

SEARIDGE TECHNOLOGIES

# DIGITAL TOWERS

RESILIENCE

RECOVERY

REFOCUS

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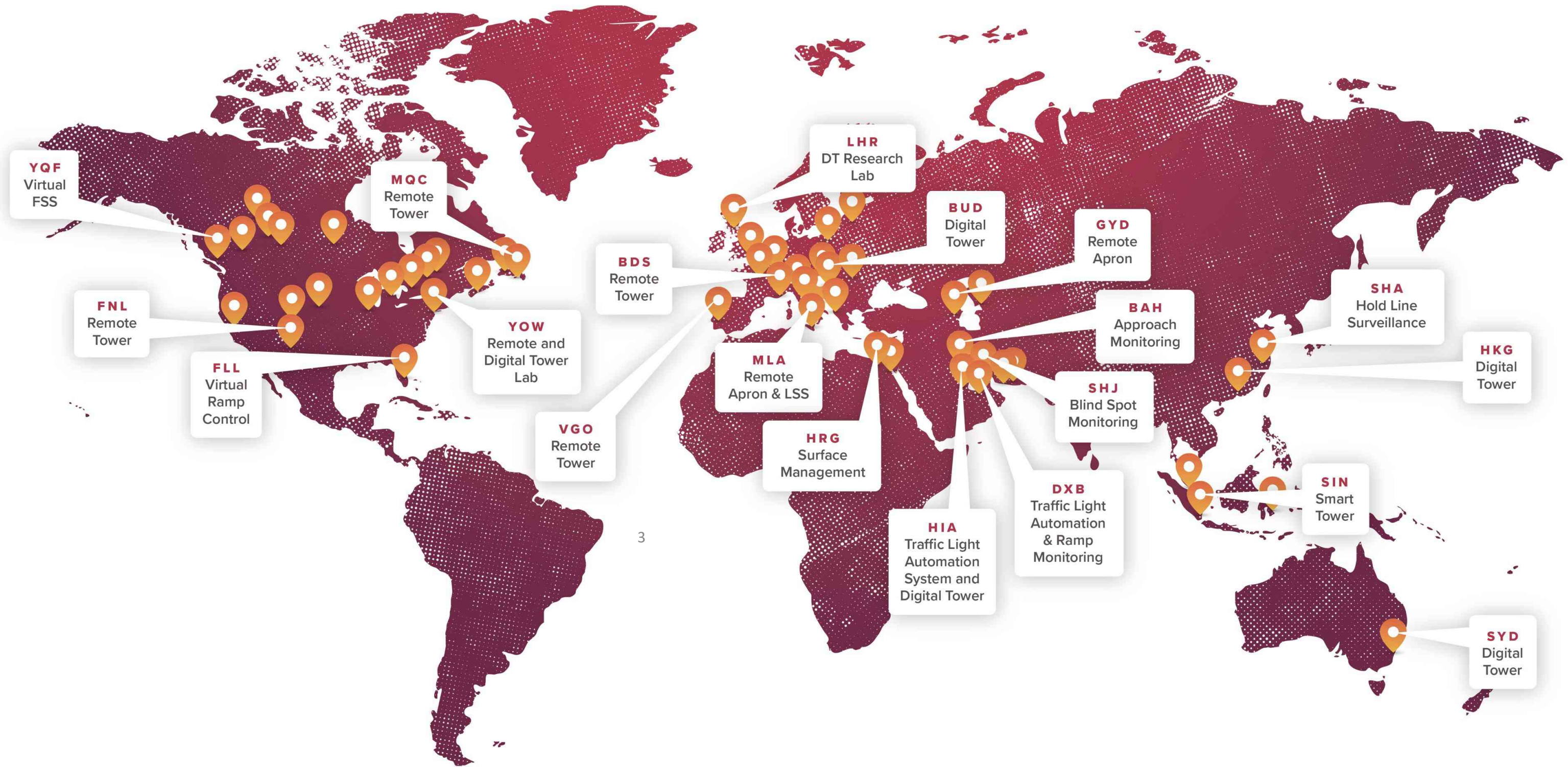


# Company Overview

- Private company, HQ in Ottawa, Canada - founded 2006
- Staff located in Canada, Singapore, Germany, UK, HK, UAE
- 40+ deployments globally
- Owned by NATS UK
- Global leader of Digital Tower and Surface Optimization Solutions
  - **1st** Video Platform for ATM
  - **1st** AI Platform for ATM
  - **1st** operational virtual/digital ramp control tower
  - **1st** operational med-lg digital tower
  - **1st** operational Hub/HIRO digital tower



