

# Comparative Study on the Trust and Purchase Intention of Korean and Chinese Consumers by Web Design Factors of Open Market Websites

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Factors of Open  
Market Websites

Choi Yeon\* · Yuri Lee

MA. Seoul National University, Seoul, Korea

Professor, Seoul National University & Research Institute of College of Human Ecology,  
Seoul National University, Seoul, Korea

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**Abstract** *This study examines open market websites of Korea and China and identifies differences in the web design factors so as to verify how the design factors affect consumers' trust and purchase intention in the open market websites. Two hundred consumers, respectively in Korea and China, filled out survey questionnaires. According to the survey result, design factors of open market websites of both countries consisted of context, contents, communities, communication, connectivity and commercial transaction; and trust-building factors were comprised of customer services, product perception and security perception. This study found that there was no significant difference in the design factors of open market websites between the two countries, but trust levels in accordance with design factors and purchase intention in accordance with trust level differed by country. Therefore, this result would help Korean companies targeting Chinese consumers understand that there are differences between Korean and Chinese consumers in their trust level and purchase intention in accordance with open market website designs; encourage Korean online shopping malls to move to the Chinese market; and provide rich insights into developing marketing plans based on the different web design factors of Korean and Chinese open markets.*

**Key words** *open market, web design factor, (web)site trust, purchase intention*

## Introduction

The expansion and commoditization of the internet has brought significant structural change in both individual life styles and corporate transactions. The rapid development of e-commerce has enabled consumers to find product information by a click whenever, wherever they need, and to compare products, prices, designs and quality between shops (Abbott, Chiang, Hwang, Paquin & Zwick, 2000). Accordingly, consumers began to pay attention to not only products displayed on the web, but also the web design

itself. Previous studies mostly dealt with security as a key factor affecting the growth of e-commerce. However, recent studies have extended their focus on the design of open market websites and how it is related to consumers' decision making. Online consumers tend to search for interesting websites that have different or unique look and feel, among numerous similar online stores. To meet such consumer desire, enhancing product quality only is no longer an answer, but it is required to develop websites that can satisfy consumers both visually and functionally and can appeal to consumers' minds. A website is a first encounter with a company's customer, and when customers purchase products online, they tend to make purchase decisions based on the product information provided by retailers and the website design also affects their decisions(Kim, Kwon, & Lee, 2001). As such, consumers make decisions based on the trust provided by retailers even online. Yet, consumers have a mixed feeling of trust and distrust, which in turn would have impact on their purchase decisions. Previous studies on online shopping regarded trust as a key driver of purchase intention, or distrust as the opposite concept to trust. Unlike in a brick-and-mortar store where consumers can touch and feel products, they have to solely rely on the information provided by retailers online and may have distrust or low levels of trust in websites. In that case, transactions are unlikely to take place. Thus, open markets have to make ceaseless efforts to enhance consumer trust by developing right web designs(Kim & Lee, 2009).

This study examined Korean and Chinese markets, among many, as Korean companies are aggressively penetrating into the Chinese market and the Chinese internet sector is rapidly developing. There may be differences in the website designs of the two countries due to different cultures and in the website trust levels in accordance with web designs. This study has a significant implication for developing and advancing online shopping malls since it examines and compares the Korean market where online utilization is particularly high compared to the size of the country and the Chinese online market with a huge potential.

Based on the problem recognition, this study is to identify differences in the website designs by taking into consideration cultural and social differences between Korea and China. In addition, it will also discuss how consumers develop trust in accordance with open market web designs, and what relationship exists between consumer trust and purchase intention.

The ultimate goal of this study is developing implications about differences in the web designs between Korea and China by identifying differences in the open market web designs of the two countries. As a result, the findings would provide practical implications for Korean companies that have plans to penetrate into the Chinese market.

### *Literary Review*

#### **Internet Open Markets of Korea and China**

Internet open markets are an open-type e-market place where an intermediary opens an online market and many individuals and companies play the roles of both consumer and sellers in the e-commerce industry. Internet open markets serve as intermediaries between sellers and buyers, and minimally involve

