

CASE STUDY

Airline Revenue Management

► **Objective**

To develop a logic module for revenue management in order to maximize the airlines revenue

► **Client**

First & largest low cost carrier (LCC) to operate in the Middle East and North Africa

► **Benefits**

Maximize revenue, improve forecasting, allocation and pricing processes

**Other Case Studies**

↳ Broadcasting Revenue Management Suite: A six-module system for broadcasters to help them maximize revenue

↳ Price Forecasting: Forecasting petrochemical prices in a volatile market scenario

↳ Behavioral Online Ad Targeting: Targeting online users based on their propensity to visit categories of websites

**Project Objective**

Develop a logic module for revenue management in order to maximize the airlines revenue. Integrate the module into the client's in-house revenue management framework to improve their current forecasting, allocation and pricing processes.

**Client**

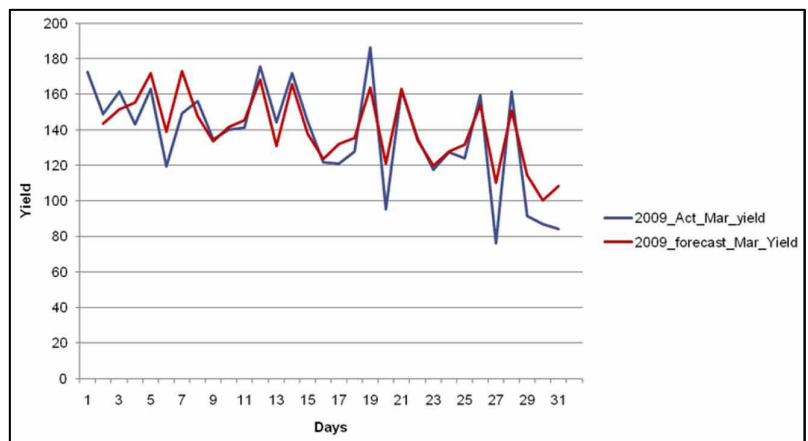
First & largest low cost carrier (LCC) to operate in the Middle East and North Africa.

**Approach**

- a) Forecasting:
  - i. Investigate various combinations of flight mapping rules and algorithms to determine the best method for forecasting.
  - ii. Study the effect of market trends, events, seasonality, day-of-week, departure time of day, fares and booking behavior (for re-forecasts) in order to arrive at the forecasting method.
- b) Optimization:
  - i. Propose optimization algorithms that automatically determine which classes should be closed or opened at a DCP and also automatically determine the allocations for each class.
  - ii. The optimization algorithm would take into account historical and current booking behavior and arrive at DCP level booking limits.
- c) Group Evaluation: Investigate decision support algorithms that automatically recommend a minimum (cut-off) price below which group should not be accepted.

**Solution and Benefits**

- a) Forecast yield and booking considering the effect of market trends, events, seasonality, day-of-week, departure time of day, fares and booking behaviour.
- b) Forecasts occur at fixed points in the life of a flight or when triggered by unusual booking activity.
- c) Fare levels are decided based on yield forecast and dispersion in yield.
- d) Determine the price point and allocation in each business type (One way, return & connection).
- e) Flights would classify based on demand (Distress, Normal or Peak Flight).
  - i. Distress would open promotional class to boost demand on the flight.
  - ii. Peak flight would sell more seats at higher price.
- f) Recommend which booking classes should be open/close.
- g) Recommend a minimum (cut-off) price below which a group should not be accepted.



Exceptionally accurate forecasts (above 90%)