Practical application to deliver Solutions

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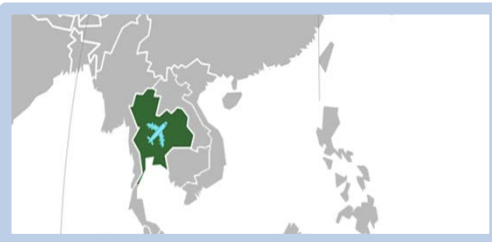
*Aviation Information World – Forecasting the Future*

Information Sharing Opportunities

- Data access and exchange across regional Air Navigation Service Providers (ANSPs), Airlines, and Airports is insufficient
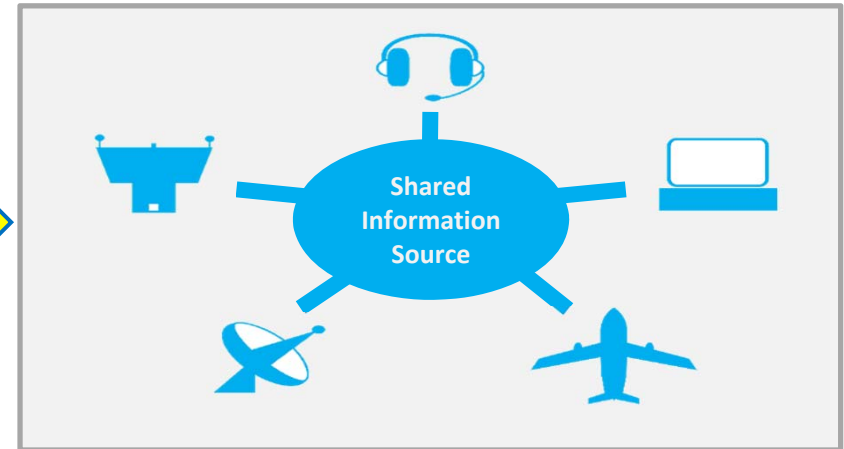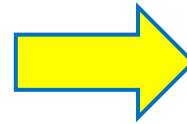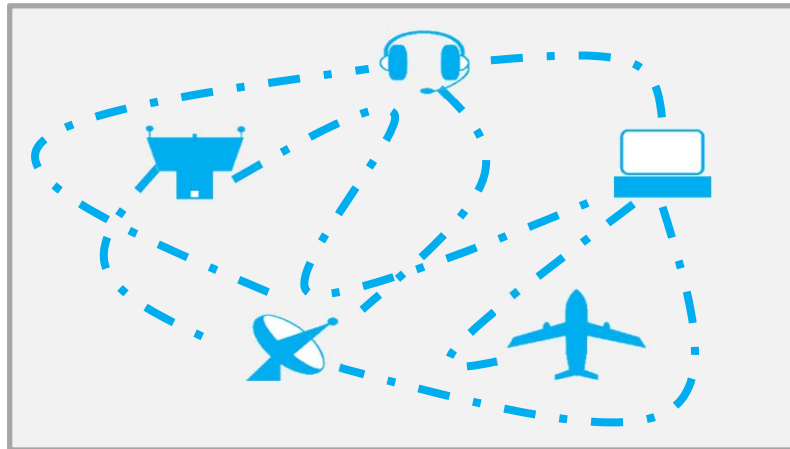
- Need for Collaborative Decision Making (CDM) process, tools, improved situational awareness, and training across regional Air Traffic Management (ATM) stakeholders
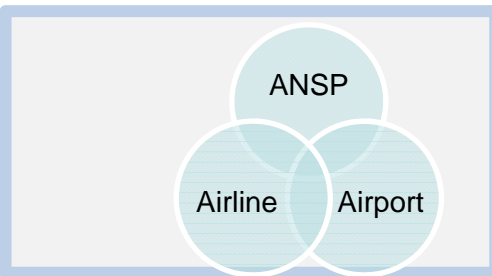
- Opportunity for new architectures to enable operational goals

