



# **CANSO's Global Leadership Summit**

**Day 2**

Thursday 25 March 2021

13:00 CET



# Simon Hocquard



Welcome and  
Introduction





Simon Hocquard  
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CEO Aireon

**Isabelle  
Mauro**



Digital transformation



# Industries in Transition

CANSO Executive Summit 2021

25 March 2021

Isabelle Mauro

Head of Telecommunications & Digital Communications Industry

World Economic Forum

# Industry Transition

## Why it matters



*Fundamental changes in technology and society are driving significant change for Industries and Business*

### Industry **boundaries blurring**

**70%** of new value created in the economy over the next decade will be based on digitally enabled platforms

**12** the average tenure of S&P500 organizations is estimated to fall from 24 years in 2016 to 12 years by 2027

### Industries **undergoing transformation**

**96%** of organizations reported they were undergoing business transformations<sup>1</sup>

*...many of which start as digital transformations*

**70%** Of Companies either have a digital transformation strategy in place or are working on one<sup>2</sup>

### **Navigating industry transformation**

**47%** Expect to realize sustainable value from business transformation efforts<sup>3</sup>

**70%** The failure rate of Programmes to change efforts - often due to employee resistance<sup>3</sup>

**50%** Of S&P500 will cease to exist by 2030<sup>4</sup>

*Businesses must learn to transition and adapt for success*

1. <https://assets.kpmg/content/dam/kpmg/pdf/2016/05/global-transformation-study-2016.pdf> | 2. <https://www.ptc.com/en/product-lifecycle-report/digital-transformation-statistics> | 3. <https://www.forbes.com/sites/carstentams/2018/01/26/why-we-need-to-rethink-organizational-change-management/#15642e94e93c> | 4. <https://www.innosight.com/insight/creative-destruction/>

# Three Opportunities for Corporate Leaders



*As companies seize the opportunity to integrate purpose with profit and invest in digital transformation to help deliver on their purpose, leaders can use digital transformation to create value along three inter-related paths*



## Opportunity 3: Principles to guide the digital transformation journey

*No single path can ensure success, but these 11 principles, commonly applied by leading organizations, can help most companies succeed in the seven dimensions of digital transformation.*

1. Be clear on purpose
2. Embed digital in every function
3. Merge innovation and efficiency
4. Integrate value and purpose
5. Advance with agile, iterative roadmaps
6. Combine short-term and long-term strategy
7. Build an entrepreneurial culture
8. Upskill executives
9. Invest in technology for the long-run
10. Be determined with technology adoption
11. Adopt new metrics



# Digital Transformation

## Market Dynamics

Digital transformation does not take place in a vacuum. External influences play an important role. In some cases, they can accelerate digitalization, in others, they may hinder it.

Data is a **driver of value**...

**\$3T** value by 2020 by connecting data <sup>1)</sup>

**x2** higher growth by proactively sharing data <sup>2)</sup>

**40%** of companies see data exchange as strategic <sup>3)</sup>

... while **shared concerns** impede progress...



**Inappropriate use of data**



Complex **regulatory environment**



**Commercial sensitivities** (liability and competition)



New equations **for trust and governance**

### Aviation

- Growing demand for travel
- Fierce price competition between online booking platforms and passenger airlines
- Rise in customer demand for digital experiences
- Emerging security threats to legacy IT systems

### Telecommunications

- Growing demand for data
- Fierce price competition between over-the-top platforms and communication service providers
- Rise in mobile-first customer behavior
- Emerging cybersecurity threats to legacy network infrastructure

Market dynamics are disrupting traditional value chains

# Digital Transformation of Telecommunications

## *A \$2 Trillion Opportunity for Industry & Society*

*There are signs that the next phase of competition in telecommunications will accelerate the need for operators to abandon incremental initiatives in favour of transformational innovation. Four themes will be especially important.*

### Networks of the Future

*Rising demands on networks and associated cost pressures are leading operators to accelerate the development of 'smart pipes' and new models of extending internet access.*

Total value at stake

**\$440 billion**  
Industry

**\$580 billion**  
Society

### Beyond the Pipe

*Digitalization offers important opportunities to extend revenue streams beyond just connectivity.*

