

RESPONDING TO THE STING OF NEGATIVE FEEDBACK IN ONLINE AUCTIONS

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Accepted by: Thomas D. Jeitschko

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ABSTRACT

Many online auction studies have investigated summary/aggregate rating measures of reputation. However, recent studies have uncovered the importance of individual-level *consumer* text (i.e., qualitative) *reviews* to potential future consumers in online auctions. This study is a natural extension as it considers *seller* text *replies* in the critical situation when an online auction seller receives negative comments/feedback from a buyer. A strategy for guiding *sellers* to proactively generate a text comment response/reply to a consumer's negative rating and review is developed and tested. Results indicate that online auction sellers can dull the impact of negative feedback/review from a consumer/buyer by constructing a justice-infused text comment reply.

INTRODUCTION

Online rating systems which enable consumer-to-consumer communications about products and providers are becoming increasingly widespread and influential. Retailers, such as Amazon and WalMart, comparison shopping service providers, such as Shopzilla and Pricegrabber, and, online auction marketplaces, such as eBay (through its Shopping.com), solicit and present consumer-generated ratings and reviews of products. And, increasingly, these purveyors enable consumer-generated ratings and reviews about *retailers/sellers*, e.g., ResellerRatings.com, Shopzilla and, of course, eBay, via its Feedback Forum. This information is crucial in a consumer's decision making process (Horrigan and Rainie 2006) as consumers are increasingly using and finding value in the Web and other electronic media before making a purchase. Indeed, consumers place more trust, on average, in consumer-generated content than in marketer-created messages (e.g., Blackshaw and Nazzaro 2004; Katz and Lazarsfeld 1955; Nielsen Buzz Metrics 2006; Richins 1983).

While the Internet has spawned billions of new consumer-to-consumer online communications of the kind noted above, not to mention those in blogs and online communities, this research is focused on a type, reputation-system/feedback *review/text* comments, that until recently had received no attention and, as recently discovered, is extremely influential, above and beyond the summary/aggregate *rating*, in online auctions (e.g., Bolton, Katok and Ockenfels 2004; Bolton, Loebbecke and Ockenfels 2008; Dellarocas 2003; Resnick and Zeckhauser 2002; Resnick et al 2006). This study extends research in this relatively new area (e.g., Pavlou and Dimoka 2006; Weinberg and Davis 2005), by investigating a class of review/text comments – *seller* text replies to a buyer's negative feedback -- that are yet to be considered in the literature and may impact a seller's reputation.

We quickly clarify the focus of this research by outlining its relevant domain and by highlighting an important area which has not received full attention. Weinberg and Davis (2005) identified that a broad array of online settings, such as retailer websites, comparison shopping websites and auction marketplace websites, enable people/sources to provide comments/evaluations, i.e., ratings and reviews, about products and exchange participants (e.g., providers/sellers). The sources of these comments are varied, but, comprise mostly buyers (including, in some instances, consumers who are not buyers) and sellers. The comments may contain components that are quantitative (e.g., rating) and/or qualitative (e.g., review/text) with a valence along a continuum from positive to negative. In addition, the action of a comment can be an evaluation or a response/reply (to an evaluation). For example, eBay's Feedback Forum allows both exchange participants, i.e., the buyer and the seller, to comment on their exchange experiences through a rating and associated text review (about the product or the other exchange participant) and, further, for each exchange participant to indicate a follow-on text *response/reply* to such a rating and review (e.g., see Resnick and Zeckhauser 2002). See Figure 1. The shaded elements in Figure 1 distinguish the focus of this research and how it extends the literature. Recent studies have uncovered the importance of *consumer* text (i.e., qualitative) reviews to potential future consumers in online settings (e.g., Pavlou and Dimoka 2006). This research investigates *seller* text *replies* to negative comments/feedback from buyers in online auctions.

In the next section, we review relevant literature and describe the managerial problem and a new approach for managing it. Then, we formulate hypotheses for testing this approach. Next, we detail our methodology for testing the hypotheses, followed by the results and associated discussion. We conclude with a section on directions for future research.

LITERATURE

Online Auctions

Research on auction theory and practice is well-established (e.g., see McAfee and McMillan 1987; Milgrom 1989). Scholars note, however, that the marketing literature on auctions is “sparse” (Chakravarti et al. 2002), while urging marketers to conduct more research in this area. Indeed, online auctions have played a prominent role in e-commerce and marketing, as annual merchandise sales (i.e., gross merchandise value) now exceed \$50 billion.

Lucking-Reiley’s (2000) seminal paper introduces Internet auctions. He investigated 142 Internet auction sites, and provided a comprehensive overview of the Internet auction industry, including its early history, business models, goods sold, auction formats and options, and concerns about fraud. Herschlag and Zwick (2000) provide a review of non-academic articles which touch on many of the same themes.