A Problem we aim to solve…

Problem:
- **Conflicting multiple information sources**
- **Point-to-point system connections**
- **Limited data sharing and isolated**
- **Inability for true situational awareness and decision implications**

Solution:
- A single shared information source for data and apps
- A system-wide integrated data (SWIM)
- Open data sharing and collaborative decision making
- Holistic view of operations

Benefits: Data Convergence

Global and Regional Goals
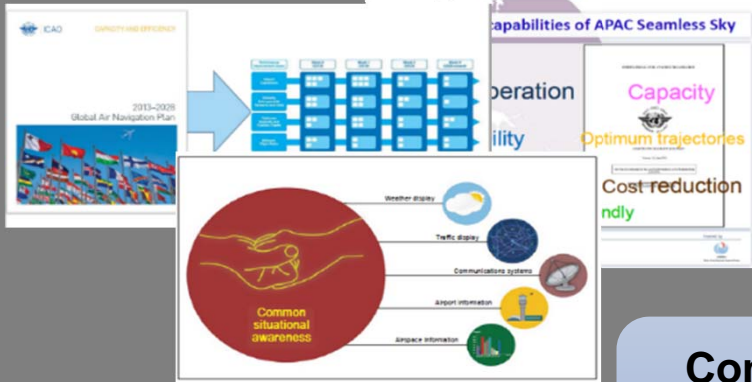
Stakeholder Surveys, Feedback, and Discussions

Airline

ANSP

Airport

Convergence on needs for ATFM/CDM and SWIM

Industry Studies

Quantitative Research

www.iata.org/SkyFusion

SWIM: Enabler to Solution

| Problem | Enabler | Application | Solution |
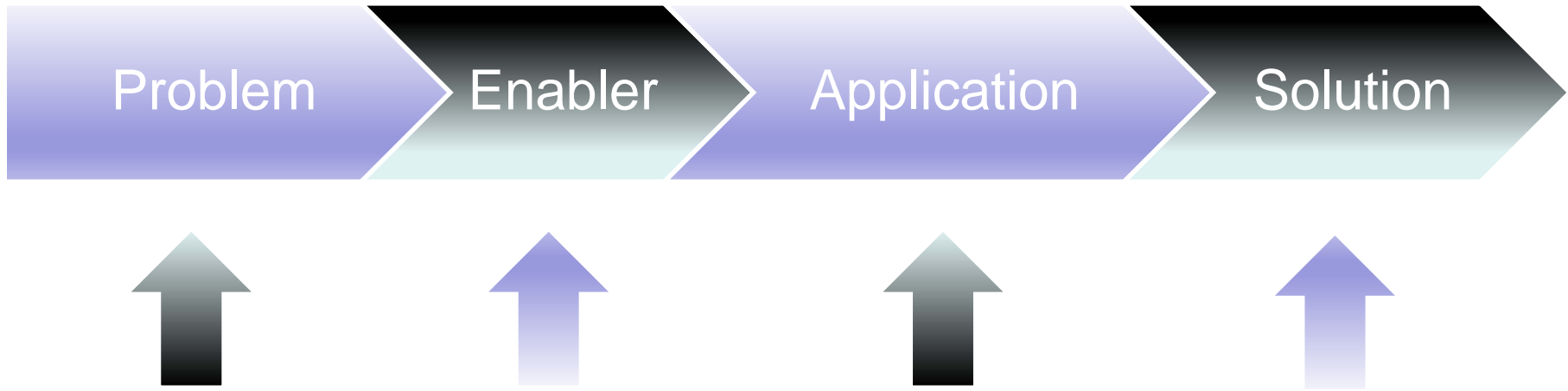
Enabling sharing of information through data standards in order to achieve system to system data exchange

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AT-EC

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SWIM Enables….

