Effect of Manufacturer Reputation, Retailer Reputation and Seller Reputation in China’s Online Shopping Market

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ABSTRACT: This study examines the effectiveness of manufacturer brand reputation, online retailer reputation, and online seller’s reputation in reducing Chinese consumers’ perceived risk regarding online shopping and further increasing their purchase intention in online shopping. The experiment is a 2 (manufacturer reputation: well-known and unknown) × 2 (retailer reputation: strong and weak) × 2 (information on the seller’s reputation: present and absent) factorial design, and 281 college students participated in this study. The results of the univariate analysis of variance show the availability of information on the online seller’s reputation has a significant effect on perceived risk and manufacturer brand reputation and online retailer reputation have no effect on consumers’ perception of risk. The linear regression results reveal perceived risk has a negative impact on Chinese consumers’ purchase intentions on the Internet.

KEYWORDS: Internet, Shopping, China, Risk, Manufacturer Reputation, Retailer Reputation, Online Seller Reputation, Purchase Intention

1. Introduction

In recent years, Internet retailing has generated an increased level of attention among marketing academicians and practitioners (Lwin & Williams, 2006). Despite the rapid growth and the apparent overall attractiveness of the industry, the uncertainties associated with online shopping contribute to the ebb of Internet retailing and its growth potential. Lack of trust is frequently the key reason why people don’t make purchase online (Lee & Turban, 2001). Studies have shown that perceived risk is a critical determinant of purchase intention in an online non-store retailing context (Lwin & Williams, 2006). Shopping on the Internet has been associated with carrying multiple risks. The risk consumers perceive in electronic commerce (e-commerce) is greater than that of commerce at brick-and-mortar retail stores because of e-commerce’s distribution and impersonal nature (Zhou, Dai & Zhang, 2007). Perceived risk negatively influences consumers’ intention to shop online (Bhatnagar, Misra & Rao, 2000; Park, Lee & Ahn, 2004). The key point of minimizing these risks is to find a suitable way to establish trust between Ecommerce trading partners. In an environment where one has to deal with unknown parties, reputation is used to establish this trust among interacting parties (Alnemr et al., 2010).
Online shopping has increased faster in developing markets than in developed economies (ACNielsen, 2005). Concurrent with the development of the Internet are the rapid growth of the Chinese economy and the explosion of the Chinese virtual market. The number of Internet users in China reached 298 million in the end of 2008 (accounting for 22.6% of China’s population), and a quarter of Chinese Internet users are active online shoppers (Anonymous, 2009). Retail websites accounted for half of China’s e-commerce, with a transaction volume of online shopping estimated at 59.4 billion RMB (US$8.5 billion) in 2007, and apparel, accessories and cosmetics are among the top categories (Hoare, 2008; Yu, 2006). With China’s online shopping environment maturing and offering improved service, this volume could continue to grow quickly.

Despite the importance of trust in consumer-based e-commerce and the considerable potential of China’s online shopping market, there has been little empirical research examining the role and effectiveness of trust-building strategies in the Chinese online shopping market is scarce. Our intention is to close the gap by focusing on analyzing the effectiveness of three online reputation-based trust management strategies that Internet marketers could use to promote online shopping among Chinese consumers. Specifically, our study examines the effectiveness of manufacturer brand reputation, online retailer’s reputation, and online seller’s reputation in reducing consumers’ perceived risk regarding online shopping and further increasing consumers’ intentions to purchase apparel products. The rapid growth of online shopping in China underscores the importance of understanding how to build trust into e-commerce among Chinese consumers. We believe that findings of the study should help online retailers identify effective online reputation management strategies that can be used to promote trust and reduce the amount of risk Chinese consumers perceive in online shopping and further increase their purchase intention.

The apparel shopping context was selected for the present study because apparel and accessories represent one of the largest categories of online sales around the world (Cassar, 2009). Additionally, the choice of the apparel context was deemed appropriate because apparel products are likely to be products with which Chinese college students who comprise the sample for the study have some familiarity purchasing on their own.