Online auction studies have focused primarily on a) reputation issues, such as the effectiveness of reputation systems (e.g., Bolton, Katok and Ockenfels), the value of reputation (e.g., Melnick and Alm 2002; Resnick and Zeckhauser 2002; Resnick, Zeckhauser, Swanson and Lakewood 2006), reciprocity (e.g., Dellarocas, Fan and Wood 2004), and on b) auction-listing or merchandising issues, such as the value of providing photographs/images of an auction item (Ottaway, Bruneau and Evans 2003), setting an opening bid amount (Gilkeson and Reynolds 2003) or setting the bid increment amount (Bapna, Goes and Gupta 2003). Some research has investigated the impact of a consumer’s background, such as experience, on their online-auction behavior (e.g., see Wilcox 2000).

A seller’s online-auction reputation feedback, consists of ratings (e.g., positive, neutral and negative in eBay) and text reviews created by auction winners (i.e., consumers), is a type of

word of web information that is passed along to other auction-community members/consumers, to assist them in assessing a seller and reducing uncertainty associated with their auction-related decision making, such as whether to place a bid, or how much to bid. In describing its reputation system, eBay indicates that “The Feedback Forum is the place to learn about your trading partners, view their reputations, and express your opinions by leaving feedback on your transactions. Such member-to-member comments help the millions of buyers and sellers in the community build trust and share their trading experiences with others.” Online-auction reputation systems can be an important means for avoiding Akerlof’s (1970) “market for lemons” and creating a healthy market which includes products available at a variety of quality levels and associated prices where, for example, buyers may be willing to pay a premium for products sold by sellers with superior reputations (Resnick et al. 2000).

Reputation information for an individual auction includes many details. For example, in eBay’s Feedback Forum, it includes a rating that is either positive, neutral, or negative, and an associated text comment/review, as well as optional “response” statements by the individual (e.g., seller) to the other exchange participant’s (e.g., buyer) rating and review. In addition, optional “follow-up” statements beyond the initial rating and review and a response are possible. An eBay member’s reputation score is based on the auction ratings received in individual auctions from those who have participated in an exchange with that member, and is computed using the following procedures: a) +1 point is tallied for each person who has left a positive rating for that member; b) 0 points are tallied for each person who has left a neutral rating for that member; c) -1 point is tallied for each person who has left a negative rating for that member; and d) the sum of these amounts yields the reputation score for that member.

Nearly all research into the impact of online-auction feedback on consumer/bidder behavior has considered only quantitative *aggregate* reputation measures, such as the (overall) reputation score, the number of positive ratings and the number of negative ratings. Evidence indicates that the reputation score does not fully explain how bidders use reputation information, and that bidders place more weight on negative ratings than on positive ratings (Ba and Pavlou 2002; Lucking-Reilly 2000; Melnik and Alm 2002).

Indeed, until recently, research in online auctions had overlooked the importance of many reputation system elements/"details" (Weinberg and Davis, 2005), such as individual-auction text review comments, which contain "much (service performance) information about sellers," (Ba and Pavlou 2002, p. 256). Weinberg and Davis (2005) found that when online auction bidders/buyers examine a seller's reputation, they inspect not only the quantitative measures, but also many individual-auction details such as individual-auction text review comments, particularly those associated with a negative rating. Similarly, in another rating and review context (online books, e.g., Amazon.com), Chevalier and Mayzlin (2006, p. 346) recently reported that consumers "actually read and respond to written reviews, not merely the average star ranking summary statistic provided by the Web sites."

Research into text comment reviews, which delves below the surface of the aggregate-quantitative reputation measures, is, arguably, more important because it can provide greater insights into the impact of reputation information, as well as guidance on how organizations might manage and engage it. Pavlou and Dimoka (2006) recently report that buyer/consumer text review comments in online auctions had a greater impact on a seller's credibility and benevolence than did aggregate "crude numerical" measures. In addition, they advise online auction practitioners to attract outstanding (i.e., extremely positive) text comments, to avoid

receiving abysmal (i.e., extremely negative) text comments and to develop strategies to support these ends.

Managing The Impact of Text Comment Reviews on Reputation

The extant literature in online auctions, be it for quantitative aggregate summary measures/ratings or detailed text comment reviews, is consistent in its recommendations for managing reputation: maximize positive, and minimize negative, ratings and reviews, with more emphasis on the latter (e.g., Ba and Pavlou 2002; Lucking-Reilly 2000; Melnik and Alm 2002; Pavlou and Dimoka 2006; Resnick and Zeckhauser 2002; Resnick et al 2006). Strategies that manage this, particularly with respect to negative information (as it has consistently been shown to have a greater impact than has positive information), are important because, in online auctions, a rating and review tends to be forever/permanent. For example, eBay indicates on its “About Feedback” webpage (2009) that “Ratings and comments are generally a permanent part of a member’s Feedback Profile” (although, there are some conditions where eBay will intervene and erase feedback).

