CONSTRUCTION OF TRUST BELIEFS THROUGH RESPONSE TO ONLINE NEGATIVE PRODUCT REVIEW: A JUSTICE PERSPECTIVE

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CONSTRUCTION OF TRUST BELIEFS THROUGH RESPONSE TO ONLINE NEGATIVE PRODUCT REVIEW: A JUSTICE PERSPECTIVE

Research-in-Progress

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Abstract

How does a vendor’s explanation to negative online consumer reviews influence consumers’ trust in the vendor? Little understanding is available in either service recovery literature or e-commerce literature. In the online environment, a vendor’s response to customer complaints is often posted on a website and examined broadly by consumers including complainants and potential consumers. This is different from the offline environment whereby the explanation is only received by complainants. Therefore, effectively response to online negative reviews is a critical business activity that is oriented towards consumers in a larger scope than it would be in the offline environment. We intend to investigate how an online vendor’s response influences consumers’ trust beliefs toward the vendor. Justice theory and Toulmin’s model of argumentation are applied to analyze the mediating variables between vendor explanation and consumer trust. Three constructs, i.e., apology provision, explanation adequacy and responder information disclosure, are proposed to be the mediating variables. For practitioners, they also serve as guidance to construct response content.

Keywords: Justice perceptions, user-generated content, online trust, electronic commerce, service recovery, negative product review
Introduction

Over the past a few years, Web 2.0 websites (e.g., Wikipedia, del.icio.us, flickr.com, yelp.com) have become popular communication media for users by facilitating the access to user-generated contents (e.g., users’ knowledge, interest and experience)(Turban et al. 2008). As a result, online consumer reviews have become a new channel for gathering product information and has drawn a growing attention with its increasing popularity and importance(Chen et al. 2008).

Online consumer reviews can be viewed as a special type of Word-of-Mouth (WOM) (Godes et al. 2004) which could influence potential customers’ trust belief. Unlike traditional WOM, customers’ voice in an e-marketplace website can potentially be heard by anyone on the Internet, hence bringing more challenges to e-vendors to maintain their reputation. To enhance e-vendors’ ability to manage their customers, some e-marketplaces offer e-vendors an online function to response to their customers’ reviews. For example, in a travel website TripAdvisor.com, hotels listed there can provide a ‘management response’ directly to every customer’s review and the response is also public online. Such a function is helpful especially to e-vendor’s service recovery when the e-vendor has encountered a service failure which brings about an online negative review. However, how to effectively respond to a negative review is not yet clear. Therefore, the purpose of our research is to investigate the interaction mechanisms between an e-vendor and customers that would affect potential customers’ trust belief in the e-vendor.

Theoretical Framework and Hypothesis Development

In the service recovery literature, providing an explanation is considered an important strategy to alleviate consumers’ negative perception after service failure (Bradley et al. 2009; Mattila 2006; Shaw et al. 2003). Past research (e.g. McColl-Kennedy et al. 2003) has found that individuals have a normative expectation to receive an explanation after service failure. However whether the explanation delivered to consumers is properly constructed will affect the effect produced. While some research (Skarlicki et al. 2006) has indicated that the usage of explanations occasionally backfires, and other studies (e.g. Bobocel et al. 1998) showed that explanations may not result in universally favorable consequences, the majority of past research supports that explanations generally succeed in reducing consumers’ perceived harm caused by service failure (Colquitt et al. 2002; Karatepe 2006; Liao 2007; Mattila 2006; Shaw et al. 2003). We propose three factors, namely, apology provision, explanation adequacy and responder information disclosure, as main factors in explanation construction. The first two factors relate to the content of an explanation and the third relates to responder.

Our study draws on justice theory as the mechanism to produce the effects of explanation. Studies across various contexts (e.g., legal, organizational, buyer-seller, marriage) have found the notion of justice valuable in explaining people's reactions to conflict situations (e.g. Gilliland 1993; Goodwin et al. 1992; Lind et al. 1988). In order to better understand this concept, researchers have distinguished different dimensions of justice. Even though the dimensionality of justice is still a debatable issue in the justice literature, recent studies have demonstrated that justice has four dimensions, i.e., distributive, procedural, informational, and interpersonal justice (Colquitt et al. 2001). Distributive justice refers to the evaluation of the fairness of economic and socio-emotional outcome (Cropanzano et al. 2001). Procedural justice refers to perception of fairness with regard to process and procedure used to make decisions concerning the outcome (Byrne et al. 2001). Interpersonal justice captures the degree to which decision makers treat people with politeness, dignity and respect. Finally informational justice concerns the adequacy of explanation behind the process and outcome (Greenberg et al. 2001).

