

A 3D visualization of an aircraft in flight, showing streamlines of airflow around the fuselage and wings. The streamlines are depicted as glowing blue and green lines against a dark blue background, illustrating aerodynamic data.

AnalyticX transforms data into insights

Nico Zimmer | Boeing Global Services | Digital Aviation & Analytics |
Research & Rapid Development

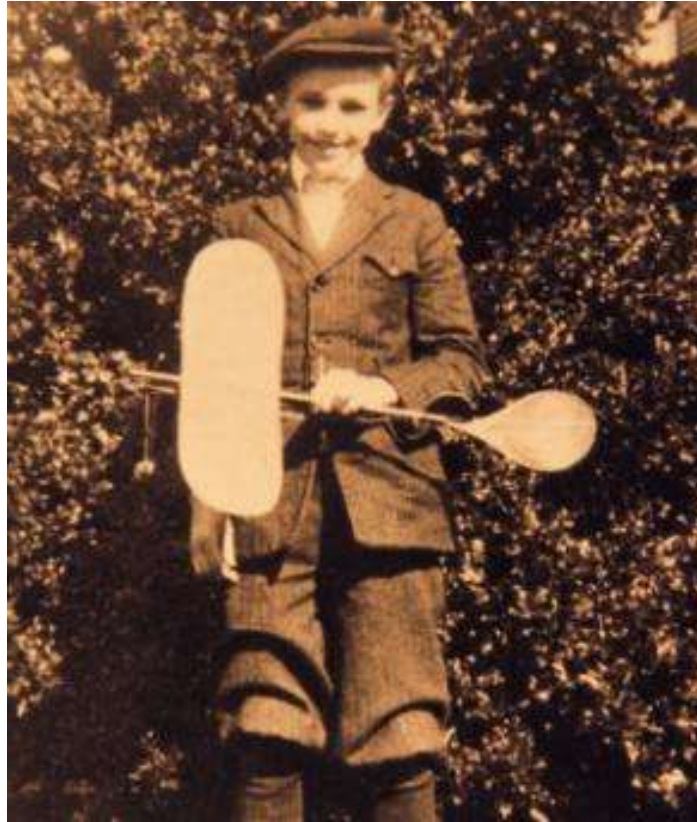
01-12-2017

data scientist (n):

https://en.oxforddictionaries.com/definition/data_scientist

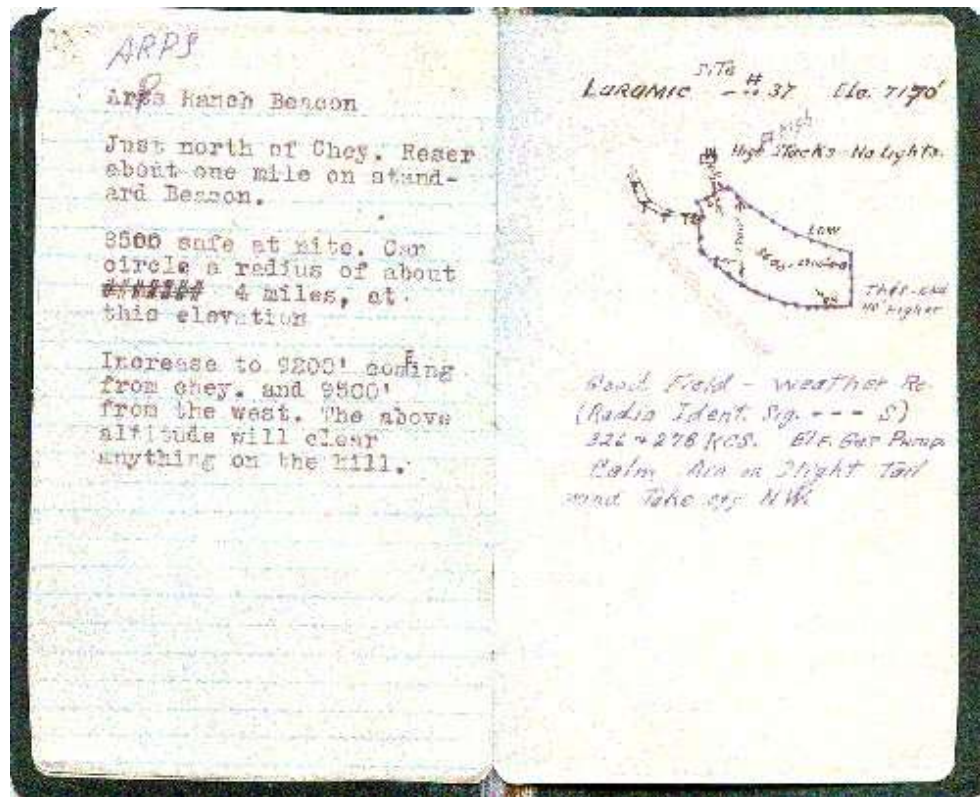
A person employed to **analyze and interpret complex** digital **data**, such as the usage statistics of a website, especially **in order to assist** a business in its **decision-making**.