2. Conceptual background

Trust and perceived risk determines the consumers’ online transaction intentions (Jarvenpaa, Tractinsky & Saarinen, 1999). Trust is an especially important factor under conditions of uncertainty and risk. The unique virtual shopping environment associated with online shopping raises uncertainties for consumers, and the higher level of
uncertainty, would in turn, increase the overall perceived risks and untrustworthiness of online shopping (Biswas & Biswas, 2004). Many studies have indicated that credit card security, buying without touching or feeling an item, being unable to return an item, and the privacy/security of personal information remain Internet consumers’ main concerns (Bellman, Lohse & Johnson, 1999; Suki & Suki, 2007). All of these issues increase risk, and influence a consumer’s trust and purchasing decision in online shopping. Therefore, building consumer trust in Internet shopping is necessary for an Internet shopping transaction.

Research has suggested that consumers frequently rely on trust attributes, or risk-relieving activities (also known as extrinsic cues) to decrease uncertainties associated with Internet shopping (Chu, Choi & Song, 2005; Dowling & Staelin, 1994; Park & Stoel, 2005; Tan, 1999). These risk relievers include seeking information from formal and informal sources (e.g., obtaining information from other consumers who have used the product), limiting the set of alternatives to well-known brands, purchasing from retailers with good reputations, trying the product before purchasing, and reducing the amount that could be lost (e.g., by insisting on warranties/money-back guarantee) (Akaah & Korgaonkar, 1988; Dowling & Staelin, 1994). Lwin and Williams (2006) analyzed risk relievers based on the findings of prior studies in this field. The authors identified the most important six risk relievers, namely, “warranty/money-back guarantee,” “brand/manufacturer reputation,” “retailer reputation,” “price,” “information source/reference group,” and “trial.” Previous research within an online shopping context has suggested that consumers would consider online shopping to be safe and trustworthy when external cues are present versus when they are not (Barsky, 1995; Chu et al., 2005).

When consumers are unable to determine the risk before online transaction takes place, they often rely on the major source of information in E-commerce, reputation system to estimate the risk and reduce uncertainties associated with Internet shopping for products (Alnemr, et al., 2010; Chu et al., 2005; Park & Stoel, 2005; Senecal & Nantel, 2004; Tan, 1999). This study examined the effectiveness of three reputation-based trust management strategies (or risk relievers), namely manufacturer brand reputation, online retailer’s reputation, and online seller’s reputation in the online shopping context. We examined their effectiveness in reducing Chinese consumers’ perceived risk regarding online shopping and further increasing their purchase intentions in the online market. The conceptual model of this study is summarized in Figure 1 below.
3. Research hypotheses

3.1 Manufacturer brand reputation

Research shows that consumers often use brand names as risk relievers in making product choices (Chu et al., 2005; Grewal et al., 1998). Since manufacturer reputation is directly linked to the product, the manufacturer’s reputation has the greatest impact on consumer perception of product quality (Grewal et al., 1998; Rao & Monroe, 1989). A well-known manufacturer brand name associated with a positive brand image creates competitive advantages in terms of increasing consumers’ interest, attention, and positive evaluation of a product (Porter & Claycomb, 1997; Shen, 2001). When buying apparel products on the Internet, consumers normally cannot physically see or try on the product; thus, brand names play an important role in reducing perceived risk and assessing product quality (Moon & Millison, 2000; Park & Stoel, 2005). Therefore, a strong manufacturer brand name, a sign of quality, could reduce risk associated with product quality in the online shopping context (Vijayasarathy & Jones, 1999).

**H1:** Chinese online shoppers’ perceived risk of online shopping will be lower when the manufacturer brand is more well-known.