Total value at stake

**\$650 billion**  
Industry

**\$290 billion**  
Society

### Redefining Customer Engagement

*To win customer mindshare in a digital world, and exceed B2C and B2B customer expectations, operations must rethink customer service.*

Total value at stake

**\$30 billion**  
Industry

**\$2 billion**  
Society

### Bridging the Gap on Innovation

*Rapidly accelerating innovation cycles are forcing industry players to go beyond in-house R&D and transforming company culture to attract the best digital talent.*

Total value at stake

**\$160 billion**  
Industry

**\$1 billion**  
Society

# *Thank you*

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*For any question, please contact Isabelle Mauro @  
Isabelle.mauro@weforum.org*





**Isabelle Mauro**

**Alex Bristol**



# Break

See you in 5 minutes!



# Simon Hocquard



Welcome back!



# Ian Painter



What does the data say?



CIRIUM

## What does the data say?

Ian Painter,  
General Manager, Air Operations

# Powerful data, advanced analytics and an open eco-system – it's in our DNA



A global provider of information-based analytics and decision tools for customers.

**\$10bn** revenues

**\$40bn+** market capitalization.

**180+** countries served

**75%+** Fortune 500 as clients

**30,000+** employees in **40** countries

## Risk & data services

**High growth analytics supported by Big Data**

**\$2.8bn** revenues, **8,700** employees

**5 petabyte** HPCC open source big data platform

**Legal**

**Scientific, technical & medical**

**Exhibitions**

## LexisNexis® Risk Solutions Group

**Aviation & air travel - Cirium**

Chemicals & Energy – I.C.I.S

Data & tech – LexisNexis Risk Solutions

Agriculture – Proagrica

Commercial Property – EG

HR – XpertHR

Tax – Nextens



**Group**

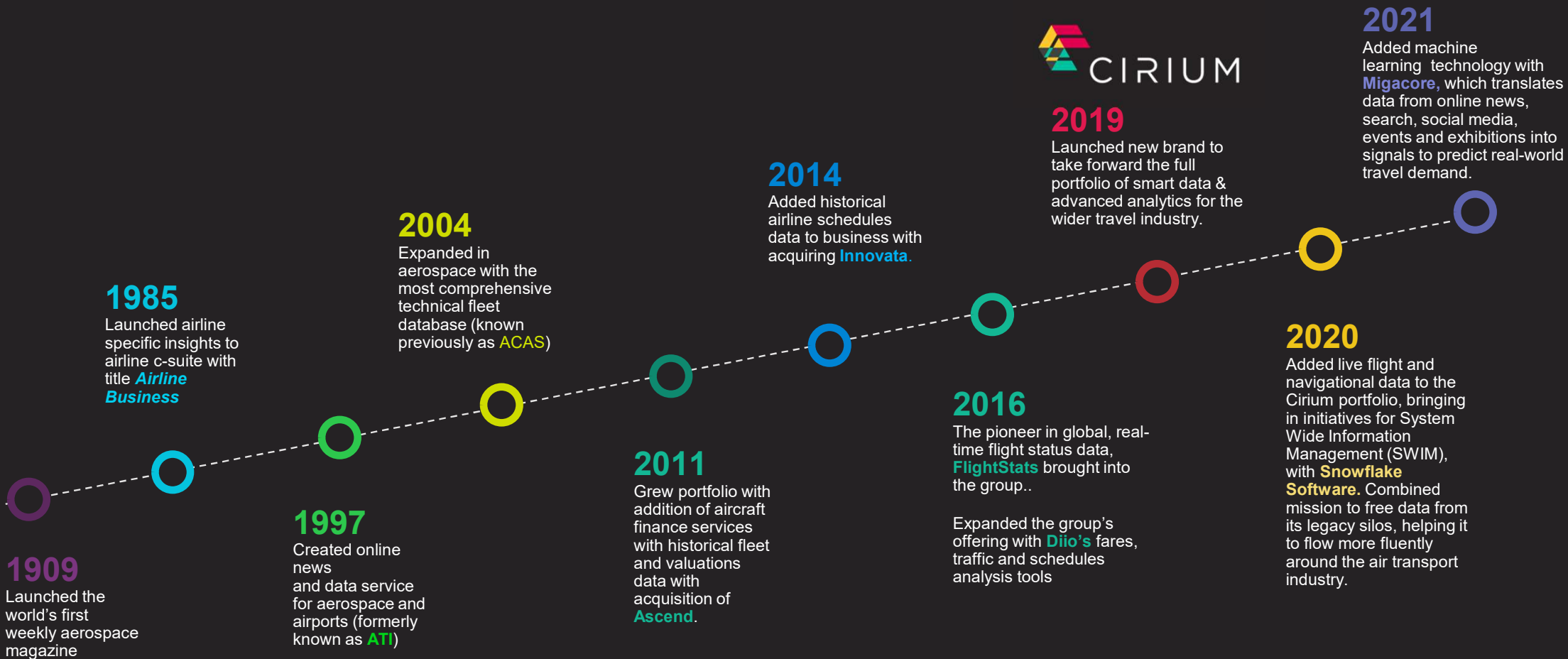
**Divisions**

**Brands**






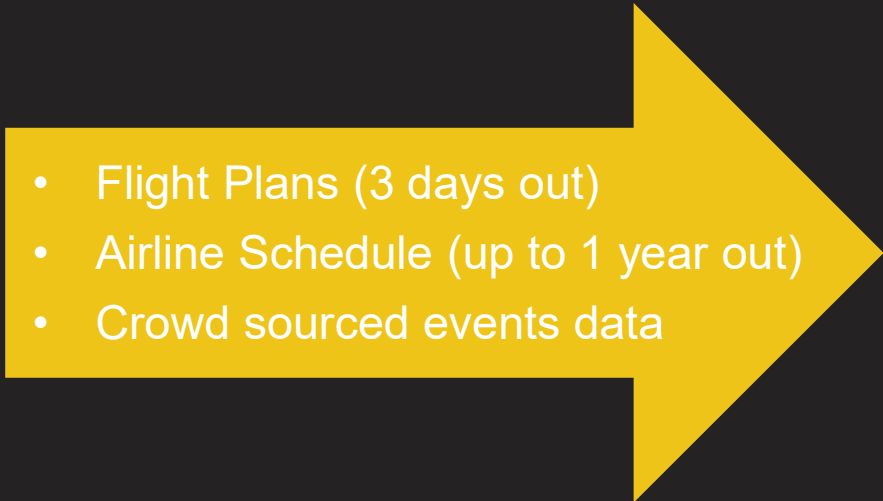
# We created a new data analytics powerhouse under a new brand



So what does the data say?

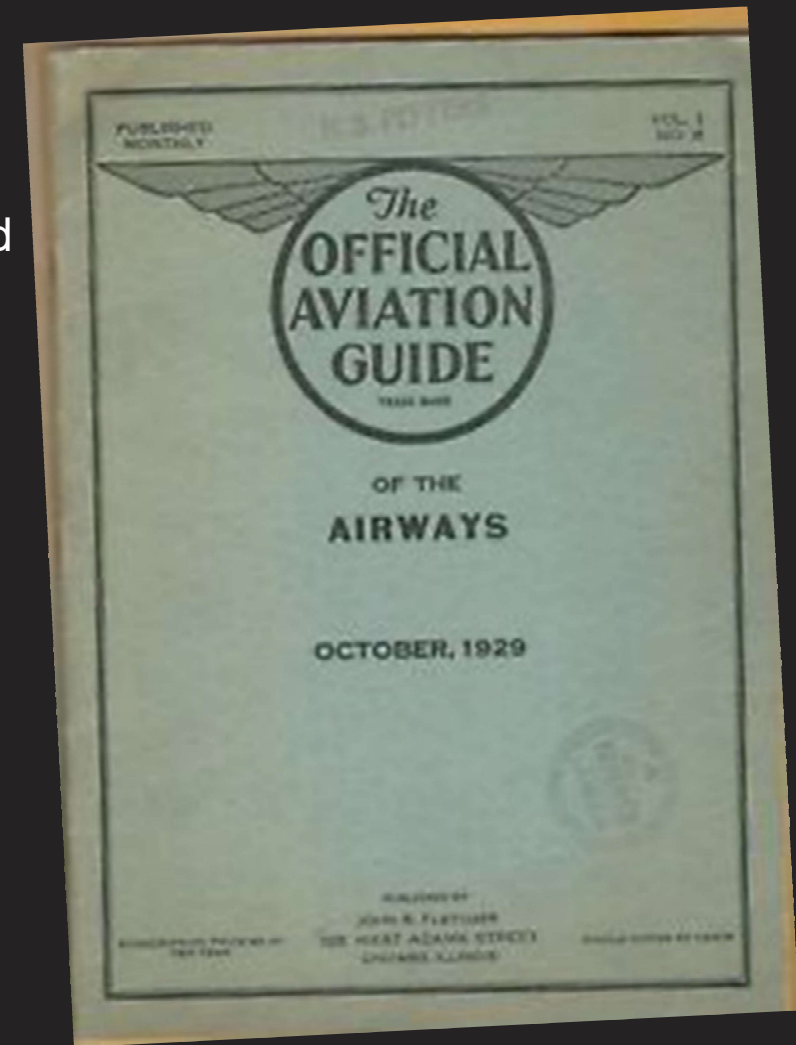
## Looking backwards and forwards to predict the future