Airline

↗ Improves situational awareness at home and abroad

↗ Provides tools for collaboration across borders

↗ Supports enhanced decision making

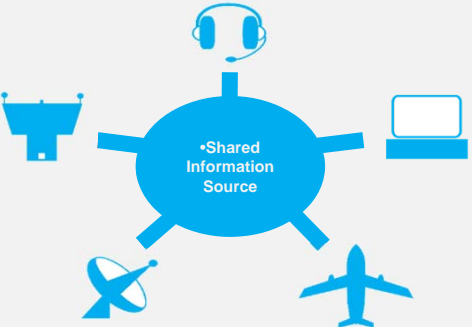↗ Serves to link airlines with ATM network via SWIM-enabled information network

ANSP

↗ Create Information and tools that complement existing decision support systems

↗ Enables common situational awareness, and effective dialogue between stakeholders

↗ Future-proofs ATM systems

Airport

↗ Improves situational awareness unconstrained by borders

↗ Provides collaboration tool

↗ Provides a means to interconnect Airport CDM system via ATM network

SWIM Benefits : Air Traffic Flow Management (ATFM)

- ✓ SWIM can enable data for command center function to enhance CDM capabilities
- ✓ Information that provides situational awareness to users on impacts

- ✓ Reduction of holding can save airlines as much as 71 USD per minute avoided

• *source ACI study delay minute 2014*

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SWIM **Benefits** : Empowering Decisions

✓ 95% Passengers are Happiest in Dwelling Time

✓ #1 thing passengers demand is accurate information

✓ Happy passengers spend 45% more

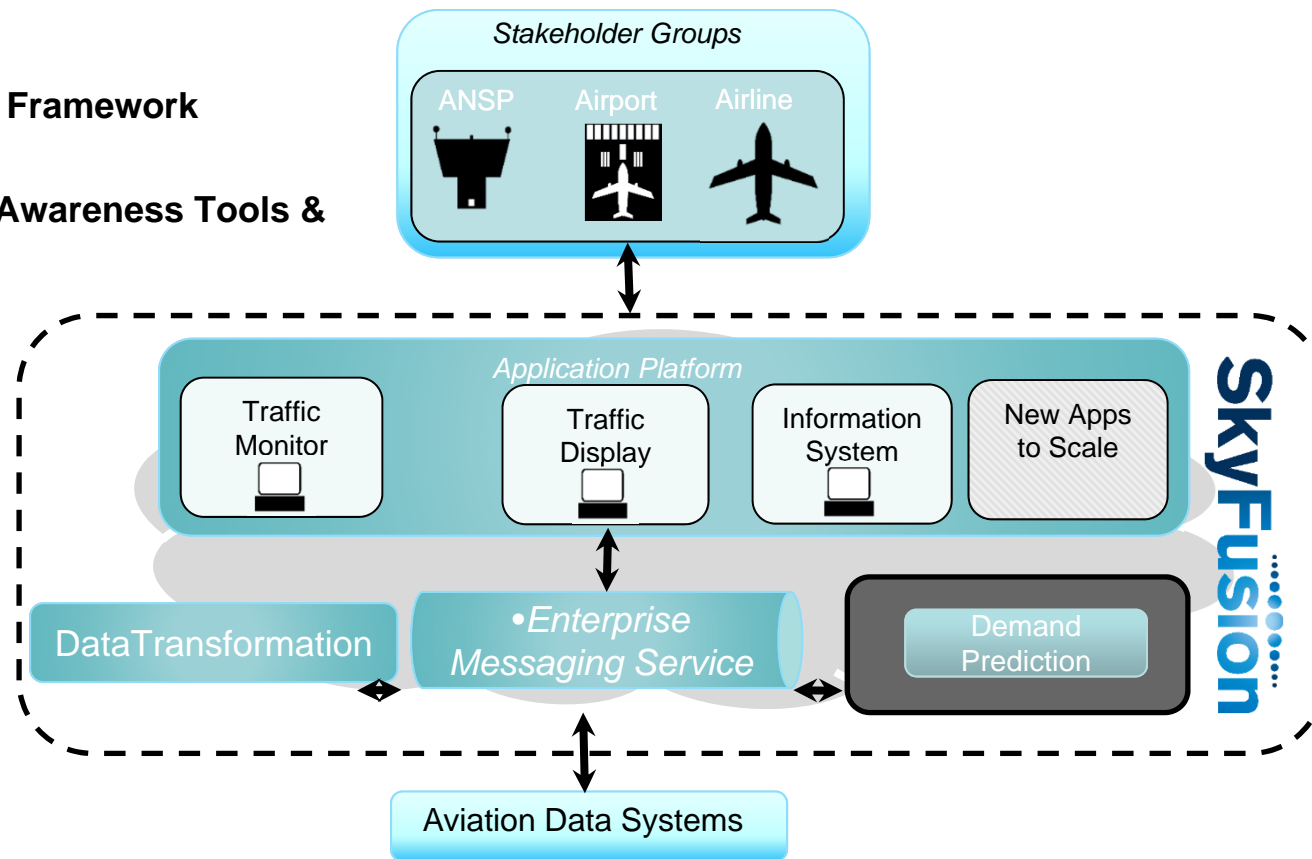✓ Revenue enhancement of $10 Average opportunity during delay which has been accurately communicated to passengers