3.2 Online retailer’s reputation

Retailer reputation also plays an important role in many purchases, as retailers provide the interface between consumers and manufacturers (Purohit & Srivastava, 2001). Similar to manufacturer brand name, a retailer’s reputation can be interpreted as the perception of quality associated with it. For example, “Nordstrom” represents an image of a luxurious store environment, high levels of customer service, and high-quality
merchandise (Grewal et al., 1998). Retailer reputations serve as a strong sign of product quality and risk reduction. Consumers’ perceived purchase risk was lower for retailers who have a reputation for providing good service and quality products than for unknown retailers (Dawar & Parker, 1994; Purohit & Srivastava, 2001). The absence of a storefront in an online environment increases the uncertainty of Internet shopping, but this can be reduced by a trustworthy retailer (Biswas & Biswas, 2004; Chu et al., 2005; Vijayasarathy & Jones, 1999).

**H2:** Chinese online shoppers’ perceived risk of online shopping will be lower when the online retailer is more well-known.

### 3.3 Online seller’s reputation

One distinct feature of online shopping is that the buyer and seller do not meet face-to-face, and buyers transact almost entirely with new and unknown sellers on the online marketplaces (Gefen & Pavlou, 2006). Thus, there are often questions related to trust in the buyer-seller relationship. The feedback mechanism on the online retailers’ websites is an essential part of the system that reduces the risk and trust associated with purchasing from sellers at an electronic marketplace (Brinkmann & Siefert, 2001). Online customer reviews provided on the Internet retailer’s website have become a major information source for consumers regarding the online seller’s credibility and reputation (Bickart & Schindler, 2001; Hu, Liu & Zhang, 2008). Online customer reviews, the direct, firsthand information shared by consumers who have purchased and used the product, provide specific and trustworthy information of an online seller for potential customers, which could ultimately reduce their perceived risk of online transaction with online sellers and enable them to make more informed and confident purchasing decisions (Kim, Qu & Kim, 2009; Lim et al., 2006).

**H3:** Chinese online shoppers’ perceived risk of online shopping will be lower when customer reviews are available on a retailer’s website than when they are absent.

### 3.4 Perceived risk and purchase intention

Uncertainties and risks associated with the Internet channel are barriers to shopping online and negatively influence consumers’ purchase intention (Bhatnagar et al., 2000; Park et al., 2004). Many studies have indicated that credit card security, buying without touching or feeling an item, being unable to return an item, and the privacy/security of personal information remain Internet consumers’ main concerns (Bellman et al., 1999; Suki & Suki, 2007). All of these issues increase risk, and influence consumers’ decisions to shop online. Thus, the likelihood to purchase over the Internet decreases as consumers’ perceptions of risk increase.
**H4:** Perceived risk negatively affects Chinese online shoppers’ intention to purchase products online.

### 4. Methodology

In this study, the first three hypotheses (H1, H2, and H3) were tested using experiments in which three selected risk relievers were treated as independent variables and manipulated at two levels: 2 (retailer reputation: strong and weak) × 2 (manufacturer reputation: well-known and unknown) × 2 (information on the seller’s reputation: present and absent). Linear regression was used to test the relationship between perceived risk and purchase intentions (H4).

#### 4.1 Sample and data collection

We designed an experiment involving college students at a Chinese university located in a medium-sized city in Southwest China to test the effects of the three risk relievers on consumers’ perceived risk in an online shopping context. We targeted college students mainly because college-aged consumers between the ages of 18 and 30 make the majority of online purchases (Lee & Johnson, 2002; Modahl, 2000), the consumers who make the majority of online apparel purchases in China are of college age, and these consumers’ education level is higher than average (Yu, 2006).

Pretesting was carried out with 30 Chinese Internet shoppers to select the product stimuli and make sure that manipulations of the treatments were in accord with the researcher’s intention. In the actual experiment, we distributed a paper questionnaire to a sample of 320 students in classes at the target university. A majority of the students participating in the survey are majoring in businesses. A small gift incentive was offered to subjects to increase the response rate, but participation was voluntary. Participants were randomly assigned to one of eight cells of the between-subject experimental conditions. The number of participants in each cell was 40 (320/8 = 40).

