

Trends To Investigate

We start this analysis a bit unusually. We have forgone the “client tuning” or as it is called “target audience catering” in this analysis. It is because when thinking of a possible audience in this scenario, we have three possible types:

1. Government stakeholders guiding country policy
2. Large corporations looking to gain contracts in certain cities or with certain entities
3. Local airports

There are more OfCourse, e.g the average person trying to guess their next flight’s delay. However, as we go further in the list, the exact requirements become lesser and lesser and are quite different from one another.

E.g Government will be concerned with frequency of flights and business of airports/cities for maybe levying fuel prices or increasing supplementary industry with incentives or maybe just for increasing airport or customs security. The Large corporation will look to make a profit, so will look for something like a busy route with less city flights, to maybe setup their outlets in that city, or try to offer an airline discount on spare parts to increase total sales. A local airport would just be interested in what airlines come and go and when would they be most busy throughout the year.

All these requirements may require one or two charts, but not a complete analysis in most cases, unless for some reason the government/manufacturing industry/airport admin has gotten needlessly tech savvy.

So, lets focus on the basics. So, we can make better and more complicated analysis later. Since this is a hobby/portfolio project I have not fully extended the statistical analysis and business questions but have picked a few ones. I might in future add more.

Requirements

Below is listed a set of possible requirements. Although the Time Series looks redundant, it can later be used to answer advanced business questions, like the ones asked below.

1. Time Series Trends
 - a. Flights Per Day
 - b. Flights By Country
 - c. Flights By City
 - d. Flights By Airlines

- e. Flights By Route
 - f. Late Arrivals
 - g. Late Departures
 - h. Late Arrivals by Day
 - i. Late Departures by Day
 - j. Late Arrivals by City
 - k. Late Departures by City
 - l. Late Arrivals by Airlines
 - m. Late Departures by Airlines
 - n. Late Arrivals by Routes
 - o. Late Departures by Routes
 - p. Diversions
 - q. Diversions by Day
 - r. Diverted by Cities
 - s. Diverted by Routes
2. Statistical Trends
- a. Busy Airport/City vs Late Departure Correlation
 - b. Busy Airport/City vs Busy Airline Correlation
3. Possible Business Questions
- a. How each airline reacts to airports with most delays?
 - b. Which airlines cover the most routes?
 - c. Identify any possible monopolies of airlines