Aviation
# Technology Solutions Guide

ABM

# Technology Makes Airports Responsive to Traveler Needs

While serving hundreds of thousands of travelers every day, your airport is also generating millions of data points.

Those data points are an opportunity to improve traveler experience, gain operational efficiencies, and automatically direct teams to respond to needs at gates and concourses at peak times.

In working with some of the busiest airports around the country, ABM is using new technologies to optimize virtually all aspects of facility management and cleaning with measurable results.

In partnership with leading IoT and data platforms, ABM is creating unique technology solutions based on what airport leaders are asking for.

## Here is a snapshot of what ABM has deployed to create responsive airports:

Gate Traffic Data

Digital Counters & Alerts

ACI Survey Data Integration

Smart Restrooms

Internet of Things

Real-Time Response Systems

Centralized Dashboards

Innovation Incubation

# Smart Restrooms and Their Impact on Traveler Satisfaction

Washroom and terminal cleanliness are the two most essential infrastructure factors that impact overall passenger satisfaction, according to reports from Airports Council International. Restrooms are typically a passenger's first destination after they deplane. ABM teams go beyond scheduled cleaning to use data and technology to surge crews to specific gates and times to respond to a day's air traffic.

## Attendants and Technologies

ABM scheduling and supporting technologies work in tandem to ensure restrooms are clean, functioning, and fully stocked with paper and soap. Many leading airports have a full-time attendant in most restrooms to keep everything clean, dry, and stocked. Attendants are trained to anticipate customer needs, whether pointing a guest to an available stall or helping the elderly or those with mobility challenges.

## Restroom Ratings and Immediate Response

ABM is using technology that lets passengers rate their experience as "exceptional," "average," or "poor" by selecting a happy, neutral, or sad face on a tablet as they exit. If they pick the sad face, they get a series of options to share feedback, from cleanliness to lack of supplies to a water leak. Within seconds, an ABM supervisor gets a mobile alert and can act to quickly correct the issue.

## "Smart Clean" Tech

Working with airport facility teams, ABM is helping deliver innovative solutions across the IoT maintenance ecosystem to gain new real-time insights to exceed traveler expectations and maximize productivity and cost efficiency. This "Smart Clean" package provides detailed information about restrooms and cleaning staff, including passenger throughput, cleaning time stamps, staff activity, and the alert log.

## IoT Innovation

ABM is able to leverage solutions offered by a host of top-tier companies, including IoT equipped flush and urinal valves, faucet alerts for leaks and clogs, and water usage monitoring. And by using vacancy indicator lights on bathroom stalls, queues move quickly while tracking usage and peak times.

# ABM *Connect*™ Data Intelligence Platform for Airport Operations

ABM *Connect* is a data intelligence platform that unifies facility, flight, traveler, equipment, IoT, and service delivery data, in one place, in real time. Using artificial intelligence (AI), beacons, and mobile devices, ABM *Connect* delivers more functionality than any other solution on the market.

## Demand-Based Resourcing

ABM *Connect* enables you to schedule services and assign employees based on where people are needed most. You can set automatic schedules or redirect resources to priority tasks throughout the day. Work is tracked as it is completed.

## Beacons for Real-Time Intelligence

ABM's revolutionary beacon technology optimizes work by demand instead of by resources. Work order statuses, team member locations, audit results, and other factors are all viewed in real time. Task start/stop times are logged to track and understand time required to perform the task. This data provides performance metrics to increase workforce productivity, gain efficiency, and optimize resource allocation and cross-utilization.

## Faster Response Times

Through real-time proximity data and AI, the nearest team member is automatically dispatched to support emergent work orders. Problems are identified and resolved faster. Satisfaction issues are mitigated before they escalate.

## Flight Data Integration

Real-time OAG flight status data is integrated directly into the ABM *Connect* platform, automatically adjusting staffing workflows to best serve both the airport and travelers.

## Costly Hardware Investments Avoided

With ABM *Connect*, clients benefit from reduced hardware investments. Plus, ABM *Connect* brings an open architecture with APIs, allowing seamless communication with other open-stack systems such as CMMS. Real-time flight data drives modeling to provide insights from occupancy to consumable levels.

