A Study on Trust Building and Its Derived Value in C2C E-Commerce

Eugenia Huang, National Chengchi University, Taiwan
Ching-Chi Liu, J.P. Morgan Asset Management, Taiwan

ABSTRACT

Trust is one of the crucial factors influencing a consumer’s decision to shop on the Internet. In C2C e-commerce, customers interact with both sellers and platform providers before conducting a transaction. The aim of this study is to clarify the trust-building approach, value from trust, and difference between trust in sellers and platform providers. The results show that the main factors influencing trust in sellers and platform providers are the interaction experience with the sellers and the reputation of the platform providers, respectively. Trust in sellers directly affects value for the sellers, and similarly, trust in platform providers can directly affect value for the platform providers.

Interestingly, this study clarifies that interaction experience with sellers positively affects trust in platform providers, and trust in sellers can affect value for platform providers. These two findings suggest the need for platform providers to rethink the importance of building a good mechanism for interaction and creating value by increasing trust in sellers.

Keywords: Trust, C2C e-commerce, Auction website, Value

INTRODUCTION

With its growing popularity, the Internet is now a shopping channel that is accessible to most consumers. The Internet releases the transactions from the geography limit, which they were subject to. Moreover, with the easy search function, it has attracted a large number of consumers, enabling them to locate products and services with the best cost-and-price ratios. Internet fraud, however, has made consumers cautious about security issues when conducting transactions over the Internet. The survey conducted by YamWeb Frontier Foundation (2004) reveals that the most critical issue is privacy, followed by security. Dontje and Olthof (1999) discovered that customers hesitated to shop online because of the fear of disclosing their personal information, incomplete consumer protection measures, etc. Many factors affect trust building, such as website design, past shopping experience, and privacy and security. However, it needs further consideration that trust building procedure of trust in sellers and trust in platform providers. The difference between value for sellers and platform providers is still unclear. Our study attempts to answer these questions.

LITERATURE REVIEW

Trust

Lee and Turban (2001) concluded previous literature and divided the definition of trust into the following three categories: (1) Personality theory: trust is the faith that one has a certain thing, expect, or feeling and individual has already planted it among them deeply during the period developing in early
personality. (2) Sociology and economics: trust is a situation that exists among team members. (3) Social psychology: It is a kind of expectancy to the trading partner to trust, and demonstrates that would like to believe the will of the trading partner, the trust degree that some factors will increase, maintain or affect both parties. Mayer, Davis, and Schoorman (1995) asserted that the definition of trust includes the followings: (1) Perceived competence: the ability of the organization to have influence in a specific field. (2) Perceived benevolence: setting up the satisfactory exchange between two-way individual and individual instead of the maximization that only seeks the interests. (3) Perceived integrity: observing the organizational rule, for example protect the secret data. In Huang and Chang’s research (2004), trust in website could be measure by the following category: (1) Control: customers can really control the information or service provided by the website. (2) Reputation: customers can evaluate the reputation of the website by impressions from browsing the website. (3) Integrity: a person believes another party offer honest and guaranteed agreement, to tell the truth, meet commitment for sure. (4) Dependability: the information or service provided by the website is true and is not fake.

Mayer et al. (1995), however, focused on trust among people in the organization, perceived benevolence is to pay attention to be the good will to people, do not focus on the pursuit of the greatest interest, not suitable for the Internet in the buying and selling relationship. On the other hand, Huang and Chang’s research (2004) described that the relationship between website presentation and trust, so it lacks trust in competence. Therefore, we combine the above scholars’ options, and trust is measured by trust in competence, trust in integrity, and control.

Factors of Trust Building

There are lots of factors have an effect on trust. Walczuch, Lundgren, and Henriette (2004) found that there are three main factors which affect customers’ trust in e-retailing: (1) Experience-based factors: it means customers’ past shopping experience, including duration of experience and communication of intention (2) Perception-based factors: it means customers’ impression on the website, such as reputation, similarity, normality, familiarity. (3) Knowledge-based factors: it means that customers’ understanding of technology would affect their trust. For example: information practices and security. Gefen, Karahanna, and Straub (2003) considered that there are several factors affecting trust in B2C commerce: (1) Calculative-based trust antecedents (2) Institution-based structural assurances (3) Institution-based situational normality (4) Knowledge-based familiarity (5) Perceived ease of use. Table 1 shows past researches found what factors will affect trust.