In the experiment task, participants were asked to imagine that they were purchasing a polo shirt on the Internet and had come across a description of a polo shirt. The description contained some generic attribute information about the polo shirt. Manufacturer reputation, online retail reputation, and the availability of information on the seller’s reputation were embedded in the introduction description. After reading the description, participants are required to complete a questionnaire that collected information on the dependent measures (perceived risk and online purchase intentions), manipulation check, as well as standard demographics.
4.2 Instrument and measures

4.2.1 Product stimuli

Based on the feedback from the pre-test, a polo shirt was selected as the product category for the experiment due to the item’s popularity among Chinese online shoppers. Furthermore, polo shirt is a category involving fewer changes in style and is less affected by fashion trends. Therefore, it is expected that quality and brand name will be the major factors affecting buyers’ purchase decision.

4.2.2 Independent variables

We used actual brand names and Internet retailer names in our experiment, so the participants would conjure up perceptions of reputation and knowledge in their evaluation of the retailers and products (Bearden & Shimp, 1982; Dodds, Monroe & Grewal, 1991; Lwin & Williams, 2006).

There were two treatments for the manufacturer brand. The first was a new and unknown domestic brand for polo shirts -- Chaoyue. The second was an established and well-known international sportswear brand -- Nike, the number one sportswear brand in the Chinese market (Anonymous, 2006). Online retailer reputation was manipulated to distinguish between a strong reputation and a weak reputation. Aoyun, a new and unknown sportswear online retailer, was chosen as the retailer with a weak reputation. Taobao, the largest Internet retailer in China, was chosen as the retailer with a strong reputation (Li, Li & Lin, 2008). Similarly, the availability of information on the seller’s reputation was manipulated at two levels: presence and absence. Phrases was included in the description section of the questionnaire to indicate that customer reviews on the seller were or were not provided on the retailer’s website (see Table 1).

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<th>Table 1</th>
<th>Treatment for the Dependent Variables</th>
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<td><strong>Risk Relievers</strong></td>
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| 1. Manufacturer brand reputation | 1. *New and unknown*: Chaoyue  
2. *Established and well-known*: Nike |
2. *Established and well-known*: Taobao (www.taobao.com) |
| 3. Availability of information on the seller’s reputation | 1. *Present*: “Customer reviews on the seller are available on the retailer’s website.”  
2. *Absent*: “Customer reviews on the seller are NOT available on the retailer’s website.” |
4.2.3 Dependent variables

Perceived risk and purchase intentions were measured by existing scales. Research findings about perceived risks in product purchases (e.g., Biswas & Biswas, 2004; Lee & Huddleston, 2006) were used to develop statements related to privacy, timing, performance, and financial and social risks. We developed twelve items for perceived risk. Some of the sample items were “If I return the clothing product I bought online, I will not be able to get a full refund” and “There will be something wrong with clothing bought on the Internet, or the clothing will not fit properly.” The subjects were asked to rate these statements on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Intentions to purchase via the Internet were measured using a single item, since many consumer behaviour studies have used a single-item purchase measure (Lwin & Williams, 2006; Park & Jun, 2003). The subjects were asked to indicate the likelihood of buying the product being shown in the experiment on a 5-point Likert scale (1 = strongly unlikely to 5 = strongly likely).

5. Data analysis and results

5.1 Sample description

Of the 320 collected questionnaires, 281 responses were considered valid and were used in the study. Most participants were between the ages of 18 and 25 (97%), and 190 respondents were women (68%). One hundred and forty respondents (51%) reported having online shopping experience, and more than 70% of the respondents who had not actually purchased anything online had frequently browsed items (including apparel items) online.

5.2 Reliability of variables and manipulation check

Cronbach’s alpha was used to examine the internal consistency of the items, with a minimum criterion of approximately 0.70 (Hair et al., 1998). Items with low individual reliability were eliminated to improve the Cronbach’s alpha of the scales. In the present study, only one dependent measure, perceived risks, had multiple items (12 items). The result was that two perceived risk items were excluded from the final scale due to a low item-total correlation. The value of Cronbach’s alpha for “perceived risks” was 0.70. Thus, it was accepted as being reliable for the research.

