

The Hong Kong University of Science and Technology
Department of Information Systems,
Business Statistics and Operations Management

Seminar Announcement

***Nature of Coordination Contracts for Supply Chain Management:
Structural Results and Classifications***

by

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Date: Thursday, 30 September 2010

Time: 3:10 – 4:10 pm

Venue: Room 4379, ISOM Conference Room (Lift 17/18)

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

**Abstract:** Supply chain coordination and its associated coordination contracts have been an active research area for supply chain management research. However, little has been done on addressing matters of design, evaluation, and implementation for these coordination contracts. In this paper, based on the group decision-making and game theory, we define a framework for supply chain contracts and classify a number of well-studied contracts into groups. We demonstrate, with examples, that coordination contracts can be measured by properties of the path-dependency, the sequence of decision-making, and the reliance on side payments. With precise mathematical definitions, and subsequently developed structural properties and management insight, not only are we able to measure the goodness of supply contracts but also to reveal the nature of the supply coordination. Moreover, with one dimension measure coordination contracts in a sense of weak, ordinary, and strong, and the second dimension measures coordination contracts in terms of decision sequence of dependency, independency, and voluntary compliance, we classify coordination contracts existing in the literature into a three by three matrix.

**Biography:** Houmin Yan is a professor at the Department of Systems Engineering and Engineering Management, the Chinese University of Hong Kong, where he directs the Executive Master of Science Program in Logistics and Supply Chain Management and the Laboratory for Supply Chain Management and Enterprise Resource Planning. He was an Associate Director and Science Advisor for Hong Kong R&D Center for Logistics and Supply Chain Management Enabling Technologies. He was a tenured Associate Professor at the School of Management, the University of Texas at Dallas.

In 2004, his paper (co-authored with Gan and Sethi) "Coordination of Supply Chains with Risk-Averse Agents" received the Wickhan-Skinner Best paper Award from the 2nd World Conference on Production and Operations Management and the Society of Production and Operations Management(POMs). In 2005, his paper (co-authored with Lee and Tan) "Designing An Assembly Process with Stochastic Material Arrivals" has been awarded the Best Paper Award for "the focus issues on Operations Engineering for 2003-2004 from the Institute of Industrial Engineers(IIE)."

He received his B.S. and M.S. from Tsinghua University and his Ph.D. from the University of Toronto. He is a member of INFORMS.