Much research has been done to investigate service recovery evaluation from the perspective of justice (e.g. Hocutt et al. 1997; McCollough et al. 2000; Tax et al. 1998). Prior studies have mainly looked at the effects of perceived justice on post-complaint consumer behavior, such as word-of-mouth (e.g. Clopton et al. 2001; Davidow 2000), customer satisfaction (e.g. Hocutt et al. 1997; McCollough et al. 2000), and repurchase intention (e.g. Conlon et al. 1996; Webster et al. 1998). However, relatively little research has examined the impact of justice on consumers’ trust beliefs toward e-vendors (e.g. Turel et al. 2008). Meanwhile prior literature of justice in service recovery focused on offline contexts, few work has been done to investigate justice perception in an online setting (e.g. Turel et al. 2008).
In order to bridge this gap, our study draws on justice theory as the mechanism to investigate the effect of response to negative review on trust beliefs in an e-marketplace context. The justice literature suggests that each part of service recovery is subject to fairness considerations and that each aspect of a complaint resolution creates a justice episode (Bies 1987). Based on an extensive examination of responses to negative reviews in e-marketplace, we confirmed that response to negative reviews is a major activity of service recovery by e-vendors. For potential consumers who have not yet transacted with an e-vendor, they have not experienced a service failure as described by other complainants, neither have they experienced the procedure of service recovery. Therefore, potential consumers may not have a clear knowledge of the procedural justice concerning an e-vendor. Even when they watch the interaction between the e-vendor and a complaint, the information of the procedure is unlikely to be clear. Therefore, in this study, when we focus on the major activity of service recovery in e-marketplace, vendor responding to negative review, we apply only two dimensions of justice, i.e., distributive justice and interpersonal justice to investigate the relationship between responses and trust belief. The informational justice is covered by the construction of explanations, as we will discuss shortly.

Figure 1 shows the research model for this study. The definition and rationale for the relationship of these factors are explained below.

**Figure 1. Research Model**

*Trust Beliefs toward E-vendor*

Trust Beliefs (i.e., perceived trustworthiness of an e-vendor) refer to the perception that an e-vendor has positive attributes that are beneficial to the truster (Lee et al. 2001; McKnight et al. 2002; Pavlou 2003). Trust propensity is an important factor influencing trust beliefs (Gefen et al. 2003). It is defined as a personality trait that affects the likelihood of an entity exhibiting trust (Lee et al. 2001; Mayer et al. 1995).

*Distributive Justice and Interpersonal Justice*

Perceptions of justice are an important foundation on which people form trust cognitions (Turel et al. 2008). Treating truster with fairness signals the trustworthiness of an entity by enhancing the truster’s confidence in the integrity and benevolence of the trustee. The trustworthiness of the trustee stems from a fair outcome to and fair interpersonal treatment of the truster. In a commerce setting, such fair outcome and fair treatment also fulfill the...
psychological contract between consumers and e-vendors (Turel et al. 2008). Prior research in organizational contexts has showed that trust is affected by distributive justice (Alexander et al. 1995) and interpersonal justice (Becerra et al. 2003). Thus, we expect

**H1:** Perceptions of distributive justice is positively related to potential customers’ trust beliefs toward e-vendors.

**H2:** Perceptions of interpersonal justice is positively related to potential customers’ trust beliefs toward e-vendors.

**Apology Provision**

Apology is defined as an account that involves an admission of failure and an expression of remorse (Bies 1987). Apology provision refers to whether an apology is provided in response to negative product review. A preponderance of managerial literature (Barlow et al. 1996; Jenks 1993; Zemke 1994) indicates that providing apologies is an important part of an overall complaint recovery process. An apology is also conceptualized as a kind of psychological compensation by some studies (e.g. Davidow 2000). In online service recovery, providing apologies to negative product reviews indicates that an e-vendor admits service failure, acknowledges responsibility and regrets for the dissatisfactory outcomes. An apology provided by e-vendors positively influences the emotional outcome on the consumer side. Meanwhile, consumers tend to consider e-vendors who provide an apology for service failure to be responsive. This in turn leads to a perception that the e-vendor treats consumers with respect and politeness, i.e., with interpersonal justice. Therefore, we hypothesize,

**H3:** Responses to negative product review with apologies lead to higher perceptions of (a) distributive justice and (b) interpersonal justice by potential customers than responses without apologies.

