



BLACK BOX

Future-Proofing Airports:

Enabling Technology for a Seamless,
Sustainable Passenger Experience

Speakers



Janna Valencia

Global Vice President
Public & Consumer

BLACK BOX

Adam Lazare

Enterprise Account Manager,
IoT and Platform

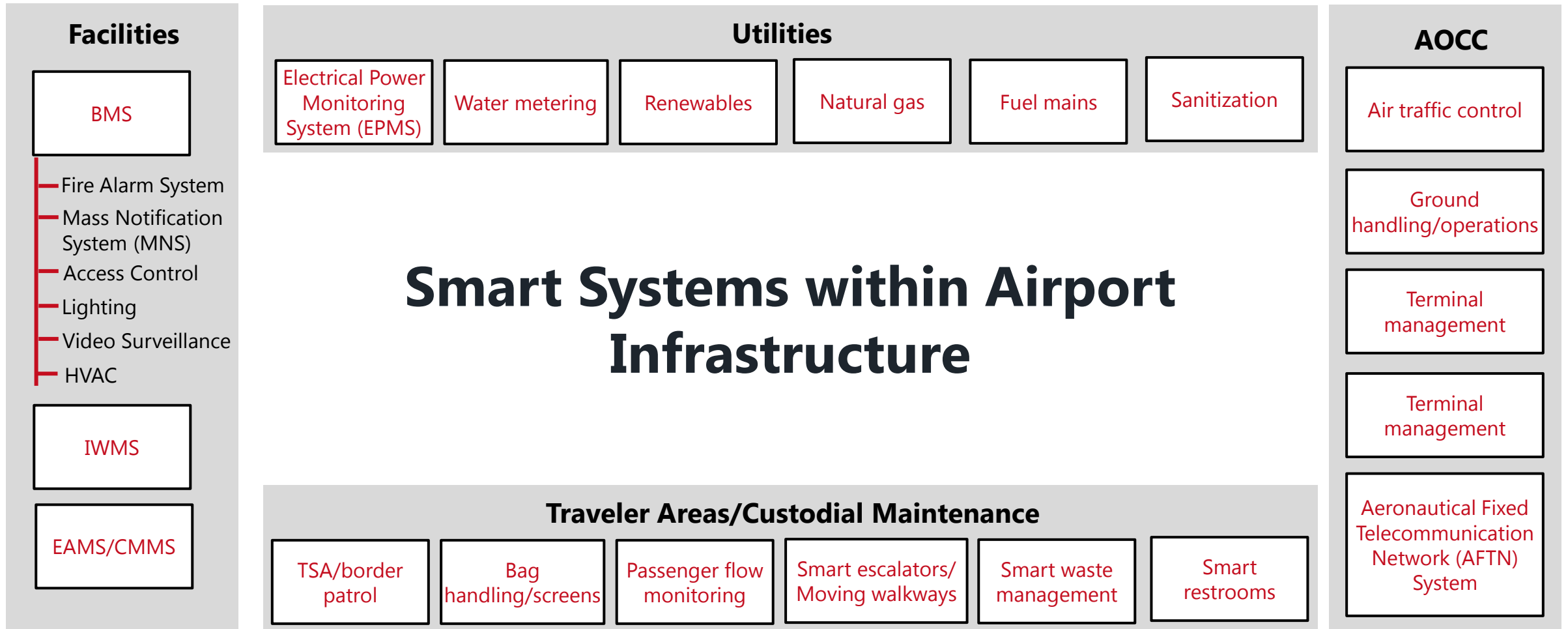
entroCIM | Wesco



← **Participate in the conversation**



Behind the Walls: The Backbone of Airport Networks



Converged Networks: Bridging IT, OT and Facilities

By integrating cutting-edge technologies, **Black Box empowers airports** to connect systems, streamline operations, generate revenue, reduce cost and create intelligent, next-generation ecosystems that prioritize safety and efficiency.



1. Smart Building & IoT Integration
2. Air Traffic Control (ATC) Tower & Remote Tower Operations
3. Parking & Ground Transportation
4. Check-In
5. Security Check
6. Gates
7. Customs & Immigration
8. Baggage Handling
9. Concessions & Retail
10. Runway & Airside Operations
11. Hangars & Maintenance
12. Airport Operations Center (AOC)
13. Data Center & IT Backbone
14. Secure Back-Office & Enterprise IT
15. Simulation & Training



From Devices to Decisions: Aggregating Data into One Pane of Glass for Converged Intelligence for Airport Optimization

Software

BMS

IWMS

CMMS

EAMS

Smart Devices

Sensors

EPMS

AOCC

Traveler

Areas/Custodial
Maintenance

Utilities



Enabled



Access



Social Intel

Converged Systems. Unified Intelligent Control.

