R² Data Labs

Airline Safety –

The future with Data Analytics

Stimulating Digital Innovation and Collaboration

March 2018

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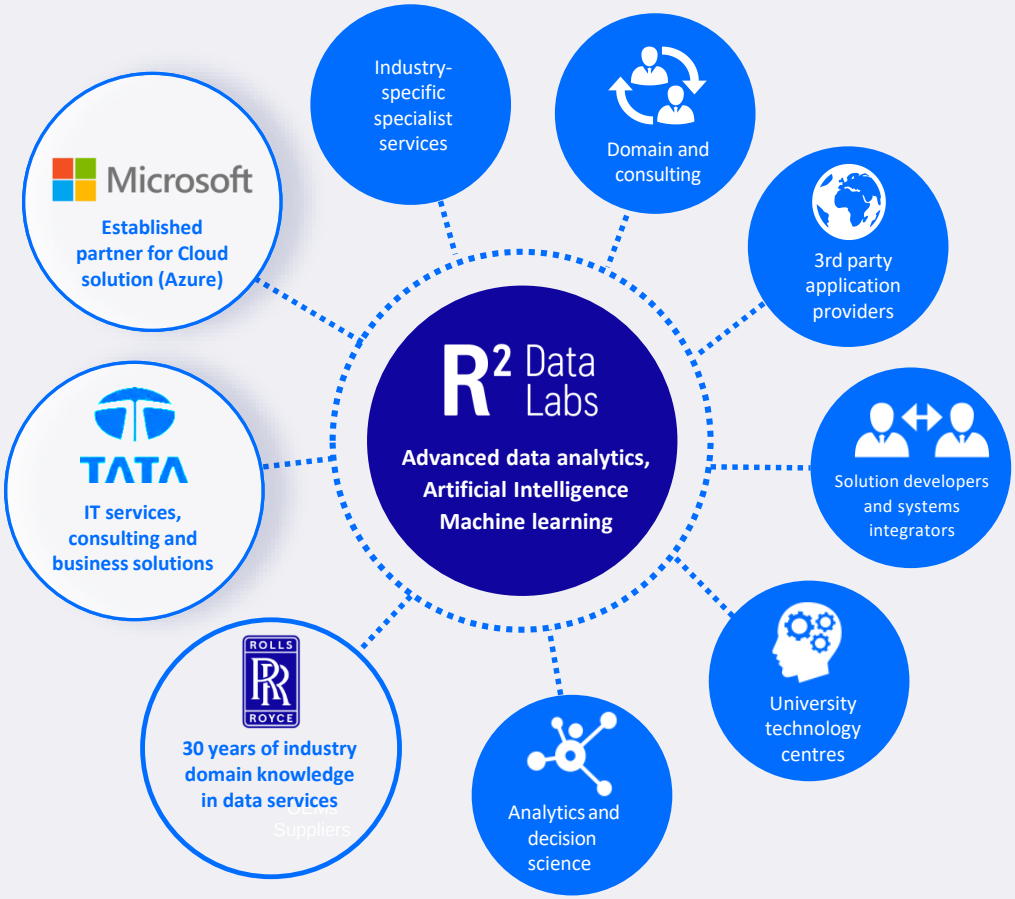
collaborating with best-in-class to power an analytics ecosystem



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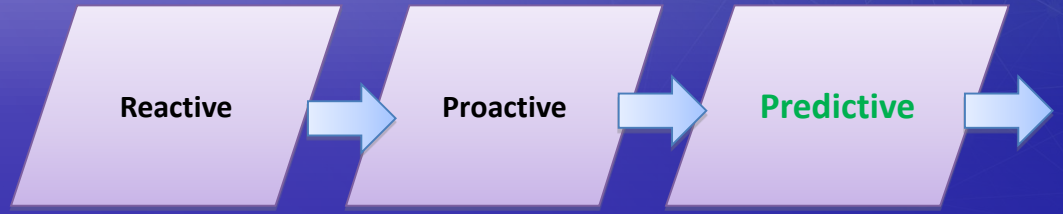
Airline customers express a need for more insight

to do more to improve safety?

