

عنوان مقاله:

Two-Level Supply Chain Quality Improvement Through a Wholesale Price Coordination Contract on Pricing, Quality, and Services

محل انتشار:

فصلنامه بین المللی مهندسی صنایع و تحقیقات تولید, دوره 30, شماره 3 (سال: 1398)

تعداد صفحات اصل مقاله: 26

نویسندگان:

.Seyyed-Mahdi Hosseini-Motlagh - School of Industrial Engineering Iran University of Science and Technology

.Mina Nouri-Harzvili - School of Industrial Engineering Iran University of Science and Technology

.Roza Zirakpourdehkordi - School of Industrial Engineering Iran University of Science and Technology

خلاصه مقاله:

Nowadays, competitive market creates the necessity of quality improvement at different levels of supply chains (SCs). This paper contributes to the SC coordination literature and proposes a bilateral wholesale price (BWP) contract for optimizing pricing and quality improvement decisions in different echelons of a cell phone SC. The SC comprises a manufacturer who deals with determining the product quality and a retailer who seeks an optimal strategy for price, after-sales service, and service level in a periodic review inventory system. First, the decentralized model is investigated, where each member makes decisions individually. Afterwards, a benchmark is obtained for the whole system optimality through centralization. To convince the members to choose the benchmark decisions, the BWP contract is proposed and is shown to be capable of simultaneous coordination of the decisions. The analyses showed that in a market which is sensitive to quality, service, and price, the application of BWP facilitates greater investing in such quality improvements while the members' profitability is guaranteed in comparison to the traditional case. Moreover, this application can increase the SC service level, since it enables the members to hold more safety stock even under high inventory costs. Overall, the proposed coordination model for pricing, quality, after-sales service, and service level leads to the optimal performance of the SC and its members while it is beneficial for the customers

کلمات کلیدی:

Quality improvement, Supply chain coordination, Pricing, Service, Periodic review inventory system, Bilateral wholesale price contract

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/992141>