In this research paper, we extend the literature by proposing and testing a novel alternative strategy for managing situations when a seller receives a permanent, negative rating and review; i.e., when the strategy of “avoiding” negative feedback has failed – the negative feedback has already been received! This strategy is focused on guiding *sellers* to proactively generate their own text comment response/reply to a consumer’s negative rating and review (of that seller), and is a natural extension to recent online auction research that has identified the significant use and impact of *consumer* generated text comment reviews. While the literature has proposed strategies for avoiding a negative rating and review, this research proposes a timely

strategy for managing a negative rating and review when an avoidance strategy has failed, i.e., *after* a seller has indeed failed in the eyes of the buyer and received negative feedback.

The literature has suggested that an effective way to recover from a (received) negative rating and review is to offset/compensate for it over time by, e.g., creating incremental/future sales that generate positive ratings and reviews. However, this strategy definitely has some weaknesses! It may take longer than desired to implement, as it is subject to the rate of future sales – again, recall that negative feedback is permanent and will be viewed in the future by potential customers; a seller who has a relatively slow turnover rate will suffer the ill effects of a negative rating and review for a longer length of time than will a seller with a relatively fast turnover rate. In addition, in each new/future auction, a seller is “working against” the damaging effects associated with a realized negative rating and review when trying to earn each future/incremental positive rating and review for counteracting a negative rating and review. With respect to reputation, it can be reasonably suggested that the new approach proposed in this research, where a seller proactively generates a (strategically constructed) text comment reply to a buyer’s negative rating and review, is faster acting and more effective in neutralizing the damage of a negative rating and review.

HYPOTHESES

Again, the strategy proposed for managing a negative rating and review generated by a consumer/buyer is for the seller to generate a text comment reply to a buyer’s negative (rating and) text comment review. This reply would be directed to not only the buyer who participated in the exchange and generated the negative feedback, but also, and, arguably, more importantly, to *future, potential* consumers who view text comment reputation-information when making a bid decision in an auction (referred to as indirect reciprocity from third parties by Bolton, Katok

and Ockenfels 2004). Note that, like a consumer generated (negative) text comment review for a completed auction, a seller's generated text comment reply would also be permanent and visible "forever" to prospective bidders/buyers.

Negative feedback received from a buyer reflects a seller's failure to meet expectations from the buyer's perspective; therefore, we characterize a seller's receipt of negative feedback from a buyer as an indicator of what is, in essence, a *service failure*, and use service recovery theory to generate hypotheses about a seller's text comment reply strategy, which can be classified as a mechanism for complaint handling.

Service recovery is a process aimed at customer satisfaction, relationships and, ultimately retention and profits (Reicheld and Sasser 1990), where organizations respond directly to a customer who has complained about an experience involving a service failure (Hart, Heskett and Sasser 1990). The research domain of complaint handling online, i.e., online service recovery, is relatively new. However, the importance of understanding more about this critical area has been identified (McCollough, Berry and Yadav 2000).

Tax, Brown and Chandrashekar (1998) built a framework which integrates complaint handling, relationship marketing and three dimensions of justice and show that customers evaluate complaint incidents in terms of distributive justice, procedural justice and interactional justice. *Distributive* justice refers to the equity or fairness of an exchange/outcome in terms of costs and benefits (Deutsch 1985). Examples of service recovery "distributions" are upgrades, exchanges, refunds and cost adjustments. *Procedural* justice refers to the means by which an end is accomplished. A fair complaint "procedure" is comprised of several elements: convenience, timeliness, ease, flexibility and control over the disposition (Tax, Brown and Chandrashekar 1998). For example, a complaint handling "procedure" which requires a customer to contact

FedEx and find a “late” parcel would be perceived as having less justice than one in which the provider/shipper carries out this task (for the customer). *Interactional* justice refers to the fairness of interpersonal treatment, e.g., politeness, respect and honesty. An apology for a service failure is an example of a (likely) effective interactional justice recovery effort (McCollough, Berry and Yadav 2000; Smith, Bolton and Wagner 1999; Wirtz and Mattila 2004).

Increased justice along each dimension leads to a higher, more positive, evaluation of the effect of a service recovery action. Therefore:

H₁: A seller’s *effectiveness in handling a buyer complaint* is positively related to the degree of justice communicated in its text comment reply. We test this, and each subsequent hypothesis (except for hypothesis 2, which does not deal with justice), separately for each type of justice¹.

