Exploring Impact of E-Marketplace Reputation and Reference Group on Trust of E-Marketplace

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Abstract

While electronic commerce radically accelerates business transactions and interactions, e-marketplace providers constantly face the challenge in attracting critical mass of participants. Previous studies suggest that trust is the prerequisite to online transaction and interaction. The purpose of this research is to explore relational factors in influencing e-vendors’ decision in terms of developing long term business relationship with e-marketplace. Based on trust-commitment theory, this research proposes e-marketplace reputation and reference groups as antecedents for developing e-vendors’ trust in e-marketplace providers and consequently lead to relationship commitment. Based on responses of 162 active e-vendors, the result reveals that e-marketplace reputation and reference groups contribute to trust of e-marketplace providers. Furthermore, e-vendors’ trust in e-marketplace providers has an impact on long-term business relationships. The research findings provide actionable guideline for e-marketplace provider.

Keywords: Commitment-trust theory, Relationship marketing, E-marketplace, B2B.
1. **INTRODUCTION**

The popularity of public e-marketplace has changed the competition landscape and become a viable market mechanism for e-vendors to gain or disseminate information and conduct transactions globally. The public e-marketplace constructs an open intermediary transaction platform facilitating business transactions between e-vendors who have no prior interactions (White et al. 2007; Turban et al. 2009). The rise and rapid growth of public e-marketplace provides not only a business channel for small and medium enterprises (SME) to interact with customers but also distinct opportunities to reach emerging, promising new markets (Chang & Wong 2010).

Public e-marketplace has proliferated yet undergone continuous shakeout in recent years (White et al. 2007). While some of the e-marketplaces are thriving and profitable, most of the e-marketplace providers struggle in attracting critical mass of participants and creating a viable level of transactions (Yu 2007; White et al. 2007). The asymmetric performance mirrors the importance of understanding how and why e-vendors adopt and maintain long-term relationship with public e-marketplace.

Scholarly literatures have highlighted the importance of trust in e-marketplace adoption (Hsiao 2003; Chang & Wong 2010). Trust, manifests the confidence of e-vendors to the transaction mechanisms of e-marketplace, is the core of developing sustained social relationship in cyberspace (Morgan & Hunt 1994; Chien et al. 2012). Previous researches have investigated trust development process from technological, social, and relational aspects (Hsiao 2003; Chang & Wong 2010; White et al. 2007; Chien et al. 2012). However, most of the studies focus on individual customers rather than business customers (Caceres & Paparoidamis 2007). There has been little systematic study to explore why an e-marketplace flourishes and develops sustained relationship with e-vendors.

The purpose of this study is to identify and investigate relational factors leading to trust and sustained business relationship with e-marketplace providers. Hsiao (2003) suggest that trust is a socio-cultural factor associated with reputation and trustworthiness of the trustor. Based on this point of view, we propose e-marketplace reputation and reference group as major antecedents driving to trust on e-marketplace. E-marketplace reputation is an intangible organizational asset that embodies the salient characteristics of the organization in the online community (Ewing et al. 2010). Reference group reflects the normative impact of the influential individuals on the trust of e-marketplace. These two factors capture the impact of relational strategies on trust development.

This paper begins with a discussion on trust-commitment theory, research model and research hypothesis. The research method is discussed in the followed section. The final section concludes the research findings and implications.

2. **LITERATURE REVIEW AND RESEARCH HYPOTHESIS**
2.1. Trust-commitment Theory of Relationship Marketing

Relationship marketing refers to marketing strategies in terms of attracting and retaining customers through facilitating satisfactory business exchange (Morgan & Hunt 1994). Trust and commitment are salient factors of relationship marketing (Morgan & Hunt 1994). Trust refers to the trustor's overall perception toward an exchange party's competence, benevolence, integrity, and willingness to fulfill his/her promise (McKnight et al. 2002). Relationship commitment refers to the beliefs that maintaining an ongoing relationship is important, beneficial, and valuable (Morgan & Hunt, 1994). High motivation and loyalty are common forms of relationship commitment.

