Abstract: This research investigates the factors that have a relationship with online purchase intentions. This article focuses on online purchase intention among students at eight universities in Beijing, China. The One-way analysis of variance (ANOVA), Pearson correlation coefficient, and Spearman correlation coefficient were used for analyzing the hypotheses in this study. All the factors (variables) considered in this research, namely, perceived price, perceived ease of use, website quality, website brand, and customer value and trust have positive relationships and were found to have an important effect on purchase intention. Several recommendations were made with a view to increase the number of online shopping customers.

Keywords: Online Purchase, Purchase Intention, E-Commerce, Customer Value, Online Shopping, Trust, Perceived Price, Perceived Ease of Use, Website Quality, Website Brand.

Introduction

Online shopping allows consumers to purchase goods or services directly from a real-time seller over the Internet, without any intermediary service. There are three types of online shopping: B2C (Business-to-Consumer); B2B (Business-to-Business); and C2C (Consumer-to-Consumer). B2C refers to business activities whereby customers pay to get products or services through the Internet (Bussler, 2003). A good example of a B2C transaction is that of a customer buying a pair of shoes via a virtual (online) shop. B2B can be defined as a business commerce transaction between business partners, for instance, manufactures selling goods to wholesalers (Bussler, 2003). As to C2C, it refers to electrical-based commerce transactions between customers and other third parties (Bussler, 2003). The best example of C2C is online auctions, which allows some consumers to post one or more items for sale and others to bid for them. Simply put, online shopping can be seen as the computerized version of traditional shopping, where consumers buy products or services through online virtual stores.

There is much consensus regarding the attractive attributes of Internet shopping as compared with traditional shopping (Breitenbach & Van Doren, 1998; Crawford, 2000; Ray, 2001; Schaeffer, 2000; and Then and Delong, 1999). These attributes include: time and money-saving; convenience or easy accessibility; the shopper's ability to screen and select a wide range of alternatives; and the availability of information for purchase intention. Moreover, simplicity, fast speed and variety of products allow consumers to reduce the cost and time of procurement. With the development of the Internet and the popularization of computers, shopping on the Internet has become commonplace. Still, even though the future of online shopping looks bright, there are many variables that can disrupt the online shopping process. With the high number of sellers and shoppers in the online market, customers’ value and brand trust evaluation have become crucial indicators for e-commerce (McDougall et al., 2000; Doina and Nathan, 2008). According to Chu and Lu (2007), customer value is significantly influenced by perceived price and perceived ease of use. These factors also can be used to predict the purchase intention of buying online. So can trust, affected by quality and brand image (Chang and Chen, 2008). Trust not only
affects potential customers but also influences repurchase customer’s intentions. Many consumers who have never used online shopping for purchasing products may become online consumers in the future (Broekhuizen, 2006).

This article focuses on online purchase intention among students at eight universities in Beijing, China. Online shopping is playing a more and more important role in Chinese social life. It has been growing very rapidly. According to a research on China online shopping conducted in 2009-2010 by iResearch, the Chinese online shopping market reached 248.4 billion Yuan ($36.7 billion Dollars) in 2009, a 93.7% increase compared to 2008. One of the reasons for the huge growth of online shopping is the recognition by consumers and enterprises of the value of online channels. E-commerce can easily meet their daily shopping needs. It also provides personalized services (Leinoff, 2011).

After reviewing the relevant literature, this article will introduce the conceptual framework and methodology used. It will focus then on the findings and discuss their implications for online shopping in terms of future prospects among the student population.

1. Literature Review

- E-Commerce

E-Commerce is a modern business methodology that demonstrates the needs of merchants, organizations, and customers to reduce the costs while ameliorating the quality of products and services (Kalakota and Whinston, 1996). Shim at el., (2001) defined e-Commerce as the purchasing of goods or services via the Internet by using WWW (World Wide Web). E-commerce increases the speed of service delivery. The e-commerce process consists in using the Internet to buy and sell products or services electronically (Laudon, 1991). It enables people to do business in an easily and speedy way. Buying and selling products or services through the Internet give small businesses a chance to compete with MNCs (Muti-National Companies). Many benefits which companies can be derived from electronic commerce such as, for instance, attracting new customers in a fast and inexpensive way, improving the quality of after-sale service, making it possible to sell goods or services 24 hours per day, 7 days a week, and reducing the labor cost and resources needed (Kalakota and Whinston, 1996).

