Managerial Response to Online Compliments: Helpful or Harmful?

Research-in-Progress

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Abstract

There is limited systematic research on managerial response strategies to online customer compliments and positive e-WOM. In this paper, we synthesize altruism theory, social exchange theory and psychological reactance theory to develop our theoretical model that explores the mechanism through which online customer compliments influence customer attitudes and the mechanisms through which managerial responses can alter these influences. We test our model using data from TripAdvisor.com—a leading travel review platform. Using advanced text analytics we extract and code the variables in our model from positive reviews and the managerial responses to these reviews in Tripadvisor.com.

Keywords: Managerial response, online compliments, positive reviews, customer attitude

Introduction

A growing number of popular review forums such as TripAdvisor not only provide customer reviews but also permit managerial response to such reviews. Managerial response to negative reviews could be easily understood as a natural strategy by the firm since negative reviews will cause an immediate damage to a company's reputation and managers will try to devise some responses to mitigate the harmful effects of negative WOM (Word of Mouth) in the online review forum environment. However, a closer scrutiny of the review platform reveals that managers respond to positive reviews (i.e. customer compliments) more often than negative reviews (i.e. customer complaints). Positive reviews could serve as a strong predictor of product or service quality (Khare 2011) and increase firm brand image. Why do managers make efforts to respond to positive reviews? Is the effect of managerial response to positive reviews (i.e. customer compliments) helpful or harmful? Since positive reviews are permanently achieved and available to a large audience (Dellarocas 2003), managers should understand not only the effect of their responses to the satisfied customers but also its influence on future customers who are observing the interaction between managers and customers.

Customer compliments represent a powerful feedback to business and their potential for helping to shape both organizational and individual behaviors may be greater than that of customer complaints (Kraft and Martin 2001). Issues related to online customer compliments have received far less attention in the literature. Past research has examined the offline managerial response to customer compliments (Herbert 1986; Herbert and Straight 1989; Payne, Parry, Huff, Otto and Hunt 2002). There is limited systematic research on managerial response strategies to online customer compliments and positive e-WOM. Recent studies have started to explore if managerial response to online reviews do have an effect on overall customer attitudes (Ravichandran, Huang, and Sharpe 2012; Sharpe, Huang, and Ravichandran 2014; Sparks, So and Bradley 2016; Proserpio and Zervas 2015), the impact of managerial response on customer satisfaction (Gu and Ye 2014) and the effect of management response on subsequent online review
volume and valence (Ye, Gu and Chen 2010). However, these studies are just the first step towards developing a deeper understanding of effective managerial response strategies. There is a clear need for developing theoretically anchored frameworks in order to dig deeper into both the nature of reviews and that of the responses to derive effective strategies to deal with e-WOM. Recently, there is some literature analyzing the actual content embedded in reviews and responses. Wang and Chaudhry (2015) found that response tailored to negative (positive) reviews enhances (exacerbates) the positive (negative) effect on subsequent opinion. Ravichandran, Deng and Huang (2015) analyzed how future customers' attitudes will be influenced by observing different managerial responses to different customer complaints (i.e. negative reviews). To the best of our knowledge, our study is the first to dig deep into online customer compliments and managerial responses in order to understand the heterogeneity arising from the different ways managers handle online customer compliments by analyzing the textual content of positive reviews and managerial responses.

In order to theorize and test which kinds of managerial responses to customer compliments are helpful and which of them are harmful, we measure if and how future customers’ attitudes as reflected in the overall valance of their reviews, will be influenced by observing such managerial response to customer compliments in online review forums. While customer reviews are primarily influenced by their experiences with the product or service and the degree of expectation disconfirmation (Osarenkhoe and Komunda 2013), we argue that a customer’s attitude is also influenced by psychological reactance. Psychological reactance theory (Brehm 1966; Brehm 1989; Brehm and Brehm 2013) claims that whenever people perceive that a free behavior is restricted or eliminated, they tend to experience reactance and are motivated to change their attitudes and behaviors to restore their freedom and autonomy. It is likely that customers observing such interactions could be influenced by managerial responsiveness or lack thereof and hence modulate their views. In addition, we argue that there are also other important factors which may interact with psychological reactance to formulate the complicated mechanism through which online customer compliments influence customer attitudes and the mechanism through which different managerial responses can alter these influences.