The first aviation data scientist



The Little Black Book

Captain Elrey B. Jeppesen (1907 – 1996)



Quality-Tested Terminal and
Enroute Charts – So You Can
Worry Less and Fly More

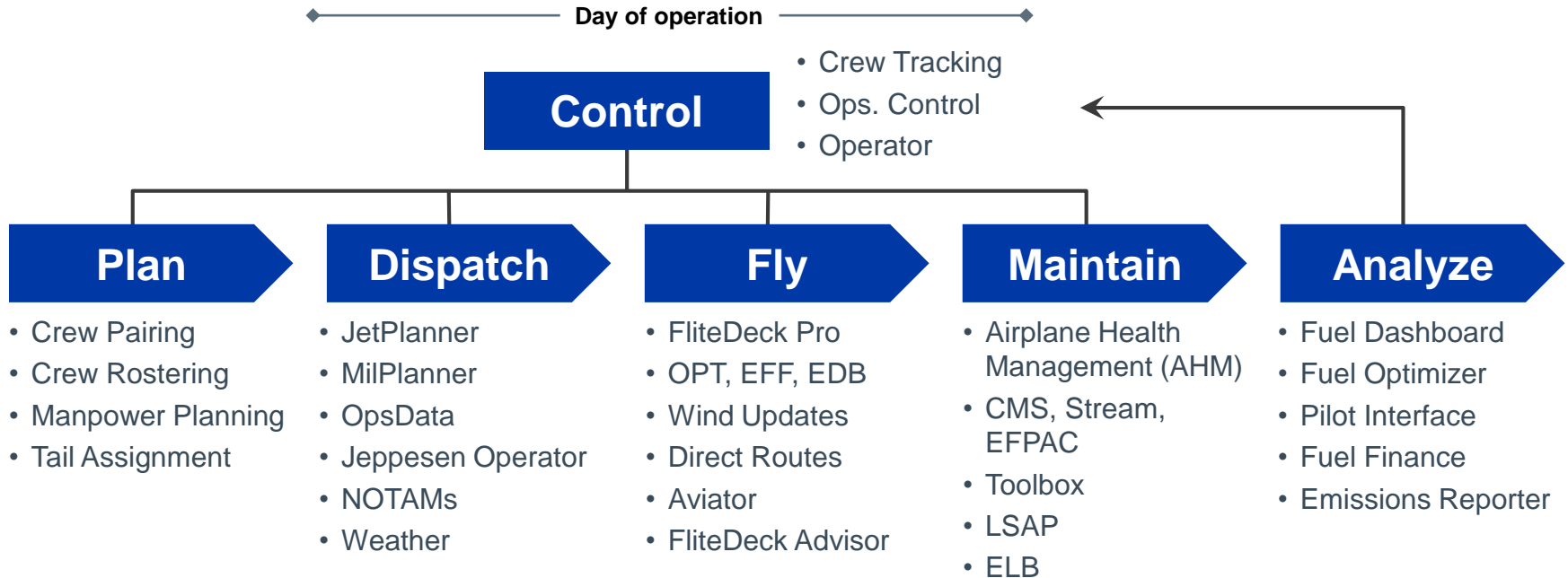
FROM PAPER TO DIGITAL



DIGITAL AVIATION AND ANALYTICS

What we do with the data!