In addition, the literature suggests that a more severe service failure necessitates a stronger “remedy” in order to restore a sense of justice/fairness (e.g., Tax, Brown and Chandrashekar 1998). Therefore, it is also hypothesized that:

H₂: A seller’s *effectiveness in handling a buyer complaint* is negatively related to the severity of the complaint (i.e., the effectiveness of a fixed/set method for handling a complaint decreases as the severity of the complaint increases.)

¹ Our plan was that if none of the three types of justice were significant, we would examine the three types jointly; however, *this occasion never obtained*.

The service recovery literature has extended into the online realm. For example, Maxham and Netemeyer (2003) tested the relationship between degree of justice and relevant outcomes (e.g., attitude toward the seller, purchase intent) in a field study of online customers who registered complaints via telephone. This research reported a positive relationship between degree of justice and attitude toward the seller and between degree of justice and purchase intent. Given that this holds true for call-in complaints, we conjecture that it holds true also here in the online auction setting. Thus,

H₃: The degree of justice communicated in a seller's text comment reply is positively related to a potential bidder's *attitude toward the seller*.

H₄: The degree of justice communicated in a seller's text comment reply is positively related to a potential bidder's *intent to bid*.

The importance of service quality in offline contexts is well established (e.g., Parasuraman, Zeithaml and Berry 1985, 1988, 1991, Zeithaml, Berry and Parasuraman 1988, Zeithaml, Parasuraman and Berry 1990). Consistent with this, it has followed that e-service quality is important in online retailing (Barnes and Vidgen 2002, Rust and Lemon 2001, Yoo and Donthu 2001, Zeithaml, Parasuraman and Malhotra 2000). Further, recent studies have identified a relationship among service quality, service recovery and important behaviors/behavioral intentions (Collier and Bienstock 2006, Holloway and Beatty 2003), suggesting a positive relationship between justice and service quality expectations.

H₅: The degree of justice communicated in a seller's text comment reply is positively related to a potential bidder's *service quality expectations*.

The United States Internet Crime Complaint Center (IC³) reports that Internet auction fraud continues to account for the greatest number of Internet complaints, 45% in 2006 (Internet Crime Complaint Center 2007; Noyes, 2007). Given this, the importance of seller trustworthiness in online/virtual exchange contexts and electronic commerce (e.g., Balasubramanian, Konana and Menon 2003, Gefen 2002, Mayor, McKnight, Choudhury and Kacmar 2002, Reichheld and Schefter 2000, Serva, Benamati and Fuller 2005, Strader and Ramaswami 2002, Wang, Beatty and Foxx 2004), and the positive relationship between trustworthiness and outcomes such as satisfaction (e.g., Balasubramanian, Konana and Menon 2003) and choice (e.g., Strader and Ramaswami 2002), our last hypothesis, is:

H₆: The degree of justice communicated in a seller's text comment reply is positively related to its *trustworthiness*.

METHODOLOGY

Several studies have highlighted the value and importance of controlled experiments when studying online auction reputation (e.g., Bolton, Katok and Ockenfels 2004; Bolton Loebbecke and Ockenfels 2008). A similar approach is used in this study. Each subject assumed the role of a prospective bidder in an online auction² who was inspecting the feedback/reputation information

² The auction item was a \$150 gift certificate to a preferred store. This auction-item stimulus was selected because gift certificates are indeed sold at online auction sites, the price was explicit and believed to be high enough to have

of the online auction's seller. The feedback information indicated how buyers had rated the seller in past/"completed" auctions. Given the focus of this study, the feedback information included a (buyer's) negative rating and text comment review, and the seller's text comment reply to it. In accordance with the service recovery literature, the seller's text comment reply was constructed/manipulated to communicate different degrees of the three types of justice, interactional, procedural and distributive.

We constructed the negative rating and review to correspond with the result of a service failure in shipping, which is a top concern and source of complaints in online auctions (Noyes 2007; Pavlou and Dimoka, 2006; Resnick and Zeckhauser 2002) and in online retailing in general (Holloway and Beatty 2003). In addition, shipping has been used as a stimulus in notable online auction studies on reputation (e.g., Bolton, Katok and Ockenfels 2004). Consistent with the two types of negative text comment reviews reported by Pavlou and Dimoka (2006), abysmal and ordinary, the negative text comment review in this study was manipulated to be abysmal/severe ("Paid for next day shipping, now 10 days, not received yet") or ordinary/mild ("Paid for standard shipping, expected within 5 day, now 10, not received yet").

The seller's text comment reply was manipulated to communicate

- high/low interactional justice ([I am] "VERY SORRY!" [this happened], [null/not-addressed]),
- high/low procedural justice ("my policy is that I will contact shipper", "my policy is that you contact the shipper") and
- high/low distributive justice ([I] "Will FULLY REFUND ship[ping] fee", [null/not-addressed]).

some risk associated with selecting a seller, and it was general enough to minimize bias that may be associated with particular brands or products.