The objective of our study is to address the following question: how future customers’ attitudes will be influenced by observing different managerial responses to various customer compliments. We synthesize altruism theory, social exchange theory and psychological reactance theory to develop our theoretical model that explores the pathways through which customer compliments and managerial responses to such compliments impact customer attitudes. Using altruism theory and social exchange theory, we explain customer complimenting behavior and manager responding behavior. Using psychological reactance theory, we examine the effects of different responses to customer compliments on customer attitudes. We test our propositions using data from TripAdvisor.com, a leading travel forum. We use extensive text analytics to extract and code the reviews and managerial responses from this online forum to compile our data.

We believe that this paper makes three main contributions. Our paper adds to a growing research on social media strategies of firms. Firms are trying to identify ways in which they can make profitable use of social media (Kaplan and Haenlein 2010) and examine the helpfulness of online reviews (Mudambi and Schuff 2010; Weathers, Swain and Grover 2015) in social media websites. In this paper, we develop a fine-grained characterization of managerial responses and customer compliments in the online review forum by text mining the actual content in managerial responses and positive reviews. We examine how different types of managerial response strategies vary in their impacts on subsequent customer attitude in order to understand which kinds of response strategies are helpful and which are harmful. In addition, this paper adds to the literature on psychological reactance. We argue that the effect of psychological reactance to managerial response is modulated by other important factors such as the perceived utility of managerial response, the nature of customer compliments and the fit between managerial response and customer compliments. Thirdly, this study has implications for practitioner audiences. Based on the theoretically anchored classification of managerial responses and positive reviews, this paper provides guidance for managers to interact with their customers openly and skillfully in the review community in response to expressed satisfaction and praises.

The rest of the article is organized as follows. The theoretical background is presented in the second section. In the third section, we synthesize the theories and develop our research hypotheses. We discuss
data and empirical methodology in the fourth section. Finally, we conclude by presenting the managerial implications and ongoing work.

**Theoretical Background**

We synthesize three theories to develop our theoretical model: altruism theory, social exchange theory and psychological reactance theory. Altruism theory is used to explain customer complimenting behavior. Social exchange theory is used to analyze managerial responding behavior. Psychological reactance theory is applied to describe future customers’ behavior when observing customer compliments and corresponding managerial responses.

**Altruism Theory**

Although customer complimenting behavior could be clarified by eight motivations (Kraft and Martin 2001; Payne et al. 2002; Otto, Payne, Parry and Hunt 2005): delight/great satisfaction, dissonance reduction, reciprocity/social norms, flattery, improve future service for others, high involvement with product or service, voting behavior to continue special services or products, and to buffer complaints, there is still need to examine customer compliments from a theoretical perspective. Berger (2014) explained how much of customer comments is driven by egoism versus altruism. Egoism involves acting exclusively in one’s own self-interest (Jones, Felps and Bigley 2007). Altruism is motivation with the ultimate goal of increasing the welfare of one or more individuals other than oneself (Montada and Lerner 1996). On one side, emotion regulation (e.g. delight, reduce dissonance reduction), deepening social bonds (e.g. reciprocity/social norm), flattery are all explicitly motivated by the self, or make the self better off as a by-product of interpersonal communication (Berger 2014). Compliments caused by delight could not provide future customers with objective opinions since they contain more emotional clues than rational ones. Compliments which reassures self she/he made a good choice could not reflect the actual quality of product or service since customers may have different requirements and preferences. Compliments caused by deepening social bonds could not provide much useful information to future customers since the complimenting customer probably feels obligated to be interpersonally proper. Compliments as an actual flattery could not offer genuine information about product or service since the complimenting customer probably would like to gain undeserved reward. On the other side, individuals acting on altruistic goals are willing to volunteer themselves to contribute their knowledge to online customer reviews without anticipating direct rewards in return (Rathore 2015). Motivations such as improving future service for others benefit future customers and encourage the hotel to provide more excellent service in the future. Motivations such as high involvement with service benefit future customers since complimenting customers can provide more accurate and unobservable information about the hotel to future customers. Motivations such as buffering complaints can also benefit the hotel and future customers by providing constructive suggestions to the hotel in an acceptable way and offering future customers the pros and cons about the hotel. Motivations such as voting to continue specific service or products benefit future customers since they can continue enjoying the benefits brought by such service. All of these four motivations are categorized as altruistic. To sum up, we classify customer compliments (i.e. positive reviews) into two types in this paper: egoistic compliments (i.e. delight, dissonance reduction, reciprocity and flattery), and altruistic compliments (i.e. improve future service for others, high involvement, voting behavior and buffering complaints).