in the transactions. Unlike internet shopping malls, open markets have brokerage fees as their main revenue sources, and have evolved into various forms, like B2C, B2B and C2B, from their initial form of C2C. In addition, internet open markets are based on interactive or two-way pricing mechanism, including group purchase, auction and negotiation(Kim, 2006). In 2011 when the online open markets showed remarkable growth in Korea, Gmarket([www.gmarket.co.kr](http://www.gmarket.co.kr)), Auction([www.auction.co.kr](http://www.auction.co.kr)) and 11<sup>th</sup> Street ([www.11st.co.kr](http://www.11st.co.kr)) occupied top 3 positions([www.rankey.com](http://www.rankey.com)). Meanwhile, China adopted the internet much later than advanced economies, but its e-commerce industry has achieved remarkable growth. According to the statistics of “Chinese e-commerce market research report,” published by CNNIC of China, the number of online shoppers in China was expected to reach 87.88 million by June 2009 with the CAGR of 38.9%, and the total spending to exceed 250 billion RMB by the end of 2009(CNNIC, December 2009). Currently, Taobao(淘宝网 [www.taobao.com](http://www.taobao.com)) took up the majority of the online open market industry of China with its share of 83.6%, followed by PaiPai(拍拍网 [www.paipai.com](http://www.paipai.com)) and EchWang(易趣网 [www.eachnet.com](http://www.eachnet.com))(iresearch.cn, 2007).

#### **Cultural Differences in the Internet Industry**

Previous studies have examined cultural aspects of the online environment in accordance with cultural components of each country or region. According to Park and Jun(2003), cultural differences were found in the internet usage and perceived risks from internet shopping, while no significant difference was found between Korean and American consumers in their online purchase intention and experiences. According to an empirical study of Zhao & Hu(2005) on online cultural differences by country(China, Japan, India and the U.S.), Chinese websites tended to show collectivism and family images. This demonstrates the family-oriented Chinese culture.

Korea and China have been closely related by geographic location and their shared history, and have developed similar oriental culture. However, the two countries also have very distinctive characteristics and their online shopping malls also present such distinctions.

Kim(2002) extended standardization-localization advertising strategies from offline only to both online and offline, and compared and analyzed how the online industry environment of each country, along with cultural characteristics, influenced homepage advertising information. The study found that although Korea and China have similar tradition and cultural background, Korean websites contained much more information than their Chinese counterparts since Korea early and widely adopted telecommunications technology and services and its government regulation is not as strict as that of China. Another study examined differences in online word-of-mouth effects by culture between Korea and China, based on the online reviews about search goods and experience goods posted on the dedicated and general online shops(Hwang, Jeong & Park, 2006). The study found that Korean consumers posted more positive reviews, while Chinese consumers posted more subjective reviews. In addition, Korean reviews were longer than Chinese ones on average. The reasons behind such differences are 1) consumers from different cultures(Korea and China) value different things, and 2) development stages of online shopping malls of the

two countries were also different. This researcher expects that online shopping websites themselves may differ by country(Korea and China), and intends to verify the difference by examining online shopping mall users.

### **Design Factors of Internet Shopping Mall Websites**

As retailers directly contact their customers via web, they must immediately understand and respond to customer complaints and evaluation as well as market changes. However, if customers do not feel easy on their websites, the web design may not be in good shape. Many researchers at home and abroad have studied on website design factors, and mostly suggested the factors as service quality or web features.

Jeon and Jeong(2006) categorized website characteristics by design, information usefulness, security and order/payment convenience. Kim, Lee, and Kim(2001) evaluated quality of internet portal services based on information, user friendliness, communication and security. Regarding internet shopping malls, Yoo and Donthu(2000) suggested nine evaluation dimensions: internet shopping mall design, price competitiveness, usability, order clearness, reputation, security, system speed, merchandising differentiation, and product quality assurance. Wolfenbarger and Gilly(2003) proposed eTailQ for internet site quality, and eTailQ includes web design, reliability/fulfillment, and privacy/security and customer service.

Previous studies suggested in-depth information provision, customization level, reliability and security as primary components of website design, but failed to explain the influence of shopping mall design components on customer-to-customer communication, appropriateness of layout and pictures/video clips, contents or other possible factors for convenient commerce activities.

With the primary focus on the website design and contents delivery, this study suggests 7Cs of the Mohammed et al. study(2003) as design components. Mohammed et al.(2003) sufficiently explained internet shopping malls, and suggested 7Cs as website design components for effective operation: context, content, commerce, connection, communication, customization and community. They claimed that all seven components should be considered in designing a website and presented each component in detail. The study explained website layout, design and contents separately, detailed customer-to-customer communication and interaction, and customer-to-site communication, and addressed intra-site and inter-site connection that other studies have hardly examined. As the factors suggested by Mohammed et al.(2003) fit the orientation of this study, this study designates the seven components as design factors.

