Smart Airport of The Future
Planning for Innovation at Airports
Topics to be covered

- Single Token – SITA Smart Path
- Day of Travel Airport App
- Day of Operations – Airport Pulse
SITA Smart Path
SINGLE TOKEN TRAVEL
Travel data, identity details and biometric linked at earliest opportunity to create a single token.
VARIOUS STEPS

Check-in kiosks
5,500 at 160 airports

Check-in desks
45,000 at 400+ airports

Self-service bag drops
225 at 31 airports

Security access gates
40 at 8 airports

Border control gates
50 at 5 airports

Self-boarding gates
1,040 at 18 airports

Biometric kiosks
45 at 4 airports
Check-In

SITA Kiosk application captures check-in data, travel document data and biometric. Single travel token is created.
Single travel token used to verify passenger and facilitate baggage reconciliation later during the journey.
Single travel token used to verify passenger and control access to the Restricted Zone.
Immigration

Single travel token used to verify the passenger and control immigration status.
Single travel token used to verify passenger and control access to aircraft.
DAY OF TRAVEL
AIRPORT APP
DAY OF TRAVEL SERVICES

- Mobile applications
- Digital maps
- Application Programming Interfaces (APIs)
- Beacon technology and services
WHEREVER YOU ARE

• Real-time flight status
• Security wait times
• Weather forecast
• Departing terminal INFO
• Driving route to airport & drive time
• Live traffic updates
ARRIVING AT THE AIRPORT

Informed and taken to where they need to go

• Personalized welcome message
• Check-in and bag-drop desk location
• Latest flight updates
NAVIGATING THE AIRPORT

- Gate number
- Directory of airport amenities
- Wait time
- Graphical map with routes
- Time remaining before flight
- Gate information updates
- Turn by turn directions to gates
SHOPPING, EATING & RELAXING

• Near me: places to eat and shop, sorted in order of walk times
• Nearest in-store promotions and offers
Optimize gate time

- Latest information about your flight
- Updated weather forecast at destination
HELP WITH TRANSFERS

Smooth connection
- Personalized message
- Latest flight updates
- Directions, including maps and walking times
- More time to relax, eat & shop
ON ARRIVAL

Easy and fast exit
- Where to claim your bags – including maps and walk times
- Taxi stand and public transport INFO with directions
WHY DOES AN AIRPORT NEED A SMARTPHONE APP?

- Reduce stress and anxiety on day of travel
- Increase Non-Aeronautical Revenue ($$$)
- Branding and Engagement
- Business Intelligence - Analytics
Day of Operations
Airport Pulse
INDUSTRY TRENDS

Airports remain focused on cost control and productivity improvements across their operational processes:
Growing interest in applying business intelligence (BI) to improve both the customer experience and airport operations
89% of airports will use BI to conduct airport service quality data analysis by 2017
Top 3 priorities for BI analysis:

- **Airport Service Quality reporting**: 50% for 2014, 89% by 2017 (89%)
- **Capacity analysis**: 38% for 2014, 84% by 2017 (84%)
- **Passenger flow**: 34% for 2014, 83% by 2017 (83%)

Source: SITA’s 2014 Airport IT Trends Survey
DAY OF OPERATIONS BI SNAPSHOT

The Day of Operations BI solution is made accessible to users via AirportPulse, an intuitive, airport-wide, business intelligence portal which delivers a dynamic central view of the airport ecosystem.

KEY BENEFITS
- Enhanced collaboration between the different stakeholders involved in airport operations
- Enablement of pre-emptive, corrective actions
- Improved airport experience for all stakeholders
- Commercial and operational benefits from improved understanding of passenger flows
- Reduction in waiting times through improved queue management
- Improved asset utilization and management of chokepoints

FEATURE / FUNCTION
- Intuitive, digital business intelligence platform
- Monitoring, analysis, prediction and reporting of the daily patterns of the airport
- Real-time queue information to airport customers and stakeholders
- Automated daily SLA and performance reporting
- Open connection to existing airport applications

QueueAnalyzer
FlowAnalyzer
FlowPredictor
OperationsAnalyzer
DataExplorer
CommonUseAnalyzer
# HOW DOES IT WORK?