# 01 GLOBAL DEPLOYMENTS



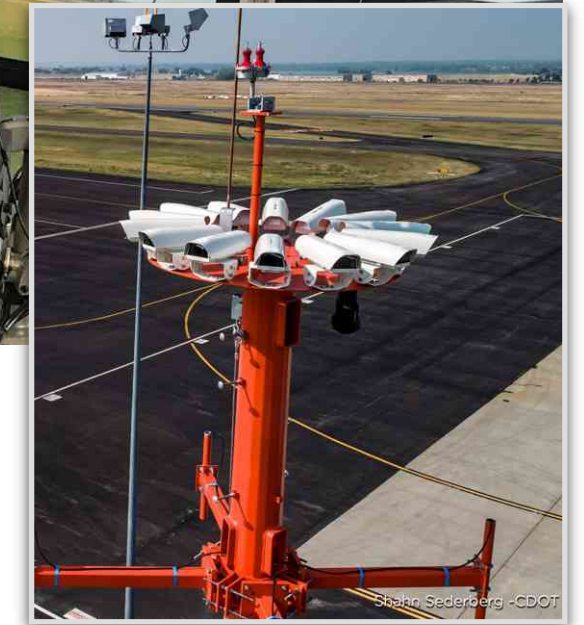
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# Brick and Mortar vs Digital/Remote ATC Tower