Context refers to perceived feelings that customers have from interface of a website, including layout and design. Layout is a combination of many visual components, like color, text and images. Thus, context includes both functional aspects such as site navigation and design aspects.

Content refers to digitized information that a website provides. It includes text, video, sound, graphic, message, products and services. Graphic style contains color, type, the number of pictures, graphic and animation(Zeithaml et al., 2002). Web-page graphics consist of GIF(still-photo) and animation(moving picture) types, and always serve more purposes in addition to usability improvement, information provision, reliability or interest trigger.

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Commerce refers to the process of selling products or services, and the capability that allow customers to carry on transactions online. Accordingly, websites provide information like baskets, delivery information, order status and product details for customer convenience. Swift responses to customers' service requests are also very important.

Connection refers to the degree of intra-site or inter-site contents association. Websites use hyperlinks to connect other contents within the site or in other sites, in order to hold consumers on the site as long as possible and to have consumers explore more information on the site or even compare information against other sites.

Communication refers to conversations between website and user, and is one of the most important features of the internet (Chiu et al., 2005). There are three type of communication: site-user (e.g. email notification), user-site (e.g. customers' service request) and user-user (e.g. real-time online chatting).

Customization refers to website's providing contexts and contents suitable for customer preference, or user's selecting preferred contents and contexts.

Community refers to a formal or informal group between users for sharing their opinions and information on their common interest via web boards, games or real-time chatting. By providing contents or services through online community, websites can attract more customers, build close relationship with them and encourage customers to share information between them.

### **Consumers' Trust in Online Shopping**

Many disciplines, like psychology, sociology, economics and business, have paid attention to reliability. It is defined and explained in many different ways according to study subjects, such as individual to individual, individual to organization or organization to organization (Goh & Choi, 2005). From socio-psychological perspectives, reliability is understood as a comprehensive concept that encompasses expectations to and willingness to transaction, risks accompanied when expectations are realized and peripheral factors that encourage or discourage reliability in transaction. Consumer reliability particularly plays an important role in the situation that includes uncertainties and risks (Ahn, 2007). This reliability concept between supplier and buyer applies to the online environment. As online shopping malls are not constrained by time, distance or place and offer readily available services throughout purchase activities from product information search to payment and delivery, they provide convenience, economic value and pleasure for consumers while extending the market scope and reducing transaction costs for companies (Jeon & Kim, 2004).

Although online shopping malls provide abundant benefits as described above, consumers still have to make purchase decisions by relying on the product information that sellers provides, unlike in offline markets. Thus, consumers' trust in each component of a website is a critical factor to their long-term patronage to the website. In addition, as consumers cannot touch and feel products online and thus are left more vulnerable, online sellers must be more transparent and sincere to their customers so that they can obtain consumers' trust (Park, 2000)

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Based on previous studies, when consumer-seller relationship is built in the online environment, both parties have no direct control over the other, and thus trust is critical. Jarvenpaa, Tractinsky and Vitale(1999) insisted that trust promoted consumers' purchase intention online, and was the single most important factor in the success of internet shopping. Accordingly, trust reduces consumers' risks, has positive influences on consumers' attitude toward online stores and thus improves their purchase intention. In addition, the study of Oh and Yoon(2006) on potential customers of online shopping malls found that consumers' trust in websites positively affected their purchase intention.

Yoon(2000) claimed that transaction stability, website reality, search features and personal tendency affected consumers' trust in online shopping malls. Raymond and Matthew(1999) suggested that information quality was the primary factor to build consumer trust in websites, and trust was built by information relevance, accuracy, timeliness and usefulness. Raymond(1999) verified in his exploratory study on preceding factors to trust-building in e-commerce that information quality, web interface design and company reliability affected consumer trust. Information quality included accuracy, timeliness and usefulness, web interface design included ease of search, high speed and reliability, and company reliability included brand reputation and certification display. Having consumers trust security of their personal information and the website is cited to be critical to build trust online(Tan & Thoen, 2001). Yoon(2003) proposed overall reliability, trust in products and services, prompt update of product and price information, prompt responses to return and after-sales service requests, personal information protection and transaction security as tools to measure consumer trust.

As this study focuses on site design usefulness, web interface and personal information security as important factors affecting consumers' website trust, it selects customer service, product perception and security perception factors, which Jarvenpaa & Todd(1997) defined, as sub-dimensions of trust.

Product perception factor includes product price, product diversity, and product quality(Baker, Levy & Grewal, 1992). As consumers could not touch or physically try out available products online but only see them via screen, the product quality delivered by photos and explanation is an important part in their trust. Price is also an important clue by which consumer perceive the product. Previous studies found that price might serve as a clue depending on related products and available information, and higher prices for the quality had negative impact on the website.

