Dominate Retailer Supply Chain Coordination under

Return and Buyback Policies

Student: Kuei-Feng Lee Advisor: Dr. Chi-Yang Tsai

Institute of Industrial Engineering and Management Yuan-Ze University

ABSTRACT

In this study, there are two period of sales and assume a dominate retailer with a manufacturer in the systems. In this first period of sales, retailers offer customers unconditionally return, the product and refund. The return the product and surplus product will continue to sell to the second period with a special discount. And also give customers the unconditional return and refund in the second period. At the end of the second period of sales, retailers refresh the remaining product and the return product, the manufacturer repurchase these products with repurchase price and through the third parties obtained surplus value of the product. Nowadays, this type of retailers, such as Wal-Mart, the "power" to determine the retail price of the product, so that they can maximize their own benefit, because there are many manufacturer like with this type of retailers for sales their product to make more benefit. Difference between centralized and decentralized management, and in the dominate retailers consider maximizing their own benefit, will not make the profits of the supply chain maximum. So how the manufacturer cooperate with dominate retailer is one. of the problem.

In this study discuss the dominate retailers any different with decentralized management and centralized management. Under the dominate retailers management the manufacturer how to accept the conditions which dominate retailers proposed. So with a profit sharing contracts, which develop acceptable conditions to manufacturer, and also analyze the dominate retailers sensitivity analysis, which change the parameter effect of the decision values and overall profit.

Keyword: Two-echelon Inventory System · Continuous-Review (s,S)Inventory Policy · Inventory Record Inaccuracy · Simulation · Flexsim