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Factors affecting trust</th>
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<tbody>
<tr>
<td>Dayal, Landesberg, &amp; Zeisser (1999)</td>
<td>Secure technology, merchant legitimacy, and robust order fulfillment,</td>
</tr>
</tbody>
</table>
Jarvenpaa, Tractinsky, & Saarinen (1999) Perceived scale and reputation


In our research, we summarized the factors from past researches, and we found there are four key factors affecting trust. They are interaction experience, web design, reputation, perceived protection of privacy and security. Therefore, we will discuss those factors in detail.

**Interaction Experience**

As the experience of using the website increases, customers would take more positive attribute toward the website (Bruner & Kumar, 2000). Ganesan (1994) discovered that the more interaction between the buyer and seller, the less the buyer consider that he would be cheat by the seller. Moreover, sellers’ service quality is another important factor that affects buyers’ trust. Strader and Ramaswami (2002) found that buyers pay much attention to the quality of trading with sellers. Gounaris and Dimitriadis (2003) brought up the method of evaluating the service quality of the website, and it includes the following categories: (1) Customer care and risk reduction benefit: it includes security of trading and privacy information, on-time product delivery, and communication. (2) Information benefit: it includes relative, in-time, credible information. (3) Interaction facilitation benefit: it includes convenience for browsing, and appropriate web design.

**Website Design and Product Information**

Roy, Dewit, Aubert (2001) pointed out that easiness to browsing the website, easiness to learn how to use the website and assisting tools benefit customers’ trust in sellers. Huang and Chang (2004) developed the idea a little further. They discovered that web presentation would affect customers’ impression and trust in the website. Web presentation includes the following parts: (1) Tool for browsing and making a decision: it is tools which could help consumers browse or make a decision, such as search engine, site map, decision tools and etc... (2) Mechanism for interaction and communication: customers can communicate with the corporation or other customers. For example: email address, phone number of the corporation, customer service center, online forum etc... (3) Declaration of security and privacy: declaration of the website for guaranteeing customers’ security and privacy. For example: privacy policy, security policy and etc… (4) Description of corporation background: relative information about the corporation. For example: history of the corporation and etc… (5) Information of products: relative information about products. For example: the picture of the product, the description of the product, and etc… (6) Information of trade process: relative information about trading process. For example: description of delivery process, the process of returning products and etc… Especially tools for browsing and making decision, declaration of security and privacy, information of products and information of trade process would effect customers’ impression on the website and customers’ initial trust.

**Reputation**

According to Levitt (1965), the fame, reliability, and popularity of an organization constitute its reputation. Shrum and Wuthnow (1998) further pointed out that the products and the management
performance also contribute to the formation of reputation. Strader and Ramaswami’s study (2002) on the trust building in C2C platform providers cited the sellers’ reputation and the past experience with the sites to be the two most important factors that lead to trust. Einwiller (2001) pointed out that reputation and brand affects trust between online dealers and customers.

Privacy and Security
Privacy and security problems are very critical issues which online customers care about. Yoon (2002) discovered that transaction security had positive effect on customers’ trust and satisfaction. If the corporation relieves customers’ fear of privacy and security, the corporation will win customers’ trust. Liu, Marchewka, Lu, and Yu conducted a research on the relationship between privacy and trust in 2004, and they referred to Fair Information Practice from USA Federal Trade Commission. Fair Information Practice included four dimensions: (1) Notice: providing people notice that personal information is being collected prior to the collection of that information. (2) Access: providing people with access to the data that is collected about them. (3) Choice: providing people with a choice to allow an organization to use or share information collected about them. (4) Security: providing reasonable assurance that personal information is kept secure. With their study, the relationship between privacy and trust is significantly positive. Privacy and security had a strong effect on whether an individual trusted a website.

Value From Trust
Strader and Ramaswami (2002) discovered that customers would pay 7%~10% premiums to sellers who they trusted. Ba and Pavlou’s study (2002) found that trust could contribute to premiums, and premiums varied with the price and the type of product. According to Nelson’s definition (1970), there are two types of products: experience products and search products. Experience products are those whose quality is assessed only after purchase. On the contrary, search products are those whose quality can be assessed prior to purchase appropriately. Ba and Pavlou (2002) claimed that experience products have higher leverage than search products under the same price of the product. With high trust, experience products can get more premiums than search products. Besides, expensive products have higher leverage than inexpensive products under the same type of the product. With high trust, expensive products can get more premiums than inexpensive products. Therefore, types and price of products have effect on how much value from trust.

