

Revenue Management and Market Analytics

Department in Management Science

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Dear colleagues:

We are writing to share our vision about the recently formed Revenue Management and Market Analytics department in Management Science. We welcome papers from the SIGecom community!

Revenue Management started in the airline industry and spread to hotel, rental car, rail and other industries more than forty years ago. Since then some dramatic changes have occurred in the distribution and sales processes (for instance the new NDC initiative of IATA), and new business models have emerged that revolutionized these industries (an early example is the Priceline model). Recently, e-commerce, cloud computing, sharing economy, matching and online markets have introduced even more interesting operational models, ripe for analytics and the practice of management science (Market Analytics).

Research in Revenue Management (RM) and Market Analytics (MA) is playing catchup with the number and variety of new applications and industry practices. We view the RM and MA department in Management Science (MS) as one of the primary outlets to publish cutting-edge research that is grounded in reality and that improves our understanding of these areas.

In our editorial statement we mention that we would like to have an eclectic department that looks for a mix of approaches including modeling, theoretical, empirical, algorithmic, or computational. We would like to emphasize that we are open to papers coming from diverse communities including operations management, operations research, economics, computer science, marketing, and information systems. For instance, we recently approached the ACM EC (Economics and Computation) conference organizers to include our department in MS for “forward-to-journal” option for accepted papers. Overall, if the paper provides an important contribution to RM or MA we feel it belongs to the department.

We further say in our editorial statement that “The paper should score high on most of the following criteria: (1) How realistic and significant is the application studied?; (2) How original/creative is the approach adopted?; (3) How significant would be its impact on practice?” Let us now provide a more detailed description using examples of papers that have been published in MS, albeit in different departments.

First, we welcome theoretical papers such as “Learning in Repeated Auctions

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with Budgets: ... ,” by Balseiro and Gur (MS, forthcoming) and “Mean-Field Equilibria of Dynamic Auctions with Learning,” by Iyer, Johari, and Sundararajan (MS, 2014), that have a strong methodological component but at the same time shed a new light on relevant RM and MA applications. Second, we welcome papers with a strong modeling component, such as “Intertemporal Price Discrimination: ... ,” by Besbes and Lobel (MS, 2015), and “Optimal Allocation Without Money: ... ,” by Ashlagi and Shi (MS, 2015) that provide novel insights on RM and MA settings. Third, empirical papers with clear practical insights, such as “Fake it till you make it: ... ,” by Luca and Zervas (MS, 2016), and “Reducing Discrimination with Reviews in the Sharing Economy: ... ” by Cui, Li, and Zhang (MS, forthcoming), are very valuable to improve our understanding and move the field forward. Finally, papers with novel and original implementations of RM or MA models or that show clear potential for actual implementation, such as “Scheduling Promotion Vehicles to Boost Profits” by Beardman, Cohen, Panchangam, Perakis, and Segev (MS, 2019) and “The Effectiveness of Field Price Discretion: ... ,” by Phillips, Simsek, and Van Ryzin (MS, 2015), are important to showcase the relevance of academic work.

The examples above are just indicative; we have no pre-conceived notions of style or approaches and welcome all original and innovative contributions to the field. Specifically, a number of our colleagues have been asking if “management insight” is the primary criteria for publication in MS. While certainly an important part of the mission statement of the journal, RM and MA spans multiple disciplines and in the end has managerial, implementation, and algorithmic manifestations. Hence, any style of research and contribution that advances our understanding along any of these dimensions will be considered and evaluated carefully by us, our associate editors, and thoughtful experts in the field. Needless to say, all of these papers are expected to meet the quality criteria of MS: (1) be novel and original enough in terms of the application studied, the methods used, or perhaps even both; and (2) that they offer some generalizable insights and analysis.

In summary, we hope to make our department inclusive of a variety of approaches to create a rich and diverse and stimulating body of new research in RM and MA.

We would like to mention that we are organizing four sessions at the Seattle INFORMS conference on RM and MA to highlight recent prominent research in RM and MA. We look forward to continue receiving your exciting work in RM and MA.

Warm regards,
Kalyan Talluri and Gabriel Weintraub