## Traditional ATC Tower



## Digital / Remote ATC Tower



# Digital/Remote Tower vs Traditional ATC Tower

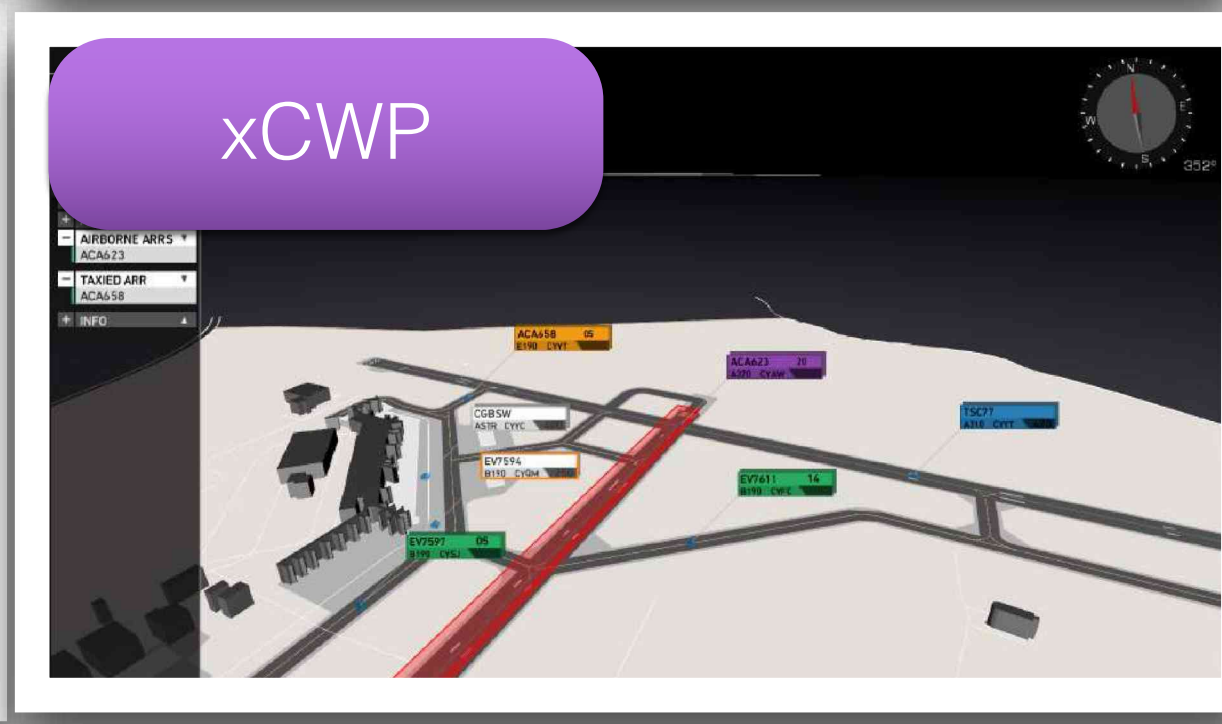
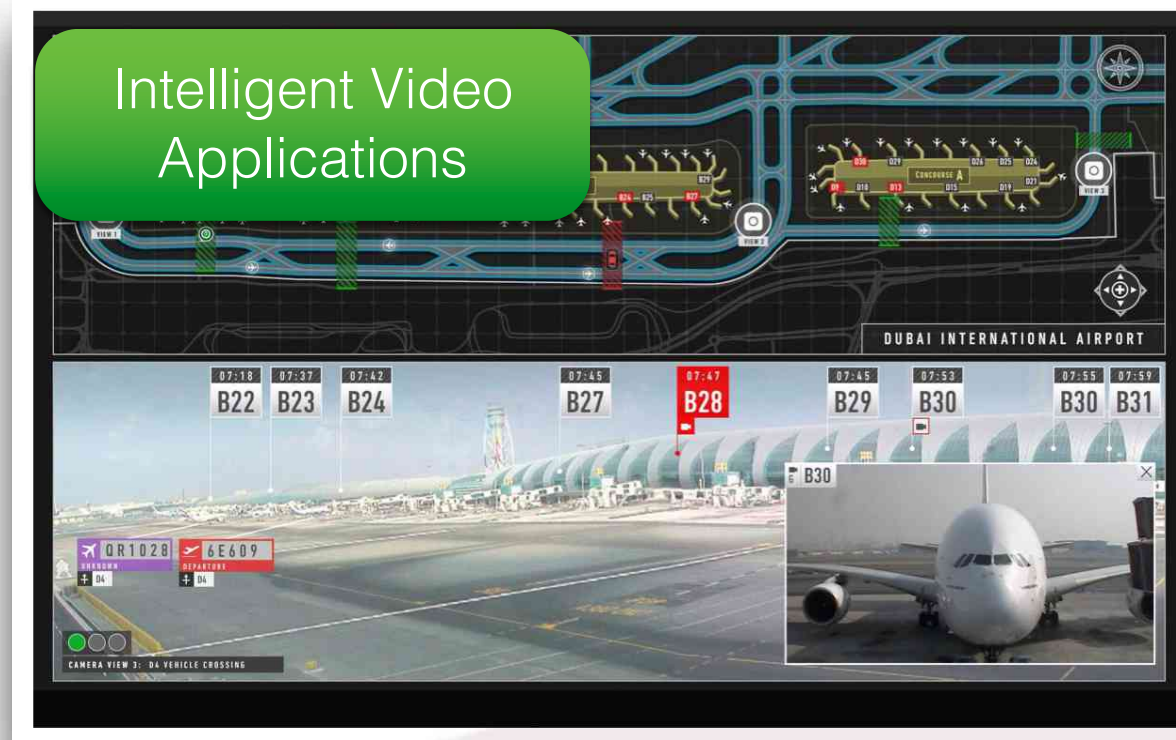