- **Airline customers express a need** for more insight to enable them to FOCUS their PROACTIVE care where it's needed more
- **Can we** integrate Safety Management (SMS) data with continuous operational data (QAR & Weather & more)



"we want to help aviation safety
by using captured safety management knowledge
to develop predictive analytics
from ALL available operational data"

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Digital Innovation

How to provide earlier awareness across the operation to inform its safety management care?

early Awareness, quicker Help

- **factors growing their affect in fleet risk**
  - Line Operations: gaining personal perspective
  - Flight Training: early insight into where to review
  - Safety Management: growing risk and emerging cause

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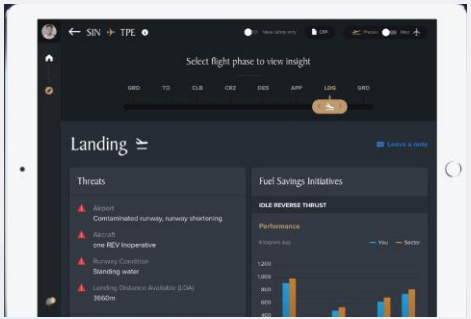
Digital Innovation

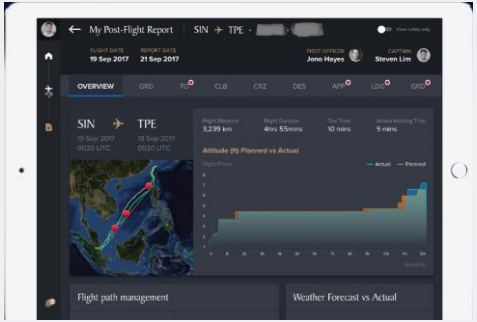
How can I be more aware of what lies ahead?

How can I look back upon this flight?

How can I see how I compare to fleet?

Line Operations, gaining personal awareness





- **Pre-Flight**
  - What do we know about this route?
  - What lies ahead today?
- **Post-Flight**
  - How did that flight go, would I have done anything differently?
  - How do I compare to the fleet average, is this improving?

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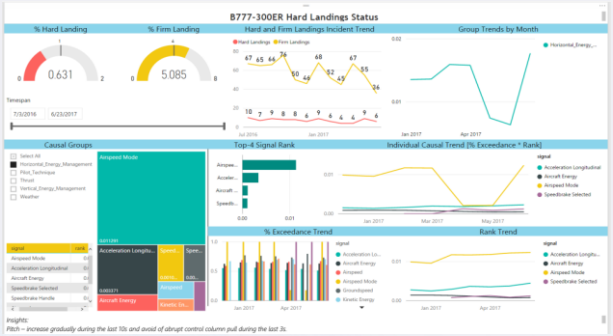
Flight Training, quicker to understand

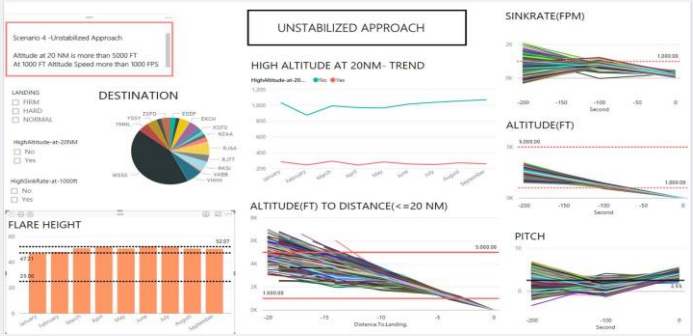
Digital Innovation

What is changing in the fleet?

Should we change the training program?

Should we help in a more specifically?





- **What can I see more quickly and more clearly**
  - What can the data tell me? - what is changing across the fleet
  - How can I gain a quicker ability to look for what I know?

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Digital Innovation

How do we bring the expertise closer to big data?

How can I find new patterns that could grow without mitigation?

Safety Management, what can I find?

- **How can I gain quick access to ALL data**
  - to explore to find unprotected risk
  - to change the shape of the operation
  - to protect against future threats

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Data & Perspective

How can we gain more airline operational perspective ?

Collaborate across the skies

- **Can we give more to Individual Airlines**
  - managing a risk innately, doesn't mean it is not there
  - Really finding useful insight … depends on its contrast

Can we share our data, in a safe place, for a safe pursuit…

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Agility

Innovation

Acceleration

Making data think

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