

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light greenish-blue. They are both tilted at an angle.

Data Science in the aviation industry

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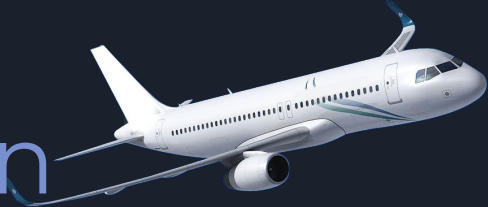


Introduction



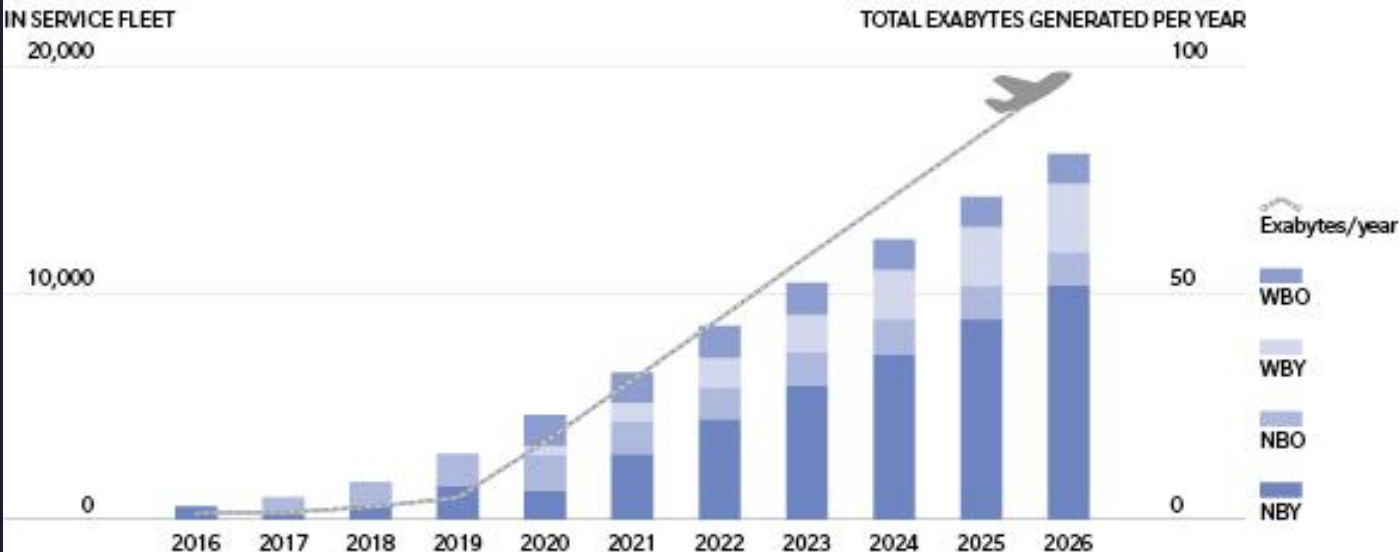
- Data, a major role in the airline industry - From customer loyalty programs to financial models predicting fuel prices.
- Today, airlines almost need to view themselves as data companies first and transportation companies second.

Growth in Data collection



DATA GENERATED FROM PROJECTED GLOBAL FLEET

IN 2026, THE GLOBAL FLEET WILL GENERATE 98 EXABYTES OF DATA
(THAT'S 98 MILLION TERABYTES OR 98 BILLION GIGABYTES)

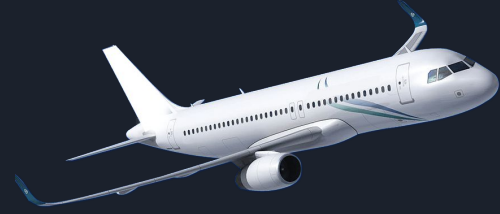


Source: Oliver Wyman Fleet & MRO Forecast, www.planestats.com/betterinsight

www.oliverwyman.com



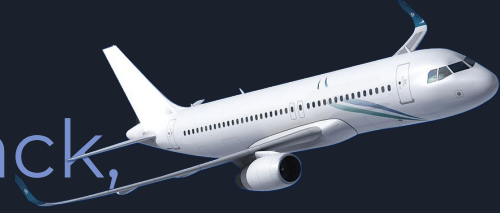
The Problem



- Carriers lack the IT infrastructure to capture, store, and analyze vast amounts of data being generated and it needs to be processed in real time.
- Not just a question of investing in better technology. Airlines may need to reorganize both their operations and their processes in order to make sure data plays a central role, rather than merely being an afterthought.
- Customer interactions and touch points must be redesigned in order to capture as much information as possible. They must also have the ability to implement changes in real-time based on that data and its analysis.



Information Collected To Track, Measure & Analyze Behavior



- Search History
- Purchase History
- Checked luggage
- Departure & Arrival date and time
- Destination & Departure city
- In-flight sales/duty free spend
- In-flight food choices
- Hotel, rental car connections
- Number of travelers we fly with
- Credit card points earned
- Miles used
- Our influence over other people through social media



Applications In The Aviation Industry



- **Personalized Offers** - United Airlines' "collect, detect, act" system analyzes 150 variables in a customer profile
- **Improving Marketing Efforts** - Launch promoted flights to a specific place when they see more people are looking at traveling there by analyzing trends.
- **Pricing and Network Strategies** - Increase the prices when there is a large demand for flights from point A to point B
- **Smarter Flights** -improve flight safety with pilot reports, incident reports, control positions and warning reports etc
- **Increasing Customer Satisfaction** - Real-Time Baggage Status, Wearable Technology & IoT



THANK YOU