In the context of e-marketplace where business interactions are anonymous and outcomes are uncertain, trust is the cornerstone for developing permanent relationship (Hsiao 2003; Caceres & Paparoidamis 2005). E-marketplace reputation and reference group are important driving forces to develop trust when e-vendors lack of knowledge about the e-marketplace. Ewing et al. (2010, p. 729) define corporate reputation as “observers’ collective judgments of a corporation based in assessments of the financial, social, and environmental impacts attributed to the corporation over time”. Based on the definition, e-marketplace reputation comprises the aggregate external perceptions on the salient characteristics of the e-marketplace (Veloutsou & Montinho 2009). The positive e-marketplace reputation demonstrates the ability of the e-marketplace to carry out the online transactions and thus strengthen the mutual trust between e-vendors and service providers. Reference group refers to the impact of influential individuals in the social network toward the adoption of e-marketplace. Reference group plays a key role in the trust development because opinions of influential individuals tend to influence the preference of the social members (Senecal & Nantel 2004). Trust in the ability, benevolence, integrity, and predictability of e-marketplace is central to constructive long-term relationship.

In sum, trust and relationship commitment are both important within the context of e-marketplace adoption because they reduce uncertainty and motivate e-vendors continuously depending on e-marketplace for business transaction.

2.2. E-marketplace Reputation and Trust

E-marketplace reputation refers to an aggregate perception and judgment of collective stakeholder group such as customers, employees, and investors toward the characteristics of the organization (Keh & Xie 2009; Veloutsou & Montinho 2009). In the context of e-marketplace, e-marketplace reputation reflects an overall evaluation, image, and identification of the e-marketplace. The reputation of e-marketplace form symbolic meanings that is helpful to develop sustained business relationship with e-vendors.

E-marketplace reputation relates to customer trust in two ways. First, e-marketplace reputation
reflects the quality of products and services over a certain period of time. Positive e-marketplace reputation manifests the sustained superior performance and satisfactory services of the e-marketplace and thus enhances the perceived trustworthiness, credibility, reliability, and responsibility of the e-marketplace (Keh & Xie 2009). Second, e-marketplace reputation creates mental symbol and image through which e-marketplace interlinks with e-vendors and develops business relationship. Positive e-marketplace reputation signals that e-marketplace will continuously comply with market expectations and endeavor to enhance the corporate images (Veloutsou & Moutinho 2009). As such, e-marketplace reputation adds credibility and trustworthiness of the e-marketplace. Based on these grounds, the following relationship is proposed.

H1: E-vendor tends to trust e-marketplaces with positive e-marketplace reputation.

2.3. Reference Group and Trust

The opinion of influential individuals is also an important predictor of trust and relationship commitment. Reference group refers to social group members that are psychologically significant for one's decision making (White & Dahl 2006). In the context of e-marketplace, recommendation of the reference group often exerts motivation for e-vendors in terms of adopting and developing business relationship with the e-marketplace provider when the evaluation of transaction platform is difficult before adoption (Senecal & Nantel 2004).

Recommendation from reference group is important in promoting the e-marketplace. E-vendors tend to rely on informational reference group when they possess limited knowledge or face uncertainty in adopting e-marketplace (Lee et al. 2011). The empirical study of Li et al. (2008) argues that people tend to comply with important referents in decision making. The information and experiences shared from the reference group increases the transparency and predictability of the e-marketplace and thus increase the trustworthiness of the e-marketplace provider. Thus,

H2. Positive comments of the reference group have positive impact on e-vendor’s trust of the e-marketplace.

2.4. Trust and Commitment

Trust is an enabling condition for sustaining the long-term relationship (Morgan & Hunt 1994). Trust symbolizes the positive psychological state in which a trustee believes in the counterparts’ benevolence and integrity to uphold the promise. Trust is the fundamental condition to eliminate the concern of uncertainty of online transaction.

Trust is the antecedent of commitment (Morgan & Hunt 1994). Commitment refers to the willingness to develop and maintain positive exchange relationship (Morgan & Hunt 1994). According to Morgan and Hunt (1994), trust is built only when e-vendors perceive that an
organization is reliable and predictable. Given the uncertainty of virtual interactions, trust is a necessary condition to facilitate the adoption of e-marketplace. Trust signifies a belief in the reliability and responsibility of an e-marketplace. Commitment is achieved when e-vendors develop a sense of attachment and trust in the e-marketplace. Thus, the hypothesis is proposed below.

**H4. Trust influences relationship commitment positively.**

Figure 1 presents the research model and research hypotheses.