rTWR VIEW



TWR VIEW

# Searidge Digital Tower Solution Toolbox



# Scalable Digital/Remote Tower Solutions For All Types of Airport Operations

**Small Low Volume**



**Large Volume - Multiple Runway**



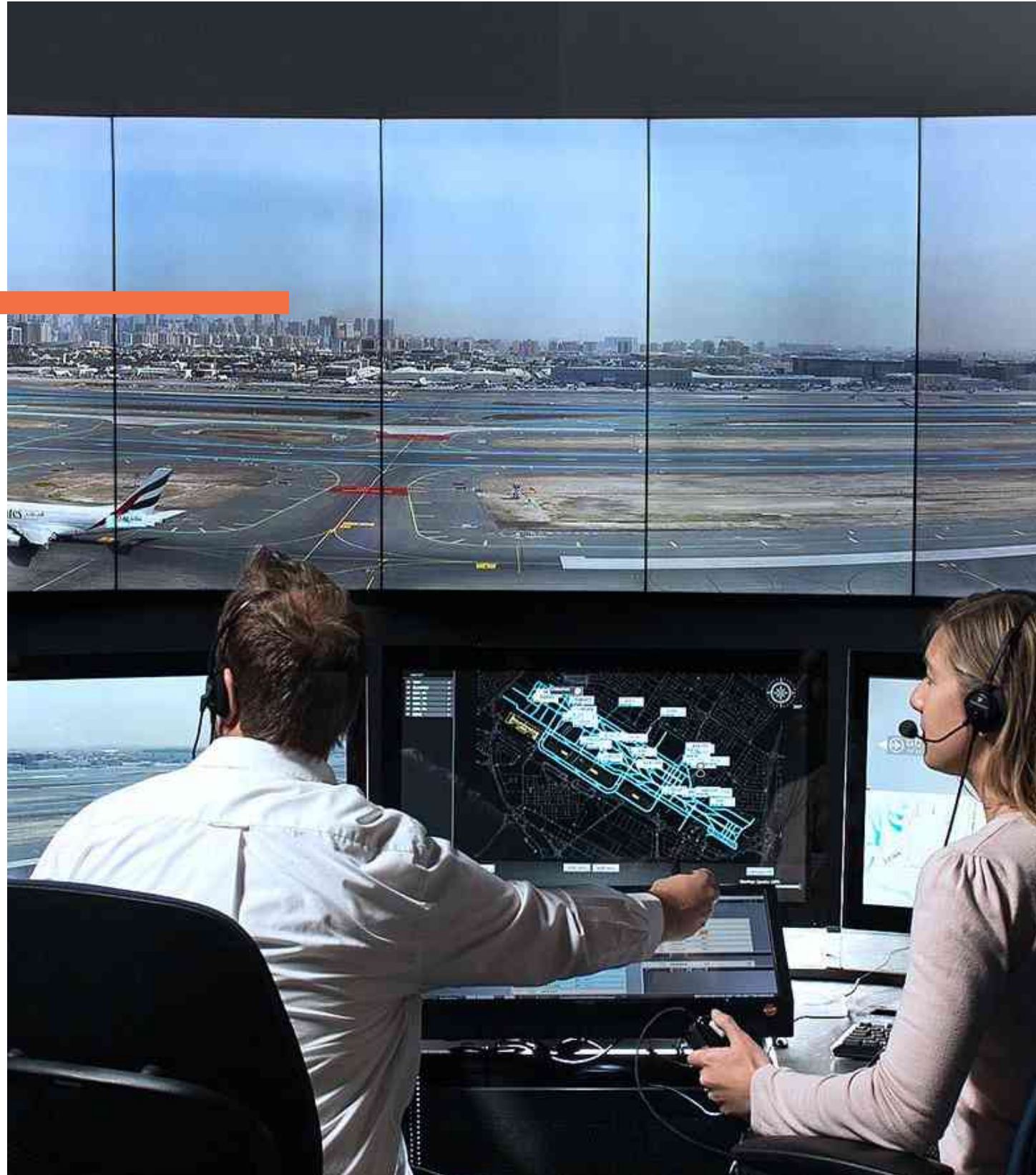
**Low - Med Volume – Single Runway**



**Apron Control / Management**



# THE THREE R'S 01



## RESILIENCE

As an industry, how have we adapted to weather the worst ever storm to hit aviation?

## RECOVERY

As traffic and passengers begin to return, what can we do to support our partners?

## REFOCUS

Building back provides an opportunity to refocus. What should be the priority areas?

# RESILIENCE

## ANSPs FACING SIGNIFICANT CHALLENGES

Maintaining essential services in lockdowns before vaccines were available

Faced with fixed costs while seeing significant decreases in revenues

While all ANSPs had contingency plans, one was able to leverage its digital tower to help keep operational ATCOs safe

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# CONTINGENCY = RESILIENCE

## RESILIENCE



Budapest rTWR Digital Tower certified live operations in 2017

First dual runway digital tower and largest airport operational

In COVID-19 resilience response, HungaroControl separated Aerodrome Control teams (A&B):

Day shifts (A) in rTWR

Night shifts (B) in traditional TWR

Benefit:

Resilient aerodrome operations

3000+ hours of safe operation

50,000+ aircraft movements

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# RECOVERY

## EMERGING USE CASES FOR DIGITAL TOWERS

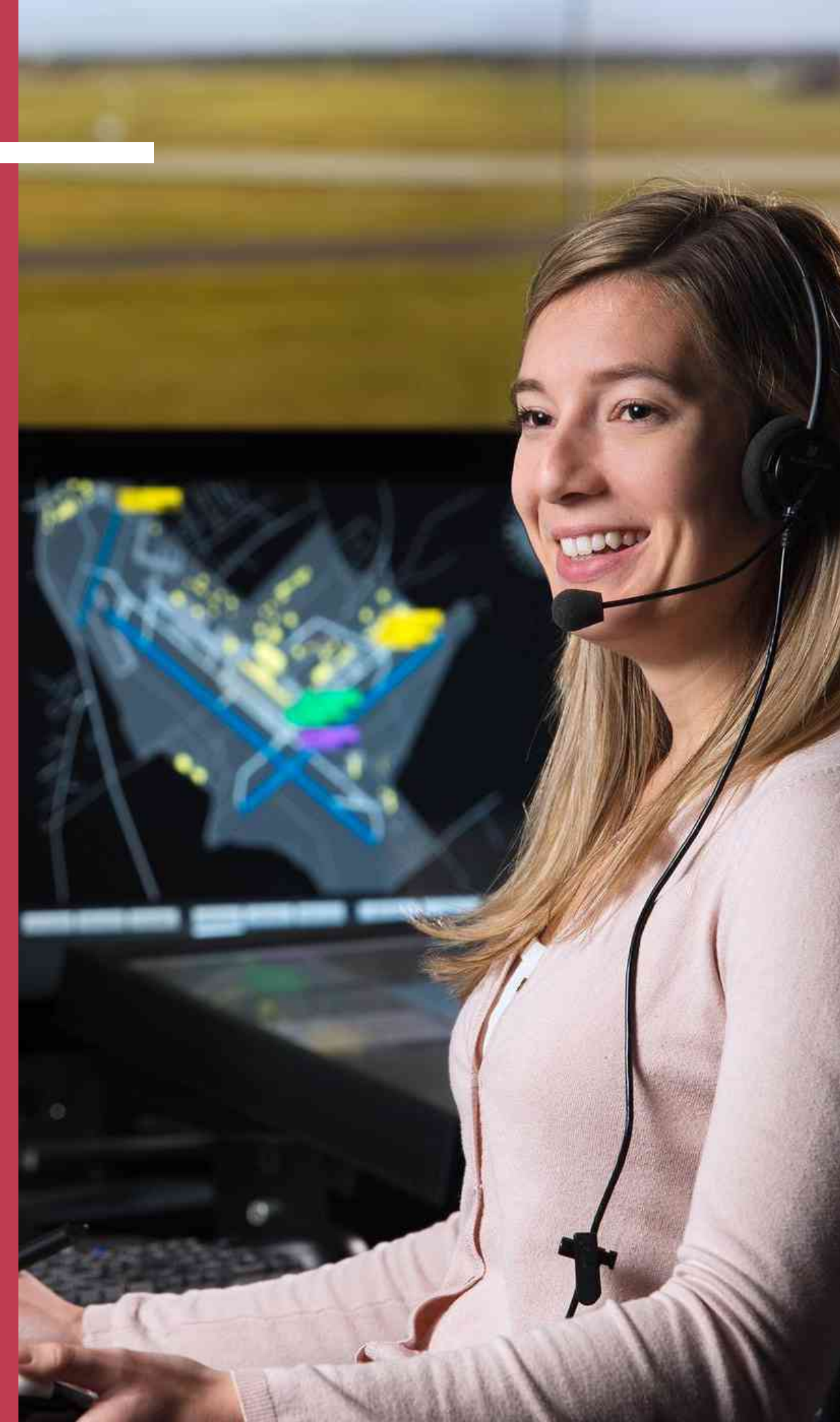
The industry environment is very different from 2019

Scalable solutions are important; ANSPs need the right solution for their operations, that can be scaled up when required

“Sweat your assets”:

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Digital Tower technology can be integrated with your existing operational systems, ensuring existing assets bring return, and smoothing the path of operational change



# SCALABLE SOLUTIONS

## RECOVERY



Scalable means you get the right solution for your Airports.

