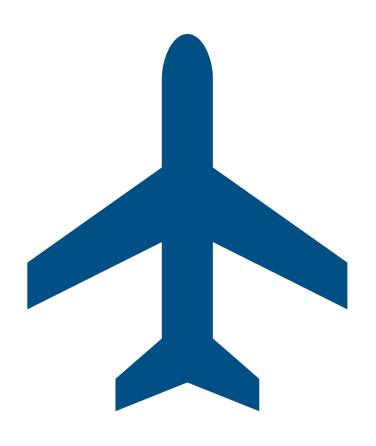
Textron

By: Jack Warner, Michael Guel, Freya Dave, Priyank Mehta, Haris Mukunt Baskaran

Takeoff

Using a 2-week time lag, we can project sales based on duration.

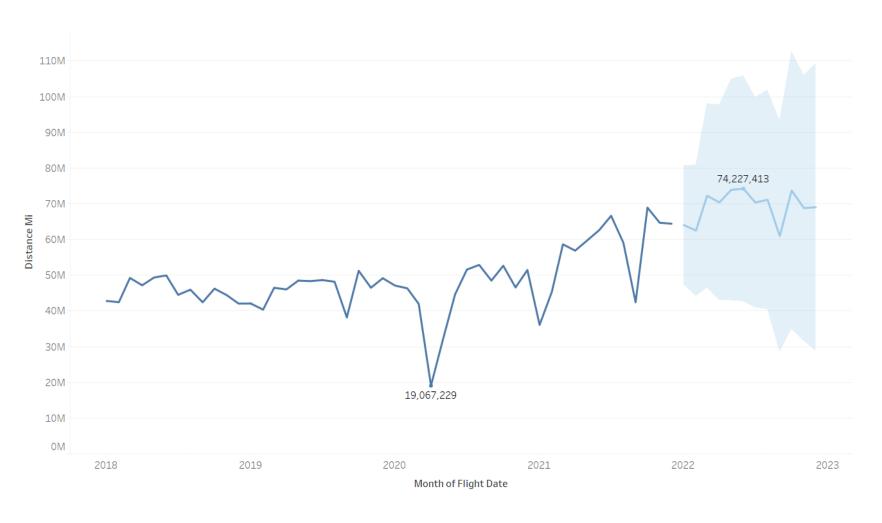
Tracking activity of flights (Active, Passive, Retired) can lead to better forecasting and revenue planning





Distance Projection

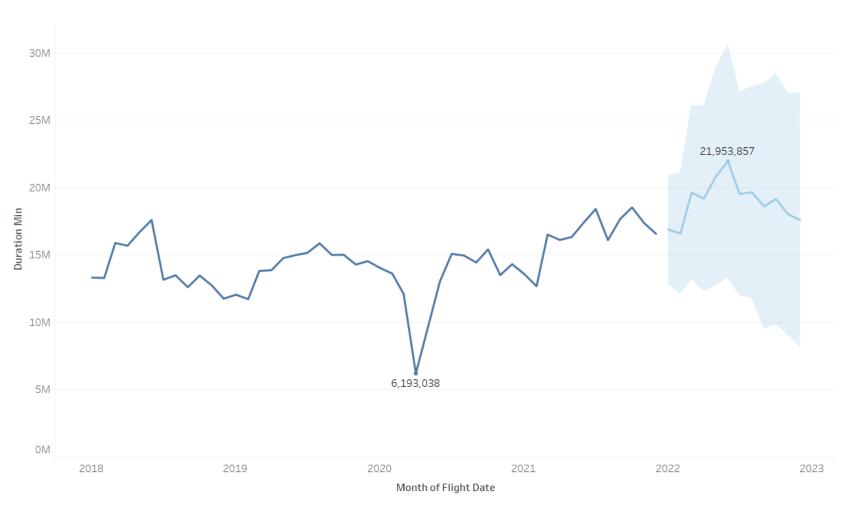
- 7.8% growth in distance flown
- Peaking mid 2022





Duration Projection

- 4.2% growth in duration
- Peaking June 2022



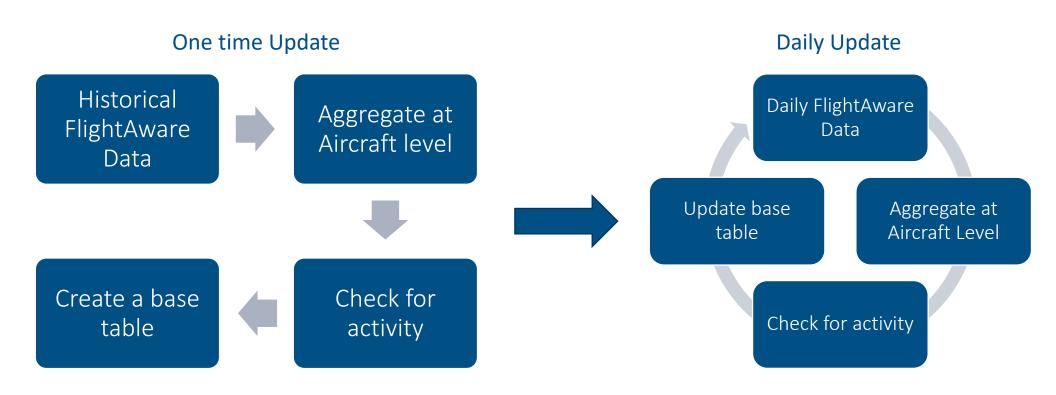


Flight Activity Analysis

Operation Type	95 %ile IdleDays (Passive)	99 %ile IdleDays (Retired)
CARGO	4	17
CHARTER	6	37
COMMERCIAL	3	41
FRACTIONAL	4	25
GENERAL	20	377
GOVERNMENT	15	89
UNKNOWN	8	110



ETL Process



Aircraft ID	Operation Type	Status	Last Active Date	Updated Date
168208	GENERAL	ACTIVE	2022-01-29	2022-02-12



Data Modeling



Model Data Preparation

Sales		Flights			
Year	Week	Sales	Year	Week	Duration

- A 2-week lag on sales
- Week level aggregation
- Removal of outliers



Duration By Operation Type





Model Insights

1 minute increase in flight times in week T = \$3 increase in part sales in week T+2 projected average weekly sales in June 2022

Commercial flight times have most impact on part sales



Landing

Flight Activity Creation of an ETL process to track activity of each flight

Data Modeling Implement the sales prediction model utilizing competitor's sales data



Q&A?