A 2⁴ between subjects complete factorial design was employed where subjects were randomly assigned to each treatment – see Figure 2 for an example of the reputation/feedback stimulus. After exposure to the seller’s reputation information, subjects then responded to the various scales and questions of the measurement instrument.

Sample

The sample was drawn from readers of a leading online auction news publisher and resource, auctionbytes.com. The publisher announced the study to its readership. Participants were entered into a lottery for \$50. A total of 328 respondents completed the online task and questionnaire. All had prior experience with online auctions and the average subject had participated in more than 50 online auctions.

RESULTS

Scale Reliability

Each scale in the study was taken directly, or adapted with minor changes, from well established scales. A multi-item scale to measure the severity of the negative text comment review, i.e., complaint severity, was used as a manipulation check and in testing H₂; and five multi-item scales were used as dependent variables. The dependent variables measured a subject’s belief about the seller’s text comment reply with respect to effectiveness of complaint handling (for testing H₁), attitude toward the seller (for testing H₃), bidding intent (for testing H₄), expected service quality (for testing H₅) and trustworthiness (for testing H₆).

Each scale had a high degree of reliability. The complaint severity scale consisted of five items and was based on the severity scale developed by Weun, Beatty and Jones (2004). The Cronbach’s alpha of a reliability test for this scale was .963. The scale for measuring the handling of the complaint in terms of perceived justice (e.g., Chebat and Slusarczyk 2005) was a

seven-item scale, adapted from Blodgett, Granbois and Walters (1993), Blodgett, Hill and Tax (1997) and Tax, Brown and Chandrashekar (1998). The Cronbach's alpha of a reliability test for this scale was .800; after one item was removed, it was .925. The scale for attitude toward the seller was adapted from Stafford (1996, 1998) and Day and Stafford (1997), consisted of seven items, and had a Cronbach's alpha of .979 in a reliability test. The scale for bidding intent consisted of six items and was adapted from the purchase intent scale used by Till and Busler (2000). The Cronbach's alpha of a reliability test for this scale was .975. Our scale of expected service quality was based on Spreng and Mackroy (1996) and Cronin, Brady and Hult (2000). The Cronbach's alpha of a reliability test for this scale was .990. The scale of a potential bidder/buyer's trustworthiness of a seller, which was adapted from De Wulf, Odekerken-Schröder and Iacobucci (2001), Ramsey and Sohi (1997) and Doney and Cannon (1997), had a Cronbach's alpha of .534 in a reliability test with all 6 items, and, one of .963 after 2 items were removed. The actual items used in each scale are listed in Table 1.

Complaint severity

As noted earlier, two levels of complaints were constructed; one was severe/abysmal and the other was mild/ordinary. It was expected that the severe complaint would be perceived as more negative than the mild complaint. Indeed, this was the case ($p < .01$).

Findings

Hypothesis H₁ suggests a positive relationship between the *effectiveness in handling a buyer complaint* and the degree of justice communicated in a text comment reply and H₂ proposes a negative relationship between the *effectiveness in handling a buyer complaint* and the severity of a complaint (i.e., the effectiveness of a fixed/set method for handling a complaint decreases as the severity of the complaint increases). H₁ is supported, as a higher level of each

type of justice corresponds to a better evaluation of the handling of a complaint ($p < .01$ for distributive justice, $p < .01$ for interactional justice and $p < .05$ for procedural justice). H_2 , however, is not supported as complaint severity was nonsignificant ($p = .68$). In addition, all n -way interaction effects among the three types of justice and complaint severity, $n \geq 2$, were not significant; this lack of significant interaction effects holds true also for all subsequent hypotheses (i.e., for all subsequent dependent variables).

Hypothesis H_3 , suggests a positive relationship between the degree of justice communicated in a seller's text comment reply and a potential bidder's *attitude toward the seller*. This hypothesis is supported for level of distributive justice ($p < .01$) and level of interactional justice ($p < .01$). The result for procedural justice was nonsignificant ($p = .38$).

Hypothesis H_4 , proposes a positive relationship between the degree of justice communicated in a seller's text comment reply is positively and a potential bidder's *intent to bid*. H_4 is supported for the level of distributive justice ($p < .01$). It is not supported for interactional justice ($p = .11$), nor for procedural justice ($p = .70$).

Hypothesis H_5 , pertaining to the positive relationship between degree of justice communicated in a seller's text reply and a potential bidder's *service quality expectations* is supported for the level of distributive justice ($p < .01$). Similar to the pattern of hypothesis 4, it was not supported for interactional justice ($p = .50$), nor for procedural justice ($p = .35$).

