

Literature Study

1. *J. Dai et al says that the resulting solutions are used to determine assortment selection policies for the stochastic problem. Simulation studies show that several of these policies generate significantly more revenue than the airline's existing policy, and that the improved performance of these policies is robust with respect to misspecification errors as well as with respect to errors in parameter estimates.*
2. *Larance et al says that this paper relates the probability of filling the plane, under the optimal policy, with the ratios of the current to the highest remaining fare classes. In addition, it extends the solution from monotonically increasing fares to fares occurring in arbitrary order. Finally, it demonstrates how Monte Carlo integration is easy to use to get arbitrarily close approximations to the optimal policy.*
3. *Zichao Li et al says that the second is a local branching heuristic that combines branching ideas and local search. The two approaches show promising results in providing good quality heuristic solutions within reasonable computational times, for difficult and large shipment consolidation problems.*
4. *Hoi lam ma et al says that by reviewing 75 papers in the area, we have categorized the papers into four areas: uncertainty and robust solutions, big data and machine learning, smart technologies, and integrated information support systems. Based on the above, we also suggest some future research directions for researchers in the area.*
5. *Lili ma et al says that our results suggest that prescriptive learning which combines prediction with decision making provides a principled approach for managing the air cargo revenue ecosystem. Furthermore, the proposed approach can be abstracted to many other application domains where decision making needs to be carried out in face of both data and behavioral uncertainty.*

Reference

1. Dai, Jim, et al. "Choice based revenue management for parallel flights." Available at SSRN 2404193 (2014).
2. Robinson, Lawrence W. "Optimal and approximate control policies for airline booking with sequential nonmonotonic fare classes." *Operations Research* 43. 2 (1995): 252-263.
3. Li, Zichao, James H. Bookbinder, and Samir Elhedhli. "Optimal shipment decisions for an airfreight forwarder: Formulation and solution methods." *Transportation Research Part C: Emerging Technologies* 21.1 (2012): 17-30.
4. Ma, Hoi-Lam, et al. "Tackling uncertainties in aircraft maintenance routing: A review of emerging technologies." *Transportation Research Part E: Logistics and Transportation Review* 164 (2022): 102805.
5. Rizzo, Stefano Giovanni, et al. "Uncertainty-bounded reinforcement learning for revenue optimization in air cargo: a prescriptive learning approach." *Knowledge and Information Systems* 64. 9 (2022): 2515-2541.