AIRLINES DATA ANALYTICS FOR AVIATION INDUSTRY

The Purpose of this chapter to review the previous of Researchers on the Airlines Data Analytics for Aviation Industry. This chapter will present the main recent works on the effects of Airlines and Airport service and to avoid delays in Air Travel across different locations at Municipality level.

(Rosenberger et al., 2003) presents an optimization model that reschedules legs and reroutes aircraft by minimizing an objective function involving rerouting and cancellation costs. The problem is formulated as a set partitioning model with additional time slot and airport capacity constraints. The authors developed a heuristic called Aircraft Selection Heuristic (ASR) to select for each disrupted aircraft, a number of non-disrupted aircraft that could be used to swap with the disrupted one

Reference:

Jarrah et al.,1993 -Cancellations and total passenger delays. Swap, ferrying and retiming - Minimum cost network flow; Network flow algorithms.

Teodorovic & Stojkovic, 1990 -Cancellation and total passenger delays - Heuristic

Teodorovic & Guberinic, 1984 - Total passenger delays; Reassign and re- timing the flights - Heuristic; Branch and Bound.