Finally, hypothesis H_6 , postulating a positive relationship between *trustworthiness* and the degree of justice communicated, was supported for the level of distributive justice ($p < .01$) and level of interactional justice ($p < .05$); it was not supported for procedural justice ($p = .88$).

Table 2 summarizes these results.

DISCUSSION

Most research on online auction reputations systems has focused on the relationship between aggregate/summary measures of reputation (e.g., overall reputation score and total number of negatives/complaints) and final outcome measures (e.g., final bid/price). One key conclusion, consistent with Kahneman and Tversky (1974), has been that consumers/bidders place much greater weight on a negative rating than on a positive rating; and the associated practical prescription has been to place more emphasis on avoiding (receipt) of a negative rating than on earning a positive rating.

Recently, however, the literature has reported that consumers read and place significant weight on “detailed” reputation system elements, i.e., the text comment reviews in a seller’s reputation feedback (Pavlou and Dimoka, 2006; Weinberg and Davis, 2005). This research investigates further the impact of text comments in online auctions by examining the relationship between (a seller’s) text comment *reply* (to a consumer’s/buyer’s text comment review). The results reveal a relationship between a text comment reply and reputation-related consumer perceptions, and the results show that using a justice-infused text comment reply (to a negative consumer text review, i.e., a complaint) can have a significant effect on the key reputation-related consumer/bidder perceptions of complaint handling, attitude toward the seller, intent to bid, service quality expectations and trustworthiness.

This research extends the literature by being the first to examine the affect of a text comment reply on a consumer’s reputation-related perceptions and by using a service-recovery framework in providing a new strategy for the important process of managing reputation perceptions when consumer’s publicize negative feedback. It also, perhaps, introduces the notion that, in general, service recovery principles could be effective in helping

sellers/retailers/manufacturers respond to and manage consumer-generated negative information that appears in a variety of online locations where consumers seek rating and review information and where sellers can provide their own text comments on a consumer's rating and review, e.g., Amazon.com, CircuitCity.com, epinions.com.

Online auction sellers can quickly dull the impact of negative feedback/review from a consumer/buyer by constructing a justice-infused text comment reply. This is important because bidders typically review text comments and place great value on them when assessing seller reputation and, ultimately, when making a bidding decision. Further, given the permanence (referred to as "persistence" in several fields outside of marketing) of text comments and their related effects, the sooner an effective text comment reply is posted, the better, because of its impact on future potential bidders/customers.

It was somewhat surprising that complaint severity was not significant. Recall that two levels of severity of the complaint were developed, and this non-significance was in spite of the fact that in a manipulation check it was indicated that each level was significantly different from the other; i.e., one was more severe than the other. One plausible explanation for this finding could be that potential bidders are highly sensitive to negatives/complaints in online-auction reputation systems, such that "a negative is a negative," period! Were this the case, it could be framed as being either good or bad from a seller's perspective. Perhaps *good*, in that a complaint of relatively higher severity can be handled/managed as effectively as one of lower severity with similar effort/reply. However, perhaps *bad*, as a relatively less severe complaint has just as negative an effect as a more severe complaint; hence, even a somewhat less severe complaint can be a serious problem for a seller.

Naturally, there are some limitations in this study. One should be cautious in assuming that the results in this study apply to all types of online locations where rating and review information is available and to all types of complaints. This study investigated only online auctions and one type of complaint. Yet, eBay does generate the greatest gross merchandise sales of all places where consumers can shop online, and shipping has been reported as the top consumer concern and complaint with respect to online auctions and retailing.

Finally, while this study reflects communications in an online channel, we believe that relevant implications may prevail in offline/"physical" channels because online information is becoming increasingly ubiquitous (e.g., wireless internet via mobile technology, such as cell phones) and is now routinely used by consumers for decision making in all types of shopping channels, i.e., for physical stores also, not just shopping online! For example, 67% of new-car buyers search online as part of their shopping process before buying from a dealer, offline (J.D. Power 2005); and, in a study of 11 different product categories, comscore reports that 63% of consumers who searched online and made a purchase, made the purchase *offline* (Mills 2006). Retailers and other providers should not assume that consumers shopping in physical locations are unaware of and immune from complaints or information posted online.

FUTURE RESEARCH

There is much more about this topic that we need to learn and understand. Future research should investigate other classes of complaints, either service-related issues beyond delivery/shipping, such as payment processing, communications, or product-related issues, such as product condition/quality. Further, it would be useful to test the effectiveness of a provider "reply" in other online contexts where consumers post and access rating and review information.