*95% source SITA 2015 IT report, 45% JD Power Study, #1 surveyed disruption

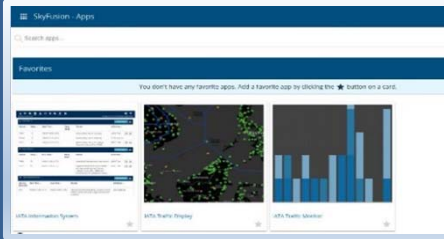www.iata.org/SkyFusion

Application : What is SkyFusion ?

- **In-cloud Data Exchange Platform**

- **Application Framework**

- **Situational Awareness Tools & Beyond**

Stakeholder Groups
ANSP   Airport   Airline

Application Platform
Traffic Monitor | Traffic Display | Information System | New Apps to Scale

DataTransformation | •Enterprise Messaging Service | Demand Prediction

Aviation Data Systems

SkyFusion
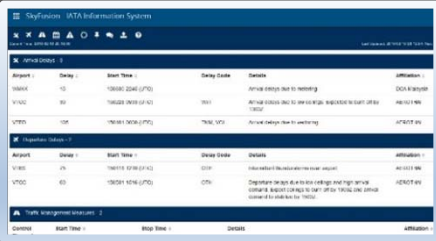
Solution : Functional Cloud Environment
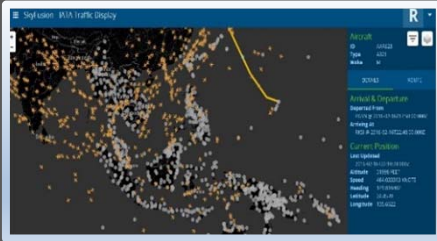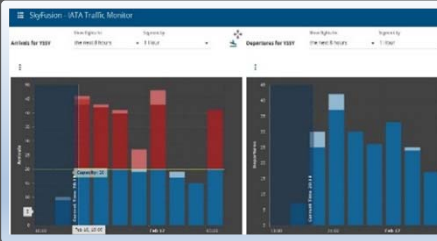
SWIM Helps: CDM and ATFM

✓ **Airlines, ANSPs and Airports are empowered to make decisions that are best for their operations**

✓ **SWIM enables cross border and cross organization data sharing**

✓ **Contributes to reducing inefficiencies avoidable with CDM & ATFM : >3B USD by 2020**

• **source A4A ATFM study 2014*

SkyFusion Benefits

SkyFusion is a platform that:

- Connects disparate aviation stakeholder systems; and

- Hosts software-as-a-service (SAAS) applications

SkyFusion solves two core needs:

- Enables sharing of data across systems from multiple stakeholders in internationally recognized, SWIM standard format

- Provides a one-stop shop for applications
  - Built on the data exchange, simplifying integration and lowering development cost

Learning by doing….

Let's move from demonstration and theory to a

real operational environment

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