Pricing and revenue management relationships

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The link between Revenue Management and Pricing has been about capacity management. As this principle of economics, as price determines capacity and this Revenue Management has been a series of control, whether discounting or availability. In this issue, a number of papers explore these relationships. Binesh and colleagues meta-analysis of the literature reveals the importance of the following concepts pricing strategy, demand modelling and forecasting, business analysis, performance analysis and evaluation, inventory and price optimization, setting booking controls, and distribution channel management. The observation is that there has been a shift Revenue Management as tactical tool to a core strategy. Kiarashrad and colleagues note that airport dominance, route dominance, time dominance, and flag carrier dominance have influence on average ticket price in the market and model finds the best time and routes for flights to increase pricing power and eventually airline profit. Smith raises the issue of decomposition in the profit of business and organisations highlighting the importance of using a proper decomposition in constructing a measurement of the impacts of changes in quantity sold, price, variable costs, and mix on the profitability.

Fjell and Pal's paper draws out that the repeated myopic use of inverse elasticity pricing rule converges on the profit maximizing price only if demand is sufficiently convex, and that it will never converge for linear or strictly concave demands. We show that by adjusting the repeated use of

the pricing rule, one can achieve convergence for concave demands. Firms intend to use customer choice-based models instead of an independent demand paradigm to generate more revenue. Alamdari and Savard address the choice-based seat inventory control problem with stochastic demand using a deep reinforcement learning technique named Deep Q-Network (DQN). Using an Action Generation (AGen) algorithm they overcome the problem.

Liu explores the connections between risk and price sensitivity in the under research field of pricing in the cosmetic medical services. With IATA's New Distribution Capability (NDC), booking classes and fares filed into Global Distribution Systems will no longer be necessary, and the task of Airline Revenue Management will shift from optimizing the availability of fares to generate optimal offered prices for each seat product which the airline sells according Juhasz's paper on optimal pricing for multiple products in a classless Revenue Management situation. Juhasz demonstrates that marginal revenue transformation theory can be extended into the classless RM environment and introduce a network optimization algorithm based on this.

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