- 
- Surveillance / radar
  - Flight status / OOOI times
  - MVT messages
  - AODBs
  - QAR
  - Ticketing

- 
- Flight Plans (3 days out)
  - Airline Schedule (up to 1 year out)
  - Crowd sourced events data

## Predicting the future since 1929

- 1929 The Official Aviation Guide of the Airways is published
  - 35 Airlines, 300 flights
- 1958 Computer generated city-pair indexes
- 1971 IATA Standard Schedules Information Manual
- Schedules are published 6-9 in advance
- Schedule change inside 4 months were minor
- Airlines flew over 98% of their published schedule





# Global totals from 01-Jan-2020 to 30-Dec-2020

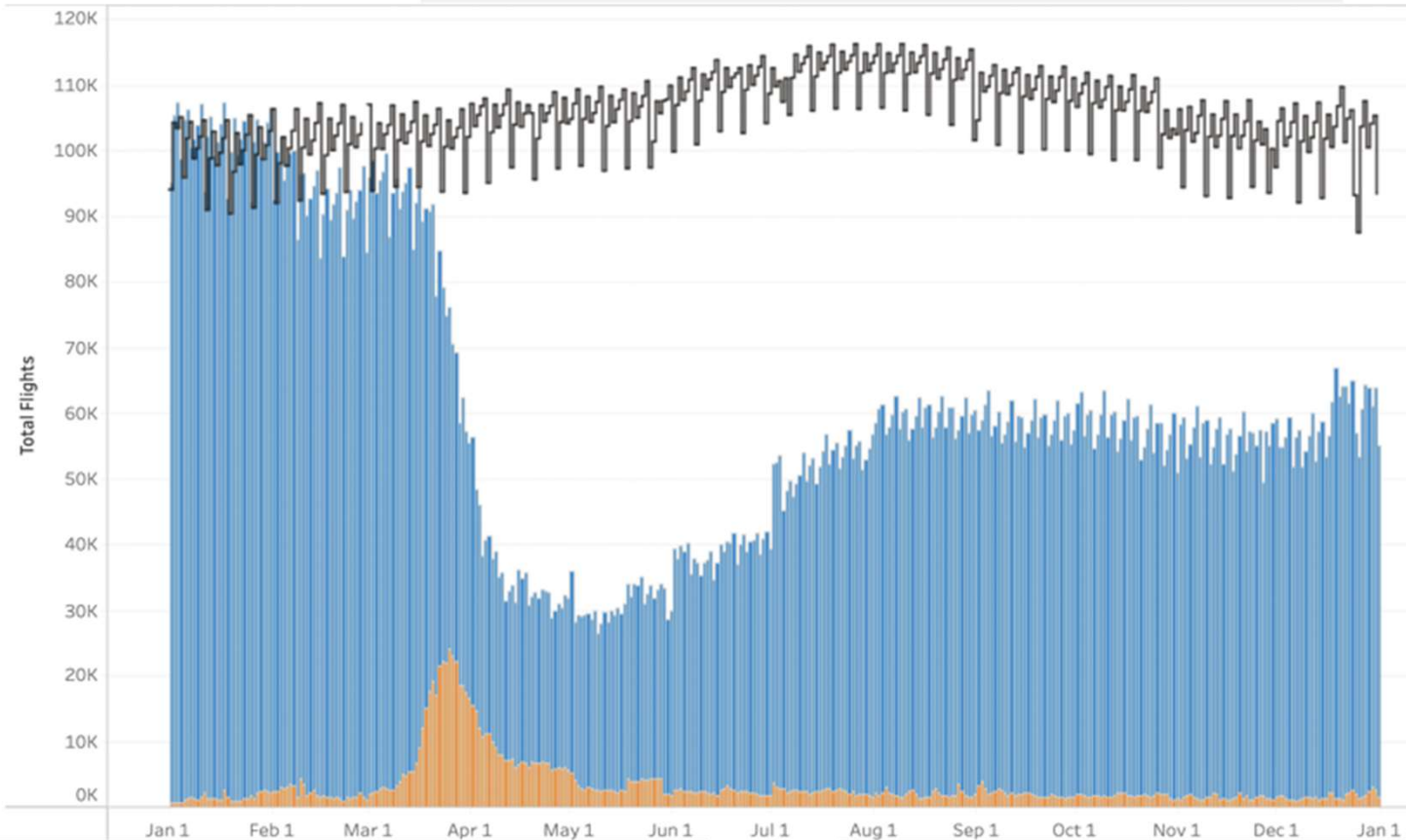
## Daily Impact Year over Year

Scheduled Flights in 2019 vs 2020 Performance

Completed Flights 2020

Never Flew Flights 2020

Scheduled Flights 2019



2020  
scheduled flights  
**22,214,708**

2019  
scheduled flights  
**38,489,938**

Actual flights flown  
21,016,334

Flights not flown  
1,198,374

YoY travel  
42% ↓

YoY flights not flown  
87.11% ↑

So what does the data say?

So what does the data say?