Distributive justice focuses on compensation for financial loss and emotional loss (Tax et al. 1998). The important role of apology suggests that restitution is not just for economic loss, but also for emotional loss. Viewing apologies as an emotional compensation is consistent with the concept of restoring "psychological equity" (Walster et al. 1973) to people who have been treated poorly. Prior research also shows that apologies lead to better perceived interpersonal justice in offline settings (Goodwin et al. 1992; Wirtz et al. 2004). We hypothesize that the same relationship will hold in online settings.

**Explanation Adequacy**

According to Shaw et al. (2003), explanation adequacy can be defined as the extent to which the explanations provided are clear, reasonable, and detailed. Past research (e.g. McColl-Kennedy et al. 2003) has found that individuals have a normative expectation to receive an explanation following a breakdown of service. The act of providing explanations first fulfills consumers’ expectation. Second, if the service failure results from external causes or internal but super-ordinate goals that are justifiable, the service failure can be at least partly “excused”. An adequate explanation could make the recipient view the event in question as the only feasible or ethically defensible option, which in turn make the outcomes emotional acceptable. Explanation adequacy also demonstrates that an e-vendor concerns about the inconvenient outcome and puts sufficient effort to handle the complaint. This will generate the perceptions that complainants are treated with respect by the e-vendor. Therefore, we expect that

**H4:** Response to negative product review with higher explanation adequacy leads to higher perceptions of (a) distributive justice and (b) interpersonal justice by potential customers.

While information provided by complainants might not be always accurate, and negative comments can be overstated sometimes, it is important for e-vendor to provide more adequate information about service failure in response. Providing an adequate explanation for service failure enables e-vendor to self-defend against distort negative product review. Past research demonstrates that Toulmin’s model of argumentation can be used as a basis to construct an explanation (Gregor et al. 1999; Kim et al. 2003; Kim et al. 2006). Explanations that conform to Toulmin’s model of argumentation, in that they provide adequate justification for the explanation should be more persuasive and lead to greater trust, agreement, satisfaction, and acceptance (Gregor et al. 1999). In this study, we identify two types of argument claim-only and claim-data to denote different levels of explanation adequacy. Compared with claim-only explanation, claim-data explanation provides more supporting evidence to increase consumer trust (Kim et al. 2006). Higher explanation adequacy can be attained using claim-data explanation.
Responder Information Disclosure

The information processing literature has repeatedly demonstrated that attributes of a message source often exert direct effects on message recipients’ attitudes and behavior, independent of the message content (e.g., Chang 2004; Kang et al. 2006; Menon et al. 2003; Pornpitakpan 2004; Simpson et al. 2000). In our study, the attributes of a message source are represented by the information of responder (i.e., name and title) included in the response. Including responder’s information in response demonstrates responder’s sincerity to handle complaints. This enables consumers to accept the response more positively because the response is presented in a more formal and polite manner. It also indicates that there is someone who is willing to be responsible for dissatisfactory outcome. Allocation of responsibility produces perceived fairness of emotional outcome. Thus, we expect

H5: Responses to negative product review with responder information disclosure produce higher perception of (a) distributive justice and (b) interpersonal justice than responses without responder information disclosure.

Methodology

This research is still in progress. The hypotheses proposed in the present study will be tested with a laboratory experiment with a $2 \times 2 \times 2$ between-subject factorial design (i.e., 2 types of apology provision (between-subject) × 2 levels of explanation adequacy (between-subject) × 2 levels of responder information disclosure (between-subject)). Apology provision is manipulated by providing e-vendor response towards negative review with apologies or without apologies; explanation adequacy is manipulated by including in the explanation (1) e-vendor’s claim only (2) both e-vendor’s claim and data; and responder information disclosure is manipulated by providing responder information or not.

