The Hong Kong University of Science and Technology Dept of Information Systems, Business Statistics and Operations Management Dept of Industrial Engineering & Decision Analytics Joint Seminar Announcement



Data-Driven Newsvendor Problem with Pricing Decision by Prof. Ye LU Professor Southern University of Science and Technology

Date	:	12
Time	:	10:
Venue	:	Cas

12 May 2023 (Friday) 10:30 – 11:45 AM Case Room 1001, LSK Business Building



**Abstract**: We study a price-setting newsvendor problem in which the retailer exercised only a few price points with a sample set of demand realizations on each exercised price. Given this limited demand information, we set up a robust optimization problem of maximizing worst-case profit or minimizing maximum regret. We show that this robust problem can be reduced to an easy-to-implement optimization problem. This new model has some advantages in comparison with traditional models, which assumes that demand model follows some specific form.

**Bio**: Prof. Ye Lu received a PhD in operations research from MIT in 2009, a PhD in mathematics from the University of Notre Dame in 2006, and a BS in applied mathematics from Tsinghua University in 2002. His research interest is to use optimization and statistical models to solve real world problems. He joined CityU in 2009 and now a professor at department of management science. He is also a professor and an associate dean of business school at Southern University of Science and technology.