RESEARCH DESIGN

According to literature review and the objective of our research, we develop the research model. Figure 1 illustrates the research model used in this study. Our research focuses on whether the trust in sellers and trust in platform providers are different in the trust-building procedure, and whether the values for sellers and platform providers derived from these two kinds of trust are different. Therefore, we want to find out which factors affect trust in seller and trust in platform provider at first. We set two groups of factors affecting trust building, one group is from sellers, and the other group is from platform providers. The first group of factors is directly controlled by seller, such as interaction experience, product information, and sellers’ reputation. On the other hand, the second group of factors is directly controlled by platform providers, including website interface, reputation of the platform provider, and buyers’ perception of security and privacy. These two groups of factors affect two kinds of trust respectively. On the one hand the group of factors from sellers affects buyers’ trust in sellers, and on the
other hand the group of factors from platform providers affects buyers’ trust in platform providers. In addition, value derived from trust in sellers would direct affect value for sellers and value derived from trust in platform providers would direct affect value for platform providers.

In C2C e-commerce, customers interact with both sellers and platform providers before conducting a transaction. We hope to elucidate whether the group of factors from sellers could affect trust in platform providers and the group of factors from the platform providers could affect trust in sellers. Moreover, it is reasonable to find out whether trust in sellers has the positive impact on value for platform providers and trust in platform providers has the positive impact on value for sellers too. Table 2 shows the eight main hypotheses in our research. In our research model, each variable refers to past researches. We refer to past researches and adjust the indicator to fit our research model. Table 3 lists each indicator of each variable, and reference.

**Figure 1: Research Model**

**Table 2: Variable Definition**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Reference</th>
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<tr>
<td>Product information</td>
<td>Product information</td>
<td>Huang and Chang (2004), Gefen et al. (2003)</td>
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<tr>
<td>Seller’s reputation</td>
<td>Deals reputation</td>
<td>Resnic et al. (2004)</td>
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<tr>
<td>Website interface</td>
<td>Ease of usage, tools for browsing and decision making</td>
<td>Huang and Chang (2004), Gefen et al. (2003)</td>
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<tr>
<td>Reputation of platform provider</td>
<td>Scale, history, brand</td>
<td>Shenkar and Yuchtman-Yaar (1997)</td>
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<tr>
<td>Buyer’s trust in platform provider</td>
<td>Competence, integrity, controllable</td>
<td>Mayer et al. (1995), Huang and Chang (2004)</td>
</tr>
<tr>
<td>Value for seller</td>
<td>Premium, repurchase, recommend, positive reputation</td>
<td>Strader and Ramaswami (2002)</td>
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<td>Value for platform provider</td>
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**Table 3: List of Hypotheses**

<table>
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<tr>
<th>Number</th>
<th>Description</th>
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<tr>
<td><strong>H1</strong></td>
<td>The group of factors from sellers has the positive impact on buyers’ trust in the sellers. H1-1: Interaction experience has the positive impact on buyers’ trust in the sellers. H1-2: Sellers’ product information has the positive impact on buyers’ trust in the sellers. H1-3: Sellers’ reputation has the positive impact on buyers’ trust in the sellers.</td>
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<tr>
<td><strong>H2:</strong></td>
<td>The group of factors from platform providers has the positive impact on buyers’ trust in the platform providers H2-1: Interface of platform providers has the positive impact on buyers’ trust in the platform providers. H2-2: Reputation of platform providers has the positive impact on buyers’ trust in the platform providers. H2-3: Buyers’ perception of security and privacy has the positive impact on buyers’ trust in the platform providers.</td>
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<tr>
<td>H3</td>
<td>The group of factors from sellers has the positive impact on buyers’ trust in platform providers.</td>
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<tr>
<td>H3-1:</td>
<td>Interaction experience with sellers has the positive impact on buyers’ trust in platform providers.</td>
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<tr>
<td>H3-2:</td>
<td>Sellers’ product information has the positive impact on buyers’ trust in platform providers.</td>
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<tr>
<td>H3-3:</td>
<td>Sellers’ reputation has the positive impact on buyers’ trust in platform providers.</td>
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<tr>
<td>H4</td>
<td>The group of factors from platform providers has the positive impact on buyers’ trust in sellers.</td>
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<tr>
<td>H4-1:</td>
<td>Platform providers interface has the positive impact on buyers’ trust in sellers.</td>
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<tr>
<td>H4-2:</td>
<td>Reputation of platform providers has the positive impact on buyers’ trust in sellers.</td>
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<tr>
<td>H4-3:</td>
<td>Buyers’ perception of security and privacy has the positive impact on buyers’ trust in sellers.</td>
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<tr>
<td>H5</td>
<td>Buyers’ trust in sellers has the positive impact on value for sellers.</td>
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<td>H6</td>
<td>Buyers’ trust in platform providers has the positive impact on value for platform providers.</td>
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<tr>
<td>H7</td>
<td>Buyers’ trust in sellers has the positive impact on value for platform providers.</td>
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<tr>
<td>H8</td>
<td>Buyers’ trust in platform providers has the positive impact on value for sellers.</td>
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The target of sampling is those customers who have bought products on C2C auction website, because auction website is most popular platform in C2C e-commerce nowadays. We ask respondents to answer our questionnaire according to their latest transaction on auction website for preventing most samples from being high degree of trust. Comparing to answering our questionnaire according to the most familiar seller, this approach can decentralize the degree of trust of samples. We chose online questionnaire survey because the population of our research has Internet surfing experience. The questionnaire was designed according to the research model and each variable is measured by multiple questions. Questions of every variable refer to original literature and are modified according to the context of our research.