**Social Exchange Theory**

Social exchange theory can explain why managers respond to all reviews including online compliments. Social exchange theory proposes that social behavior is the result of an exchange process and social exchange is limited to actions that are contingent on rewarding reactions from others based on two-sided, mutually dependent, and mutually rewarding process (Blau 1964; Cropanzano and Mitchell 2005; Cook, Cheshire, Rice and Nakagawa 2013). Managerial response to online compliments can be considered as a reciprocal response to feedback which is favorable and beneficial for the company. While the traditional compliment responses literature identifies categories of responses that are in general use: appreciation token, comment acceptance, reassignment, return, qualification, praise downgrade, disagreement, question, praise upgrade, comment history, no acknowledge, request interpretation (Herbert 1986; Herbert and Straight 1989; Payne et al. 2002), we classify the compliment response into template and
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personalized one (Wang et al 2015) by considering the online characteristics of managerial responses. Template response involves appreciation and comment acceptance in order to show politeness and esteem to customer compliments. Personalized response is written to target at each clue about praises, criticism, requirement and suggestions from each customer. Since online positive reviews are accumulating very quickly, it is impossible for managers to write personalized response to each review. Thus, managers are more likely to use template response to most of their positive reviews.

Psychological Reactance Theory

Psychological reactance theory (Brehm 1966; Brehm 1989; Brehm and Brehm 2013) proposes that whenever people realize that a free behavior is restricted or eliminated, they tend to experience reactance and are motivated to change their attitudes and behaviors to restore their freedom and autonomy (Baek and Morimoto 2012). In the manager response context, a manager’s intervention in an online review community could be interpreted as a threat to community members’ freedom of expression (Wang et al. 2015). In this paper, we argue that managerial response to online compliments could be interpreted as a threat to future customer’s freedom of expression. Future customers already have had an experience with a service or product and plan to write a review in the online review forum. While their opinions are primarily influenced by their own experiences, they are also influenced by the information provided by other customers and managers (i.e. customer reviews and managerial response). Positive reviews could serve as a strong predictor of product or service quality (Khare 2011). When future customers observe a strong and clear signal about the quality of product or service from positive reviews, they could easily make decision about agreeing or disagreeing with others’ opinions in order to write a fair review. However, external disturbance from managers would distract them from processing helpful information so that it complicates their decision-making processes. Managerial response could be considered as an intrusive action which interferes with the principles of information sharing in an online community (Lee, Xie and Besharat 2016), influences the perceptions of customers and threatens the community goal of sharing personal actual experience (Wang et al., 2015). As a result, these subsequent reviewers incline to bias their opinions downward in a possibly subconscious act of disobedience and give an insincerely lower opinion than he or she would have otherwise given (Wang et al. 2015).

When it comes to differential influences of personalized response and template response, there is evidence that customers tend to experience psychological reactance in response to highly personalized messages when they feel restricted by a sense of being too identifiable or observable by companies (White, Zahay, Thorbjørnsen and Shavitt 2008). Wang et al (2015) also suggested managers should pay close attention to applying template responses to customer compliments. Thus, personalized response seems to provoke more psychological reactance than template response.

