

## Business Data Analyst – Case Study

You are an analyst working with an airline, operating out of the Chicago, Illinois area in the United States called Chicago Air 1. The airline's management team has a strong airline operations background, but don't have much financial or data analytics experience. Many of their systems are disparate and not connected. You were shocked to find out that until just recently, the airline could not pull specific aircraft details, such as route and seating capacity, from a single report, but rather needed to open two or more files and compare the information. The airline has recently been able to connect their data sources and have put together charts and graphs using the data. The company needs your help interpreting the data to drive their strategic decisions to grow and position themselves in the market.

They have provided 4 datasets:

- Flights – information on all the 9396 flights
- Routes – data on all route segments operated by the company
- Aircraft – data on aircraft type and seat capacity per flight ID
- Airports – all airports where the company flies from

The management team is highly concerned with **how they can optimize their portfolio to reach higher profitability**, but they have no clue where to start from.

Your role as a consultant is to answer the following:

- What is the as-is state? Where does the airline make the most profit and where does it suffer (think routes, airports, airplanes, any combination you think is important)?
- Identify quick wins – are there any immediate improvements that the airline can implement to reach higher profitability?
- Where should they focus in the long-term? What is the most **impactful** strategy and why?

You have the Excel file: Data-Analysis-of-aircraft-fuel-cost-route-and-revenue.xls

Some analysis has already been done to help you start. You can use the data in any way in order to answer the questions. Your final deliverable is a concise PowerPoint presentation which tells the story of your analysis and your recommendations. Make sure you support all of your findings with facts.