

16th meeting of the GOR Working Group Pricing & Revenue Management

Claudius Steinhardt, Munich

GOR ARBEITSGRUPPE



Over the last decade, the working group “Pricing and Revenue Management” has evolved to one of the largest groups within the German Operational Research Society (GOR). The group is dedicated to all topics around revenue management and pricing analytics, specifically focusing on approaches originating from Operations Research, mathematics and data science that aim at improving decision support to revenue maximization-related questions. Its annual meetings attract researchers as well as practitioners from many different industries, such as airlines, rental companies, hotels, tour operators, retailers, software vendors, consultants, and many more.

This year’s annual meeting of the working group was promoted under the title *Pricing & Revenue Management Summit*. With more than 130 participants, this summit was the largest of the 16 GOR “Pricing and Revenue Management” group meetings so far. The event was hosted by the Italy based Global Pricing & Revenue Management Competence Centre of the Boston Consulting Group and took place in the BCG Munich office. Taking account of the broad scope of the summit, it was the first meeting of the working group which included two parallel streams in the afternoon: one *business/management* oriented track and a second track that was focused on *technical/research* related topics.



The conference was opened by *Alberto Guerrini* and *Professor Claudius Steinhardt*, who jointly led through the morning session. The session started with a thrilling talk by *Professor Peter Belobaba* from the Massachusetts Institute of Technology. He reported on the latest developments of research concerning next generation pricing mechanisms in the airline industry. He stressed the opportunities of airlines' new distribution capabilities to apply non-pre-defined and continuous dynamic prices and to introduce dynamic bundling, thereby tackling the difficulties of estimating the willingness to pay in single segment/personalized pricing. The next speaker, *Alfonso Delgado*, Managing Director of Solution Development Partners at BCG, discussed the challenges and opportunities that come along with real-time availability of competitive data, new technologies and advances in machine learning as well as with the extensive deployment of artificial intelligence. In the next talk, *Simon Rimrod*, Head of Pricing and Revenue Management and of Revenue Management tools at Lufthansa Group, gave interesting insights into the Lufthansa approach of involving the "segment of the fewer" into airline revenue management. The key to personalized pricing is starting all product developments from the perspective of the customer and, hence, offering more customized packages including various components rather than just adapting prices to the customer segments.

After a short coffee break, *Professor Robert Klein* from the University of Augsburg and *Professor Claudius Steinhardt* from the Bundeswehr University Munich walked the audience through the revenue management research advances of the past decade by introducing the central choice-based revenue management problem, explaining the key results and managerial insights, and discussing their implications for industry applications. The morning session was closed by *Luigi De Filippo*, Senior Vice President and Revenue Manager of Silversea Cruises. He reported on revenue management in the ultra-luxury segment of cruises, where customers are willing to pay several ten thousands of Euros and more for a one-week cruise. He stressed the importance of planning destinations and itineraries with a strong attention to the customers' interests and demands and how differentiation from the competitors strongly influences the company's revenue.

After the lunch break, the participants were able to choose between two breakout sessions, one hosted by the GOR working group, the other one hosted by BCG. The GOR session had a strong focus on methodologies and systems. *Dr. Stefan Pölt*, Head of Revenue Management Tools at Deutsche Lufthansa, discussed the advantages of going back from OD-based revenue management to considering a leg-based revenue management approach. For the airline, the leg-based approach is related to a higher robustness in the solutions, which, according to initial simulation runs, has high potential to result in a higher revenue. The second talk of this breakout session was given by *Professor Arnoud den Boer* from University of Amsterdam together with *Dr. Alwin Haensel*, founder of Haensel AMS, a company that provides advanced data analytics and machine learning technologies and solutions. The speakers introduced a coding contest comparing dynamic pricing algorithms in simulated markets with various competition settings. They discussed the insights derived from the last tournament and described the setup of the upcoming run of the contest. Somehow contrary to the first talk of the breakout, the next talk dealt with the advantages of developing a leg-based revenue management approach towards an OD-based approach. *Dr. Philipp Bartke* and *Simon Hohberger* discussed respective developments at Deutsche Bahn Fernverkehr. *Martin Friedemann*, Managing Director of Opremic services, closed the first breakout session with a vivid talk about a simulation based revenue management training tool to empower revenue management teams towards enhanced intuition regarding revenue management oriented decision making.

The second breakout session was entitled "Innovation@work". *Silvio Palumbo*, Partner & Managing Director at BCG, opened the session by sharing insights of an AI-based pricing optimization project across different service lines at a major full service carrier airline. *Mario Alovisi*, Vice President Revenue Management at Costa, presented the cruise line's data-driven approach to generate ancillary onboard

revenues. The key to the double digit revenue growth that could be gained lies in tailored onboard service value propositions for different customer groups, based on an intelligent recommendation system. *Matthias Kuhn*, Vice President Revenue Management at Flixbus, shared Flixbus' approach to automate and optimize the huge amount of price points to be set. The company uses a decision tree based approach and mainly focusses on the automation of long term decisions. The last presentation of this breakout session was held by *Ivan Martinez*, Revenue and Pricing Director at lastminute.com. Since most of the online travel agencies' online traffic is directed from meta search engines, offering a relatively low fare price compared to traditional travel agencies is a key strategy within the OTA's pricing. To compensate for this revenue gap, they rely on additional revenue sources and face the challenge of forecasting this additional revenue correctly.

The conference was closed by a call to action by *Lamberto Biscarini*, Senior Partner & Managing Director at BCG. He reported on common pitfalls in disregarding the opportunities of the latest advances in technology and data handling, and illustrated the potential of the latter by presenting best practices from various industries.

Besides the conference, there was also an informal pre-conference dinner at the eve of the meeting. BCG invited all participants to the *Wirtshaus in der Au* in the heart of Munich, where the participants took the opportunity to network and meet old colleagues and friends.

We thank BCG for hosting this year's successful event and cordially invite all interested "Pricing & Revenue Management" enthusiasts to attend one of our upcoming meetings. The next meeting will take place in spring 2020.