Manipulation checks based on similar previous studies were conducted at the end of experiment. Subjects are asked to evaluate the manufacturer reputation (very strong reputation and very weak reputation), retailer reputation (very strong reputation and very weak reputation), and information on the online seller’s reputation (very abundant and
very scarce) on 5-point Likert scales. A $2 \times 2 \times 2$ ANOVA showed that participants in the good-reputation condition perceived the manufacturer’s reputation were significantly higher relative to the poor-reputation condition ($F(1, 273) = 78.62, p < 0.0001$). The other manipulations did not affect perception of manufacturer reputation. Similarly, the result of the manipulation of retailer reputation revealed that participants in the poor-reputation condition perceived the retailer’s reputation were significantly lower relative to the good-reputation condition ($F(1, 273) = 108.54, p < 0.0001$). The retailer reputation ratings did not vary with any other manipulation. Finally, the result of the manipulation check of the importance of the seller’s reputation information indicated a significant main effect of customer reviews ($F(1, 273) = 85.78, p < 0.0001$). There were no significant main effects of the other manipulations on customer reviews. Thus, these results indicate that the independent variables were successfully manipulated.

5.3 Result of hypothesis testing

5.3.1 Univariate analysis of variance (ANOVA)

The results of the univariate analysis of variance, presented in Table 2 and Table 3, reveal that only the availability of information on the online seller’s reputation (customer reviews) has a significant effect on perceived risk ($F(1, 273) = 31.19, p < 0.0001$). When customer reviews on the seller were available on a retailer’s website, consumers perceived lower purchase risk compared to when customer reviews were absent ($M = 12.34$ vs. $13.42$). Hence, the results supported H3. The results are consistent with Hu et al.’s study (2008), which found that online reviews of the seller could reduce consumers’ perceived uncertainty of online transactions and influence consumers’ purchase behaviour. However, in this study, both manufacturer brand reputation and online retailer reputation did not have a significant effect on consumers’ perception of risk. Thus, H1 and H2 were not supported (see Table 2).

5.3.2 Regression analysis

The linear regression results ($\beta = -0.18, t$ value $= -7.74, p < 0.001$) provide evidence of the negative impact of perceived risk on consumers’ purchase intentions on the Internet. Thus, H4 was supported. This is congruent with previous studies that suggested that consumers’ risk perception would discourage their transaction intention in the cyber marketplace (Jarvenpaa & Todd, 1997; Kim & Ahn, 2006).
6. Discussions, conclusions and recommendations

The main purpose of this study was to investigate the effectiveness of manufacturer brand reputation, online retailer reputation, and online seller’s reputation on Chinese consumers’ perception of risk associated with online shopping. Previous research has studied similar relationships using data collected mainly from the U.S. The findings of this study help not only validate previous results in a cross-culture setting but also increase Internet marketers’ understanding of their target consumers in China and provide marketers with more knowledge about how reputation-based trust management strategies influence Chinese shoppers’ perception of risk when they purchase products on the Internet.

Unlike the findings from most empirical studies conducted in the U.S., manufacturer brand reputation had no weakening effect on Chinese consumers’ perceived risks of online shopping ($M = 12.93$ vs. 12.83), $F (1, 273) = 0.24$, $p = 0.63$. A possible explanation for the results is that fake and cheaply made goods are ubiquitous on e-commerce sites in China,
and the big name brands are normally the favourite target of counterfeits (Hargrave, 2005). Chinese consumers are suspicious of name brands when buying them online, even though consumers generally have a positive attitude and purchase intentions toward a well-known, high equity (Hsu, 2007). Therefore, a reputable brand does not necessarily signal good quality and a safe purchase in the Chinese online market because the product may be a fake. Brands, especially big name brands, should increase their presence and set up their own stores on the Chinese cyber market to prevent counterfeit products from hurting brand equity and sales.

