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ANALYSIS ON MULTI-FACTORS AFFECTING TRUST IN ONLINE TRADE IN CHINA

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ABSTRACT

The great changes of Internet have taken place rapidly for more than 5 years, not only in basic facilities, but also in sorts of products & services provided for customers. The issue on trust in online trade becomes an urgent matter in the development of e-Business. With the survey based 183 users of Internet, this paper analyzes the main factors affecting trust in online trade among Chinese customers. The cause that customers have less trust in merchants is short of useful information. Paying great attention to the information could reach the objective of fostering consumers' trust.

INTRODUCTION

The development & application of e-Business based Internet are vociferating and impelling a new era of mankind society. As the expanding of online trade, the issue on its trust is extruding and becoming more important. ICTs relate the business processes of many companies with each other, and make merchants to reduce their operational cost, to enlarge market, and to form closer & wider international co-operation relationships. The trade on Internet is general trends at present.

But, under the circumstance of Internet being like a raging fire, to build and maintain the trust of vast customers in online trade is becoming a key factor in the further development of eBusiness based Internet. To solve the problem of trust in online trade is stared in the face. As far as it is concerned, we must have sufficient cognition and pay great attention to it. The trust can be comprehended that, on one hand, users believe their personal information security & privacy under a full protection during trade processes; on the other hand, they believe their requirements satisfied by online trade.

In the field of commerce, trust is not a new topic. Retrospecting to remote antiquity bazaar when labor exchange took place, people had taken the trust into consideration. They dubitatively touched the merchandises they want to buy (accurately, it was an exchange), for appreciating their real values. As time passes, they also expected to have several reliable bargainers and to exchange with them immovably. Afterwards, arisen metal money, paper money and the equivalent exchange manner substituted for labor exchange were related to the issues on trust. As people bartered material objects for metal money, they always thought of the metal's real value, same as for paper money. Today, when vigorously developing e-Business tries to impact the traditional business models, it also ineluctably face the issue.

In the world, a lot of research projects on the issue were spread. Many universities and institutes concentrate the issue from different aspects by various methods. According to the explanation of Modern Chinese Dictionary, the word trust means believe and be willing to trust with. In e-Business, we regard it as individual's good wishes to the other individuals or organizations. And the wishes are based the past behavior and compellent guaranty of the individuals or organizations. The social capitals presented by the trust has the same significance with practical capitals. It could create more social value and realize social prosperity.

INVESTIGATION

Recently, we made a survey on the issue. The goal of our survey was to learn about main effective factors to trustworthiness and their degree difference. In this questionnaire survey, we sent 300 questionnaires and got back 183 responses. For the pertinence, we chose the users as investigated objects who touched frequently the Internet and used it every week, not random sample. The average age of the respondents is 28-year-old. And the average weekly-Web-usage is 14.7 hours. The questions of the questionnaire are ranged from personal information, attitude to online trade & its trust, to brand, cooperation with third-party, purchasing process, after-service, and technology.
In total, 5 aspects and 18 potential factors affecting Internet trust are investigated. All respondents give their marks according to their opinions. We stored the data to Access Database and then made a statistic analysis.

RESULT ANALYSIS ON ONLINE TRUST ISSUE

Within 183 respondents, there are 65 people who have the experience of purchase via Internet, occupying 35.5%; 118 people who never purchase via Internet, occupying 65.5%. Figure 1 shows the obvious difference between their attitude to the trade trust.

We see that, in experienced respondents, there are 35.3% of the trust attitude. It's much higher than 11% in non-experienced ones. But in experienced respondents, there are 7.7% of the distrust attitude. It's much less than 20.3% in non-experienced ones. These indicate that, experienced respondents have bigger degree of the trade trust than non-experienced ones have.

The Most Effective Factor in Merchant Choice to Consumers

Generally, there are two factors to restrict Chinese e-Business development. One is logistics; the other is payment via Internet. Here, the result of our survey remind us of a noticeable fact: when the respondents sorted convenient payment, fast goods delivery, safety & trust, species & quality of merchandise according to their importance, most people put the safety & trust in the first place, and then, species & quality of merchandise, fast goods delivery, convenient payment, in turn. Hence, the safety & trust of the trade should be primarily considered.

In Figure 2, people pay more attention to the safety & trust than to the others. At present, when we focus our attention on building logistics system and payment system, we have to think much of reliability & security of the trade via Internet, to protect individuals' information from illegal use or damage, and to improve consumers' trust.

Factors Affecting Online Trade Trust

We thought, online trade trust of consumers is decided commonly by several factors. In our questionnaire, we list 18 potential factors affecting online trade trust according to 5 aspects, including brand, cooperation with third-party, purchasing process, after-service, and technology. Respondents are invited to give their corresponding scores ranging from the lowest: 1 to the highest: 5. Table 1 is the statistic result of the survey.