Experimental Website Design

The host website used for the experiment is created with a name of “Trip Advisor”. The website is modeled after a real and competitive third-party online recommendation website (www.tripadvisor.com). TripAdvisor is utilized to provide website interface design and data of hotels including their reviews. A hotel in New York City is chosen based on several criteria (i.e., average rank among hotels in the city with an overall rating around 3 stars, existence of company’s responses towards comments). Since the experiment will be conducted in Singapore, a hotel in New York can minimize subjects’ prior knowledge and experience with the hotel, leading to better experimental control. Based on the original distribution of consumers’ review and 5-star rating scale, a review with a rating of 1-star or 2-star is considered as a negative review, and one with 4- or 5-star is positive. A review page is designed for the hotel with 10 reviews, including 2 5-star reviews, 4 4-star reviews, 2 3-star reviews, 1 2-star review and 1 1-star review. All the 10 reviews are original customer reviews. However, the company’s response towards 1-star review is manipulated based on the design of different treatments in the experiment. The three design factors (i.e., apology provision, explanation adequacy and responder information disclosure) are varied across different treatments. The 1-star review is placed at the top of the review list so that subjects will read the review and its response.

Measurement

As shown in Figure 1, seven constructs are included in the research model. The definitions and operationalizations of these constructs were self-developed or based on relevant literature with revisions to fit this research. The measurement for apology provision is based on the definition of apologies. Explanation adequacy is based on the elements of Toulmin’s model (claim-data vs. claim-only). Measurements for responder information disclosure are based on its definition. The procedure of instrument development recommended by Moore & Benbasat (1991) is followed to assure content validity.

The study also captures subjects’ gender, age and trust propensity (Gefen et al. 2003) as controlled variables. The items are described in the Appendix 1. Most of the items are rated with a 7-point Likert (1932) scale ranging from “strongly disagree” to “strongly agree”. Only trust propensity is measured with a 5-point Likert scale.


**Experiment Design**

To enhance the realism (Singleton et al. 1999) and generalizability of findings, subjects will be recruited from MBA students of a main university in Singapore, who are likely to be more frequent travelers. Invitation email for the experiment will be distributed via Intranet of the university in September 2010. Participants will be assigned randomly to the eight conditions. Before the experiment they will be briefed on the general task for the experiment and requested to fill out an online questionnaire about their demographic information and trust propensity. Then they will be given several minutes to get familiar with the website. After that, they will be instructed to read a webpage of the hotel we designed for each condition with the task of evaluating the hotel for a winter holiday stay using information on its online product review page. No time restriction will be imposed on the completion of online browsing so as to cater for individual differences in decision-making. After reading the reviews about this hotel, participants will be redirected to another online questionnaire. In particular, subjects will be asked to fill out the measures of trust belief followed by measures for independent variables. A token payment of will be given upon completion of the questionnaire to motivate the subjects to participate seriously. Each experiment session will last about 40 minutes.

A pilot test has been carried out to check the experimental process and instrument before the official experiment. The t-test results for manipulation check items were significant, indicating all the three manipulations in the experiment are valid. However, further data collection is needed for hypothesis testing.

For the data analysis, MANOVA will be conducted by using SPSS after the data collection.

**Implication**

**Theoretical Implications**

This study contributes to the theoretical understanding and empirical examination of factors that influence potential consumers’ trust beliefs from a justice perspective. Factors analyzed in this paper differ from previous studies. Current service recovery literature mainly focuses on the interaction between a vendor and the complaining customer rather than the view of potential customers on the e-vendor. Current literature also does not pay much attention to the e-marketplace environment. Most of these factors for explanation construction are rooted in previous service recovery literature (e.g. Shaw et al. 2003). They are chosen to address the inconsistent findings in research on this area (Davidow 2003).

Even though past research has examined the effect of explanation on customers’ perceptions after service failure in offline settings, relatively few research is conducted in online contexts (e.g. Utz et al. 2009). While response to service failure in offline settings is only received by the complainant, response in online contexts reaches a much broader audience including potential consumers. Without actual service experience, potential consumers who read an e-vendor’s response to negative reviews might go through a different decision-making processes than the complainant. This effect of explanation has not been studied before. Our study taps onto this research gap and tries to contribute to the service recovery literature by providing more insights of the impact of explanation in online contexts.

As to justice theory, much research has applied it to investigate service recovery (e.g. Hocutt et al. 1997; McCollough et al. 2000; Tax et al. 1998). Prior studies have mainly looked at the effects of perceived justice on post-complaint consumer behavior, such as word-of-mouth (e.g. Clopton et al. 2001; Davidow 2000), customer satisfactions (e.g. Hocutt et al. 1997; McCollough et al. 2000), and repurchase intention (e.g. Conlon et al. 1996; Webster et al. 1998). However, relatively few research has examined the impact of justice perceptions on consumers’ trust beliefs toward vendors (e.g. Turel et al. 2008). Our study draws on the trust literature and justice theory to build a research model which helps to better understand the relationship between trust formation and justice perceptions.
Practical Implications

The paper suggests a few key factors for e-vendors to follow when dealing with online negative customer review, in order to turn their “public image crises” into an opportunity to promote themselves as a reliable and responsible service provider. Given the fact that more and more consumers are sharing their opinion and experiences on Web 2.0 websites, e-vendors are encouraged to spend more effort on the reviews on their companies, because the effect produced by online reviews lasts longer and reaches further.

