

The Newsletter of the
INFORMS Revenue Management and Pricing Section

Wyndham Exchange & Rentals wins the 2011 Practice Prize from the INFORMS Revenue Management and Pricing Section

The RM&P Section Practice Award recognizes outstanding applications of revenue management and pricing techniques. The 1st-prize winner and finalists were selected based on their impact, originality, and technical merit.

The 2011 Prize has been presented to Wyndham Exchange & Rentals' Metrics & Algorithms Team for their project "Optimizing Vacation Exchange." According to Robert Shumsky, Chair of the judging committee, "The team from Wyndham has created an innovative solution to a difficult problem: how to enable its 3.8 million members to trade time at their vacation properties. Their solution was simple and transparent to their members, and was backed up by a sophisticated optimization model to dynamically calculate the value of each property in the exchange. The new system improved customer satisfaction, increased transactions and revenue for Wyndham, and led to a sea change in the industry."

The Wyndham Metrics & Algorithms team members are Srinidhi Melkote (Director of Analytics), Dasong Cao (Senior Research Scientist), Preeti Modgil (Analytical Systems Architect), Arjun Madhavan (Manager of Analytics), Sneha Thakkar (Senior Research Scientist), and Ryan Connelly (Lead Analyst).

The prize was awarded on June 24, 2011 during the INFORMS Revenue Management and Pricing Section summer conference at Columbia University. Wyndham's entry was one of three outstanding finalists for the prize. The other finalists were:

- **Google, Inc. DoubleClick Ad Exchange: Auction Design in Practice**, by Yishay Mansour, Muthu Muthukrishnan and Noam Nisan;
- **Walt Disney Parks & Resorts, Golf Course Revenue Management**, by Lila Rasekh, Yihua Li, and Mehmet Gulsen.

The members of the Practice Prize judging committee were Brenda Barnes (Brenda A. Barnes, LLC), Darius Walczak (PROS), Loren Williams (Predictix), and Peiling Wu (General Motors). The committee was chaired by Robert Shumsky (Tuck School at Dartmouth).

If you are interested in submitting an entry for the 2012 Practice Prize, please contact shumsky@dartmouth.edu. Also visit the [Section Web Site](#) for more information about the Revenue Management and Pricing Section.

Congratulations to the winning team!



From left to right: Jeremy Terbush (Vice President Analytics, Wyndham), Arjun Madhavan (Manager of Analytics, Wyndham), Ryan Connelly (Lead Analyst, Wyndham), Robert Shumsky (Practice Prize Chair, Tuck School at Dartmouth), Dasong Cao (Senior Research Scientist, Wyndham) Srinidhi Melkote (Director of Analytics)

The Eleventh Annual INFORMS Revenue Management and Pricing Conference

The eleventh annual INFORMS Revenue Management and Pricing Conference was held at Columbia University in New York City on June 23 and June 24, 2011. The conference was jointly hosted by the Columbia University Business School and Department of Industrial Engineering and Operations Research. With 165 attendees from 20 different countries and 81 presentations, the 2011 conference was the largest to date as measured either by attendance or number of presentations. In addition, the conference featured two plenary speakers as well as the award of the 2011 Revenue Management and Pricing practice prize. The conference sponsors were Hewlett-Packard, PROS Solutions, and the Center for Pricing and Revenue Management at Columbia University.

There were two plenary speakers, each of whom addressed a topic that is currently on the frontier of pricing and revenue management research and application. Asu Ozdaglar, a professor at MIT's Department of Electric Engineering and Computer Science Department, spoke on "Dynamics and Optimization in Social Networks." Among the problems that she addressed is the question of whether a product should be sold at differential prices to participants in a social network based on a measure of their degree of influence within the network. From her presentation, it is clear that, while there are some interesting initial results, there is a wide range of open questions regarding pricing in social networks.



Shmuel Oren -- the Earl J. Isaac Professor of Industrial Engineering and Operations Research and the University of California, Berkeley -- was the other plenary speaker. His talk was entitled “Smart Markets for a Smart Electricity Grid”. One of his key themes was the complexity of the pricing and market design problems in the electricity market. The market for electricity is particularly complex because of the time variability of demand, the difficulty of storing the product, and the physical characteristics of electricity generation, transmission and distribution. Pricing and mechanism design are critical issues in electricity markets given both the importance of electricity to the overall economy. Improperly designed market mechanisms can lead to disastrous outcomes as evidenced by the botched California deregulation of electricity in 2000 and 2001.

One way to measure the growth of the field of pricing and revenue management is to compare the 2011 conference with the inaugural conference – which was also held at Columbia University – in 200. The first conference attracted about forty attendees and featured a single track for one day with a total of 16 talks. This year’s conference was more than four times larger in terms of both attendance and number of talks. More than just demonstrating quantitative growth, attendance at the 2011 conference showed that there is a growing international community of pricing and revenue management academics and practitioners who are involved in both research and implementation. The quantity, quality, and variety of presentations at the 2011 INFORMS Pricing and Revenue Management Conference and the enthusiasm of the participants bode well for the continuing vitality and growth of the field.