

INFOSYS PREDICTIVE MAINTENANCE OFFERING FOR AIRLINES



The ultimate commitment to passenger safety

Some of the challenges encountered by the Airline Industry are wear and tear, minor accidents, small manufacturing defects, and others. These affect the maintenance schedule of the plane, but many times go undetected by traditional maintenance schedules of per cycle time and flying hours. Aircraft-on-ground eats into profits which are already squeezed. A predictive maintenance offering enables airlines to leverage technology to identify maintenance gaps and ensure their aircraft is flying for a maximum time.

About the offering

Infosys predictive maintenance offering for airlines leverages a combination of technologies, some of these are,

- Internet of Things (IoT) – to monitor critical components
- Real-time data analytics – to receive updates on data variations and implications
- Algorithmic prediction models – for insights into potential failure situations
- Machine learning – to receive alerts on risk
- Augmented reality, virtual reality, and mixed reality technologies – to troubleshoot and inform on problems so that engineers are prepared to respond either at the destination or hangar

Infosys has aircraft engineering credentials with the world's top aircraft manufactures. Our experience with heavy machinery industries help create best practices on fault prediction and recommendation. Our offering for airlines not only reduces maintenance costs, it also provides the ultimate commitment to passenger safety.





Salient features

- Mines maintenance logs to identify areas that need intervention
- Uses data from sensors to create statistical models on engine health
- Integrates multiple streams of data from onboard devices and enterprise systems
- Enables text analytics and correlation analysis of maintenance logs, messages from the aircraft, ground station, and component information
- Visualizes log analytics through a smart dashboard for optimized asset maintenance



Business benefits

Predictive maintenance for fleet management and aircraft maintenance helps customers to reduce,

- Delays, cancellations (D&C's) and improve fleet uptime through need-based maintenance
- Maintenance costs and improve aircraft availability by optimizing the maintenance program
- Maintenance turn-around time (TAT) through improved and timely diagnostics
- Parts inventory through integrated planning

Case study

The client was a large US-based airline. They wanted to improve fleet utilization. Infosys created a robust data analytics framework. This was used to capture and analyze operational and asset data for predictive maintenance of the clients' fleet of aircrafts. This helped the client achieve,

- Integrated planning for improved spare parts inventory
- Predictive diagnostics to reduce flight delays and cancellations
- Condition-based maintenance to rationalize costs
- Prompt maintenance to maximize aircraft fleet uptime



For more information, contact askus@infosys.com

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