End-to-End solutions & services optimizing operational efficiency



Mobile • Data • Documents • Distribution • Services

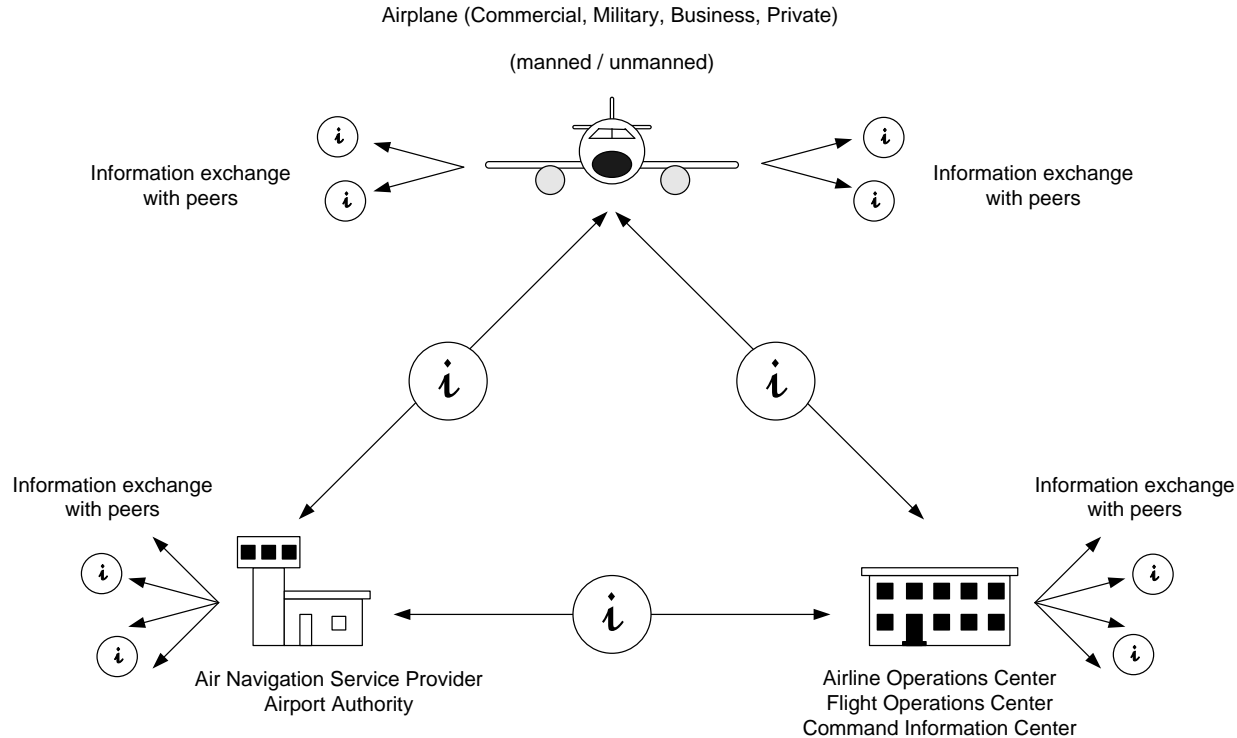
• Flight Support Services • JDM • Dynamic Data Distribution • Aircraft Interface Device • ANSP Services • OEM Services