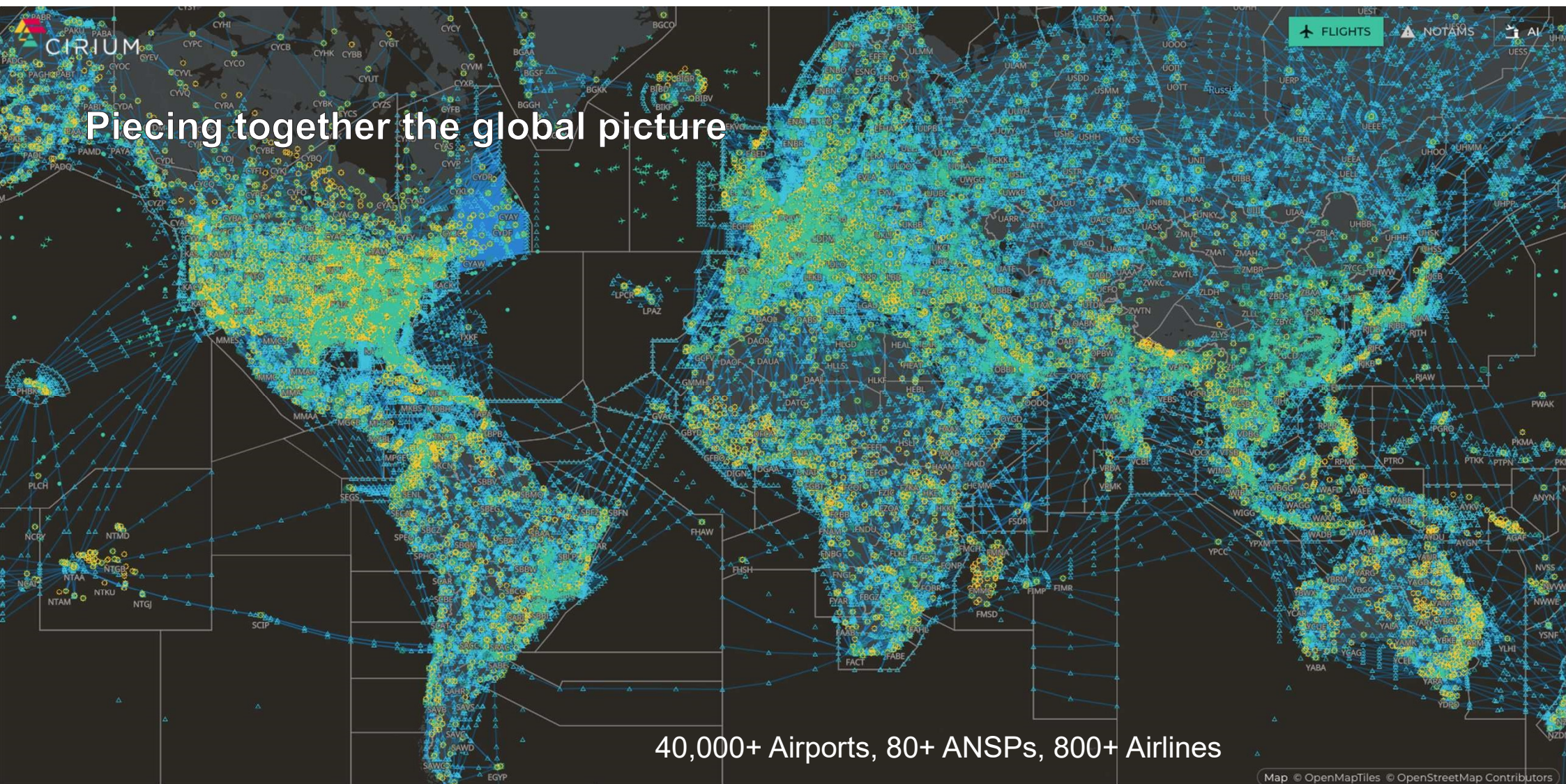
Aviation is a system of systems

Data is siloed away by FIR, Airline or Airport ...

There is not one authoritative organisation that holds the complete picture







## Piecing together the global picture

40,000+ Airports, 80+ ANSPs, 800+ Airlines



# The scaling effect of global data provision

## AIRLINES

Fleet, network and price planning, competitive benchmarking, operational efficiency and traveler management



## AIRPORTS

Air service development, competitive benchmarking, operational planning and disruption management



## TRAVEL

Real-time trip monitoring and alerting for corporations, TMCs and other travel companies across managed travel



## ONLINE

Powering online travel agencies, flight search and traveler apps with a mix of flight, fleet schedules and status data



## AIR NAVIGATION

Providing an integrated 360° view of a flight for Air Navigation Service Providers bringing together multiple datasets in real time



## GOVERNMENT

Working with governmental agencies to inform transport & tourism policy, air safety and border security



## FINANCE

Serving the world's fleet financiers, lessors, insurers & equity analysts with aircraft valuations and market



## AEROSPACE

Market land-scaping of the world fleet and monitoring of commercial flying for manufacturers & the aftermarket



## What does this mean for ANSPs?

- ANSP need to recognize they only have part of the picture
- To manage unpredictability and future sustained growth, ANSPs will be reliant on data from other ANSPs and 3<sup>rd</sup> parties outside of their FIR
- This will require data partnerships with other stakeholders as well as the commercial sector



## What can an ANSP do and why should they do it?

- 1 Think outside of the FIR
- 2 Embrace data exchange with other airspace users and stakeholders as well as the commercial sector
- 3 Have a simple data release policy
- 4 Charge for the data if you wish, but understand that comes with overhead & SLAs
- 5 Work in partnership with the commercial sector & appreciate they will want to make money from your data



An aerial photograph of a beach at sunset. The ocean waves are breaking onto the shore, creating white foam. The sand is wet and reflects the golden light of the setting sun. Several dark rocks are scattered along the coastline. The overall mood is serene and powerful.

The rising tide lifts  
all the boats.

John F. Kennedy





**Ian Painter**



**Don Thoma**

# Simon Hocquard



Closing remarks



# Thank you

