

Editorial

Many of the papers in this issue focus on how the business environment, of which revenue management (RM) is a part, is changing, and how RM approaches have been invented or adapted. This adaptability and inventiveness show how RM, as a body of knowledge, will never stand still. It is underpinned by cutting-edge research in universities and in companies by practitioners, who will find an opportunity to make it work, and also by scientists who will meet that challenge.

RESEARCH PAPERS

Eguchi and Belobaba set out to investigate the impact of RM on Japan's domestic airline business. Based upon the parameters of group bookings, a model is developed to test simulations on the market. The result of the simulations, using a modified EMSR_b algorithm under different competition scenarios, shows the recent integration of two large Japanese carriers and direct competition from a third existing carrier. This suggests that the revenue gains from using fare class yield management are as high as 5 per cent when one competitor implements systematic RM forecasts and optimisation. The simulated revenue gains are substantially less under scenarios in which both competitors implement fare class yield management, at 1 per cent for each carrier. The importance of the paper lies in the conclusion that the apparent complexity and constraints of seat inventory should not be used to rationalise continued delays in the implementation of more systematic approaches to RM.

El-Haber and El-Taha set out to formulate a discrete time, finite horizon, Markov decision process for a two-leg airline seat

inventory control problem. The paper, although theoretical and conceptual, demonstrates through percentage gain how the seat allocation problem is improved. First, one establishes the optimal trip booking limits with the goal of maximising expected profit. Secondly, each trip is solved independently for individual booking classes. El-Haber and El-Taba set out to show how theoretical solutions could be applied in further studies.

PRACTICE PAPERS

Boyd and Kallesen's excellent paper demonstrates how the world of RM is modelling changing passenger behaviour where the passenger wants the lowest available fare. Traditional models of RM, based upon slowing eroding customer segmentation approaches, have facilitated a big step change in the science of our subject. Traditional models assume the passenger will buy the lowest fare, either because fare restrictions are minimal or because price is more important than restrictions. Under Boyd and Kallesen's yieldable model of demand, the passenger is specifically interested in a class product and will purchase that product even when a less expensive class product is available. Here, the priceable model of demand means that price is the important consideration. Hence, when fare class restrictions are negligible and the distribution environment transparent, the priceable demand model is appropriate. When fare class restrictions are significant or the distribution environment promotes segmentation, by allowing the passengers to see only those fares an airline wants them to see, the yieldable demand model is appropriate. Thus, Boyd and Kallesen realise that when priceable

demand is accounted for, the net effect is to keep revenues from spiralling downwards by better limiting the availability of low-fare seats.

Vinod elaborates on the approaches and applications of RM in the hotel industry based around three components: pricing, RM and product distribution. A pricing strategy is necessary to maximise the revenue potential of customer segmentation and price elasticity, whereas RM is about optimally matching revenue to the supply of rooms. Product distribution is about cost-effective electronic sales and distribution of products offered by the hotel to improve occupancy levels and profitability. Vinod raises a lot of issues which he deals with in a methodical manner, concluding that significant incremental revenues are achievable if the process is systematically adopted in the hotel — not just by the revenue manager.

Pölt tackles the questions of how to aggregate origin and destination (O&D) availability and incorporate it into management reports using mathematical models. Pölt's novel approach is not a perfect solution, but is purposeful when working in a realistic rather than a theoretical environment. The paper presents two different mathematical models which avoid and factor out double counting. Approach one bounds O&D availability within a selected subnet defined by the aggregation level, whereas approach B bounds O&D availability to the total network in one run.

FUTURE OF REVENUE MANAGEMENT AND REVIEWS AND EVENTS

Cary challenges Kuhlmann's (2004) piece regarding RM in the airline industry, 'Why is revenue management not working', explaining that Kuhlmann's assertions are misguided as the business environment has changed and airlines are meeting today's challenges. Cary goes on to say that the pay-off of combining forecasting and optimisation will lead to an intelligence shift.

Finally, I reviewed *Trading Up: The New American Luxury*, an excellent account of how middle Americans are indulging themselves on new luxuries and adventures. The basis of the book is founded on the principles of America's low interest rates, stable employment, a world of Wal-Mart and falling pricing and increased equities that have led to leisure becoming the number one item of household expenditure. This book is full of excellent case studies including how Victoria's Secret became the sexiest place in the world and how travel and far away places are becoming the norm. This book is a must for any of you interested in pricing!

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Editor

REFERENCE

Kuhlmann, R. (2004) 'Why is revenue management not working?', *Journal of Revenue and Pricing Management*, Vol. 2, No. 4, pp. 378–387.