**DATA ANALYSIS**

We carried out the pilot test at first, and there were 50 respondents. According to respondents’ feedback, we revised the questionnaire and did item analysis to assure the discrimination of each question. After the revision, we started formal survey on the Internet and restricted respondents to buyers in C2C auction website. In order to balance trust level of samples, their sellers were restricted to the latest sellers. The number of respondents gathered is 413. After examining the samples, there are 389 valid samples. Most respondents are 19~30 years old, and female respondents are 59.6% of total.

Figure 2: Result of Path Analysis

***: Significant at the 0.01 level (2-tailed)**

In our research, we used Cronbach’s α to examine the reliability of questionnaire. The result shows that most variables have certain reliability, all cronbach’s α exceed 0.6. Therefore, the questionnaire is trustworthy. On the other hand, we used factor analysis to test the construct validity of questionnaire. The result of factor analysis shows that factor loading of most question items exceed 0.5, and two question items only exceed 0.4. Consequently, the questionnaire has certain construct validity.

We used path analysis to test the direct relationship among factors from sellers, factors from platform providers, trust, and value. When trust in sellers is the dependant variable, interaction
experience and seller’s reputation have the significant impact. Interaction experience is the independent variable which has highest standardized coefficients.

When trust in platform providers is the dependant variable, reputation of platform providers, interaction experience, and perceived protection of privacy and security have the significant impact. Reputation of platform provider is the independent variable which has highest standardized coefficients. It is noticeable that interaction experience belongs to factors from sellers, also has significant impact on trust in platform providers.

When value for sellers is the dependant variable, there is only trust in seller having significant impact. However, when value for platform provider is the dependant variable, trust in sellers and trust in platform providers both have the significant impact. Trust in platform providers is the independent variable which has highest standardized coefficients. It is noticeable that trust in seller also has significant impact on value for platform provider.

CONCLUSION

In keeping with prior studies, we built the research model to separately examine the factors that would affect trust in sellers, trust in platform providers, value for sellers, and value for platform providers. We administered a questionnaire to people who have shopped on C2C auction website and used path analysis to elucidate these direct effects among the factors from sellers and platform providers, trust, and value.

The results indicate that interaction experience is the key factor influencing trust in a seller. Therefore, sellers should prioritize improving their interaction with buyers. Providing good quality of service is of great importance, for example reducing response time and identifying old customers. Sellers’ reputation is another factor influencing trust in sellers; reputation of sellers helps potential customers understand them. However, in our research, customers all have bought goods from the sellers, so the fact may reduce the power of effect from reputation. Therefore, for experienced customers, interaction experience is the most crucial factor affecting trust in sellers. On the other hand, our research shows that trust in platform providers is influenced by the reputation of the platform providers, interaction experience between buyers and sellers, and buyers’ perceived protection of privacy and security. The reputation of platform providers is the most important factor.

The link between trust and value is clear. Trust in sellers brings value for sellers. Therefore, sellers wanting to get value from buyers, for example, premiums, should work on earning their trust. Two kinds of trust result in value for platform providers. Trust in platform providers itself plays the leading role, and trust in sellers plays the supporting role. Consequently, it is convinced that trust can bring value in C2C e-commerce.

It should be mentioned that interaction experience between buyers and sellers also encourages trust in platform providers. Therefore, for platform providers, maintaining a good interaction experience between buyers and sellers is a great way to earn the buyers’ trust. Moreover, it is interesting that trust in sellers can create value for platform providers. Managers of platform providers can facilitate a good interaction experience between buyers and sellers; for example, building a good mechanism for interaction and improving trust in sellers. These actions would finally contribute value for the platform providers. To sum up, helping sellers on the platform have a good relationship between buyers can also benefit platform providers.
The paper has successfully identified several important factors contributing to the building of trust. However, exhaustion of all the key factors cannot be guaranteed yet. Future research can explore the other factors that have not been properly represented in our research model.

REFERENCES