- Cyber and Physical Security
- Always-On Infrastructure
- Predictive Maintenance
- Smart and Safe Environment
- Sustainable and Optimized
- Situational Awareness
- Mass Communication and SMS
- Operational Efficiency



Emerging Technologies and Future Proofing: Enabling a Converged Technology Stack



Independent Data Layer – Operational data is made available to all applications

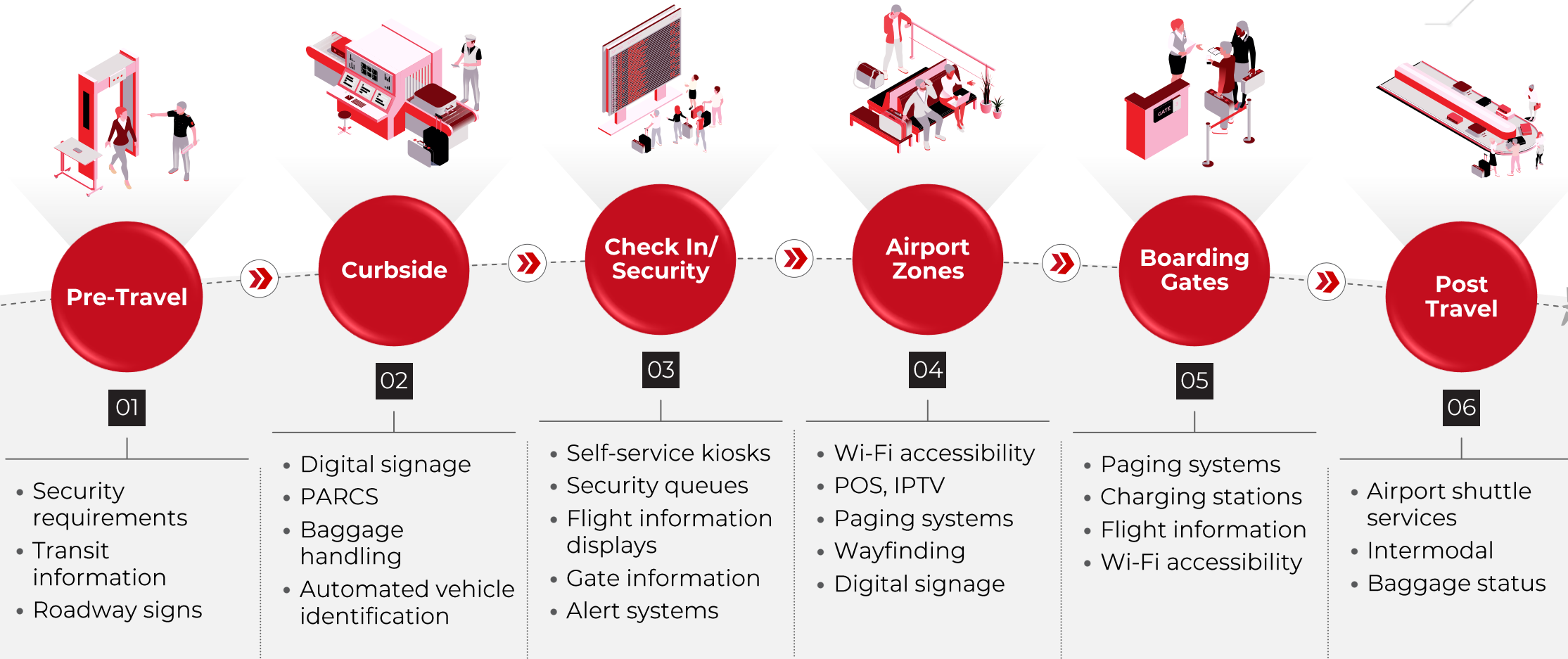
Hardware – Hardware is secure, discoverable, standard telemetry, and open APIs

Software – Uses standardized telemetry, includes open APIs, and uses or provides an independent data layer

Services – Applies industry best practices and implements standardized telemetry



Unified, Intelligent Control for Business Outcomes & Passenger Experience





THANK YOU

for your time, visit us at **Booth 411**
for more information.

BLACK BOX[®]

BLACKBOX.COM



Case Study – International Airport Optimizes Central Utility Plant and Maintains Traveler Comfort

Scope

- Legacy system integration
- API connector development
- entroCIM implementation
 - Dashboarding
 - Graphics
 - Analytics
 - Cloud hosting
- Subject matter expert support

Integrated Systems

- HVAC – Chiller plant
- Utility metering

Outcomes

- Developed logic sequences, reporting and visualizations
- Enriched data with API connectors to local utilities enabling predictive price forecasting that informed optimization sequencing
- Automated reporting to stakeholders

Case Study – Unified remote system access in Air Traffic Control Centers

Customer need

To update and unify remote system access in their ATCC. Additionally, they needed to streamline and simplify maintenance of disparate systems and equipment and achieve a standardized approach that could also reduce systems training for their service technicians.

Results - Standardized ATTC support with Black Box

- Smoother workflows
- Greater functional transparency
- Increased scalability for future airport expansion needs
- Removed system redundancy (and added costs)

+ entroCIM Central Intelligence Manager

Accelerated incident response via automated workflows

Proactive, predictive fault detection and diagnostics

Actionable data intelligence to understand correlating subsystem impacts and interdependencies of airport operations

Reduced blind spots via unified connectivity of all siloed, intelligent systems within airport infrastructure

A converged network provides ease of access to centralized data for optimized airport infrastructure visibility and operations