<table>
<thead>
<tr>
<th>Factor category</th>
<th>Factor description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td>Supports of off-line entities</td>
<td>4.005</td>
</tr>
<tr>
<td></td>
<td>Asset value of Web site brand</td>
<td>3.585</td>
</tr>
<tr>
<td></td>
<td>Species &amp; quality of goods via Internet</td>
<td>3.563</td>
</tr>
<tr>
<td></td>
<td>Click rate of the Web site</td>
<td>2.153</td>
</tr>
<tr>
<td></td>
<td>co-operation with third-party</td>
<td>3.620</td>
</tr>
<tr>
<td></td>
<td>Seals of approval of CA institute</td>
<td>4.055</td>
</tr>
<tr>
<td></td>
<td>Payment Guarantee of Banking House</td>
<td>4.087</td>
</tr>
<tr>
<td></td>
<td>Brand logo of logistics delivery corp.</td>
<td>3.432</td>
</tr>
<tr>
<td></td>
<td>Federation with the reliable Web site</td>
<td>2.907</td>
</tr>
<tr>
<td></td>
<td>purchase process</td>
<td>3.861</td>
</tr>
</tbody>
</table>
Fast finding out goods wanted 3.913
Simple order process, only one time needed 3.809
[after-service] 3.863
Convenient delivery system, goods arrived in time 4.306
Receive consumers’ complaint 3.825
Real-time Feedback of opinion & suggestion of users 3.579
Providing order-tracking service 3.344
Clarity of return policy 4.262
[technology] 3.721
Stability of Service Function of the Web site 4.142
Navigation speed of web pages 3.869
Page design of the Web site 3.153

Within the 5 aspects, respondents redeemed that the factor affecting by far the trade trust is after-service. The others are respectively purchase process, technology, cooperation with third-party, brand. Those are shown in table 2.

Table 2 Comparison Among the Factors of the Trade Trust

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td>3.809</td>
</tr>
<tr>
<td>Cooperation with the 3rd side</td>
<td>3.644</td>
</tr>
<tr>
<td>Purchase Process</td>
<td>4.063</td>
</tr>
<tr>
<td>After-service technology</td>
<td>3.981</td>
</tr>
<tr>
<td>[technical]</td>
<td>3.869</td>
</tr>
</tbody>
</table>

So far, under the circumstance of lack of enough trust in online trade, it is normal for consumers to pay the most attention to after-service. In general, consumers always locate at weak side when they trade with merchants. Now, the weak side extrudes more and more in online trade. If an e-Business enterprise give explicit after-service assurance to consumers, it seems that the consumers have more counters in their hands during a game and have more trust in online trade. It is a pity that e-Business enterprises in China have no such promise to consumers at the present time.

Within all of the 18 factors, the front 6 factors are respectively: (a) Convenient delivery system, Consumers get the goods in time; (b) Clarity of return policy; (c) Robust of service function of the Web site; (d) Payment guarantee of banking house; (e) Seals of approval of CA institute; (f) Supports of off-line entities. Thereinto, we would like to emphasize the follows:

- **Logistics Delivery System**
  Many consumers expect their ordered goods arrived as soon as possible. Especially for the trade tenderfoot, it means less risk to get goods earlier. Forasmuch, the ability of logistics network become an important factor which effects on the trade trust.

- **CA Institute**
  CA centers are set up for identity cognizance of participants in e-Business activities and for assurance of trade security, and radically secure the trade of eBusiness to go with a swing. The importance of CA centers is extensively identified with. For the moment, the internal CA centers in China are being developed, such as Security Hierarchy Electronic Certificate Authority (www.sheca.com), China Financial Certification Authority (www.cfca.com.cn), etc.. But most of the centers are subjected to local area, and mostly centralize at Beijing, Shanghai, Tianjin, and so on. We look forward to coming forth of standard CA institute approved by market.

- **Converse Logistics (Clarity of return policy)**
  E-Business services come down to a new issue, called Converse Logistics, namely returning goods. Consumers wonder how to do, in case of receiving wrong goods. That's a handicap of online trade. Thereby, before submitting the orders, the consumers always want to learn about whether they could return the goods or not, when they are dissatisfied with them. This is the issue of Converse Logistics.

- **Stability of System Technology**
  The technology realizing e-Business model becomes gradually ripeness. Many problems on technology operation result from human factor. Background operation of a Web site is a dark box for consumers, who only judge stand or fall of the Web site and reliable degree by downstage service. An unstable service system would give bad first impression to consumers and will cause the reduction of the trade trust.