Example: FliteDeck Pro

The next generation of information management

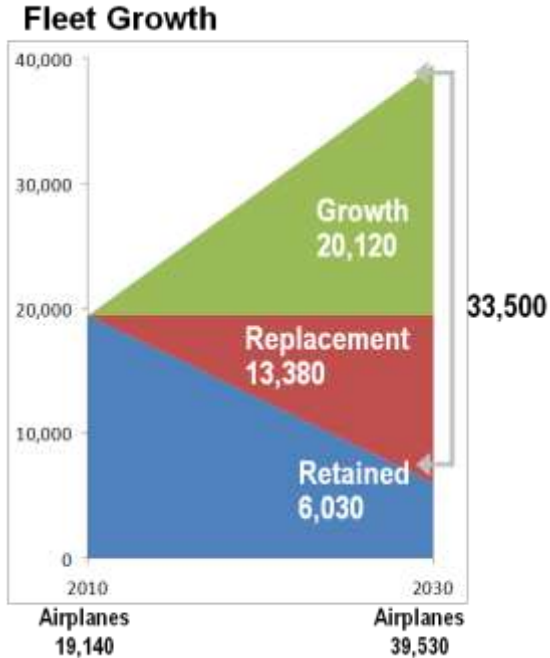


NextGEN / SESAR – Aviation Overhaul

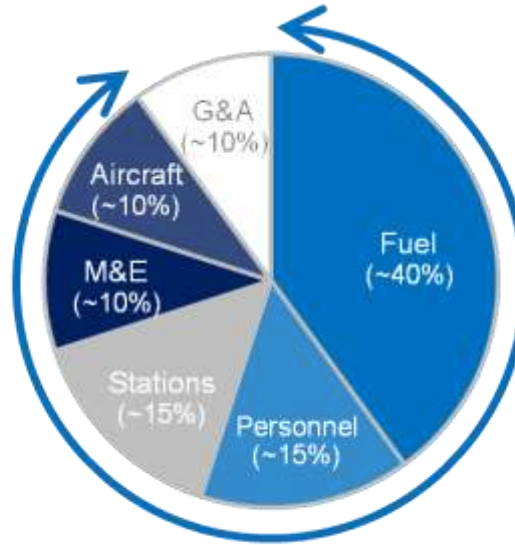


...and enormous challenges for Airlines too

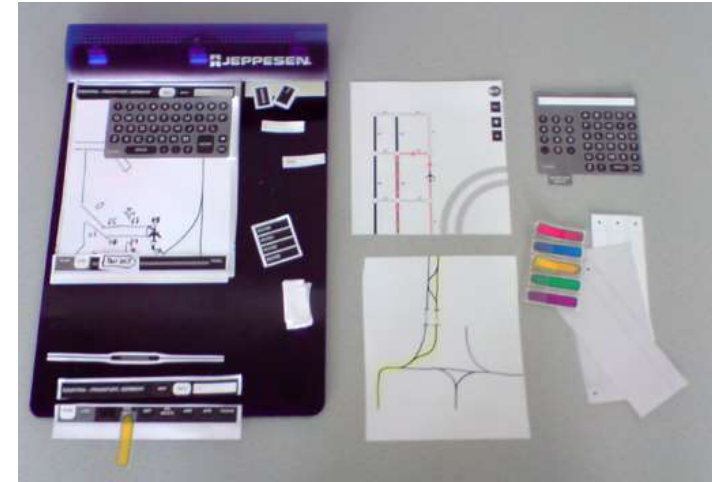
Retrofit



Cost Pressures



Digital Transformation





FROM DIGITAL TO  INTELLIGENT
INTEGRATED
INFORMATION

Boeing Global Services

A dedicated services business focused on the needs of global defense, space and commercial customers

Standing up in July 2017 to integrate the services capabilities of the defense, space and commercial sectors

Headquartered in the Dallas, TX area, with multiple operations worldwide

Innovative disruptor generating a robust pipeline of products, services

Designed for faster customer response and operational agility, with a streamlined infrastructure



Dedicated Services Culture

Meet today's Aviation Data Scientists

Boeing Global Services – Digital Aviation & Analytics Lab - Frankfurt



Meet today's Aviation Data Scientists



What We (I) Do?