- Online Shopping

Today, a fast growing number of consumers shop online, not only to purchase products or services, but also to gather product information or even browse for enjoyment. The online shopping environment is now playing an increasing role in the overall relationship between online shoppers and retailers (Demangeot and Broderick, 2006). So much so that its effect on consumer response has become one of the most important points to understand for marketing planning (Demangeot and Broderick, 2006). Service quality in the online environment is an important constituent of the effectiveness of e-commerce (Yang et al., 2002; Janda et al., 2006).

Online shopping can be divided into four sub-processes: (i) navigation; (ii) information searching; (iii) online transactions; and (iv) customer interactions (Kalakota and Whinston, 1996). Typically, customers do not evaluate each sub-process carefully when they visit an online shop. They perceive the service as an overall process and outcome (Van Riel et al., 2001). E-service quality has become a crucial factor for online customers since, compared with traditional channels, it is much easier to find out about product technical features and prices through the Internet. High standard e-service quality will provide online customers’ benefits compared with traditional shopping (Yang et al., 2002). Few studies have tested the relationship among the different dimensions of customer satisfaction,
e-service quality, and purchase intentions for online shopping (Yang et al., 2002; Woffnbarger and Gilly, 2003).

Mummelaneni (2005) found that pleasure and arousal during online shopping navigation strongly influence satisfaction, operability and willingness to purchase online can also affect online shopping websites (Gammack and Hodkinson, 2003). While in traditional shopping contexts, atmospheric factors affect approach behaviors by inducing positive emotions such as arousal and pleasure, in online shopping environments, the theatres of experiences are much smaller and require some technological skills to be navigated successfully (Donovan and Rossiter, 1982; Sherman et al., 1997).

- Purchase Intention

Purchase Intention can be defined as a consumer’s willingness to purchase a product or service. It can also be understood in terms of patronage, intention, and loyalty (Bloemer and Ruyter, 1998; Hsu and Liu, 1998; Kim et al., 2007). It refers to the Stimulus Organism Reaction (SOR) paradigm. The S-O-R paradigm is also called the SOR model. S stands for Stimulus (attraction), O for procedures in the organism and R for Reaction of the organism. The basic conception is that a stimulus (for example an advertising statement about a certain commercial product or the remuneration system) in the organism is converted (for example in the form of motivation, decision, or learning process). The reactions induced then lead, for example, to changed consumer behavior or to increased work (Eroglu et al., 2003).

- Customer Value

Customer value may affect satisfaction, loyalty, preference and other important outcomes (Crónin, 2000). It is seen as the cornerstone of marketing, competitive strategy, retention of customers, and relationship management (Roberts, 1994). Customer value finds its origins in both the product and certain offerings beyond the product exchanged (Lindgreen and Wynstra, 2005; Eggert & Ulaga, 2002, 2006).

Zeithaml (1988) stated that value is the customer’s overall assessment of the practical use of a product. It depends on the perceptions of what is received and what is given. For the online shopping industry, it is not only about the product itself, but also about the website, the process of finding, the Internet channel, and ordering, and receiving products. All these contribute to the value to consumers (Keeney, 1999).

- Trust

Trust has been defined as “a psychological state composing the intention to accept vulnerability based on expectations of the intentions or behavior of another” (Rousseau et al., 1998). It also can be defined in terms of how people believe the company will provide a superior service or product for them (Bradach and Eccles, 1989). It can also be viewed as a control mechanism that facilitates exchange relationships characterized by uncertainty, vulnerability and dependence. Moorman et al., (1993) stated that trust is the willingness to rely on an exchange partner in whom one has confidence. Customers’ trust can be heavily affected by service guarantee, which represents the service quality of a company (Ahmed, 2003).

Trust is also crucial for e-commerce since the seller’s physical absence makes online shopping more vulnerable (Lowry et al., 2008; McKnight and Chervany, 2002). Internet users suffer significant uncertainties and risks in transactions with unknown sellers on a website (Hoffman et al., 1996). Research indicates that trust is the most influential factors for e-commerce (Gefen, 2000; Reichheld and Schefter, 2000). Trust can significantly increase confidence in the buying process. Trust in the online shopping process may influence online customer reviews as the circumstance which trust is transferred to individuals (Henslin, 1968;
- **Perceived Price**

Kalyanaram and Winner (1995) defined perceived price as the money that a customer expect to spend for a certain product/service. An increase in objective price lowers the acquisition utility when the equivalent value of the product remains constant. Online consumers who shop frequently have better price information, and will be highly affected by price. Online shoppers enjoy a cost advantage over traditional channels in terms of administrative, overhead, and transaction costs. Consumers’ perception of online prices might impact their purchase intention for online products. An acceptable range of price involves a judgment of price based on a comparison with acceptable prices stored in memory (Lichtenstein et al., 1988).

