

What determines customers' evaluation of online reviews? The role of review and product characteristics

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Online reviews play an important role in the uncertainty reduction efforts of customers. In this study we investigate which factors influence the customers' evaluation of online reviews and prove that both product and review characteristics play a role in the perceived helpfulness.

During the last years there has been a huge increase in available choice options for customers (Schwartz et al. 2002), a phenomenon called hyperchoice (Mick, Broniarczyk, and Haidt 2004). But confrontation with extensive options makes decision making more difficult (Schwartz et al. 2002), partly because customers feel more responsible for their choices (Mick et al. 2004). As a result consumers will experience more uncertainty (Anderson 2003). Being confronted with an extensive assortment size may be especially likely in an online context. In addition, products online are intangible which is an additional source of uncertainty (Eggert 2006). According to the uncertainty reduction theory (Berger, and Calabrese 1975), customers will engage in uncertainty reduction efforts to alleviate and eliminate risk caused by uncertainty and to maximize outcome value. Online customer reviews have become an important source of information and can play a prominent role in this process (Chevalier, and Mayzlin 2006). While previous research has mainly focused on the link between customer reviews and product sales (Chevalier, and Mayzlin 2006; Hu, Liu, and Zhang 2008), this study explores the use of customer reviews in a pre-decision context.

Confronted with an extensive number of alternatives, customers have to make a selection of considered products beforehand for which they subsequently engage in an online search. In an attempt to make an adequate decision, they may consult customer reviews. In the present study we investigate factors that influence customers' evaluation of the helpfulness of reviews. We focus on Amazon.com ratings of helpfulness of reviews. These ratings result from a two-step process. First, customers have to decide whether or not they will rate the helpfulness of a particular review. Second, if they decide to provide a rating, they will have to decide on a positive or negative rating. The current paper investigates whether and how these two decisions are affected by product and review characteristics, like whether the review was positive or negative, the number of words, the position of the review, whether the review is written by credible reviewer, the sales rank of a product, and the type of product.

Our data consists of both product features and customer review characteristics for 260 different products, of which 116 were books and 144 CD's, taken from the public website of Amazon.com. We collected information on the price, the position on the Amazon bestseller list (sales rank) and the number of reviews written for the product. We included products with different sales ranks, with groups ranked from 1 to 25, 101 to 125, 501 to 525, 1001 to 1025, 5001 to 5025 and 10001 to 10025. For each product we took a maximum of 20 reviews into our sample, which resulted in a total of 4229 reviews, of which 1664 (39,3%) were book reviews and 2565 were CD reviews (60,7%). For 40 products there were no reviews, so we did not include them in our analysis. For each review, we counted the number of words in the review, the position the review had on the website, whether it was a top 100 – reviewer (i.e. credible reviewer), the score (ranging from 1 to 5) given by the reviewer to the product and also the number of customers that voted on the helpfulness and the percentage of voting customers that found it helpful. To explore which characteristics influence revealed customer appreciation we used multilevel regression analysis.

The present findings suggest that whether the review is positive or negative, its length and position, the reviewer credibility, the sales rank and the type of the product are important predictors for the review to get a helpfulness response by the reader. Whether this response is positive and thus indicating that the reader values this review or not depends on the sales rank (depending on the type of product), number of words and score given by the reviewer.

Customers are responding more to negative reviews, which presumably render them more uncertain about their inclinations to purchase, than to (moderately) positive reviews. At the same time, however, positive reviews are rated as more helpful than negative ones. While the former can be due to the fact that customers react more extensively to inconsistency, the latter can be explained by peoples' tendency to systematically prefer information that is consistent rather than inconsistent with their own standpoint (Festinger 1957). A quadratic relationship with review length shows that moderately long reviews are considered more helpful than short or long reviews. This represents a trade-off between a balanced message with different arguments and too much information. Regarding the position of a review, book reviews further down the website, which happen to be the older reviews, attract more responses. Reviews posted long after the product release will get less attention. For CD reviews, this position effect was not obtained. Consumers tend to selectively pay more attention to reviews from top 100-reviewers, but no effect was found on the valence of the vote (helpful or not). Obviously, reviews for bestselling products attract more votes than reviews for products with low sales. However, reviews for products further down the sales ranking are perceived as more helpful. Indeed, they may be more unknown products, for which extra information can be more helpful. This relationship cannot be found for CD's. Finally, book reviews attract more votes regarding their helpfulness than CD reviews. Possibly, customers rely more on the opinions of others for books than for CDs. The latter are more subject to personal taste.

To conclude, our results show a significant effect of several product and review characteristics on the evaluation of online reviews. For future research it might be interesting to examine the influence of experts on the evaluation of negative reviews. Also an evaluation of the review content, such as objectivity, and its connection to the valuation of the review by the

customer would be interesting. Finally, since we believe that the degree of uncertainty is essential to explain potential buyers' assessment of reviews, a further step would be to test this by manipulating the degree of uncertainty.

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