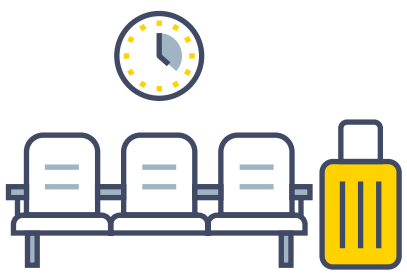
ANSYS®

REDUCING MAINTENANCE, REPAIR AND OVERHAUL COSTS

With fewer new aircraft programs, rising operational costs and increased scrutiny around program efficiency, A&D companies need to optimize MRO operations to reduce costs and generate revenue.

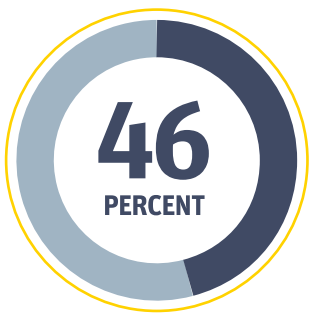
By 2028, the global fleet and maintenance, repair and overhaul (MRO) market are expected to increase by nearly

50%



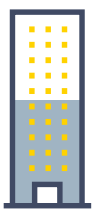
FAA/Nextor estimated the annual cost of delays in 2017 at

$26.6 BILLION



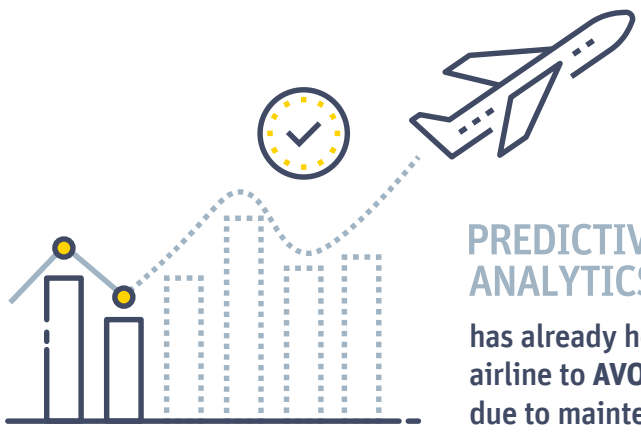
of **DELAYED FLIGHTS** are caused primarily by airline processes, such as **MAINTENANCE**

A&D companies need to optimize MRO operations to reduce costs and generate additional revenue.



51%

of companies are considering **LEVERAGING DATA ANALYTICS AND PREDICTIVE MAINTENANCE TO COMBAT RISING MRO COSTS**



PREDICTIVE ANALYTICS

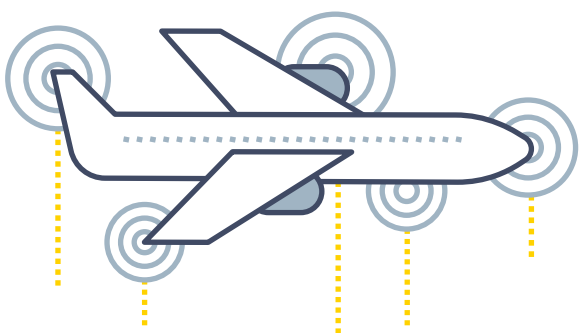
has already helped a single airline to **AVOID 1,200 DELAYS** due to maintenance

The prevalence of low-cost sensors, connectivity and analytics is enabling the digital transformation of operations.

A U.S.-based aircraft engine manufacturer has over

5,000 SENSORS

installed on the aircraft, powered by its next-generation engines



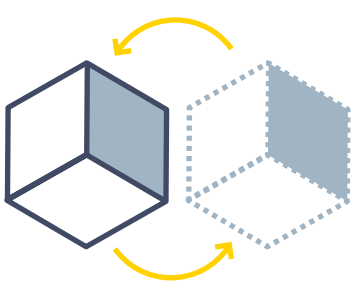
These sensors are connected using IoT and can generate

UP TO 10 GB

of data per second

PREDICTIVE MAINTENANCE HAS ALREADY SHOWN IT CAN DECREASE ENGINE MAINTENANCE COSTS BY 33% WHILE INCREASING RELIABILITY BY 30%

Simulation accelerates condition-based maintenance and maximizes cost savings through digital transformation.



Companies who invest in digital twins will experience a

30% IMPROVEMENT

in cycle times of critical processes, including maintenance

of IoT platform vendors will **INTEGRATE SIMULATION PLATFORMS, SYSTEMS AND CAPABILITIES** to create **DIGITAL TWINS BY 2022**

A well-structured digital twin of an aircraft enables performance tracking with

147% MORE ACCURACY

and can track the aircraft at longer ranges

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Sources: Airlines.org, ANSYS.com, Aviation-Technology.me, Challenge.com, EY.com, MRO-Network.com, OliverWyman.com, PTC.com