Emerging business cases:

- Hybrid operations

- Airport expansion

- Contingency

A multi-runway international airport and a small regional airport can share the same platform

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# REFOCUS

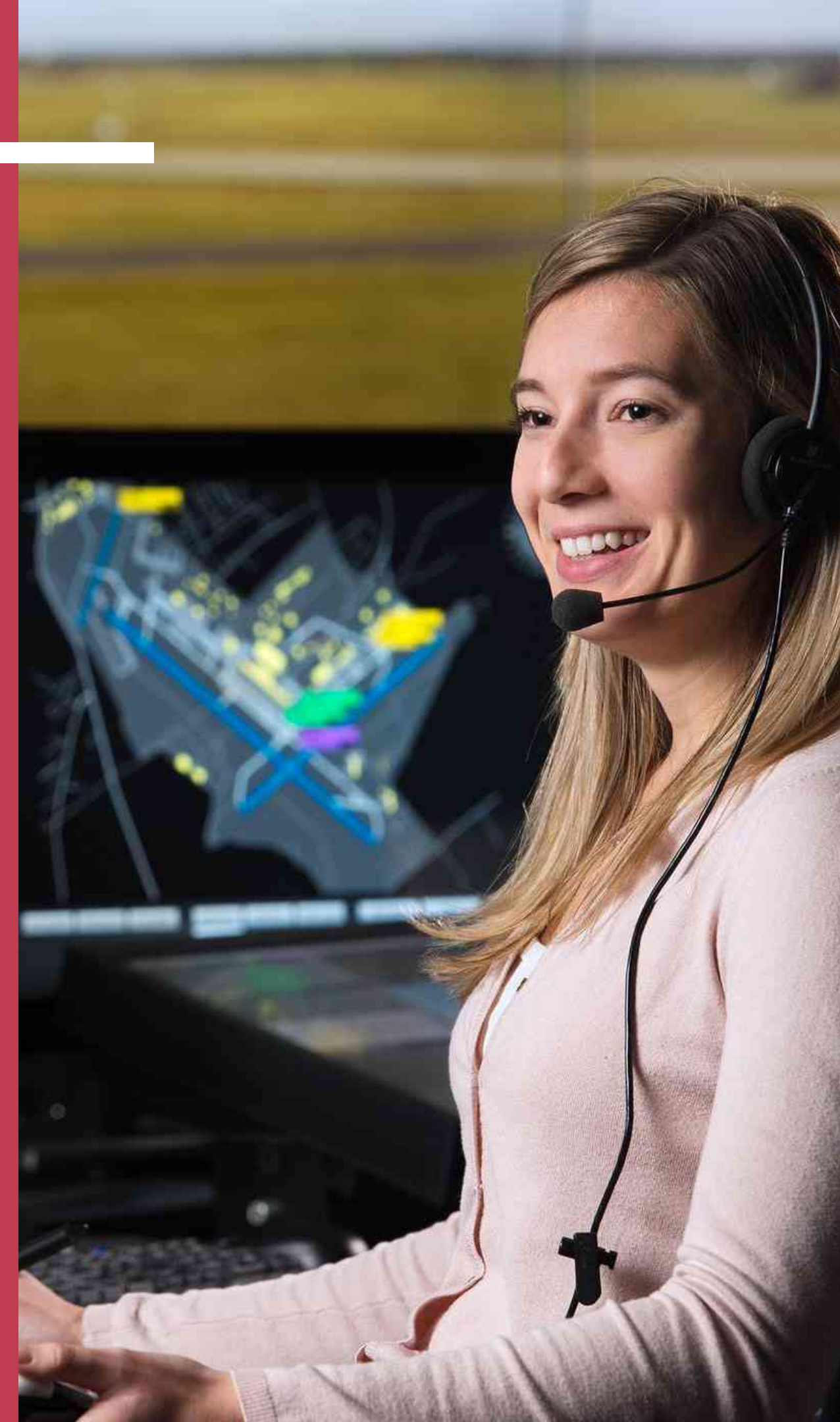
## OPPORTUNITY TO DO THINGS DIFFERENTLY

Challenge from ANSPs and Airports to utilize existing systems when implementing Digital Tower

