Speaker: Professor Rahul Telang, Heinz College, Carnegie Mellon University

Date: Friday, September 13, 2013

Time: 1:15 - 2:30 pm

Location: Room 1520

Title: The Impact of Likes on the Sales of Movies in Video-on-Demand: a Randomized Experiment

Abstract: Peer-rating systems have become an increasingly popular way for consumers to learn about the quality of products. However, measuring the true impact of these ratings systems on consumer behavior represents a challenging empirical problem. In this paper we attempt to measure the impact of rating systems on consumer behavior by designing and implementing a randomized field experiment to determine the role that likes play on the sales of movies in Video-on-Demand (VoD). Specifically, we used the VoD system of a large telecommunications provider during the latter half of 2012. The VoD system of this provider suggests movies to subscribers when they log in. Suggested movies are displayed on the user's TV screen under several editorial menus. Under each menu movies are shown from left to right in decreasing order of the number of likes the movie received. During our experiment, movies were primarily placed in their true slots and shown along with their true number of likes. However, sometimes some movies had their positions swapped. These movies, randomly chosen, were therefore displayed out of order and with a fake number of likes. We found that promoting a movie by one slot increased weekly sales by 4% on average. We found that the amount of information publicly available about movies affected this statistic. Better known movies were less sensitive to manipulations. We also found that a movie promoted (demoted) to a fake slot sold 15.9% less (27.7% more) than a true movie placed at that slot, on average across all manipulations we introduced. Likewise, we found that a movie promoted (demoted) to a fake slot received 33.1% fewer (30.1% more) likes than a true movie at that slot. Therefore, manipulated movies tend to move back to their true slot over time. Hence, we found that the self-fulfilling prophecies widely discussed in the literature on the effect of ratings on sales are hard to sustain in a market in which goods are costly and sufficiently well-known. This process is likely to converge quickly, which might lead the telecommunications provider to promote different movies over time.
Bio: Professor Telang’s research interest lies in two major domains. First is on Digital Media Industry with a particular focus on digitization of songs, movies, TV and books is affecting the incentives of content provider, content distributors as well public policy challenges in terms of innovation and copyright. In particular, he has examined the issue proliferation of distribution platforms including online piracy and its impact on traditional music, movies and books industry. Recently, he is investigating the role of social networks on music diffusion, technology adoption, and employee job search. Some of his prior work explored the challenges of interaction of multiple platforms (web portals vs telephony for customer service; SMS and voice for cellular phones). He was the recipient of Sloan Foundation Industry Study fellowship for his work in this domain and is a co-director of Digital Media Research Center at the Heinz College. His work is also funded extensively by industry participants including Google.

His second area of work is on economics of information security and privacy. He has examined the issue of vendors’ incentives to improve the quality of their products and role of policy making and standards in changing these incentives. His earlier work explores the challenges of vulnerability disclosure and how competition and policy making affect these patch release decisions. Recently, he is examining the role of data breach disclosure laws on identity thefts. He was the recipient of NSF CAREER award for his work on economics of information security.

Dr. Telang has published extensively in many top journals like Management Science, Marketing Science, Information Systems Research, MIS Quarterly, and Journal of Marketing Research. He is on the editorial board of Management Science and ISR. He has organized many conferences and workshops and many of his papers have received top honors at journals and conferences.