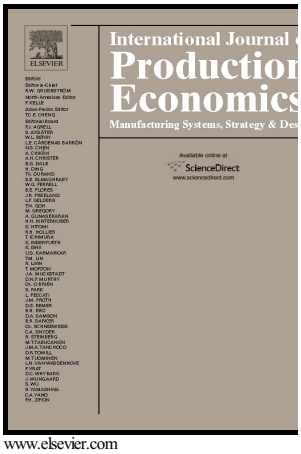

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Abstract

In this paper, considering a supply chain subject to stochastic demand, we present a newsvendor model to study the game process between a supplier owning private cost information and a retailer suffering from inventory inaccuracy problem. We present that by setting the contract parameters appropriately, both partners have the right incentive for maximizing the total supply chain profit: the supplier share information actively by choosing the contract designed for his marginal production cost, while the retailer's rational decision concurs with the overall optimal decision. We further study the supply chain performance and the interval of the coordinating contract parameters under different situations by illustrating the model through some numerical assumptions, establishing and highlighting the conditions under which the RFID technology is preferable to the system.

Keywords: Supply chain coordination; Asymmetric information; Inventory inaccuracy; Radio frequency identification