The latter is important because consumers are increasingly using and finding value in the Web and other electronic media before making a purchase and for social purposes, such as the expression and sharing of opinions or expertise, and the volume of “consumer-to-consumer”/“people-to-people” interactions is increasing. In fact, it is, arguably, now “normal” for consumers to seek out others’ opinions online, e.g., 34% of people reported that the Internet played a “crucial” or “important” role in finding advice or support from other people, for consumption activities such as investing or selecting a school/college (Horrigan and Rainie 2006). Indeed, the most, influential and persuasive form of communication in many cases, as indicated in studies conducted prior to and after the introduction of the Web, is that from a consumer to a consumer. Consumers place more trust, on average, in information generated/expressed by other consumers than in messages created and communicated by marketers/providers (e.g., Blackshaw and Nazzaro 2004; Katz and Lazarsfeld 1955; Nielsen Buzz Metrics 2006; Richins 1983).

In addition, the “next generation” of consumers, the 79+ million tech-savvy “Millennials,” frequently access consumer generated content (e.g., ratings and reviews) at online settings such as video sharing site YouTube.com, social networking site MySpace.com, and blogging site Blogger.com (Mello, 2006). In fact, these three websites, whose popularity is arguably driven by Millennials, were ranked 3rd, 6th and 9th, respectively, in *global* traffic by Alexa.com as of February 3, 2009. We believe that these different types of online settings are fertile ground for learning more about the impact of provider replies to complaints or, more broadly, provider comments to consumer concerns/issues.

We also believe that this line of research has potential within the realm of online games/“worlds” or other virtual places, as they provide “real” marketing opportunities for

providers and their brands. Over the past 3-4 years, massively multiplayer online games (MMOGs) or role playing games (MMORPGs) – where consumers/players “live,” engage and *create* in a virtual world – have evolved dramatically with respect to their impact and recognition in the “real”/physical world. For example, virtual items from the online game Everquest, that are usable only in the virtual world of Everquest, have sold on eBay for thousands of dollars in *real* money; one player in the game Project Entropia spent \$100,000 for a game item (Terdiman 2005). Sony, Everquest’s provider, has opened Station Exchange (see <http://stationexchange.station.sony.com>) an online auction service that facilitates the exchange of real money and virtual game elements, where nearly \$2,000,000 has changed hands among bidders and sellers. Anshe Chung created a net worth exceeding \$1,000,000, entirely through actions inside the virtual world of Second Life (Hof, 2006). The total size of today’s virtual economy, again, in *real* currency, may be on the order of billions of dollars (Castranova 2005). It is likely that in these virtual worlds, consumer (content) creations and communications, including complaints, will have increasing (real) impact in the “total” (i.e., real and virtual) world.

Finally, we see an opportunity to apply customer lifetime value modeling (e.g., Berger and Nasr 1998; Rust, Lemon, and Zeithaml 2004; Venkatesan and Kumar 2004) to situations where consumer to consumer communications are operative online. For example, an organization adding its voice to a conversation with consumers about ratings and reviews or reputation (on the organization) could impact the future behavior and cash flows of not only its current customers, but also of future potential customers. Indeed, as future potential customers will likely access and use information from an online source in their decision making, an organization’s comments could influence their purchase probabilities and repeat purchase rates with a given seller/organization.

