Sensors Take Flight at Birmingham Airport to Ease Passengers Minds and Improve Resource Planning.

Birmingham Airport joins UK Airports Bristol, Edinburgh and Manchester airports by implementing BlipTrack queue management technology from BLIP Systems. The sensor-based solution helps the airport to improve resource planning and to ease travelers minds with accurate line wait times.

With more than 11 million passengers in 2016, the busiest year in the airports history, Birmingham Airport realised that they needed a solution to accurately measure queues and predict wait times. After reviewing several systems, the airport enlisted the expertise of software specialists Gentrack to implement the sensor-agnostic BlipTrack solution.

"Birmingham Airport engaged with BLIP Systems, following a competitive tender process. During the evaluation of technological solutions, we met with a number of existing BLIP Systems' customers, who had implemented BlipTrack in similar successful projects", says Chris Wilson, Head of Terminal Operations at Birmingham.

Operationally, the airport uses, among other things, the data to monitor line density in real-time, which allows management to respond promptly and effectively to irregular operations and disruptions, such as opening additional lines. It enables the airport to comply with service-level agreements, and to evaluate and challenge key performance indicators with great accuracy. In addition, the live wait time information is shared with passengers on screens, to improve the travel experience, with hopefully more satisfied and recurring passengers as a result.

"The solution is used at the north immigration hall to measure and predict the wait time at the UK Border. The data really helps to understand the actual wait time for the border, and helps discussion with the UKBF (United Kingdom Border Force) planning team and resourcing plans for the future. By sharing the information on screens, we help reduce passenger frustration by creating realistic wait time expectations. It makes the passengers feel more relaxed and helps them to better plan the final elements of their journey as well as onward travel," continues Chris Wilson.

"Today, many airports display wait times to their passengers. Typically, this is done by measuring dwell times of people leaving the line. However, these "historic" times may not be accurate for those entering the line, especially if the number of people suddenly changes or more lines open up. BlipTrack combines and analyses both the number of people in line and the average throughput of the area. With these two measurements, accurate wait times can be displayed," explains Christian Bugislaus Carstens, Marketing Manager at BLIP Systems.

The solution works by placing dedicated Bluetooth/WiFi sensors. The sensors detect mobiles devices, such as smartphones and tablets. By identifying the devices at multiple sensors, specific and accurate statistical information, such as travel times, dwell times and movement patterns become available, without interaction from the travellers.

"It's been an excellent project with great support from the design, installation and technical team. The BLIP Systems' team are a credit to the organisation and have helped the airport immensely, with data analysis and reporting. Moving forward, we have plans to continue the project to incorporate other areas, such as the southbound security and immigration," ends Chris Wilson.

Internationally, more than 25 international airports use the technology, including Schiphol Airport in Amsterdam, JFK Airport in New York, Copenhagen, Dublin, Oslo, Geneva, Brussels, Cincinnati and Auckland. BlipTrack is also implemented in optimization efforts in road traffic in Portsmouth, Bangkok, Zürich and Stockholm. In recent years, the solution has been rolled out in train stations, ports, ski resorts, amusement parks, and at events all over the world.