![Figure 1](image-url)  
*Figure 1. The research model.*

### 3. RESEARCH METHOD AND DESIGN

#### 3.1. Questionnaire Design and Pilot Study

To examine the relationship between e-marketplace reputation, reference group, trust, and relationship commitment, a questionnaire is developed to collect data from major e-marketplaces in Taiwan. According to the Institute for Information Industry (Taiwan), over 80% of the e-vendors rely on public e-marketplaces for business transactions. Among the e-marketplaces, PChome, Yahoo, and Ichiba are most popular transaction platforms. Active buyers and sellers on tw.yahoo.com, pchome.com.tw, and rakuten.com.tw were targeted for model testing.

A total of 1253 firms were contacted to seek their participation in this research. One hundred and eighty five responded to our survey. We discarded 23 responses who are individual buyers, yielding an effective response rate of 14.76%.

#### 3.2. Measures

The questionnaire is the major research instrument and therefore warrants considerable attention. The questionnaire items are developed based on the literature. The questionnaire comprises two
sections: section A includes subsections on research variables while section B requests background information on the sample firm. All the items were measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The operationalizations of the constructs are provided below.

**E-marketplace reputation.** E-marketplace reputation refers to the information linked an e-marketplace in buyers' and sellers' memory. The measurement of e-marketplace reputation is based on Cretu and Brodie (2007) and assesses the overall evaluation of the e-marketplace in terms of the overall success and perfections in management.

**Reference group.** Reference group refers to the impact of informal social groups in influence the selection and preferences of the buyers and sellers onto e-marketplaces. This study measures this construct based on Veloutsou and Moutinho (2009) and assesses the impact of important individuals on the e-vendors in terms of developing long-term relationship with the e-marketplace.

**Trust.** Trust refers to the depth and assurance of feelings based on inconclusive evidence of the e-marketplace (McKnight et al, 2002). The operationalization of trust is based on Lee and Chung (2009), Cho and Hu (2009), and Keh and Xie (2009).

**Relationship commitment.** Relationship commitment refers to the attitude as well as the willingness of the buyers and sellers to continuously conduct transaction in the e-marketplace. The operationalization of relationship commitment is based on Wu et al. (2010).

### 3.3. Data Analysis

#### 3.3.1. Descriptive Data Analysis

Table 1 summarizes the characteristics of the respondents. Table 1 indicates that consumer electronic products, food, and clothing are major sectors of online transactions. Fifty-five percent of the e-vendors have more than one year online transaction experiences with the e-marketplace. Over forty percent of the e-vendors are small sized companies with annual sales less than 1 million New Taiwan Dollars. The descriptive data suggest that e-marketplace is a popular transaction platform for startup business.

<table>
<thead>
<tr>
<th>Company profile</th>
<th>Type</th>
<th>Count (n=162)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industries</td>
<td>Consumer electronic products</td>
<td>35</td>
<td>18.9</td>
</tr>
<tr>
<td></td>
<td>Clothing</td>
<td>46</td>
<td>24.9</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>59</td>
<td>31.9</td>
</tr>
<tr>
<td></td>
<td>Cosmetics</td>
<td>28</td>
<td>15.1</td>
</tr>
<tr>
<td>Length of operation</td>
<td>Others</td>
<td>Less than six months</td>
<td>Six months - one year</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------</td>
<td>----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>16</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.2</td>
<td>9.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total asset (Unit: 1 million New Taiwan Dollars)</th>
<th>Less than 1</th>
<th>1 - 3</th>
<th>3 - 5</th>
<th>5 - 10</th>
<th>10 - 50</th>
<th>Above 50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66</td>
<td>34</td>
<td>31</td>
<td>19</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>40.7</td>
<td>21.0</td>
<td>19.1</td>
<td>11.7</td>
<td>6.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Table 1. Respondent profile (The exchange rate of New Taiwan Dollar vs. US dollar is 30:1.)

### 3.3.2. Analysis of Measurement Model

Confirmative factor analysis is conducted to examine the effect of the research model. The statistical analysis shows a good model fit according to the fit standards: all the values are within a reasonable range ($\chi^2/df = 1.374$; GFI = 0.867; NFI = 0.902; AGFI = 0.826; RMSEA = 0.048; CFI = 0.971; IFI = 0.971; RMR = 0.036) (Hair et al., 2006). All factor loadings for scale items are above 0.5, and are significant at $p < 0.001$. These test results indicate the appropriateness of the research model. Table 2 summarizes statistical outcomes of measurement constructs.

