

The Hong Kong Polytechnic University
Department of Logistics and Maritime Studies
Research Seminar

Research on impacts of online reviews from channel perspective

by

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(Conducted in English)

Abstract:

Online reviews have begun to show its tremendous influence on consumers' purchase decisions. A growing body of empirical research has studied the impact of online reviews on consumers' purchase behaviors and on firms' marketing strategies; yet theoretical study on the impacts of this emerging media is not sufficient, especially from supply chain channel perspective. In practice, abundant products are sold through distribution channels with manufacturers and retailers. Understanding the implication of online reviews on the pricing decisions and profits of players in channel perspective is of practical interest. This dissertation attempts to achieve theoretical and practical innovation in the following three aspects.

We first investigate the effects of online consumer reviews in a dual channel where a manufacturer distributes a product through a retailer channel and an internet channel. By deriving both players' optimal pricing and profits with online reviews. We find that under the decentralized structure, positive online reviews only affect the manufacturer's prices but negative online reviews may lower all prices. Both players have the chance to profit from positive online reviews, but negative online reviews depress the manufacturer's profit. Under the vertically integrated structure, we demonstrate that positive online reviews not always favor the whole supply chain but negative online reviews are always detrimental.

We then examine the impacts of online review distributions, the average rating and the variance, in a supply chain with two competing manufacturers selling vertical differential products through a common retailer. By a two-period game model, we show that both the average rating and the variance play significant roles in affecting the upstream competition and profits of channel members. Specifically, from the average rating dimension, we demonstrate that there exists a Pareto zone in which all members profit from a higher average rating of the high-quality product simultaneously. In contrast, the improvement of the average rating of the low-quality product may hurt both manufacturers but always benefit the retailer. Then, from the variance dimension, the low-quality manufacturer has a higher probability to benefit from a higher variance of either product. We also show that it is beneficial for the retailer to have a higher variance of each product.

Furthermore, we provide a theoretical analysis of the cooperative stimulation of online reviews in a supply chain with a manufacturer and a retailer, under decentralized supply structure and centralized supply structure. We aim to understand whether such behavior benefits the manufacturer and the retailer at the same time, and how the cooperative stimulation affects the pricing decisions and profits of both players under different channel structures.

Bio:

Yang Wenjuan is currently a PhD student under the supervision of Prof. Yan Hong and Prof. Zhang Jiantong. Her research interests are supply chain management and consumer behavior.

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All are welcome!