Research & Rapid Development

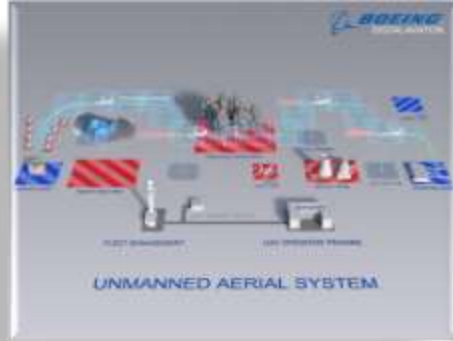
RAPID
SOFTWARE
DEVELOPMENT

Research Focus

Long-Term Research Thrusts



Analytics-
Empowered
Airline



Unmanned
Aerial
System
(UAS)

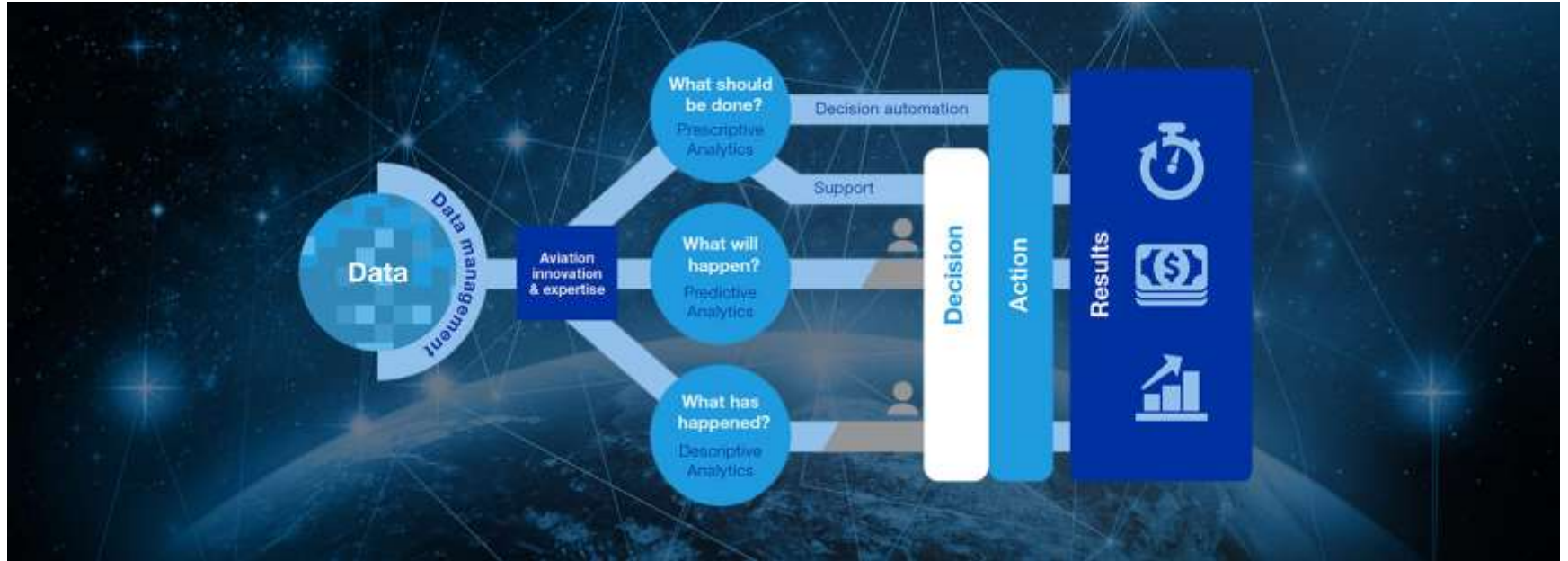


Reduced
Crew
Operation
(RCO)