Customer service is an effort to actively communicate with customers for their convenience and to care and respond to customers' requests. The more actively a website communicates with customers, the longer it is likely to maintain relationships with customers. This study conceptualized customer service factors as responsiveness and promptitude.

Security perception factor consists of privacy risks, economic risks and payment process risks, and is one of the most important factors to the success of online shopping malls. The lower the risks about security consumers perceive, the more they trust the website and the longer they maintain transaction relationship.

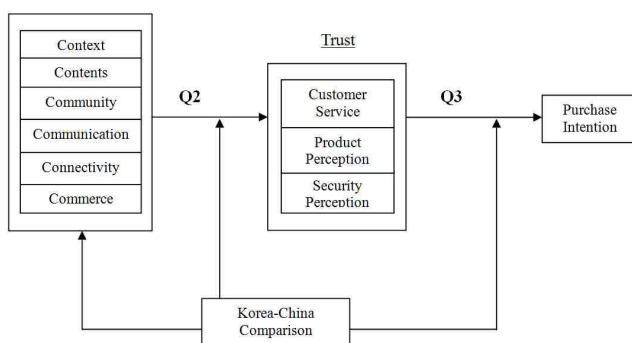
## Research Method

### Research Questions

To empirically identify the correlations between trust and purchase intention on the open market websites of Korea and China, the following research questions and models were established(see Figure 1).

- Q1. To identify differences in the web design factors of Korean and Chinese open market websites
- Q2. To identify how website design factors Korean and Chinese open market websites influence consumer trust
- Q3. To identify the influence of trust on purchase intention

**Q1.**  
Web Design Components



**Figure 1.**  
Research Model

### Measurements

#### *Development of Measurement*

This study adopted survey questionnaires that were drafted in both Korean and Chinese, and definitions and measuring tools of each variable are as presented in Table 1. All questions were developed based on the 5-point Likert scale, and asked respondents to answer after deciding one open market that they frequented. Subject sites were Gmarket, Auction and 11<sup>th</sup> Street of Korea, and TaobaoWang(淘宝网), PaiPaiWang(拍拍网) and EcWang(易趣网) of China.

Web design components of open market consisted of context, content, communication, community, connectivity and commerce, and 23 relevant questions were developed. Among the 23 questions, 13 questions to measure trust were developed about product perception, customer service and security perception, 2 questions to measure purchase intention were developed, and 4 questions to examine demographics

were developed including age, gender, visiting and purchase frequency.

**Table 1.**  
Definition of Variables and Previous Studies

Variable	Definition	items	Source
Context	Site layout and design appropriateness	4	Lee(2000), Hong(2000)
Contents	Appropriateness of digital information of the site	4	Kang(2002), Kim(2001)
Commerce	Capability to effectively carry on transactions	4	Park(2007), Fassnacht & Koese(2006)
Connectivity	Connection within the site or with other related sites	3	Steenkamp & Geyskens (2006) Bart(2005)
Community	Interaction between site and user	4	Yoo(2004)
Communication	Communication between users	4	Lee(2006)
Customer service	Trust in system, information and services	7	Jarvenpaa & Todd(1997)
Product perception	Trust in product price, variety and quality	3	
Security perception	Trust in personal information protection, payment system and return policy	3	
Purchase intention	Intention to purchase any item in the shopping mall and items recommended by the shopping mall	2	Yoo(2002)

*Data Collection and Analysis*

This study examines consumers who frequent open market websites to identify differences between Korea and China in the web design components of open markets. Data were collected online by a specialized marketing research firm. In each country, 200 questionnaires were distributed to college students who live in Seoul(Korea) and Shanghai(China) and often shop online. The survey was conducted for 22 days from March 29 to April 20, 2010, and totally 400 questionnaires were analyzed. In Korea, Gmarket(56.0%) was most visited, followed by 11<sup>th</sup> street(25.5%), and Auction(18.5%), whereas in Chian, Taobao(96.5%) dominated the market, followed by EchWang(2.0%) and PaiPaiWang(1.0%). Respondents consisted of male(50%) and female(50%) students evenly distributed who are mostly in their early 20s. 78.5% of Korean respondents and 89.5% Chinese respondents answered that they visited the website at least once a month. 79% Koreans and 75.5% Chinese said they purchased at the website at least once a month. The data were analyzed by using SPSS17.0, and factor analysis, reliability analysis, independent samples t-test, regression and ANOVA were conducted.