- **Supports of Off-line Entities**
  The attitude of Chinese Internet consumers to the supports
of off-line Entities is sense. Within Click rate of the Web site, Federation with a reliable Web site, Page design of the Web site, Providing order-tracking service, Brand logo of logistics delivery corp., Click rate of the Web site is at large thought to have not so much influence to the trade trust. It reminds us of existence of Internet practical value besides eye economy.

### Analysis on Respondents' Attitudes vs. Effective Factors

Within the 6 more influential factors, system service function of the Web site, fast delivery system, Seals of approval of CA institute, payment guarantee of bank, Supports of off-line entities, Clarity of return policy, we made more profound analysis in terms of the respondents'attitudes to the trade trust. Table 3 shows that, different respondents' attitudes result in different concerned factors.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Atti.</th>
<th>Trust</th>
<th>Gen.</th>
<th>Doubt</th>
</tr>
</thead>
<tbody>
<tr>
<td>system service function</td>
<td>4.41</td>
<td>4.11</td>
<td>4.15</td>
<td></td>
</tr>
<tr>
<td>fast delivery system</td>
<td>4.29</td>
<td>4.28</td>
<td>4.44</td>
<td></td>
</tr>
<tr>
<td>Seals of approval of CA institute</td>
<td>4.18</td>
<td>4.01</td>
<td>4.11</td>
<td></td>
</tr>
<tr>
<td>payment guarantee of bank</td>
<td>4.18</td>
<td>4.04</td>
<td>4.26</td>
<td></td>
</tr>
<tr>
<td>Supports of off-line entities</td>
<td>4.12</td>
<td>3.9</td>
<td>4.48</td>
<td></td>
</tr>
<tr>
<td>Clarity of return policy</td>
<td>3.79</td>
<td>4.42</td>
<td>4.26</td>
<td></td>
</tr>
</tbody>
</table>

In Table 3, the consumers, accounting for 19.7% of respondents and having the attitude of the trade trust, are mostly concerned for system service function and less concerned for Clarity of return policy. Because of the trust in online trade, they pay more attention to e-Business technology ability and to system stability. But another people, accounting for 64.5% of respondents and having the attitude of common, pay more attention to Clarity of return policy. The others, accounting for 15.8% of respondents and having the attitude of doubt, give their attention to all these factors. It is necessary for changing consumers' attitudes from doubt to trust to improve these key factors.

All in all, there are many issues on online trade. The issue on trust shares a lot. Consumers distrust online trade because of the asymmetry of information. Consumers know e-Business merchants less. Enterprises forwardly declare themselves, or make use of third-party, and increase their transparency. If they do, the consumers' trusts are to be held. We believe that, along with solving the trust issue, online trade will walk out its vale and meet its gallop.

### RESEARCH FINDINGS

From our investigation, some findings are discussed below.

#### The Third Party Guaranty to Solve the Trust Crisis of e-Business

From naissance day of e-Business on, its model has relapsed adversely into trust crisis. Although e-Business could reduce unnecessary taches greatly and make merchants closer to consumers, trade counters on Internet just are the pages on screens, which not so much reality as dirt-world ones. So does the merchandise. Consumers only see sample drawing of merchandise they want, but they can't touch it anyway. In case of making a wrong order, how should they do? As for after-service, it is difficult to be believed. Merchants via Internet are different from traditional retail business. Could they provide with standing after-maintenance & after-servicing? Many doubts water down the advantages of e-Business model. If consumers are in two minds when they press the button to make an order, e-Business will appear meaningless.

How to solve the problem? To suit the remedy to the case. Since mistrust is due to lack of information, the first thing merchants should do is that, let consumers know more about themselves. Why did sohu.com in China attract so many users? Some people thought that it provided individuation services. Another people thought it set several standards of e-Business model and possess the advantages of those aspects. In fact, it has to do with publicizing itself with the aid of media and rising its transparency. We all felt, during a quite long time, when reading newspapers, we nearly unavoidably refer to amason.com. Under media's reporting frequently, consumers knew amason.com more and more, and cut down the doubts less and less. It is necessary for a merchant to tell about its status to consumers, such as merchandise scale of the Web site, abilities off the network, especially the private policies & user's securities, and to make clear purchasing trade rules and rights & responsibilities of both sides. On one hand, the consumers under a trade trouble could look up in time; on the other
hand, consumers could make sure their orders because they know that their rights are under protection. They believe that, the background operation of the merchant is truly at same time. Besides those above, the information consumers get could come from the subtle design of the Web site. A merchant would be supposed to consider how to classify commodities rationally and make them found fast and easily. At same time, the merchant would also be supposed to do its best to simplify the trade process and make use of IT to realize one-to-one service for consumers. All of these efforts could help the merchant hold its consumers and increase their loyalty & trust, or else they might be consumers of other merchants at any moment, because the shift cost of consumers is zero in e-Business model.

