Speaker: SoYeon Chun, Georgetown University

Date: Friday, October 30, 2015

Time: 10:30 – 11:30 AM

Location: VMH 1511

Consumer Behavior, Revenue Management, and the Design of Loyalty Programs

Author(s): Anton Ovchinnikov, Dan Iancu, Nikolaos Trichakis

Abstract:
While originally viewed as marketing efforts, consumer reward loyalty programs have grown substantially in size and scope during the last two decades, to the extent that they now significantly interact with other firm functions, including operations, accounting and finance.

In the first part of the talk, we consider a question regarding the design of loyalty programs, which has been at the forefront of recent changes in the airline industry: should frequent-flyer status be awarded based on the money spent or miles flown? We present a model for strategic consumers’ decision and endogenously derive the demand as a function of prices, loyalty program design, and premium status qualification requirements. We then discuss firm's optimal pricing and design decisions, and provide managerial implications. [Based on joint work with Anton Ovchinnikov (Queen’s)]

In the second part of the talk, we consider a new currency (the points) introduced by a loyalty program, and study the problem of optimally setting the monetary value of points in a multi-period setting. We first identify important ways in which pricing in this new currency differs from traditional pricing in cash, and propose a model capturing important loyalty program considerations that are absent from standard operations/revenue management models. We then characterize the optimal pricing policies, and provide managerial insights and prescriptive recommendations. [Based on joint work with Dan Iancu (Stanford) and Nikolaos Trichakis (HBS)]

Bio:
So Yeon Chun is an assistant professor of Operations and Information Management at the Georgetown University. Her research interests lie in the fields of revenue management/operations and marketing interface with a focus on consumer loyalty programs. In
particular, she is interested in data-driven research (based on both experimental and secondary data) with applications to the hospitality, transportation, and retail industries. She holds several patents for demand analysis and decision support systems and has published articles in Operations Research, SIAM Journal on Matrix Analysis and Applications, and Multivariate Behavioural Research. So Yeon holds a Ph.D. in Operations Research, an M.S. in Applied Statistics from the Industrial Engineering at the Georgia Institute of Technology.