Group buying and online auctions are the best examples of dynamic pricing, which make it possible to evaluate the relationships between the price variables. Since dynamic pricing is very popular in online shopping, many consumers complain about perceived price unfairness (Cox, 2004). A number of studies indicate that price unfairness is one of the factors causing customer dissatisfaction and leading them to spread negative information or to engage in other actions which may deteriorate the reputation or trust of sellers (Kannan and Kopalle, 2001; Suter and Hardesty, 2005).

- **Perceived Ease of Use**

Perceived ease of use refers to the extent to which a person believes that using a new technology would not require physical and mental effort (Davis et al., 1989). It also can be understood as meaning how convenience it is for a user purchase a good or service over Internet (Cassar, 2009).

Venkatesh (2010) determined that customers tend to think using a new technology will not require physical and mental effort. Perceived ease of use assists in interpreting the factors of perceived usefulness (Davis et al., 1989). Ease of use has been determined to be a crucial factor in the IT industry (Davis, 1989; Dabholkar, 1996).

Perceived ease of use is one of the components of expectation. It also influences purchase intention positively (Bhatacherjee, 2001). Davis (1989) has documented that perceived ease of use and perceived usefulness are basic factors in information systems.

- **Website Quality**

Website quality can be defined as the features in the website providing the customers’ colorfulness and usefulness for comfortable using (Geiger and Martin, 1999). The perceived quality of the information content in terms of information utility, accuracy, and timeliness was found to have a positive effect on the perceived service quality in an online channel environment (Swaminathan et al., 1999).

Website quality reflects the accuracy, timeless, and comprehensiveness of the information and service users (Zhou, 2010). It plays a very important role in the online shopping industry (Rarasuraman, 2005; Wolfinbarger and Gilly, 2003). It positively influences purchase intention. Many previous studies have stated that website quality heavily affect customer e-loyalty and e-satisfaction and how they feel about the experiences that come from online shopping experiences (Anderson and Narus, 1990). By giving online consumers a great amount of information from the website, online retailers may reduce customers' perceived risk and uncertainty related to the online shopping process.

- **Website Brand**

Chaudhuri and Holbrook, (2001) defined Website brand as convinced expectations of the brand’s intentions and reliability. It is recognized as a central ingredient contributing to a long term bond between the customer and the brand. Brand is a major element of brand equity.
and also crucial for the development of brand loyalty (Wang, 2002). Brand reputation means customers think the brand is good or reliable. Brand reputation is developed by public relations, advertising as well as performance and quality. If the brand reputation is not good, consumers will be more suspicious and more critical to any flaws that they may find in the brand. Brand predictability is one of the correlate characteristics of website brand. Brand predictability is the accurate level of a consumers’ perception of product service or quality. Predictability can be determined by reiterating experiences with a product or brand. Increased customer’s trust because of predictability leads to positive expectations. A number of studies have stated the direct or indirect impacts of brand on attitudinal and behavioral intentions such as, for example, brand extension acceptance, brand loyalty, and future purchases (Chaudhuri and Holbrook, 2001; Delgado-Ballester, 2004; Wang, 2002; and Delgado-Ballester, 2003). In their study, Zboja and Voorhees (2006) tested the relationship between consumers’ perceptions of a brand and purchase intentions. They found that website brand was clearly correlated with customers’ satisfaction level and purchase intentions.

2. Conceptual Framework and Methodology

The conceptual framework is a modified version from previous studies of the factors influencing online music purchase intention in Taiwan (Chu & Lu, 2007) and of the impact of online store environment cues on purchase intention, trust and perceived risk (Chang & Chen, 2008).

H1: There is a relationship between perceived price and customer value.
H2: There is a relationship between perceived ease of use and customer value.
H3: There is a relationship between website quality and trust.
H4: There is a relationship between website brand and trust.
H5: There is a relationship between customer value and purchase intention.
H6: There is a relationship between trust and purchase intention.

Figure 1.1: Conceptual Framework

Source: created by the author for this study

This research uses descriptive research, which is designed to describe the characteristics of a population. The research technique used was the survey method, which can be defined as the primary data collected from a sample of population through the use of questionnaires (Zikmund, 1994). The survey used a self-administered questionnaire to gather the primary data. In a self-administered questionnaire, the respondents are normally given instructions and some materials. In the mean time they must understand the direction of the research. The benefits of this method can be easily seen as researchers will get the result quickly and also less time will be consumed for collecting the useful data.

In the first part of the questionnaire, the researcher asked a few questions to check whether the respondents were appropriate targets. Every target respondent who filled out the questionnaire got a free drink from the nearby café or restaurant. The data was gathered from eight national universities in
Beijing during September 2010. A total of 400 questionnaires were distributed. Data was also collected from secondary sources.

