

Department of Information and Systems Management  
School of Business and Management  
The Hong Kong University of Science and Technology

Seminar Announcement

*On Managing Multiechelon Systems under Stock Disposal*

by

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**25 April 2008 (Friday)**

**11:00 – 12:30 pm**

**Room 4379, ISMT Conference Room (L17/18)**

~~~~~ All interested are welcome ~~~~~

**Abstract**

We consider a nonstationary multiechelon inventory system under stochastic demand in which disposals of excess stock are allowed at each echelon. We characterize the optimal policy, which represents a novel form of the echelon basestock policy (referred to as the nested, bottom-up, echelon policy), where critical numbers depend on the echelon state of the system. While the optimal policy does not lead, in general, to the Clark-Scarf decomposition of the objective function, we identify an easily implementable (though not necessarily optimal) class of policies that does. Further, we provide conditions under which additional structural properties of the optimal policy emerge that lend themselves to direct managerial interpretation and useful guidelines regarding model implementation in practice. Finally, we propose a heuristic to numerically solve the problem and illustrate the results.

**Biography**

Alexandar Angelus is an Associate Professor of Operations Management at SMU. His research areas include inventory theory, stochastic assembly systems, dynamic programming and capacity management. He has published in Management Science and Operations Research, where he has also served as a frequent reviewer. Prior to coming to SMU in January of 2008, he taught at the Haas School of Business at UC Berkeley. Following his PhD from the Graduate School of Business at Stanford, Dr. Angelus worked in industry as a management consultant in the area of operations strategy and supply chain management. During his industry career, he came across a number of interesting and mostly unexplored operations problems, one of which is addressed in this talk.