## Sensor Data Errors Mitigated

With each sensor/unit installed in the airport, you risk inaccurate data and costly repairs. That hardware also gets outdated rapidly and may not integrate with any future CMMS, adding cost to replace equipment. ABM *Connect* avoids these risks.
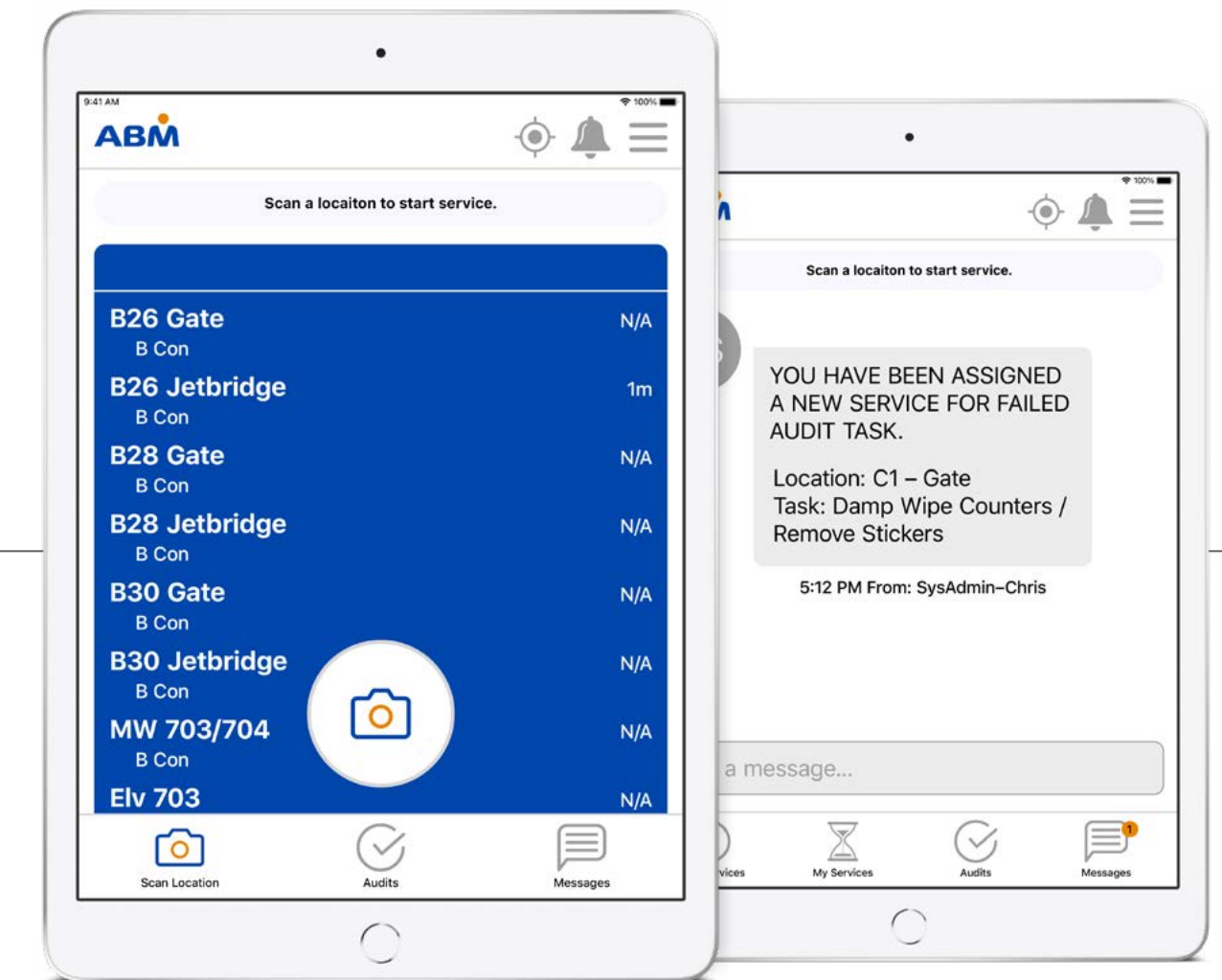
## ABM *Connect*:
### Real-Time Intelligence

- ☑ Schedule Tasks
- ☑ Assign Resources
- ☑ Scan Locations
- ☑ Check Off Completion
- ☑ Get Notes from Teams
- ☑ Send Notes and Reassign Failed Tasks
- ☑ Identify Priorities
- ☑ Reassign Teams for Urgent Services

# Mission Control for Airport Facility Services

The emerging integration of data, systems, IoT-connected tools, and mobile devices will create new ways to improve the traveler experience for facilities teams and airport leaders.

## Real-time Response

ABM aviation solutions give airport teams new tools to schedule their days, reset priorities, and respond to the airport's changing needs in real time. Using gate data, passenger forecasts for the next month, and seasonal peaks, as well as peak periods unique for your airport, you gain a predictive model ready when passenger traffic surges.

## Centralized Dashboard and Control

That same data creates a single source of truth collected in one dashboard to help airport teams make day-to-day and longer range decisions. Now this cross-platform data can be used for integrated predictive analytics. Issues are solved before they become problems. Labor is managed with ultra-efficiency. Trends are identified early. All this information provides data-driven metrics to determine the macro effects of cleaning investments over time, helping airports set benchmarks and optimize efficiency and cost savings.

## Innovation Incubator for Airports

ABM is working with teams across airports to develop innovation incubators for tech solutions to elevate guest services and custodial efficiencies. The incubator is identifying emerging systems and technologies that align to the unique needs of each airport.

# Blue Sky Opportunities

Data and technology open your airport to new opportunities to elevate the traveler experience while optimizing health and safety initiatives, operational efficiency, cost savings, and resource management.

The ABM aviation team is ready to share more about our technology solutions, best practices, emerging trends, and their impact on passenger satisfaction scores at some of the leading airports in the country. Let's talk about accelerating innovation for your airport and your travelers.

- Gate Traffic Data
- Internet of Things
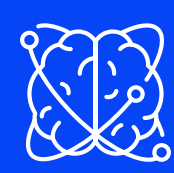- Digital Counters & Alerts
- Real-Time Response Systems
- ACI Survey Data Integration
- Centralized Dashboards
- Smart Restrooms
- Innovation Incubation

ABM provides airport services to improve operations and passenger experience.

## Visit ABM.com/Aviation or call (866) 624-1520

**ABM**

## FACILITY ENGINEERING & INFRASTRUCTURE
## SOLUTIONS

ABM drives possibility through facility, engineering, and infrastructure solutions across a wide range of industries. Our diverse, inclusive teams work together to advance a healthier, more sustainable, ever-changing world. Under our care, systems perform, businesses prosper, and occupants thrive. Every day, over 100,000 of us partner with our clients to care for the people, places, and spaces important to you. We are making spaces smarter, modernizing infrastructure, and transforming facilities to become more resilient.

## Driving possibility, together.