

Vitria's IoT Analytics Platform: Accelerating Business Value for Aerospace Manufacturers



INDUSTRY PROFILE

Aerospace Manufacturers offer a highly complex and expensive product that in turn requires a tremendous amount of after-sale service and support. Understanding the details of how customers are using, operating and maintaining the airplanes is a major piece of their long-term value proposition. Industry leaders like Boeing are turning to IoT technology and analytics to help manage product performance and create new service offerings.

BUSINESS CHALLENGES

Maintenance and performance efficiency are two of the most critical management challenges. The high capital cost and significant operating expenses are major concerns for CFOs and operation managers in these organizations.

Customer satisfaction and financial performance are also major concerns. Major airlines are often working on tight deadlines and have operational and capital concerns. Manufacturers are looking to increase customer satisfaction and long-term customer loyalty by minimizing operating costs and providing new value-added services beyond the airplane itself.

VALUE-ADDED SERVICES – ENABLED BY IoT ANALYTICS

Aerospace manufacturers recognize that success for their customers ties back to productivity and profitability. In some respects, the airplane is really a 'service' over time of X hours or a defined time period of moving cargo and/or people. Delivering that service effectively and efficiently over time depends on analytics. Operators need to be able to understand



how the airplane is operating, predict what may happen with various key sub-systems, and execute preventative and other maintenance to maximize performance and

airplane life. The use of a robust IoT analytics platform that can handle the large volume of data enables this transition.

BUSINESS BENEFITS

The inherent complexity of Aerospace manufacturers and their far-reaching supply chains make them very ripe for IoT and analytics for IoT. The complexity and typically heavy usage of the planes make them ideal for heavy usage of sensors and software to analyze the high volumes of data collected during usage. Implementing IoT Analytics on airplanes delivers a wide range of benefits:



- Significant reduction in unplanned airplane maintenance and equipment issues that cause flight delays– avoidable via analytics that flag unusual operating behavior early
- New revenue via information services that monitor fuel consumption in near real-time across a fleet and look for unusual patterns or anomalies
- Providing customers with a detailed audit trail for safety or regulatory entities
- Enhancing customers' financial performance and overall yield via analytics on capacity utilization and seating configuration options to adjust the mix for maximum revenue or profitability

IoT Analytics and airplane manufacturers are a good match. The rich data collected by the combination of sensors and traditional enterprise systems can enable a variety of new information services. The new and enhanced services enabled by IoT Analytics leads to better long-term – and profitable – customer relationships.

These service opportunities are made possible by leveraging new technology and concepts such as Vitria's Analytics Value Chain and IoT Analytics platform.