

The Impact of Bundling Perishable Products on Retailer and Producer Total Profits

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Standard discount bundles combining different product types are common strategy of producers, wholesalers, and retailers, to increase the overall sales. This paper deals with a producer that sells the items separately but considers selling standard discount bundles having same price and product mix, for a single period offering. The retailer is offered the discounted bundles allowing a purchase of more products for their money. The purchased bundles are unpacked by the retailer and the items are sold to the end-users one by one. Thus, the end-user demand distribution is unchanged, but the discount affects the retailer order quantity. The paper explores the producer/wholesaler profit maximizing bundle content (the ratio among the products in the bundle) and the bundle price. A general analytic solution for two items is described. Numerical examples demonstrate the solution for special cases of Uniform distribution and the importance of bundle optimization (content and price). The analysis reveals that bundling can be a coordination tool which may increase the expected profit for both parties: producer and retailer alike.