QUEUEANALYZER

A COMPONENT OF THE AIRPORTPULSE PORTAL SUPPORTING REAL-TIME, HISTORICAL AND PREDICTIVE QUEUE WAIT TIME MONITORING AND DISPLAY

By monitoring, measuring and understanding queue wait times, airports gain knowledge and insights which better enables operational planning and intervention to address bottlenecks, increases operational efficiency and improves the passenger experience.

ISSUES

Disparate systems

Due to disparate systems, airports have an information gap with regard to actual passenger queue wait times. As such, one cannot take proactive action because of the lack of real-time visibility and knowledge of terminal bottlenecks.

Timely information

Due to the lack of real-time information and presentation capability, airports cannot collect and provide relevant passenger queue wait time data.

SLA reporting

The correlation of data and information for contractual service level agreement (SLA) reporting and benchmarking is very time consuming.

SOLUTION

QueueAnalyzer is a cloud-enabled, real-time analytics tool which specialises in monitoring and predicting passenger queue wait times at key airport choke points, such as security checkpoints and border control.

The tool employs both historical and real-time data along with powerful and proven algorithms to deliver highly accurate, real-time queue wait times for multiple choke points across the airport.

QueueAnalyzer also leverages the underlying data to deliver accurate, automated, queue wait time performance, trending, service level reporting and other analytics.

BENEFITS

- Delivers visibility, knowledge and insights to where passengers queue, thus assisting the airport in improving operational efficiency and the overall passenger experience.

- Enables proactive rather than reactive management of passenger queuing and flow over the day of operations, delivering real-time capability to intervene as required at key choke points and terminal bottlenecks.

- Actualizes real-time capability to present queue information to passengers and airport stakeholders.

- Automates detailed SLA and queue wait performance reporting, and analysis.

- Optimizes staff roistering.

- Increases retail sales.

42%

of airports conduct retail sales analysis. This figure will rise to 80% within three years.

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HOW DOES IT WORK?

The airport's pulse is dynamic and changes quickly during the flow of daily operations. Queue times can change significantly and have immediate impact across the airport.

SOLUTION COMPONENTS

1. Turn-key solution

QueueAnalyzer consists of the following components, which are sold as a turn-key solution:

- Bluetooth (2.0 and 4.0 BLE) sensors, which detect Bluetooth devices, such as mobile phones and wearables (e.g. Fitbits).
- A Wi-Fi to Bluetooth network interface device that connects the Bluetooth sensors to the cloud-based application server.
- The application server is used to configure the system, monitor status, collect queue time statistics and perform administrative functions. The highly reliable server architecture features 99.99% availability.
- A data presentation client, which is a highly configurable, intuitive, feature-rich reporting tool that includes multiple views of real-time and historical statistics.

2. Display of estimated wait times to passengers

QueueAnalyzer supports the integration of cameras and Wi-Fi sensors for passenger throughput figures, as well as input into an estimated wait time algorithm. The results can be displayed to passengers on screens, websites and mobile applications.

3. AirportPulse

QueueAnalyzer is a component of the AirportPulse Portal, part of Day of Operations BI solution. It provides KPI dashboards and a single point of access to a broad range of services, in order to provide end-to-end situational awareness across the airport. It also provides visibility of passenger movements, thus improving security, increasing efficiency, achieving greater non-aeronautical revenues, and enhancing the passenger experience throughout the airport.

CASE STUDY

Queuing is a normal human behaviour, but at airports lengthy queues impact on the airport's overall operational efficiency by affecting the passenger flow. Such impacts affect key performance areas such as on-time performance, passenger experience and retail sales.

At a tier 1 airport, management of queue wait times has been significantly improved through the implementation of SITA's QueueAnalyzer by:

- live monitoring of queues
- daily benchmarking and reporting
- improved resource rostering and planning
- live display of queue wait times across the airport.

Retail sales benefits of up to 3% have been realized as a result of improved passenger dwell time in retail locations, and the reduction of passenger stress.

For more information please contact us at **info@sita.aero**

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