However, White et al (200e8) further asserted that customer reactance to personalized messages can be determined by whether the perceived utility of the advertised products or services embedded in messages counterbalances the psychological costs of receiving inappropriate personalized messages. Wendlandt and Schrader (2007) also found that perceived utility (e.g., some rewards and benefits from the restricted freedom) significantly decreases customer reactance. Thus, the negative effect of personalized response on future customers’ attitudes is likely to be offset by the perceived utility of such response. Therefore, we could not distinguish which kind of response is better simply from psychological reactance theory. There are definitely other important factors that interact with this reactance effect to simultaneously influence future customers’ attitudes. This gives us some insights to investigate how different types of managerial responses to different kinds of compliments vary in their impacts on subsequent customer attitude.

Hypotheses Development

By observing the interaction between managers and satisfied customers in the online review forum, we argue that future customers’ attitudes will be changed based on various types of managerial responses to various kinds of compliments. We classify responses as personalized and template while categorizing compliments as altruistic and egoistic. We would like to investigate how different combinations of response and compliment varies in their impacts on future customers’ attitudes. The basic assumption is that managerial response to online compliments will have a negative influence on future customers’ attitudes. Template response will have a less negative influence on future customers’ attitudes. We would like to examine how the nature of consumer compliments moderates the relationship between managerial
response and future customers’ attitudes. Here, the future customers refer to customers who have had pleasant or unpleasant experience with a service or product and plan to write a review in the online review forum. We argue that their opinions will be influenced by the information exchange between managers and customers. We present the research model for our study in Figure 1.

![Figure 1. Research Model](image)

**Personalized Response**

Personalized response provokes more psychological reactance in future customers, which has a negative effect on future customers’ attitudes. However, other factors compensate this negative effect when managers respond to altruistic customer compliments. Firstly, personalized response is valuable to future customers because such responses emphasizes the features of product or service. Therefore, customers’ psychological reactance could be decreased due to the perceived utility or usefulness of personalized response. Secondly, customers could gain satisfaction from altruistic behavior such as offering or sharing beneficial information to others. When observing an altruistic compliment, future customers are more likely to follow their peers to leave a positive review to support constructive suggestions or vote for continuing the specific product/service in order to help others. Thirdly, personalized response to altruistic compliments indicates that managers pay close attention to each clue about praises, criticism, requirement and suggestions embedded in such compliments and would like to follow customers’ suggestions and improve their products or service in the future. All of these three factors will offset the negative effect of personalized response on future customers’ attitudes and positively change customers’ opinions toward the hotel although they already have had an experience in the hotel, thus increasing the future review valence in the online review forum. Therefore, we hypothesize that,

\( H_1: \) Personalized response to altruistic customer compliments will have a positive influence on the future review valence.

In addition to the fact that personalized response will elicit more psychological reactance in future customers, other factors exacerbate this negative effect when managers respond to egotistic customer compliments. Firstly, egotistic compliments are less helpful since they are all about emotional regulation, social norms and flattery from complimenting customers. Future customers will be less likely to be influenced by such review and modify their attitudes based on his/her actual experience in the hotel. Secondly, personalized response to egotistic compliments indicates that managers artificially make overzealous response even if the compliment is worthless. All above mentioned factors will exacerbate the negative effect of personalized response on future customers’ attitudes and negatively change customers’ attitudes towards the hotel although they already have had an experience in the hotel, thus decreasing the future review valence in the online review forum. Therefore, we hypothesize that,
H2: Personalized response to egotistic customer compliments will have a negative influence on the future review valence.

Template Response

Template response will generate less psychological reactance than personalized response but still have a negative effect on future customers’ attitudes. Some other factors enhance this negative effect when managers respond to altruistic customer compliments. Firstly, template response is less valuable than personalized one since managers only express appreciation and esteem to customers. In addition, template response to altruistic compliments indicates that managers do not pay attention to customers’ suggestions, do not care about customers’ requirements, and even do not take time to read what customers said. All above mentioned factors will exacerbate the negative effect of template response on future customer’s attitudes and negatively change customers’ opinions toward the hotel although they already have had an experience in the hotel, thus decreasing the future review valence in the online review forum. Therefore, we hypothesize that,

H3: Template response to altruistic customer compliments will have a negative influence on the future review valence.