Inconsistent with previous studies, we found that an online retailer’s reputation could not significantly decrease Chinese consumers’ perceived risk of making online purchases (M = 12.80 vs. 12.97), F (1, 273) = 0.60, p = 0.44. This may be due to two possible reasons. One is that the majority of top online retailers in China (e.g., Taobao, Paipai, and Eachnet) function as market-makers. Similar to Amazon and eBay, they create e-marketplaces that allow a large number of buyers and sellers to meet and trade with each other. Even though these Chinese online retailers try to become a source of quality products for buyers, many illegitimate businesses have been set up at these marketplaces to sell shoddy products or defraud consumers (Yu, 2006). Unlike online shopping malls or storefronts where transactions are guaranteed solely by a seller who simultaneously acts as a market-maker, in the e-marketplace the buyer’s transaction is guaranteed by both a market-maker and a seller (Kim & Ahn, 2006). Since the quality of the product and customer service are still largely determined by the direct seller, buying from a popular e-marketplace but from an unknown seller still creates a lot of uncertainty among Chinese online shoppers. Therefore, the findings from this study indicated that the availability of the information on the direct seller’s reputation could significantly reduce consumers’ perceived risk in online transaction. Second, because e-commerce in China is still in the infancy stage, even the most reputable e-retailer in this country, Taobao, has not won consumer confidence. According to Lu et al.’s study (2009), Chinese customers’ evaluations of Taobao are not positive in a number of variables, such as content quality and customer support. The logical conclusion is that a popular Internet retailer for Chinese consumers means a shopping destination with high traffic but not necessarily a trusted seller. Based on these findings, we think Internet retailers in China should not only explore the reasons for low customer trust in order to raise customer confidence in the retailers’ websites but also ensure the high quality of the third-party seller in order to attract more buyers to the seller’s marketplace.

The results of this research show that the availability of information on the online seller’s reputation on an online retailer’s website has a negative impact on Chinese consumers’ perceived risks of online shopping (M = 12.34 vs. 13.42), F (1, 273) = 31.19, p < 0.0001. The e-commerce industry in China is still at the infancy stage compared with
more developed markets. Fraud is endemic in China’s online markets. Therefore, online customer reviews are critically important for Chinese customers when they transact with an unknown seller in such an immature and unsafe online shopping environment (Ye et al., 2009). Because online customer reviews on the seller play a central role in helping Chinese online shoppers overcome perception of risk and insecurity in online transactions, Internet retailers’ websites should support the provision of recommendations and customer reviews about sellers’ reputations and former customers’ online experiences for prospective customers’ reference.

The study results also suggest that the perceived risks associated with online shopping critically affect Chinese consumers’ decision whether to engage in this form of shopping. This is consistent with previous research suggesting that consumers’ risk perception is a primary obstacle to online commerce’s future growth (Jarvenpaa & Todd, 1997). The results from this study and previous studies suggest that Chinese Internet shoppers’ major concerns include product quality and security of payment and personal information (Yu, 2006). Internet retailers should take steps to address these concerns to help increase Chinese consumers’ confidence in making purchases on the Internet.

The findings of this research are limited in several ways. First, the number of levels of each risk reliever is limited to two in this study (manufacturer brand reputation was manipulated at two levels: new and unknown vs. established and well-known). Future studies could explore the use of more levels. For example, manufacturer brand reputation could be manipulated at four levels in future studies: “new local manufacturer brand,” “new international manufacturer brand,” “established local manufacturer brand,” and “established international manufacturer brand.” Second, this study examined only the effect of the availability of information on the online seller’s reputation on consumers’ perception of risk in online shopping. We suggest future research should also investigate the influence of a seller’s reputation (good or bad) on consumer perceived risk. Last, we recognize that using only polo shirts in this research design may have limited the findings from the present study to this particular product category, and the convenience sample used in this study also reduces the ability to generalize findings to a broader population. Therefore, a future research opportunity could cross-validate our results by including diverse product categories and expanding into other regions in China.

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References


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