Conclusion

In this paper, we proposed a framework for investigating the factors influencing potential consumers’ trust beliefs via e-vendor’s response towards negative consumer reviews. In consistence with justice theory, the research suggests that distributive justice and interpersonal justice are the main justice types that mediate the effect of explanation on potential consumers’ trust belief. While most past research focused on the role of justice in the service experienced by consumers in person, our research expands to the effect of justice in the eyes of potential customers. This perspective helps researchers and practitioners to better understand the board influence of online response to customer reviews.

Acknowledgements

We thank all reviewers, associate editor, and friends for their help and comments to this study.
## Appendix 1 Items of Constructs

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Items Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apology or Denial</strong></td>
<td>1. The hotel provided an apology for the dissatisfactory outcome in its response.</td>
<td>Self-generated</td>
</tr>
<tr>
<td></td>
<td>2. The hotel expressed regret over the dissatisfactory outcome in its response.</td>
<td></td>
</tr>
<tr>
<td><strong>Explanation Adequacy</strong></td>
<td>1. The hotel provided a clear explanation in its response.</td>
<td>Self-generated</td>
</tr>
<tr>
<td></td>
<td>2. The hotel provided sufficient information to support its standpoint.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The information provided by hotel is relevant to supporting its standpoint.</td>
<td></td>
</tr>
<tr>
<td><strong>Responder Information Disclosure</strong></td>
<td>1. The hotel provided the name of the representative who responded to low rating reviews.</td>
<td>Self-generated</td>
</tr>
<tr>
<td></td>
<td>2. The hotel provided title of the representative who responded to low rating reviews.</td>
<td></td>
</tr>
<tr>
<td><strong>Distributive Justice</strong></td>
<td>1. For the low rating review, I feel that the complaint handling outcomes are adequate for complainant’s dissatisfactory experience.</td>
<td>Adapted from (Blodgett et al. 1997)</td>
</tr>
<tr>
<td></td>
<td>2. The hotel’s offer (regarding a refund or an apology) was quite fair.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I feel that the hotel’s offer satisfied complainant’s needs.</td>
<td></td>
</tr>
<tr>
<td><strong>Interpersonal Justice</strong></td>
<td>1. The hotel treated the complaints in a polite manner in its response.</td>
<td>Adapted from (Colquitt 2001)</td>
</tr>
<tr>
<td></td>
<td>2. The hotel treated complainants with dignity in its response.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The hotel treated complainants with respect in its response.</td>
<td></td>
</tr>
<tr>
<td><strong>Trust beliefs toward e-vendor</strong></td>
<td>1. This hotel is competent.</td>
<td>Adapted from (Ba et al. 2002; Gefen 2002; Pavlou 2002)</td>
</tr>
<tr>
<td></td>
<td>2. In case of problems with the service, I trust that the hotel will be able to fix them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I trust that this hotel is professional.</td>
<td></td>
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<tr>
<td></td>
<td>4. In case of problems with the service, I trust that the hotel will make an effort to solve them quickly.</td>
<td></td>
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<tr>
<td></td>
<td>5. I believe that this hotel keeps its word.</td>
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<tr>
<td></td>
<td>6. I believe that this hotel wants the best for its buyers.</td>
<td></td>
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<tr>
<td></td>
<td>7. In case of problems with the service, I trust that the hotel will do its best to solve them.</td>
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<tr>
<td></td>
<td>8. I believe that this hotel acts honestly.</td>
<td></td>
</tr>
<tr>
<td><strong>Trust Propensity</strong></td>
<td>It is easy for me to trust a person/thing.</td>
<td>Adapted from (Gefen et al. 2003)</td>
</tr>
<tr>
<td></td>
<td>My tendency to trust a person/thing is high.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I tend to trust a person/thing, even though I have little knowledge of it.</td>
<td></td>
</tr>
</tbody>
</table>
References


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