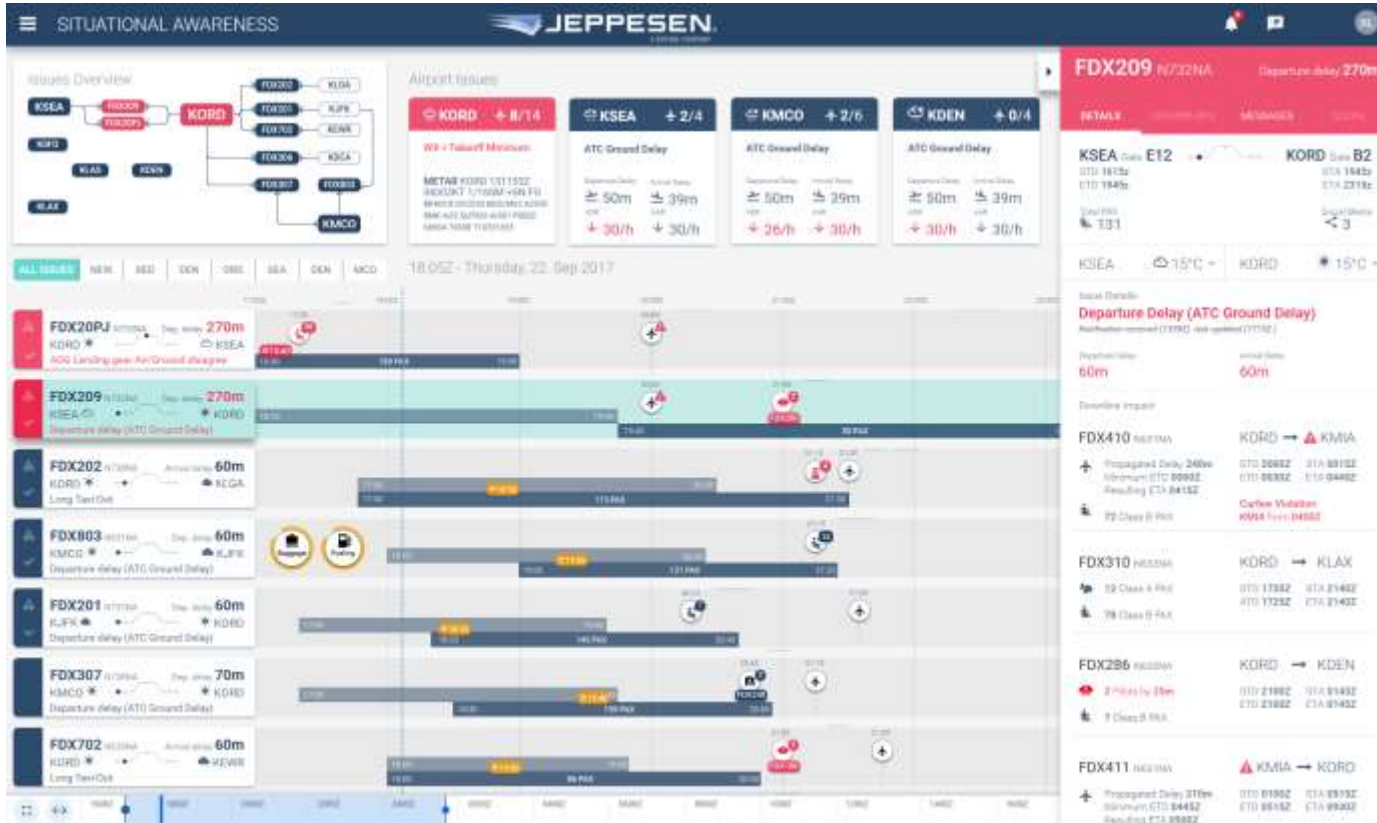
Intelligent
Cabin /
Internet of
Things

Analytics Transform Data into Insights



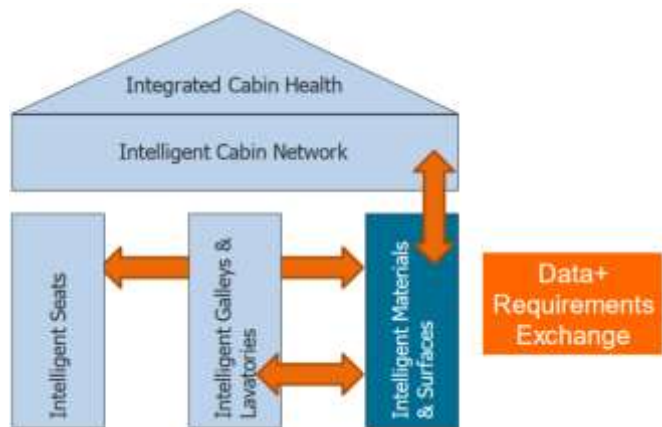
It is not just about the data - it's what you do with it!

