



# EUROPEAN AVIATION COMPANY USING REAL-TIME STREAMING DATA TO INCREASE ITS INNOVATION CYCLE

**IMPACT**

- Rapidly increase innovation cycle
- Improve cost efficiency
- Provide streaming templates on a 24/7 basis

**Challenges**

This European aviation company was facing a number of challenges which prompted the need to undergo a digital transformation. Its legacy platform was on-premise and self supported, which suffered from a lack of scalability, agility and speed of innovation. The innovation surrounding ML and streaming were lacking, so much so that the company was unable to onboard streaming use cases and doing them at scale was nearly impossible. There was a clear need for a platform that would become the central air traffic Data Hub within the next 2 years to ingest all aircraft telemetry from satellites’ air traffic surveillance, a total of millions of events per second.

**Solutions**

This company chose Cloudera Data Platform (CDP) on Microsoft Azure public cloud to address these challenges. The company is still in the implementation phase, but once deployed, CDP will provide the foundation for the current use cases in production including real-time flight data ingestion, real-time flight dashboarding, and exchanging data with other flight organizations - plus the capabilities and flexibility needed to develop new use cases. Apache Flink combined with Apache Kafka will help answer the most critical needs for telemetry at scale. Cloudera Machine Learning (CML) will help enhance the company’s ML capabilities, allowing them to adopt a common end-to-end framework. The joint partnership with PUE will also play a valuable role in helping the company be successful.

**Results**

By adopting a modern data architecture with CDP public cloud, this aviation company is seeking to rapidly increase its innovation cycle. They plan to rapidly onboard data scientist users into the platform at a significant rate. CDP and CML will result in cost efficiencies. Soon, 8 different data hubs on Azure from data engineering will provide streaming templates on a 24/7 basis. Engagement teams have started to collaboratively plan and execute on critical timelines, resulting in even more successes for the company.