Ansys

Facing the Challenge of
Future Air Mobility

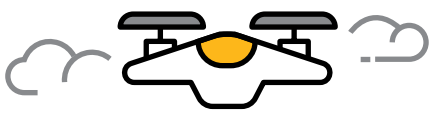
Emerging trends in urban air mobility, commercial drones and persistent connectivity are transforming the aerospace industry.

With 500 million megacity residents expected to experience traffic problems by 2030, UAM is well-placed to provide transport solutions to the value of

$500 BILLION

As of 2015, the global value of business services likely to be replaced by drones in the near future was estimated to be

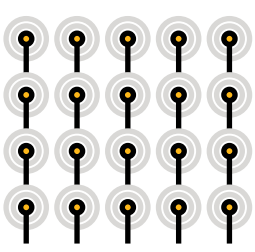
$127 BILLION



The in-flight broadband market is expected to grow sharply from $900 million in 2018 to

$30 BILLION
by 2035

Future aircraft will be more autonomous, connected and electric — and require radically advanced systems.



A commercial aircraft can contain up to

20 ANTENNAS
on its body

The challenge of writing and debugging code has grown enormously, with some of the most advanced aircraft requiring as many as

25 MILLION LINES OF CODE

A next-generation aircraft is equipped with

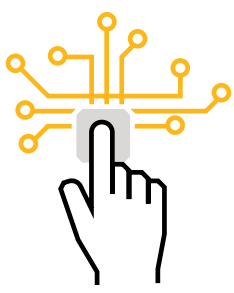
10,000+SENSORS
on each wing

Autonomous flight has a savings potential of **$110 billion**, with single-pilot operations having the potential to save airlines as much as **$60 billion** in annual operations costs

Engineering simulation is the way to explore revolutionary design spaces and rapidly innovate with less cost and risk.

The time to complete a functional safety analysis of an aircraft decreases by approximately **55%** using simulation, and time-to-market is also reduced by about **55%**

Design, simulation and validation of HMI are performed at **2X THE CONVENTIONAL SPEED** and can result in cost savings of 40% in a typical design cycle



With simulation, **EVALUATE 10X MORE DESIGN VARIABLES** in the same amount of time: easily comply with extremely stringent military standards

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*Human Machine Interface
Sources: ANSYS.com, EAS.UN.org, Forbes.com, MRO-Network.com, VisualCapitalist.com