**Research Results**

**Factor Analysis and Reliability Analysis on Website Design Components of Open Markets**

To determine how precisely each variable was measured, factor analysis and reliability analysis were conducted. Factor analysis was based on the principal component analysis of Varimax rotation, with 6 web design components and 3 trust factors. According to the factor and reliability analyses on the 23



design components items, commerce was confirmed to be a factor with the high reliability score of 0.854 and 0.905, respectively in Korea and China; and eigen values were 3.095 in Korea, explaining 16.289% of the total variance and 3.997 in China, explaining 21.037% of the total variance(see Table 2 and 3).

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**Table 2.**  
Factor Analysis on the Website Design Components of Korean Open Market

Factor	Items	Factor loading	Eigen value	Variance(%) (accumulated variance)	Cronbach's $\alpha$
Factor 1 Commerce	It is easy to check product information in my basket in this mall.	0.866	3.095	16.289 (16.289)	0.854
	This mall provides information on delivery and items in my basket.	0.858			
	It is easy to type in information required for transaction.	0.706			
	This mall provides transaction information.	0.695			
Factor 2 Community	In the community of this mall, members have frequent interactions and discussions on the web board.	0.839	2.524	13.286 (29.575)	0.779
	In the community of this mall, users reply to other users' questions or opinions.	0.763			
	In the community of this mall, users provide various contents and frequent updates.	0.713			
	I often participate in survey or opinion-soliciting activities of the community.	0.601			
Factor 3 Context	This mall is simple and easy-to-shop.	0.766	2.038	10.728 (40.304)	0.702
	It is convenient and fast to search information in this mall.	0.719			
	The background or image is new, refined and intriguing, and the feel is unique.	0.668			
Factor 4 Connectivity	I can always use the sitemap in this mall.	0.747	1.828	9.619 (49.923)	0.627
	It is easy to access this site from other sites.	0.700			
	It is possible to obtain information about this site from other sites.	0.679			
Factor 5 Communication	This mall promptly answers my questions.	0.658	1.601	8.428 (58.351)	0.580
	This mall sends email or notes when it offers an event.	0.582			
	This mall tries to adopt what I suggest.	0.568			
Factor 6 Content	This mall utilized various technologies, like flash, animation, video and sound.	0.811	1.565	8.239 (66.590)	0.482
	This mall adequately utilizes text, image and multimedia to display product information.	0.577			

**Table 3.**  
Factor Analysis on the Website Design Components of Chinese Open Market

Factor	Items	Factor loading	Eigen value	Variance(%) (accumulated variance)	Cronbach's $\alpha$
Factor 1 Commerce	This mall provides transaction information.	0.873	3.774	21.037 (21.037)	0.905
	It is easy to check product information in my basket in this mall.	0.858			
	It is easy to type in information required for transaction.	0.777			
	This mall provides information on delivery and items in my basket.	0.776			
Factor 2 Community	In the community of this mall, members have frequent interactions and discussions on the web board.	0.848	2.502	14.029 (35.066)	0.860
	In the community of this mall, users provide various contents and frequent updates.	0.756			
	In the community of this mall, users reply to other users' questions or opinions.	0.748			
	I often participate in survey or opinion-soliciting activities of the community.	0.539			
Factor 3 Communication	This mall tries to adopt what I suggest.	0.758	2.317	10.372 (45.438)	0.732
	This mall promptly answers my questions.	0.748			
	This mall sends email or notes when it offers an event.	0.565			
Factor 4 Context	The background or image is new, refined and intriguing, and the feel is unique.	0.790	2.274	9.889 (55.327)	0.778
	This mall is simple and easy-to-shop.	0.762			
	It is convenient and fast to search information in this mall.	0.476			
Factor 5 Content	This mall utilized various technologies, like flash, animation, video and sound.	0.803	1.699	9.752 (65.079)	0.704
	This mall adequately utilizes text, image and multimedia to display product information.	0.620			
Factor 6 Connectivity	I can always use the sitemap in this mall.	0.803	1.555	8.919 (73.999)	0.570
	It is easy to access this site from other sites.	0.671			
	It is possible to obtain information about this site from other sites.	0.537			

As presented in Tables 4 and 5, factor and reliability analyses were conducted on 13 questions about trust factors and customer service was identified as a factor with high scores of 0.749 and 0.795, respectively in Korea and China. This means the customer service factor is the most important to consumers' trust in a website both in Korea and China. According to the reliability analyses on 2 items of purchase intention, the reliability scores were 0.847 and 0.885, respectively in Korea and China.

