## **Comparing Consumer-Produced Product Reviews across Multiple Websites**

TREO Talk Paper

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## Abstract

Online consumer reviews have been extensively studied. However, existing literature analyzing online consumer review data mostly relies on a single data source, resulting in potentially biased analytics conclusions. Many websites encourage consumers to post reviews of their purchased products, so that new consumers can evaluate these reviews for the same product across different websites to help them make purchasing decisions. For example, if a U.S. consumer needs to buy a new refrigerator, he or she may check the online consumer product reviews for a particular refrigerator model from large retailer stores' websites such as Amazon, Walmart, Best Buy, Home Depot, and Sears, and then compares the reviews to decide whether to purchase this model and if so where to making the purchase. Confusions often arise in this process because there often exist substantial discrepancies in customer reviews across different retailers on the same product. For instance, the reviews on Best Buy may look very favorable whereas those on Amazon are not so positive. It may be helpful if we can develop a method to help consumers identify the root cause of such discrepancies in customer reviews. Clarifying such confusions can help consumers reduce concerns to make up their mind for their purchases, therefore benefiting both consumers and retailers.

Through text analytics and sentiment analysis we comparatively examine the underlying patterns of online consumer reviews of several large retailers including Sears, Home Depot, and Best Buy for a same product. Afterwards, we combine online consumer reviews from these large retailers and conduct an overall text analytics and sentiment analysis. The overall results are further compared with the results from individual retailers. The findings show that the sentiment of the online consumer reviews could vary substantially so relying on a single data source to make purchase decision is not a wise idea. Based on the results, we further propose a framework to comparatively examine and integrate multiple data sources for social media analytics of online consumer reviews. This study offers important managerial implications and identifies several new research directions for social media analytics.