

The Hong Kong University of Science and Technology

Dept of Information Systems, Business Statistics
and Operations Management
Dept of Industrial Engineering & Logistics Management
Joint Seminar Announcement

Target Oriented Decision Making and Its Role in Supply Chain Performance

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Date : 4 March 2016 (Friday)
Time : 11:00 - 12:15 pm
Venue : Room 3003, LSK Business Building



Abstract: In this talk we will discuss the target-oriented decision making in the areas of inventory management and supply chain management. Target attaining is a ubiquitous phenomenon in the business world. For example, managers are often given a revenue/cost target to reach, which can significantly affect their decisions. We investigate such decision making in the newsvendor setting, in a multiple-period framework, as well as in a supply chain. We adopt a satisficing measure to evaluate a newsvendor's decision in reaching a profit target. We find that the newsvendor's optimal ordering quantity increases with the target level and more interestingly, if his target is proportional to the profit margin, he would over-order low-margin products and under-order high-margin products. In a supply chain where the retailer is target oriented and the supplier is a profit maximizer, we find that in some cases, the supplier will set a wholesale price that is approaching to the retail price and reap all the supply chain profit. Furthermore, with a target-oriented retailer the supply chain can sometimes achieve the same efficiency level as that in a centralized system. On multi-period target-oriented decision making, we incorporate the financing decisions and demonstrate the optimal financing policies. We also discuss its applications in inventory management.

Bio: Lucy Gongtao Chen is an Assistant Professor in the Department of Decision Sciences at NUS Business School, National University of Singapore. She obtained her B.E. in Management Information System from Tsinghua University and her Ph.D. in Operations Management from the Johnson School of Management, Cornell University. Her research interest mainly lies in the areas of Inventory Management, Supply Chain Management, and interfaces between Operations and Marketing/Finance. Her work has been published at journals such as *Management Science*, *Operations Research*, *Manufacturing & Service Operations Management*, *Production and Operations Management*, and *Journal of Operations Management*. She also won the Honorable Mention for the 2007 M&SOM Student Paper Competition.