

# Assaia ApronAI



assaia



Member Working Group  
Ramp of the Future  
Finalist  
IATA IGHC Innovator  
Award



Winner  
AAAE Airport Innovation  
Forum



Shortlist  
Technological Solution of the Year

# EXECUTIVE SUMMARY

An AI-based software system monitors turnarounds through existing ramp cameras and provides situational awareness. It automatically generates event timestamps, hazardous situation alerts, and predictions.

Solution ensures that airport, carriers and handlers have the most accurate turn-time data to do better turn planning, intervention, and recovery.

This data is used to streamline ramp operations and to make the ramp a safer place for both people and equipment. It is also used to optimize operations with regards to environment friendliness.

Leverages existing investments in VDGS & CCTV systems and integrates with many software packages. Goes hand-in-hand with existing data sources.

# OUR MISSION

To ensure  
time-efficient and affordable air travel  
for the next decades by making  
apron operations more efficient, safer  
and more sustainable.

assaia

A photograph of an airport tarmac seen through a rain-streaked window. The view is blurred and obscured by numerous water droplets and vertical streaks of rain. In the center, a white aircraft is visible, surrounded by ground support equipment. To the right, a blue structure, possibly a terminal or hangar, is partially visible. The overall atmosphere is overcast and rainy.

WHAT IS YOUR  
TURNAROUND VISIBILITY?

# THE CHALLENGE

## TURNAROUNDS = BLACKBOX

Poor data availability materializes in



degraded  
OTP



suboptimal  
asset utilization



excess  
cost



unattributed  
incidents

# OUR SOLUTION

We feed ramp video\* to AI  
to understand every turnaround  
and prevent incidents.

\* preferably from existing cameras in VDGS & CCTV



# OUR ECOSYSTEM

We believe in data fusion  
and leverage your existing investments.