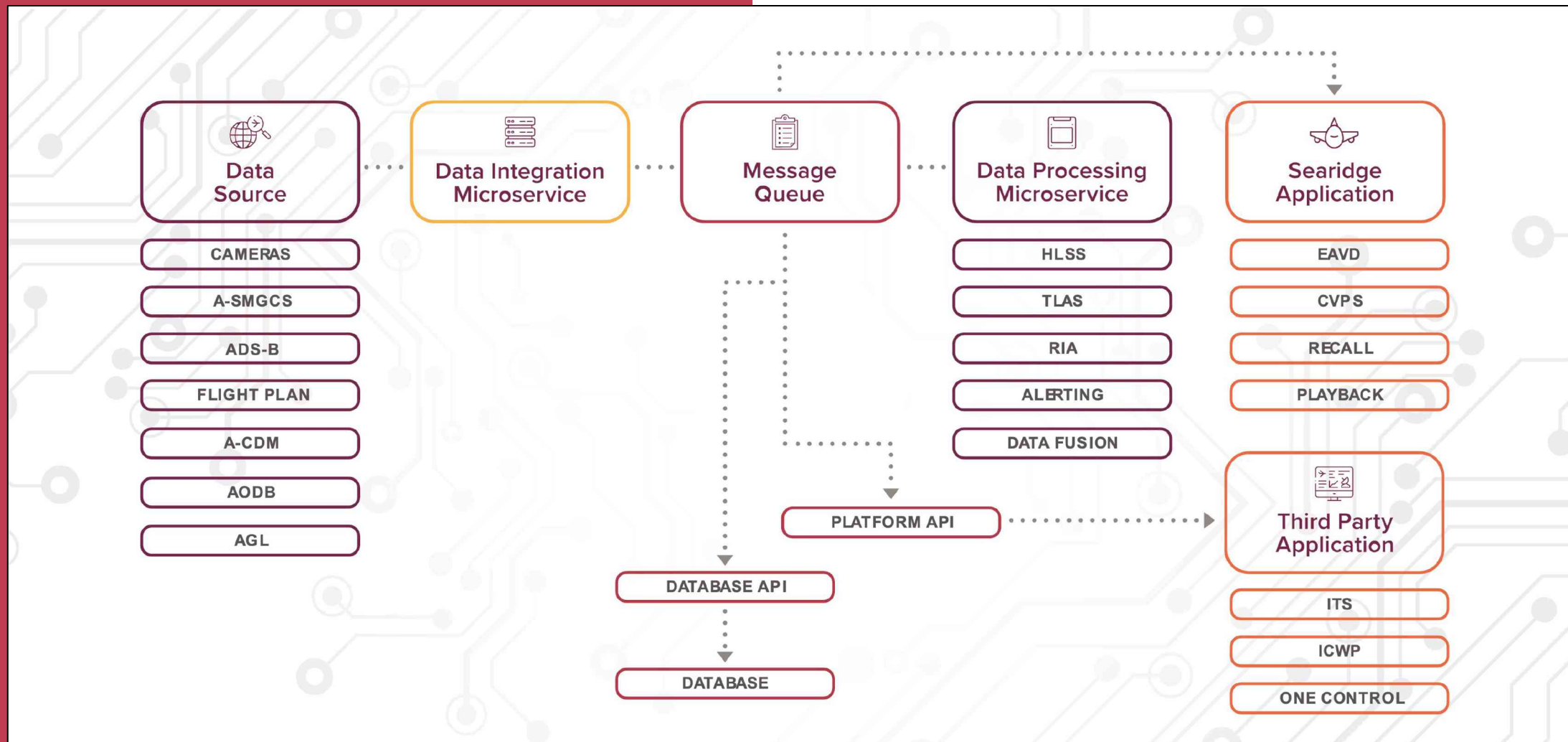
Technology is at the forefront of conversations - utilize technology to make operations more sustainable, flexible and efficient

Opportunity to build partnerships and evolve the commercial models

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# PLATFORM



## REFOCUS

Convergence between ANSPs and Airports can bring substantial benefits

One Platform – two Systems

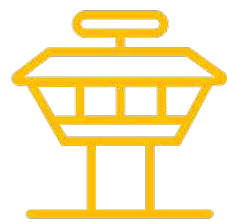
Digitalization: harmonize data sharing between Digital Tower and Digital Apron:

Shared situational picture with cyber secure user eligibility

## Case Study: Hong Kong CAD/ AAHK

- » Digital Apron and Tower Management Systems (DATMS)
- » One platform: two systems – DTF & DAMS. 100+ CWP's across airport estate
- » Data sharing between DTF & DAMS supports convergence of ATC and surface movement flow

### Benefits



- » Digital Tower for ATC in support of operation of new Runway 3
- » Enhanced views of critical areas – approach, touch down
- » AIMEE runway occupancy alerting
- » AIMEE traffic light automation



- » Digitization of Apron Management at new IAC
- » Alerting for On-Time Performance and delays
  - » Support decision making & holistic planning
  - » Facilitate resources allocation
- » AIMEE TLAS – 68x back-of-stand road/gate traffic lights for vehicle stoppage
- » Integration of relevant operational airport data –A-CDM, VDGS, gate allocation, tow, ground handling, service equipment allocation



LOADING... 98%

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