbarger, Mary and Mary C. Gilly. 2001. "Shopping Online for Free-dom, Control, and Fun." *California Management Review* 43 (Win-ter): 34-55
58. Zhou, L., Dai L., and Zhang, D. (2007). "Online Shopping Acceptance Model – A Critical Survey of Consumer Factors in Online Shopping", *Journal of Electronic Commerce Research*, vol. 8, no. 1, pp. 41-62.