- **Merchants Transmit Information to Consumers by third-party.** Although merchants can send information on its own initiative, the information lacks neutrality and can't get rid of consumers' distrust. Therefore, they had better transmit information to consumers by third-party(or say, neutral-party).

- **Merchants might adopt federation manner and federate strategic fellowship with big banks providing payment service or with third-party of stronger object flow.** The strength of third-party is sturdy. with the credit standing and business come-and -go afterward, third-party would make a collection & appreciation of information. They bring consumers a great comfort undoubtedly.

- **The consumers with purchase experience on Internet fit by far to be third-party to appreciate e-Business.** We adopt the method of questionnaire investigation to find out many issues at present, such as attention of the consumers on Internet in China, effect of the trust degree of online trade to consumption action, the factors which enhance or weaken trust in online trade. We regard these as the basis of further research on the issue of trust.

### Guarantee of Recommended Merchants on Internet

The Web site of third-party needs to collect, sort, and analyze consumers' intention in different stages. It must capture the appreciation on ease of ordering, choice of products, information of products, good price, web navigation & looks, shipping & handling, on time delivery, product representation, level & quality of customer support, and privacy policies, etc.. By sorting order based on those, third-party can recommend the best merchant on Internet to consumers. Every sorted merchant must submit its application. When a consumer makes an order, the process switches to the interface of third-party and an abbreviated survey of purchase takes place. After the date of the pact delivery, an after-sale investigation to the customer should be arranged so as to learn about the status of his or her satisfaction to the received products. Because third-party operates in a neutral situation and its ability of collecting information is much higher than any personal consumer, this manner will be more effective and more profitable.

- **Governmental Pattern**
  
  In traditional economy, we can find the shadow of third-party like network economy. The government sets up quality supervision department to supervise the merchandise quality in internal market for shaping up the market economy. General speaking, the institute is association of consumers. As a representative of most of customers, the association collects market information according to the basic rights & interests of consumers, and recommends the reliable merchandise. We believe that, in near future, the government will set up evaluation institutes of online trade.

- **Nongovernmental Pattern**
  
  Differing from the association of consumers, nongovernmental information providers of third-party pursue their profit & size. In China, the government awards ICP certification to ICPs which accord with operation criterions, like traditional management licence. It shows that the government is enhancing the management strength of online trade activities.

### Advantages of Collecting Information

Collected & sorted consumer purchase information is the fortune of eBusiness economy. If an enterprise based on e-Business gains universal praise form consumers, its trust will be promoted undoubtedly. It had better ask for the help of the neutral third-party to transmit products & services information to consumers. Third-party could give consumers an impression of impersonality, justness when it collect & transfer the information. In the e-Business of China, many Web sites, such as easelink.com and eachnet.com, are playing the roles.
CONCLUSION

In the field of business facing individuals' consumption, e-Business is everywhere via Internet and the issue on trust stand out especially. We assure that, as long as a Web site holds consumers' trust, they could make a hit. The signification building consumers' trust is ascertained by peculiarity of e-Business. In a trade, a consumer faces a virtual merchant when he or she transmit his or her confidential information, such as personal information, credit card's account no., password, and waits for purchased products or services. In this process, due to lack of information, the consumer has to worry about whether he or she could get really the products or services he or she wants. The consumer also worries about that the personal information might be let out and be illegally used by others. As long as both a perfect mechanism driving away consumers' worries and the trust are built, e-Business could be expanded forward.

Our survey also pointed out that, customers' trust has much to do with his experience in using the network. At the beginning, he or she might has a lower trust in the network. But as the experience in purchasing by the network be more and more, the degree of his or her trust would be risen. The more a Web site is visited, the more profound the customers trust in it. Although the related research in China just start, accompanied with the unceasing development of Chinese e-Business and the trust being more and more important, China will expand the research on the issue extensively and intensively.

we are going to do more painstaking survey, to research on new issues & methods, and to sum up new experience to cater for the circumstance of e-Business. We should pay attention to other impacting on the trade trust, like economy factors, law factors, and so on. But a set of wholesome law system is the radical basis of consumers' trust, and comes down to modify & perfect related laws, and to constitute some of new laws & rules. Due to the importance & particularity of those issues, we have to pursue the researches separately. In addition, our reference resource in being can't meet the requirement of quantity analysis. We need more effective methods to help us collect & sort all-sided data, to make quantitative analysis, and to construct a perfect model of online trade trust.

REFERENCES