Ops Advisor – Descriptive Analytics



Intelligent Cabin

Internet Of Things (IOT) – and a lot of data... - Predictive Analytics



Reduced Crew Operation

Future Cockpit Information Management



AR Visual Information

Object Recognition

Speech & Gesture Control

Haptic Feedback

Summary ... and retrospect

Jeppesen, and now Boeing, was the first aviation data scientist

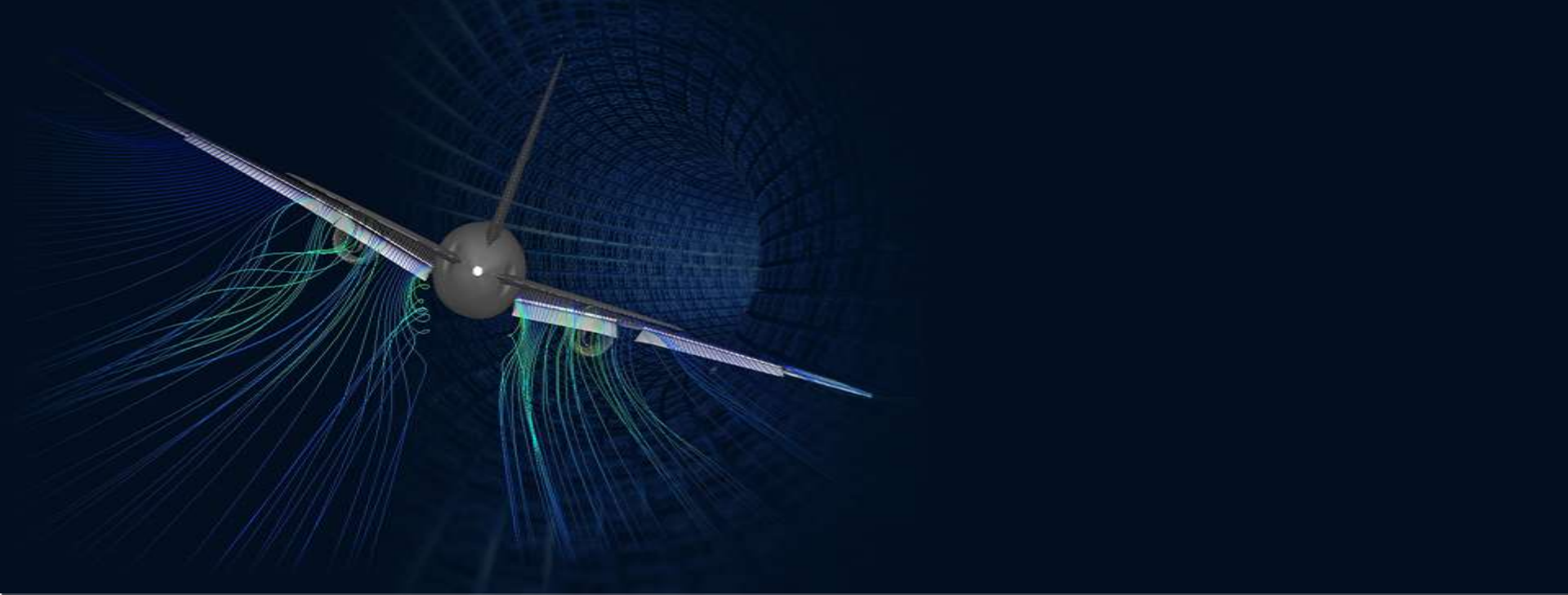
Boeing AnalytiX continues the legacy to be data scientist and enables Airline operational efficiencies through i³

It is not just about the data – it's what we (and you) do with it

Studies prepared me to think as software developer and as an engineer knowing how to be a data scientist

...it didn't prepare me for the english speaking aviation world





Thank You!

nico.zimmer@boeing.com