Template response will generate less psychological reactance than personalized response, which has a less negative effect on future customers’ attitudes. However, other factors counteract this negative effect when managers respond to egotistic customer compliments. For example, template response to egotistic compliments indicates that managers pay less attention to this invaluable compliment and only use template response to express gratitude instead of adding persuasion effects to future customers. Thus, template response to egotistic customer compliments will offset the negative effect of template response on future customers’ attitudes and positively change customers’ opinions toward the hotel although they already have had an experience in the hotel, thus increasing the future review valence in the online review forum. Therefore, we hypothesize that,

H4: Template response to egotistic customer compliment will have a positive influence on the future review valence.

Data and Methodology

Data

We collected a sample of 67,418 daily chronologically archived hotel reviews from TripAdvisor.com—a leading travel review platform. The sample consists of 156 hotels located in the US cities of Boston (n=78) and Honolulu (n=83). The data is comprehensive for each location—presenting every customer review and corresponding managerial response (if available) published on TripAdvisor.com up to the time of data collection—covering reviews between March 2001 and November 2011. The two cities differ in the nature of their tourist attraction and geographic location, thereby adding diversity to the sample. Only 11 percent of reviews received a managerial response and 48% of responses target positive reviews.

Our data includes characteristics specific to hotel reviews (hotel name, review title, review date, review content, industry star rating, total user ratings, average user rating), individual reviewers (reviewer id, address, overall rating for a specific hotel visit, stay period, and experience ratings for value, location, sleep quality, room quality, cleanliness, and service), and managerial responses (response date, responding manager’s id, response content). The richness of the dataset allows for the systematic exploration of actual occurrences of manager-customer interaction in online review forums.

Methodology

Two steps are used to label content embedded in positive reviews. First, we use Amazon Mechanical Turk (AMT) to tag half of the message as the training dataset (Lee, Hosanagar and Nair 2014). AMT is a crowd sourcing marketplace used to automate the implementation of micro tasks that require human involvement (Ghose, Ipeirotis, and Li 2012). To content-code our positive reviews, we design a survey in which AMT workers are asked to answer a series of binary yes/no questions (1/0) concerning a fine-grained characterization of positive reviews. After obtaining the training dataset, we will build an NLP
algorithm to extend the content-coding to the full set of messages (Lee et al. 2014). The content in positive reviews (i.e. customer compliments) can be categorized as egoistic compliments and altruistic compliments. Table 1 outlines the coding schema and the precise definitions of the various dimensions used to classify customer compliments.

<table>
<thead>
<tr>
<th>Categorization</th>
<th>Attribute</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egotistic</td>
<td>Delight or Great Satisfaction</td>
<td>Compliment is caused by delight or great satisfaction.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td></td>
<td>Dissonance Reduction</td>
<td>Compliment reassures self she/he made a good choice.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td></td>
<td>Reciprocity/Social Norms</td>
<td>The customer is sensitive and feels obligated to be interpersonally proper. Compliment is a polite response, socially acceptable, courteous things to do.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td></td>
<td>Flattery: To Get a Tangible Reward</td>
<td>Compliment is an actual flattery or ingratiation attempted to gain undeserved reward.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td>Altruistic</td>
<td>Improve Future Service for Others</td>
<td>Compliment is given to improve future service for others.</td>
<td>(Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td></td>
<td>High Involvement with Product or Service</td>
<td>Subject of compliment is high involvement.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td></td>
<td>Voting Behavior to Continue Special Services or Products</td>
<td>Compliment is a vote to encourage the company to continue special service or products.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
<tr>
<td></td>
<td>To Buffer Complaints and Increase Effectiveness</td>
<td>The customer may compliment and complain almost simultaneously and use a compliment to soften a complaint.</td>
<td>(Kraft and Martin, 2001; Payne et al., 2002; Otto et al., 2005)</td>
</tr>
</tbody>
</table>

The content in managerial response can be categorized as template or personalized. We follow Wang et al. (2015)’s methods to apply Latent Dirichlet Allocation (LDA) (Blei, Ng and Jordan 2003) to identify latent topics, to assign topic probabilities to each review and response after having identified the talent topics, and to use these probabilities to calculate a cosine similarity score between each pair of compliment and response. The larger the similarity score, the more personalized the response is.

