

*The Hong Kong Polytechnic University*  
*Department of Logistics and Maritime Studies*  
*Research Seminar*

## **On-Demand Service Platforms**

by

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**Date: 10 October 2018 (Wednesday)**  
**Time: 9:00am - 10:00am**  
**Venue: M714, Li Ka Shing Tower**  
**The Hong Kong Polytechnic University**  
**(Conducted in English)**

### **Abstract:**

An on-demand service platform connects waiting-time sensitive customers with independent service providers (agents). This paper examines how two defining features of an on-demand service platform—delay sensitivity and agent independence—impact the platform's optimal per-service price and wage. Delay sensitivity reduces expected utility for customers and agents, which suggests that the platform respond by decreasing the price (to encourage participation of customers) and increasing the wage (to encourage participation of agents). These intuitive price and wage prescriptions are valid in a benchmark setting without uncertainty in the customers' valuation or the agents' opportunity costs. However, uncertainty in either dimension can reverse the prescriptions: Delay sensitivity increases the optimal price when customer valuation uncertainty is moderate. Delay sensitivity decreases the optimal wage when agent opportunity cost uncertainty is high and expected opportunity cost is moderate. Under agent opportunity cost uncertainty, agent independence decreases the price. Under customer valuation uncertainty, agent independence increases the price if and only if valuation uncertainty is sufficiently high.

### **Bio:**

Terry Taylor is the Milton W. Terrill Chaired Professor of Business Administration in the Operations Information and Technology Group, Haas School of Business at the University of California, Berkeley. Prior to his position at Berkeley, he was a professor at Columbia Business School and at Dartmouth's Tuck School of Business. He received his Ph.D. and B.S. degrees from Stanford University.

His research addresses issues in supply chain management, economics of operations management, social responsibility in operations management, sharing economy platforms, and the marketing-operations interface. He is a Departmental Editor for *Production and Operations Management* and an Associate Editor for *Management Science*, *Manufacturing & Service Operations Management*, and *Operations Research*. In addition to receiving four teaching awards at Berkeley and Columbia, he has been named a Top MBA Professor by Bloomberg BusinessWeek as well as one of the Best 40 B-School Profs Under the Age of 40 by Poets & Quants. Prior to his academic career, he was a consultant for McKinsey & Company.

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**All are welcome!**