3. Findings and Discussion

The main purpose of this study is to find the relationship between the independent variables (perceived and website factors), intervening variables (customer value & trust) and the dependent variable (purchase intention). The hypotheses in this research were analyzed by product moment correlation in order to find the correlation coefficient.

A majority of the respondents was females, about 60% (240 respondents). 84% of the respondents were between 20 and 30 years old. Because the data was collected from eight national universities’ campuses, over half of the respondents had a Bachelor’s degree, (62.5% of the total number of respondents). Almost all of the respondents were graduates or undergraduate students, so they did not have any fixed income. 43.8% of the respondents earned less than 3000 Yuan (US$   ) a month and 33.5% between 3001 to 5000 Yuan (US$   ). These two groups are the first and second in the income factor.

Hypothesis one results show a weak positive relationship between perceived price and customer value. The correlation coefficient value is .332. Based on the results, hypothesis two has a strong positive relationship between perceived ease of use and customer value, with a correlation (r) at 0.806. The Pearson correlation analysis indicates that in hypothesis 3 there is a very strong positive relationship between website quality and trust with correlation at .845. Hypothesis 4 indicates that there is a very strong relationship between website brand and trust. There is also a very strong relationship between customer value and purchase intention in hypothesis 5. As to Hypothesis 6, it reveals the presence of a very strong positive relationship between trust and purchase intention.

Females not only made up the largest part of the total 400 respondents, they were also found to pay more interest to online shopping. Since the data was collected from eight national universities in Beijing, the average age of the respondents is that of most university students, that is between 20 and 30. In China, generally undergraduate students do not have a job, which means that normally they have no fixed salary. However, some of the respondents were graduate students. Oftentimes, they will have a job and thus some form of fixed monthly income.

The findings show that hypotheses one and two were rejected as null hypotheses, which means there is a relationship between perceived price, perceived ease of use and customer value. This result is in keeping with some previous studies which also show similar findings (e.g. Chu & Lu, 2007). What they all show is that service providers need to think about price factors and ease of use factor when planning to set up an online shopping business. In Beijing, as is probably the case with other large urban centers in China, there are more and more online users interested in shopping online and undoubtedly price and ease of use factor will be critical factors directly impacting customer value. This comes in addition to the fact that price and ease of use factors also affect purchase intention in an indirect way (Anitsal & Ismet, 2005).

As the results of Hypotheses three, four and six indicate, there is a relationship between website quality, website brand and trust. This is consistent with a number of previous studies on these relationships (e.g. Chang & Chen, 2008; Karimov et al., 2011; and Gummerus et al., 2010). All of them showed positive relationships between website quality, website brand and trust. When business operators improve their website, customers believe they can get more value from the web features provided by business owners.
The findings of hypotheses five and six reveal that the null hypotheses were rejected. This implies that there is a relationship between customer value, trust and purchase intention. Customer value and trust are always treated as predictors of online purchase intention (Li, 2011). Online purchase intention can be partly psychologically affected by customer value and trust (Harris, 2010). This result reminds operators of online shopping websites that since customer value and consumer trust have a direct positive influence on customers’ purchase intention, they should pay due attention on improving these two variables. Since the boom in Internet growth, online shopping took a bullet train direct to the future. The numbers of online Internet users are increasing with an incredible speed, and how to attract more of them is a huge question for online shopping business provides.

**Conclusions and Recommendations**

All the factors (variables) considered in this research, namely, perceived price, perceived ease of use, website quality, website brand, and customer value and trust have an important effect on purchase intention. As the hypothesis results show, all these variables have positive relationships. To analyze the relationship between customer value and trust and purchase intention, this study mainly focused on perceived factors and on some website features. Generally speaking, online shopping providers should pay more attention to each of the variables affecting purchase intention directly or indirectly. How to provide more customer value and gain customer trust should be the key points for them to focus on in order to experience sustainable success in the online shopping industry.

**Recommendations**

Several recommendations can be made in order to attract more of the potential online shopping customers. First, since both the price and ease of use factors have a psychological impact on online customers, online businesses should make sure that customers feel that prices are lower than in a real store. Since under the online shopping model, many of the distributing channels can be avoided, they should be in a position to reduce prices accordingly and leave online shoppers with positive feelings with regard to price. However, as the analysis shows, the respondents expressed a little dissatisfaction about the prices on Taobao.com. The researcher believes that Taobao.com should work harder on reducing its prices, in order to gain a competitive advantage in the price war in the online shopping industry. Given that in this research, the target population is students from eight national universities in Beijing, as a rule, most of them as Bachelor’s degree students do not have a chance to get a part-time job (graduate students do) because of traditional views and the way the educational system operates in China. As a result, this group of people, while well educated and sophisticated, has a low income obviously and little discretionary money; hence the need for online businesses to focus on the price factors.