**Key Variables**

*Positive Reviews.* In TripAdvisor.com, a rating of 1 corresponds to “terrible”, 2 to “poor”, 3 to “average”, 4 to “very good”, and 5 to “excellent”. Following existing literature, we classify each review in our dataset as “negative”, “neutral”, or “positive” based on ratings assignments of 1-2, 3, or 4-5 respectively (Forman and
Wiesenfeld 2008; Mayzlin 2006). In this paper, we only focus on positive reviews (rating assignments of 4-5) which only comprises 8 percent of all reviews.

We then create two composite summary variables corresponding to egoism and altruism regarding positive reviews (i.e. customer compliments). The Egoism variable is obtained by adding values of Delight/Great Satisfaction, Dissonance Reduction, Reciprocity/Social Norms and Flattery resulting in a composite variable ranging from 0 to 4. The Altruism variable is obtained by adding values of Improve Future Service, High Involvement, Voting Behavior and Buffer Complaints resulting in a composite variable ranging from 0 to 4.

**Managerial Response.** We code the response as template when the cosine similarity score is less than 0.5. We code the response as personalized when cosine similarity score is larger and equal to 0.5.

**FutureReviewValence** is designed to capture aggregate customer attitudes toward each hotel over the 30-day period following a managerial response to a positive review, for each hotel j, by reviewer i. This dependent variable is a forward-looking measure of the overall average review valence (the sum of rating/the count of ratings among these 30 days). This meant that we were not be able to calculate this variable for the reviews close to the date of data collection. This approach is enabled by the chronological presentation and inclusion of calendar date timestamps for each of the reviews and responses in the dataset and is appropriate for our estimation of managerial influence on aggregate future customer attitudes in the online review forum environment.

**Controls:** To control for hotel specific factors that may influence the future review valence, we include the total number of reviews received, location city, seasonality, industry star rating and changes in hotel quality. Firstly, we control the total number of reviews posted for each hotel because we consider that some hotels may have more reviews than others so that the likelihood of having a higher number of positive reviews may be increased. Secondly, we control for the potential effects related to the city which each hotel is located since there are more business travelers in Boston and more leisure travel customers in Honolulu and the customer expectation will be different for different purposes of travelling. Thirdly, we consider the seasonality, associated with each of the sample cities. Guided by travel industry sources (e.g. Frommers travel guides and TripAdvisor.com), we identify the months, seasons, and holidays associated with increased travel to the sample cities as such trends could potentially impact hotel review volume and customer attitudes. Fourthly, we control for the industry star rating assigned to each hotel since it could impact customer’s perception and evaluation of hotel service and further influence customer attitudes. Fifthly, we control for the actual perception of hotel quality by customers. We use factor analysis to construct this quality variable by aggregating the experience ratings—namely those related to the value, location, sleep quality, room condition, cleanliness, and service quality of each hotel review observation—to create an index measure of hotel quality. Using this variable, we assess and control for changes in hotel quality between the day a review is posted and the day it receives a response.

**Managerial Implication and Future Work**

While theoretically anchored frameworks to classify online customer compliments and managerial responses are sparse, this paper would add to the richness of our understanding of how overt managerial presence in online review forums influences customer attitudes and behavior. This paper emphasizes the importance of devising appropriate managerial response strategies to customer compliments since inappropriate response strategy will be harmful by decreasing the future review valence and further damaging the firm reputation and brand image. In addition, this paper provides guidance for managers to interact with their customers openly and skillfully in the online review forum in response to expressed satisfaction and praises. We argue that personalized response is better than template response when responding to altruistic compliments while template response is better than personalized response when responding to egoistic compliments.

Our future work will focus on coding the data we have collected and empirical testing of the hypotheses is underway. We do expect to complete this and present the results at the conference in December.

**References**