## Use Case Categories
- **Retail & Pax Flow**
- **CRM/Loyalty**
- **Queue Analysis**
- **Asset Tracking**
- **Predictive Analytics**
- **Airport Operations**

## Airport Insight Portal
- **Reports**
- **BI Dashboards**
- **Alerts & Notifications**
- **Internet of Things**
- **Terminal & Heat Maps**

## Data Sources
- **Beacon**
- **Bluetooth**
- **Wi-Fi**
- **Video/Biometric**
- **BCBP**

## Data Sources
- **AODB**
- **CUTE CUSS**
- **Baggage Systems**
- **CRM database**
SOLUTION COMPONENTS

The Day of Operations BI solution provides access to the following 6 components via the AirportPulse portal:

QueueAnalyzer
- Management of customer queuing and flow
- Automated SLA and queue reporting

FlowAnalyzer
- Visibility on customers flow and dwell time
- Insights into customer behaviour

FlowPredictor
- Real-time predictor of operational flows
- Efficient resource planning and management

OperationsAnalyzer
- Operational performance and statistics
- Visualizations of detailed airside activity

DataExplorer
- Source and shape airport data
- Industry leading information presentation

CommonUseAnalyzer
- Common use terminal data and analysis
- Automated SLA and KPI reporting
COMMONUSEANALYZER
SNAPSHOT

Event-based intelligence product that generates insights, understanding and right time statistics from Common Use Terminal Equipment (CUTE).

KEY BENEFITS

- Improved KPI and SLA performance
- Improved asset utilization and management of common-use resources
- Improved planning with insight into utilization trends
- Insight into passenger behavior

FEATURE / FUNCTION

- Access, review and report on KPI and SLA performance
- Comprehensive views including
  - Transfer desk utilization
  - Check-in pax and desks
  - CUTE user sessions
- Active dashboards and reporting specially designed to the unique pulse of the airport
- Customizable design with comprehensive set of visualization
OPERATIONSANALYZER
SNAPSHOT
Powerful, agile and customizable tool that enables timely presentation of key statistical and management information.

KEY BENEFITS
• A single portal for operational teams to access, find, review and report on the performance of the day of operations
• Improved airfield utilization
• Enhanced information sharing across airport partners
• Actionable decision-support
• Improved on time performance

FEATURE / FUNCTION
• Timely presentation of key statistical and management information
• Customizable dashboards to suit user needs and preferences
• Visualization of real-time and historical runway and taxiway movements
• Insights into airfield utilization and flight information
• CDM notifications
• Pre-defined and customizable on time performance analysis
QUEUEANALYZER SNAPSHOTS

Real-time analytics tool specialized in monitoring the end-to-end customer flow and queuing.

KEY BENEFITS

- Reduction in waiting times through improved queue management
- Enhanced understanding of passenger flows
- Improved asset utilization and chokepoints management
- Informed decision-making and improved on-time flight movements

FEATURE / FUNCTION

- Real-time queue information
- Automated daily SLA and performance reporting
- Possible integration of real-time data into websites or mobile applications - Provision of information to customers and stakeholders at their ‘fingertips’
- Intuitive charts, including trends by hour and day

Real-time queue management and presentation

HAPPENING NOW
TREND BY HOUR
TREND BY DAY
TIME DISTRIBUTION
STAFFING TREND
FLOWANALYZER SNAPSHOT

Analytics tool specialized in monitoring the end-to-end customer flow and dwell.

KEY BENEFITS

• Easy to understand end-to-end passenger flow and dwell reporting
• Provides key insights on operational passenger flows and chokepoints
• Supports non-aeronautical business units such as retail and advertising
• Improves day of operations through real-time insights

FEATURE / FUNCTION

• Comprehensive heat map functionality, including areas first visited, areas with most traffic
• Footprint distributions and dwell reporting
• Retail reporting, by time of day, weekly trends and opportunities
• Pre-defined reports available
• People flows analysis
  • Distribution from an initial zone
  • Entry and exit from a ‘central’ zone
  • Originating flows from an ‘end’ zone
FLOWPREDICTOR SNAPSHOTS
Advanced predictive tool that analyses and simulates real-time situations.

KEY BENEFITS
- Enablement of operational interventions of imminent impacts
- Actionable insights of passenger volumes per checkpoints
- Improved operational efficiency and asset utilization
- Increased on time performance
- Improved airport experience for all stakeholders
- Better planning and management of connecting flights

FEATURE / FUNCTION
- Heat maps visualize predictive queue times across the terminal
- Provision of a whole-of-airport view
- Benchmarking of SLA performance
- Prediction and simulation of passenger flows for key zones
- Detailed predictions of connecting passenger flows
- Classification of criticality allows filtering for selected impacts only

Better understanding of chokepoints and flows
DATAEXPLORER SNAPSHOT

Simplicity and speed of Internet search with the analytical power of business intelligence – for faster, more informed decision making.

KEY BENEFITS

- Immediate answers to pressing business questions
- Business users can leverage intuitive, self-service airport operations data exploration with stunning visualizations, and easily share insights with other stakeholders
- Give all users autonomy to search and discover the information they need
- Get the big picture and drill down to the details to make the right decisions
- Uncover connections and trends – anytime, anywhere
- Improve business decisions with richer information context

FEATURE / FUNCTION

- Data exploration tool specifically designed for end-users
- Interface to operations data that enables business users to explore data that might otherwise only be accessible through operational systems and with technical assistance
- Users can search for specific data using ‘Google-type’ searches, create filters, sort and present the data to gain insight into specific events, or areas of interest
THANK YOU