Software

**amadeus**

**INFORM**

**SITA**

**T-Systems**

**Ultra  
ELECTRONICS**

Video  
acquisition

**ADB  
SAFEGATE**

**avigilon**

**AXIS™  
COMMUNICATIONS**

**Genetec™**

**milestone**

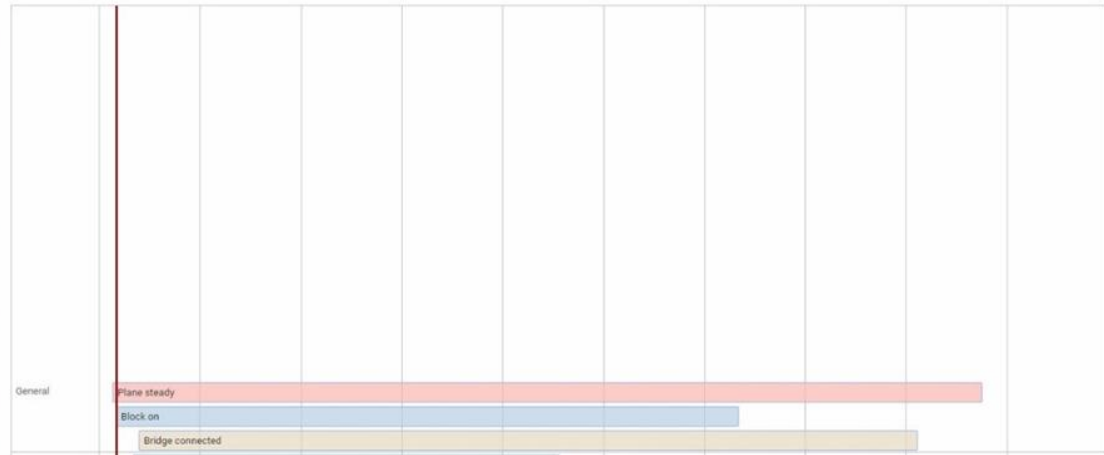
Recognized

**IATA**

**AAE  
AMERICAN ASSOCIATION  
OF AIRPORT EXECUTIVES**

**Airport  
AWARDS 2018  
SHORTLISTED**

# VISIT OUR ONLINE DEMO



Click here: <https://assaia.com/tmc>



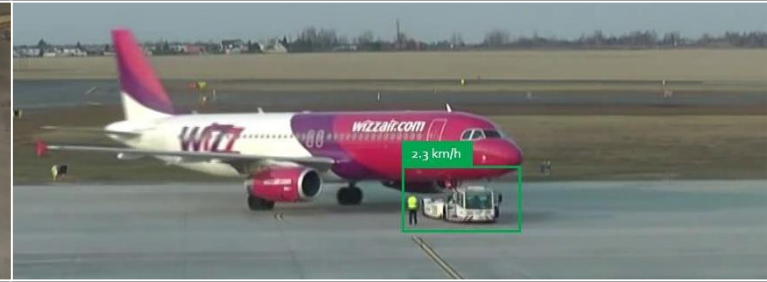
# ACCIDENT PREVENTION

## OLD WORLD:

✗ Erratic monitoring/audits  
Incidents happen

✗ Hazards undetected

✗



*Our AI can identify dangerous situations. It also has situational awareness to track speed & direction of objects.*

## NEW WORLD:

✓ 24/7 monitoring  
✓ Incidents prevented

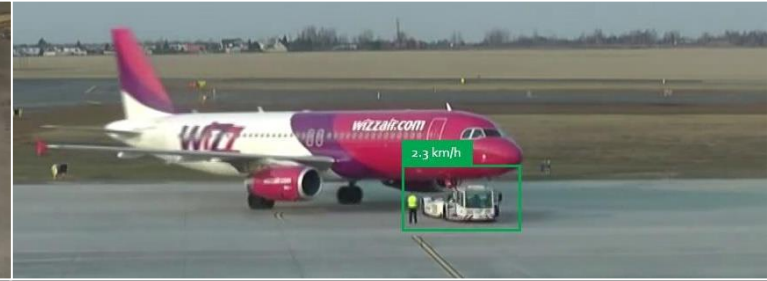
✓ Alerts ahead of time

assaia

# ACCIDENT PREVENTION & REPORTING

## OLD WORLD:

- ✗ Erratic monitoring/audits
- ✗ Hazards undetected
- ✗ Incidents unnoticed - damage unreported



*Our AI can identify dangerous situations. It also has situational awareness to track speed & direction of objects*

## NEW WORLD:

- ✓ 24/7 monitoring
- ✓ Alerts ahead of time
- ✓ Incidents prevented / damage investigated

Container out

USP

THE MOST COMPREHENSIVE SOURCE  
FOR TURNAROUND DATA.

(a source)

lowest  
cost/datapoint

common  
platform

objective  
data

# BENEFITS & ADVANTAGES

Improve  
OTP

Real-time intervention (turn recovery)  
Systematic turn optimization  
Handler performance analysis  
Improved SLA carrier/handler alignment

Increase  
turns/gate

Decrease  
cost per turn

Automated SLA & service validation  
Contract optimization (also: more dynamic)  
Decrease manual effort  
Clear responsibilities for delays & damages

Increase  
turnaround &  
back office  
efficiency

Improve  
safety record

Prevent incidents before they occur  
Increase audit coverage to ~100%  
Automate reporting

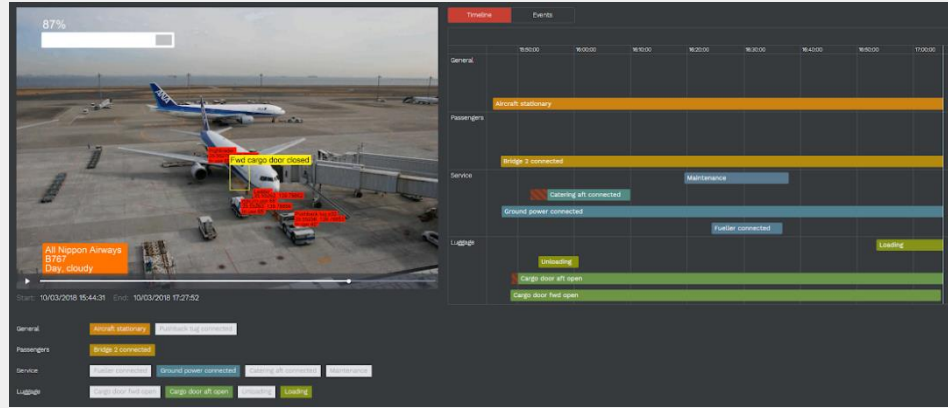
# REALTIME DASHBOARD

customer



user

turnaround  
coordinators



use case  
realtime  
turnaround  
monitoring &  
steering

before

1 turnaround/  
coordinator

after

3 turnarounds/  
coordinator

est. savings

\$2M *per year*

# DEVELOPMENT & TESTING

Assaia's technology has been tested successfully together with airports, airlines and ground handlers in various test, pilot and live deployments.

