Digital Airfield: A Collaboration Enabler

Edwin Pang <u>Product Manager – Digital</u> Towers & Transformation

7th Annual Civil Aviation SEA Summit 2024







Contents

- 1. What is a Digital Airfield?
- 2. Digital Airfield Visualisation
- 3. Today's Technology Environment
- 4. Convergence
- 5. Collaboration
- 6. Q&A

What is a Digital Airfield?





Right Info, Right Time, Right User





Integrated Airport data





Convergence

• Connecting airline, airside & ATC Ops

Automation

AI based decision support

Augmentation

Video Tags / Overlays/ MET

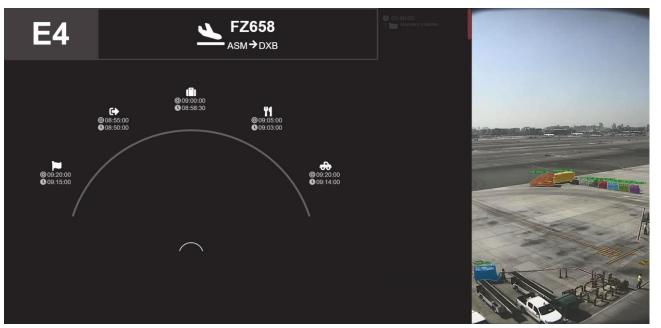
Digital Out the Window View

Cameras

Digital Airfield: Visualisation













Dow Time 44 48 ms 5%O version 4.23 1.85 x: 624 2768 radio 0.0000 x: 0.2900 eex 0.0000

eng 1 2680 el 1: x: 1.0000 veoX:0.0000 y: 0 1145 rocY:0 0000 x: 0 10000 roc2:0 9889 1570 sepectFacible 12245 for On degred Alshedlending Alshedlending commert 1 IN-FP8, 25 14 Cac-FP8 25 09 Manage, 40 01ms commere 2 IN-FP8, 25 18 Cac-FP6 25 19 Manage, 35 00ms commere 3 IN-FP8, 25 05 Cac-FP8 25 09 Manage, 42 05ms

Today's Operational Data / System Environment

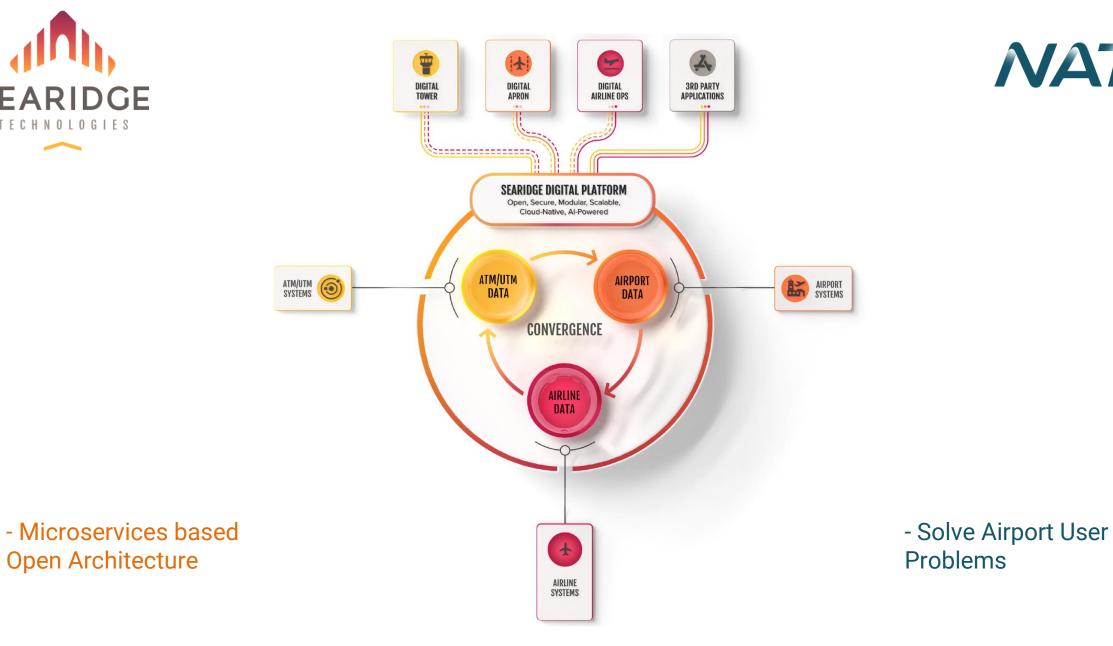


Airport ATC OEM OEM system system Airline Airline

ATC and Airport operations with:

- Limited point to point data exchange
- > Siloed monolithic systems
- Disparate OEM suppliers on each side
- No commonality of OEM between ATC and Airport







Stakeholder Collaboration - IAC







Stakeholder Collaboration - CDM





Microservices





Last Minute change of stand



RWY Occupancy Timer



Stand Not Empty for Incoming Flight

• What Microservice would you build? (Right Info, Right Time, Right User)

edwin.pang@nats.co.uk



