Abstract

Given a set of reviews of products or merchants from a wide range of authors and several reviews websites, how can we measure the true quality of the product or merchant? How do we remove the bias of individual authors or sources? How do we compare reviews obtained from different websites, where ratings may be on different scales (1-5 stars, A/B/C, etc.)? How do we filter out unreliable reviews to use only the ones with "star quality"? Taking into account these considerations, we analyze data sets from a variety of different reviews sites (the first paper, to our knowledge, to do this). These data sets include 8 million product reviews and 1.5 million merchant reviews. We explore statistic- and heuristic- based models for estimating the true quality of a product or merchant, and compare the performance of these estimators on the task of ranking pairs of objects. We also apply the same models to the task of using Netflix ratings data to rank pairs of movies, and discover that the performance of the different models is surprisingly similar on this data set.

Keywords

ranking; online reviews; data mining

Full Text: PDF

Product ratings refer to the product being advertised, while Seller Ratings refer specifically to the merchant advertising the product. For reference, the product rating here is in orange. Here’s how Amazon.com’s product and seller rating appear on Google Shopping. Reviews inform shoppers of the quality of service they can come to expect from a business they are interested in purchasing from – which can go a long way in influencing customers who may be on the fence. Additionally, it can help you stand out on Search and Shopping Ads. "By no means is [the rating] going to impact everyone that's looking at your store," says Jeff Coleman, VP of Marketplace Strategy at CPC Strategy. The higher the quality of product reviews that customers received, the more products they buy from on-line shops. As the number of products and options increase, Chinese customers need impersonal, impartial, and detailed products reviews. Specifically this thesis project will examine aggregated product reviews from different on-line sources by analyzing some existing western companies. Following this the thesis demonstrates how to aggregate product reviews for an e-business website. Of course there is a strong feedback effect as if there are highly ranked pages, this high ranked content will bring more visitors, more visitors potentially means more buyers, ultimately leading to more user written reviews - which leads to more fresh reviews and higher page ranking. These star ratings, aggregated from review sites all around the web, allow people to find companies that are highly recommended by online shoppers like them. Google Seller Ratings are based on feeds from a number of review sites like Trustpilot and Google review services. Is my TrustScore the same as a seller rating? A company’s composite rating is calculated based on ratings from several sources on a scale of 1-5, so your seller rating will not be a direct match to your company’s TrustScore.