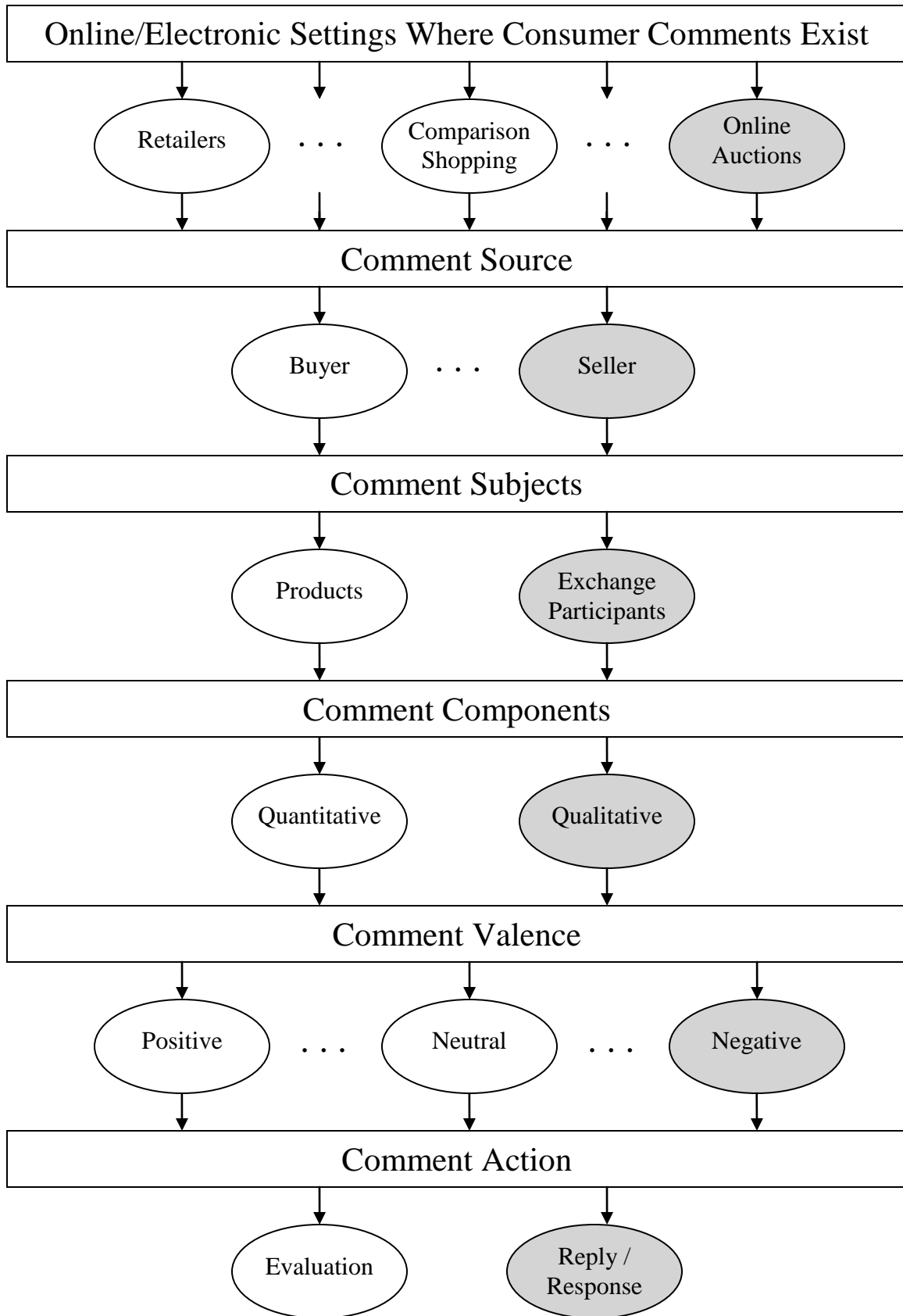


FIGURE 1 - Rating and Review Elements

When viewing this auction, you see that the auction seller (of the \$150 store gift-certificate) has previously participated in 7 auctions, all as a seller.

The seller received positive feedback in 6 of those auctions and negative feedback in 1 of those auctions

The seller's profile is as follows:

auctions received positive feedback reviews: 6

auctions received negative feedback reviews: 1

The comments associated with the 1 negative feedback review are:

Complaint (by Buyer): Paid for next day shipping, now 10 days, not received yet

Reply by Seller: My policy is that you contact the shipper. Will FULLY REFUND ship fee

FIGURE 2 - Experimental Online-auction stimulus including manipulated components

Scale	Cronbach's α
Complaint Severity (semantic differential): Mild to Severe Minor to Major Insignificant to Significant Slight to Key Trivial to Noteworthy	.963
Complaint Handling The seller found the right solution to the buyers complaint Given the circumstances, I felt that the seller offered adequate compensation The reply by the seller was friendly The seller treated the buyer with courtesy The seller apologized for the problem I felt that the buyer was treated fairly	.925
Attitude toward the Seller My feelings about auction seller are (semantic differential): bad to good negative to positive unfavorable to favorable unpleasant to pleasant downbeat to upbeat awful to nice gloomy to bright	.979
Intent to Bid Intent placing a bid for \$150 gift certificate (semantic differential): unlikely to likely improbable to probable uncertain to certain unsure to sure unconvinced to convinced unconfident to confident	.975
Expected Service Quality Service quality you would expect from auction seller (semantic differential): unexceptional to exceptional poor to excellent worst to best awful to wonderful low to high inferior to superior substandard to outstanding low-grade to first-class failing to amazing	.990
Trustworthiness This auction seller is trustworthy This auction seller is reliable This auction seller is reputable This auction seller is dependable	.963

TABLE 1 – Scale Reliability

	H ₂ Complaint Severity	Distributive Justice	Interactional Justice	Procedural Justice
H ₁ Complaint Handling	ns	<i>p</i> < .01	<i>p</i> < .01	<i>p</i> < .05
H ₃ Attitude toward Seller	ns*	<i>p</i> < .01	<i>p</i> < .01	ns
H ₄ Intent to Bid	ns*	<i>p</i> < .01	ns	ns
H ₅ Expected Service Quality	ns*	<i>p</i> < .01	ns	ns
H ₆ Trustworthiness of Seller	ns*	<i>p</i> < .01	<i>p</i> < .05	ns

* Formal hypotheses for complaint severity were not formed for these other dependent variables; however, when tested, the results were nonsignificant.

TABLE 2 - Hypothesis Test Significance Results

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