Reliability analysis on variables found that the content factor delivered the lowest score of 0.482 in

Korea, but considering that it is an important factor to build a website, it would be used for later analyses. Previous studies considered contents critical to design a website. Web contents should be regularly updated so that a website always maintains latest information. To consistently maintain information up-to-date, it should be considered from the web design stage(Siegel, 1997), Moon(2008)'s study on websites evaluated design, contents, user interface, reliability and operation management. Park(2008) proposed contents, commerce connectivity and interface factors to evaluate correlations between web design factors of internet shopping mall and customer satisfaction/loyalty, and content design may help develop positive reputation and images in consumers' minds(Srinivasan, 2002).

**Table 4.**  
Factor Analysis on the Trust of Korean Open Market

Factor	Items	Factor loading	Eigen value	Variance(%) (accumulated variance)	Cronbach's $\alpha$
Factor 1 Customer Service	I trust the information posted on the mall and the confirmation email that the mall sends me in the purchase process.	0.805	2.566	25.611 (25.611)	0.749
	I trust the answers that the mall provides to customers' questions or requests.	0.707			
	I trust the search system that is detail and convenient.	0.660			
	I trust the delivery procedure and relevant information, and can comfortably wait until I receive my order.	0.511			
Factor 2 Security Perception	I don't feel discomfort when I use my credit card in this mall.	0.803	1.950	19.497 (45.158)	0.653
	I don't feel insecure when I type in my personal information for registration to this mall.	0.648			
	I believe that this mall will change or refund if it sends me a defective product.	0.594			
Factor 3 Product Perception	I do not concern about soldout when the mall presents a product(without a sign of soldout)	0.788	1.671	16.711 (61.868)	0.659
	I trust the price information of this mall.	0.698			
	I trust the product quality of this mall.	0.503			

**Table 5.**  
Factor Analysis on the Trust of Chinese Open Market

Factor	Items	Factor loading	Eigen value	Variance(%) (accumulated variance)	Cronbach's $\alpha$
Factor 1 Customer Service	I trust the information posted on the mall and the confirmation email that the mall sends me in the purchase process.	0.838	2.519	25.192 (25.192)	0.795
	I trust the search system that is detail and convenient.	0.686			
	I trust the delivery procedure and relevant information, and can comfortably wait until I receive my order.	0.677			
	I trust the answers that the mall provides to customers' questions or requests.	0.588			
Factor 2 Security Perception	I do not concern about soldout when the mall presents a product(without a sign of soldout)	0.803	2.167	21.671 (46.863)	0.764
	I trust the product quality of this mall.	0.716			
	I trust the price information of this mall.	0.678			
Factor 3 Product Perception	I don't feel insecure when I type in my personal information for registration to this mall.	0.810	2.112	21.122 (67.985)	0.787
	I don't feel discomfort when I use my credit card in this mall.	0.727			
	I believe that this mall will change or refund if it sends me a defective product.	0.691			

#### Comparison of Web Design Components between Korean and Chinese Open Markets

According to the independent samples t-test on the web design components of Korean and Chinese open markets, most factors delivered meaningful differences( $p < .05$ ), except communication(see Table 6). Chinese open markets scored higher in the web design components than their Korean counterparts, meaning that Chinese consumers rendered higher scores to Chinese open markets.

**Table 6.**  
Comparison of Web Design Components between Korean and Chinese Open Markets

Factor	Korean(N=200)		Chines(N=200)		<i>t</i>	<i>p</i>
	Mean	S.D.	Mean	S.D.		
Context	3.3218	.76536	3.7567	.74529	-5.757	0.000
Contents	3.1050	.71697	3.4225	.77020	-4.267	0.000
Community	3.2188	.75602	3.4988	.76452	-3.683	0.000
Communication	3.3498	.68863	3.4583	.72870	-1.529	0.127
Connectivity	3.3068	.74333	3.5486	.70175	-3.346	0.001
Commerce	3.9200	.70744	4.0838	.78229	-2.196	0.029

To identify web design factors that affect customer service, product perception and security perception, stepwise multiple linear regressions were conducted, and the results are as presented in Tables 7, 8 and 9. As seen in Table 7, web design components of open market had significant influences on customer service. Among factors that influence customer service, Korean customers valued communication the most( $\beta=0.342$ ,  $p<.000$ ) and tended to trust websites that proactively and promptly respond to customers' requests or complaints, while Chinese customers valued commerce the most( $\beta=0.491$ ,  $p<.000$ ) and tended to trust websites that provide sufficient and proper information. On the other hand, connectivity and context had no significant influence on customer service in Korea, while connectivity had no significant influence in China.