<table>
<thead>
<tr>
<th>Measurement Construct and Dimensions</th>
<th>Standardized Alpha</th>
<th>Composite Reliabilities</th>
<th>Average Variances Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-marketplace reputation</td>
<td>0.90</td>
<td>0.83</td>
<td>0.63</td>
</tr>
<tr>
<td>Reference group</td>
<td>0.78</td>
<td>0.87</td>
<td>0.63</td>
</tr>
<tr>
<td>Trust</td>
<td>0.93</td>
<td>0.90</td>
<td>0.59</td>
</tr>
<tr>
<td>Relationship commitment</td>
<td>0.91</td>
<td>0.95</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Table 2. Measurement constructs

### 4. RESEARCH FINDINGS

Structural equation modelling (SEM) is employed to examine the relationships and variance among multiple variables. AMOS 7.0 was employed to conduct a SEM analysis. Figure 2 presents the results obtained from the resulting structural analysis. The antecedent constructs, path coefficients of e-marketplace reputation - trust (0.619, $t = 6.098$, $p<0.01$) and reference group – trust (0.326, $t= 4.220$, $p<0.01$).
p<0.01), are all significant providing statistical support to hypothesis 1 and 2. These aforementioned results suggest that e-marketplace reputation and opinion of reference group play an important role in facilitating the e-vendors’ trust on e-marketplaces. Thus e-marketplace providers should endeavour to build up the organization image and reputation to develop the online trust with e-vendors.

In the post-trust behaviour construct, path coefficient of trust – relationship commitment (0.844, t=8.242, p<0.01), providing statistical support to hypotheses 3. This result suggests that the formation of trusting belief will increase the scope and depth of business interactions between e-vendors and e-marketplace providers.

5. DISCUSSION

This study investigates the effect of e-marketplace reputation and reference group on trust and consequently the relationship commitment. Our results show that both e-marketplace reputation and reference group have positive effects on trust of e-vendors to the e-marketplace. Thus, developing reliable and well-known e-marketplace reputation as well as satisfying customer needs is critical for e-marketplace providers to attract critical mass of e-vendors and capture competitive advantage.

There are theoretical and practical implications of this study. Theoretically, this research supplements trust-commitment studies by laying out the implications of brand management and customer relationship management on developing e-vendors’ trust of the e-marketplace. E-marketplace providers that are able to develop trust and strengthen the business relationship with e-vendors are expected to develop competitive advantage. Thus, e-marketplace providers should develop effective marketing strategy to increase the brand visibility and customer recognition.

Three practical implications are identified based on the findings of this research. First, the results of this research suggest that e-marketplace should place more efforts in brand management to increase its visibility. Second, the research findings highlight the influential role of recommendations. Developing a social recommendation system to disseminate the information of the e-marketplace is
strategic important to attract e-vendors. Third, the relationship between trust and commitment highlights the impact of trust on developing long-term business relationship. E-marketplace provider should endeavor to demonstrate the reliability, predictability, and responsibility in dealing with online transactions. Besides, trust is hard to develop but easy to destroy. Thus maintaining positive image is also essential for trust development.

While this research contributes to the understanding of organizational strategies, there are two major research limitations. First, the research result reports the snapshot of e-marketplace reputation only. A longitudinal study is needed to trace the causal effects of e-marketplace reputation and reference group on trust of e-marketplace. Second, in this research, we focus on examining the impacts of e-marketplace reputation and reference group on trust of e-marketplace. No other factors are examined. Future research is needed to explore other factors that may contribute to the trust of e-marketplace provider.

6. CONCLUSION

This paper has proposed a research model that facilitates the investigation of the effects of e-marketplace reputation and reference group on trust of e-marketplace provider. The model was tested through analyzing data collected from 162 e-vendors in Taiwan. As expected, the results support the role of both e-marketplace reputation and reference group in developing the e-vendors' trust on e-marketplace, which result in long-term business relationship. Overall, this paper provides empirical support for the proposition that developing e-marketplace reputation and positive word-of-mouth are essential to the success of e-marketplace

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References