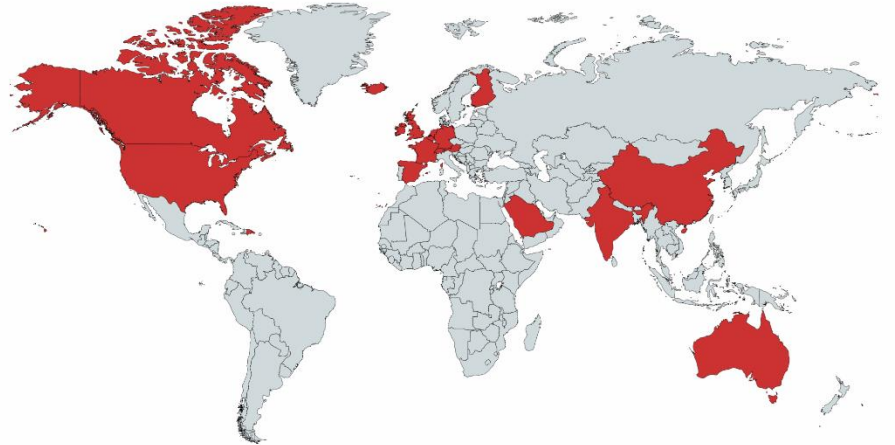
We have carried out projects at airports with 95,000 to 475,000 movements per year, among them London-Heathrow and some of the largest in the US.

During these tests, we have confirmed that our technology works

- under adverse light conditions\*
- in bad weather\*
- with many different aircraft types
- with many different cameras

\* Line of sight must be maintained.

Map shows completed, underway, and committed projects.



# Recent Sales Success

Assaia has been chosen by Seattle-Tacoma, Quebec City, and Cincinnati for a production rollout of its AI technology

Assaia is currently engaged with all major US carriers, who see the tremendous value the Apron AI can bring to their operational efficiency as well support the organizations in improving safety

LAWA, SFO and YHZ have recently chosen Assaia as the single provider of choice for a POC

Assaia is also performing its first POC with a major carrier in Latin America

# OUR CUSTOMERS

Airports

YOUR LONDON AIRPORT  
*Gatwick*

  
Toronto Pearson  
*For You. The World.*

*FINAVIA*

**EuroAirport**<sup>™</sup>  
BASEL MULHOUSE FREIBURG

+ 15 more

Airlines

  
**BRITISH  
AIRWAYS**

+ 7 more

Handlers

**swissport** 

+ 1 more



# GATWICK & ASSAIA

Gatwick Airport is one of the busiest single-use runway airports in the world. It comes at no surprise that all ground operations are centered around maximizing the utilization of their most valuable assets.

In fall 2018, Gatwick successfully validated Assaia's technology. Now, our partnership is moving forward with a production rollout at a number of positions. The data generated by the Apron AI is provided to airlines and ground handlers. It is also used to accurately predict OBt.

Expected benefits:

- Improved OTP
- Improved pax happiness
- Increased turns/gate
- Increased retail revenue

assaia

# MANAGEMENT TEAM



Head of AI  
Dr. Nikolay  
Kobyshev

expertise

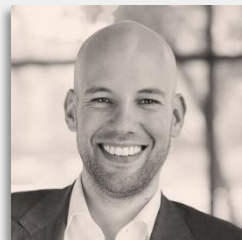
AI-based 3D reconstruction  
from 2D imagery



VP Engineering  
Dmitry  
Chugreev

expertise

Distributed high-availability,  
mission-critical enterprise systems



CEO  
Max  
Diez

expertise

Helped dozens of companies introduce  
new IT systems, together with HP,  
Accenture & Microsoft

assaia

# assaia AVIATION EXPERTISE



Chief Customer  
Officer  
Christiaan Hen

8  
years  
in airports

previous roles  
Operations Manager  
Head of Innovation  
Royal Schiphol Group



President Americas  
Norbert Steiger

20  
years in  
aviation IT

previous roles  
VP New Ventures &  
Large Deals SITA  
VP LatAm SITA

# Get in touch!

assaia  
The Apron AI

Norbert Steiger  
President Americas

Phone: +1 575 639 2263

E-mail: [norbert.steiger@assaia.com](mailto:norbert.steiger@assaia.com)