**Table 7.**  
The Influence of Web Design Components of Korean and Chinese Open Markets on Customer Service Trust

Country	Component	Dependent variable: Customer service trust				
		$\beta$	<i>t</i>	<i>p</i>	$R^2(Adjusted R^2)$	<i>F</i>
Korean	Communication	0.342	5.476	0.000	0.238 (0.223)	15.264***
	Contents	0.211	3.369	0.001		
	Community	0.208	3.334	0.001		
	Commerce	0.183	2.933	0.004		
	Connectivity	0.103	1.673	0.096		
	Context	0.053	0.917	0.360		
Chinese	Commerce	0.491	8.741	0.000	0.388 (0.372)	24.552***
	Community	0.257	4.583	0.000		
	Context	0.211	3.752	0.017		
	Contents	0.136	2.415	0.021		
	Communication	0.131	2.334	0.000		
	Connectivity	0.059	1.047	0.297		

\*\*\*  $P<0.001$

All web design components of open market have significant influences on security perception. In Korean, context( $\beta=0.276$ ,  $p<.000$ ) among design components affected the most, and the simpler and the easier to understand all information, the more strongly consumers perceive security of the website. In

China, contents( $\beta=0.279$ ,  $p<.000$ ) among design components affected the most, and the more clearly a website displays information on products and return or change policies, the less insecurity consumers perceive and the more they trust the website. On the other hand, the communication, contents and community factors had no significant impact on consumers' security perception in Korea, while the commerce factor had no significant impact in China <Table 8>.

**Table 8.**  
The Influence of Web Design Components of Korean and Chinese Open Markets on Security Perception Trust

Country	Component	Dependent variable: Security Perception Trust				
		$\beta$	$t$	$p$	$R^2(Adjusted R^2)$	$F$
Korean	Context	0.276	4.262	0.000	0.177 (0.164)	14.006***
	Commerce	0.262	4.037	0.000		
	Contents	0.199	3.098	0.002		
	Connectivity	0.178	2.749	0.007		
	Communication	0.132	2.049	0.042		
	Community	-0.111	-1.734	0.085		
Chinese	Contents	0.279	4.310	0.000	0.183 (0.166)	10.928***
	Communication	0.232	3.579	0.000		
	Context	0.186	2.879	0.004		
	Connectivity	0.130	2.011	0.046		
	Commerce	0.127	2.003	0.047		
	Community	-0.043	.0674	0.036		

\*\*\*  $P<0.001$

All web design components of open market have significant influence on product perception. In Korean, communication( $\beta=0.238$ ,  $p<.000$ ) among design components affected the most, and the faster a website handles customer requests or complains, the more customers trust the website. In China, context ( $\beta=0.279$ ,  $p<.000$ ) among design components affected the most, and it was the most important to present product photos from different angles so that customers can see the product quality. On the other hand, the commerce and community factors had no significant impact on consumers' product perception in Korea, while the content and connectivity factors had no significant impact in China <Table 9>.

**Table 9.**  
The Influence of Web Design Components of Korean and Chinese Open Markets on Product Perception

Country	Component	Dependent variable: Product Perception Trust				
		$\beta$	$t$	$p$	$R^2(Adjusted R^2)$	$F$
Korean	Communication	0.238	3.593	0.000	0.142 (0.125)	8.094***
	Connectivity	0.174	2.628	0.009		
	Community	0.173	2.614	0.010		
	Contents	0.159	2.393	0.018		
	Context	0.003	-0.003	0.997		
	Commerce	-0.035	-0.530	0.597		
Chinese	Context	0.279	4.420	0.000	0.225 (0.210)	14.186***
	Communication	0.257	4.076	0.000		
	Community	0.244	3.865	0.000		
	Connectivity	0.160	2.510	0.013		
	Commerce	0.010	0.149	0.882		
	Contents	-0.009	-0.144	0.886		

\*\*\*  $P < 0.001$

To examine online consumer trust factors that affect purchase intention, stepwise multiple linear regressions were conducted. Among the purchase intention factors, reliability scored as high as 0.847 in Korea and 0.885 in China. In the examination of the influence of consumers' website trust on their purchase intention, security perception affected the most in Korea and customer service in China. Korean customers' purchase intention is likely to be stronger when they have stronger trust in security factors, whereas Chinese customers' is likely to be stronger when they have strong trust in customer service. In Korea, security perception affected the most ( $\beta=0.434$ ,  $p<0.000$ ), followed by customer service ( $\beta=0.362$ ,  $p<0.000$ ), and product perception ( $\beta=0.253$ ,  $p<0.000$ ), while customer service affected the most ( $\beta=0.447$ ,  $p<0.000$ ), followed by product perception ( $\beta=0.380$ ,  $p<0.000$ ) and security perception ( $\beta=0.315$ ,  $p<0.000$ ) (see Table 10).

