Title: Optimal Pricing and Promotion Strategies in IT-Enabled Retail Environment

Speaker: Mr Zou Xiao

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Abstract:

Recent emergence of retail technologies and data analytics has drastically changed the landscape of retail industry in terms of consumer behavior and firm pricing and promotion strategies. From consumer's perspective, consumers nowadays can make use of channels such as mobile phones to get real-time price and promotion information about product and service. From retailers' perspective, most retailers have invested heavily in CRM systems and data analytics as the center of business activities. This thesis focuses on two recent retail technologies: Location-based service (LBS) and Customer Relationship Management (CRM) Systems and studies their economic impact on pricing, promotion and competitive strategies. Specifically, Study 1 presents a complete analytical study on optimal pricing and adoption strategy with LBS. The results show that the optimal LBS strategy for LBS infomediary as a coupon delivery channel are neither retailer adopts LBS or both retailer adopt, depending on the size of uninformed segments and reach of LBS. The location feature of LBS would let the retailers to price more aggressively in order to get more demand at initial stage, which would limit the equilibrium profit in the subsequent pricing stages. We compare the results for both Internet and LBS infomediaries, and discuss the implications of our findings on retailers' pricing, promotion and technology adoption strategies for LBS.

Study 2 presents an empirical approach to determine the optimal pricing and promotion strategies based on behavioral-based segmentation. The business value of CRM Systems replies on whether retailers can target to the right customers and employ targeted pricing and promotion strategies. By analyzing the data on consumers' profile and their purchase history from CRM Systems of a fashion retailer, we develop a customer profitability model and segmentation strategy based on consumer demographics and behavioral-based characteristics using finite-fixure model. The results can be used to assess the profit impact of pricing and promotion and provide key implication on the optimal segment targeting strategy for both research and practice.

Bio
Mr Zou Xiao is currently a Ph.D. candidate in the Department of Information Systems, at the
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Honors from the Department of Information Systems, National University of Singapore in
2009. His research interests include economics of IT, retail analytics, mobile commerce and
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