Ease of use is also very important to attract more customers because there is no consumer (or at best few) willing to purchase a product or service using complicated procedures. One of the attractions of online shopping is that it can save time (not having to go the mall) so this type of business should be free of any barrier to customer easy use the services provided. This is especially in the case of consumers who lack IT skills. In order to reduce the technological barriers, Taobao.com should therefore increase its R&D investment and develop a new online transaction system. In other words, if Taobao.com wants to attract more potential online customers, it has to make sure the services that it provides is easy for everyone to use.

Second, website features strongly
influence online customers’ decision whether to stay or leave a webpage. Thus, the content of a webpage should be complete, accurate and attractive so that customers may visit again and keep using the site. Generally, human beings are easily attracted by colorful web pages. So, as this study indicates, if Taobao.com wants to retain more customers, they need to pay more attention to their web graphic design. As we have seen (see supra), respondents are not satisfied with the web features currently provided by Taobao.com, so the researcher believes that the web design team at Taobao.com should enhance the website in terms of content and appearance.

Lastly, one critical issue for online shopping providers is how to increase customers’ value and make them trust the service providers. What is meant by customer value is the advantages that customers could get from their consumption behaviors. The data in this study shows that some of the unique features available through the online shopping method should be improved by Taobao.com. It should seek to maximize the benefits of the online shopping method by paying more attention to features such as price comparing advantages, time consumption, and in-door shopping convenience. Likewise, Taobao.com also needs to address the disadvantages encountered in the online shopping method such as, for instance, service quality, after-sales services, technical barriers, and online trust.

To conclude, generally speaking, online shopping providers should pay more attention to each of the variables affecting purchase intention directly or indirectly. How to provide more customer value and gain customer trust should be the key points for them to focus on in order to experience sustainable success in the online shopping industry.

- **Recommendations for Further Studies**

To analyze the relationship between customer value and trust and purchase intention, this study mainly focused on perceived factors and on some website features. Additional research could be conducted, however, widening the scope of this study. Even though this research provides information useful to online shopping service providers, more information can be found as this topic lends itself to many further studies that would enhance the data base. Because of time and financial constraints, this study only focuses on some of the variables that affect the customers’ online purchase intention. Yet, many other variables may influence potential online customers’ behavior. More demographic factors could be considered to analyze the relationships among online shopping behaviors. Another critical element of online shopping and an increasingly more important factor in term of consumer intention is security and privacy. More and more studies indicate that safety considerations will directly influence online purchase intention. While this research did not attempt to discover the impact of this variable on purchase intention, it could be the topic of another research. Lastly, since this study focuses on only one specific online shopping service provider - Taobao.com, the collected data does not represent the situation in the whole industry. Further research could include a few online shopping service providers as part of one study.

**References**


**Table 1: Correlations of Hypothesis Testing**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Corr. (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: There is a relationship between perceived price and customer value.</td>
<td>0.332</td>
</tr>
<tr>
<td>H2: There is a relationship between perceived ease of use and customer value.</td>
<td>0.806</td>
</tr>
<tr>
<td>H3: There is a relationship between website quality and trust.</td>
<td>0.845</td>
</tr>
<tr>
<td>H4: There is a relationship between website brand and trust.</td>
<td>0.855</td>
</tr>
<tr>
<td>H5: There is a relationship between customer value and purchase intention.</td>
<td>0.843</td>
</tr>
<tr>
<td>H6: There is a relationship between trust and purchase intention.</td>
<td>0.813</td>
</tr>
</tbody>
</table>

**Table 5.12: Reliability Result**

<table>
<thead>
<tr>
<th>Operational Dimension</th>
<th>Number of Items</th>
<th>Number of cases</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Price</td>
<td>4</td>
<td>400</td>
<td>0.634</td>
</tr>
<tr>
<td>Perceived Ease of Use</td>
<td>7</td>
<td>400</td>
<td>0.907</td>
</tr>
<tr>
<td>Website Quality</td>
<td>7</td>
<td>400</td>
<td>0.876</td>
</tr>
<tr>
<td>Website Brand</td>
<td>5</td>
<td>400</td>
<td>0.893</td>
</tr>
<tr>
<td>Customer Value</td>
<td>4</td>
<td>400</td>
<td>0.915</td>
</tr>
<tr>
<td>Trust</td>
<td>5</td>
<td>400</td>
<td>0.861</td>
</tr>
</tbody>
</table>