**Table 10.**  
The influence of trust in Korean and Chinese Open Markets on purchase intention

Country	Trust	Dependent variable: Purchase intention				
		$\beta$	$t$	$p$	$R^2(Adjusted R^2)$	$F$
Korean	security perception	0.434	7.727	0.000	0.383 (0.374)	40.574***
	customer service	0.362	6.451	0.000		
	product perception	0.253	4.516	0.000		
Chinese	customer service	0.447	8.379	0.000	0.443 (0.435)	51.976***
	product perception	0.380	7.125	0.000		
	security perception	0.315	5.912	0.000		

\*\*\*  $P < 0.001$

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### *Conclusion and Suggestions*

Regarding how web design factors of Korean and Chinese open markets influence consumer trust and purchase intention, this study concludes as below. This researcher found the need for a study to examine the marketing effect of the web design factors of online shopping malls on consumer trust and purchase intention; theoretically examined web design components and identified context, content, community, communication, connectivity and commerce as core components; and confirmed the influence of the components on consumer trust and purchase intention. Implications of this study are as follows.

This study has significance in that it extended the scope of studies on the trust in online shopping malls of Korea and China. Many studies have looked into online shopping trust or reliability, but few studies have multi-dimensionally compared Korea and China. Thus, this study examined how differently the design components affected consumer trust and purchase intention in the two countries. There were some studies that took a single-dimensional approach to consumer trust of two different countries or a multi-dimensional approach to consumer trust of a single country, but none of them compared two countries by a multi-dimensional approach. Therefore, this study has significant academic implications, and it is expected that future studies may further examine trust patterns of two different countries.

In addition, based on the thought that a study to examine the marketing effect of the web design factors of online shopping malls on consumer trust and purchase intention would be helpful for the industry to develop practical strategies, this researcher reviewed previous theories and identified online shopping mall design components: context, contents, community, communication, connectivity and commerce, and confirmed the influence of the components on consumer trust and purchase intention. Implications for the industry are as below.

There was no difference in internet components that Korean and Chinese consumers perceived in accordance with web design components of internet shopping mall. This may be attributable to the fact that unlike Korea where e-commerce is already mature, e-commerce is now growing fast in China and thus they have to adopt successful business models to build online shopping malls. Despite the similar design components, Chinese websites may have to adopt the unique culture of the country, and thus it is assumed that each component would have minor differences between the two countries. This study found that security perception had the strongest influence on purchase intention in Korea, followed by customer service and product perception, and context influenced security perception the most and communication influenced customer service and product perception the most. In China, customer service influenced purchase intention the most, followed by product perception and security perception, and customer service was affected mostly by commerce, product perception by context and security perception by contents.

To improve purchase intention by a website itself in Korea, security perception must be valued the most, and thus online shopping mall must be simple and the information must be clearly communicated. Then, customer service quality must be improved, and active site-user communication is effective to improve service quality. Lastly, it is important to consistently monitor the site as consumers tend to trust the site more when it swiftly responds to their requests or complaints.



To improve purchase intention by a website itself in China, customer service must be valued the most, and thus it is important to change customers' perception about e-commerce procedures, like card payment, delivery or return policies and obtain their trust. When the context of a website is well established, consumers tend to trust the site more and develop strong product perception. For example, when presenting a product, photos should be provided from different angles. It is also important to offer detail information on products, which makes consumers develop stronger trust in security and has positive impact on their purchase intention.

Limitations of this study and suggestions for follow-up studies are as below. This study is based on the usage characteristics of online shopping mall users of Korea and China, and thus future studies may have to overcome the following limitations. First, subjects of this study were only Korean and Chinese college students in their 20s, living in Shanghai and Seoul. Future studies are expected to include a wider variety of samples. Second, this study examined website differences of Korea and China based on consumers' usage behavior. Future studies may need to identify differences in specific consumer behavior between the two countries. Third, this study only examined website trust, but future studies need to cover distrust. Fourth, considering that Korea and China share similar culture, future studies need to compare websites between dissimilar cultures.

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