Providing airports with visibility on resource effectiveness for greater processing efficiency, to increase revenue and improve passenger experience.
BlipTrack consists of several advanced modules designed to optimize all stages of passenger handling and improve commercial areas.

From queue predictions and flow measurements to advanced capacity forecasting, the modules provide airports around the world with insights to effectively plan staffing resources as well as improve non-aviation revenue, while maintaining a high level of passenger service.

**BlipTrack Forecasting Solutions**

Accurate forecasts are key to smooth and efficient airport operations. Each day brings new changes such as flight delays, seasonal changes, national holidays and more. Disruptions impact the operational plan and require both live and long-term operational changes in airport passenger processing areas to prevent queues, frustrated passengers and lost revenue.

The ability to automatically collect and utilize real-time and historical input, provides airports with accurate forecasts of passenger volumes and expected wait times. It enables managers to
automatically and effectively plan capacity and allocate staff resources both in real-time and for the days, weeks and months to come.

The BlipTrack Passenger Appearance Forecasting Module provides decision support for operational managers to scale capacity with demand. It provides automatic forecasts for passenger appearances while compensating for changes in the flight plan, various delays and events, vacations and more.

The BlipTrack Capacity Optimizer Module allows managers to continuously optimize the number of open lanes, using the least amount of resources, without violating key performance indicators (KPIs) or compromising the passenger experience.

The BlipTrack Queue Forecasting Module enables managers to adjust production capacity in time to allocate staff resources, preventing queue build-up, violated KPIs and frustrated passengers. It provides forecasts of expected queue lengths, incorporating known deviations to flight schedules, planned capacity and productivity.
The success of an airport, and its image, is heavily influenced by the ability to handle passenger flow smoothly and efficiently. Documentation of movement patterns is crucial to greater efficiency when planning and optimizing the position of retail outlets and services.

To understand and improve individual areas of operations, it is important that the passenger’s journey is seen as one process, rather than as a string of isolated events. The understanding that all individual events influence each other is key to unlocking potential gains.

Providing management with a better understanding on where and how passengers move, enables them to optimize opening hours, signage, shop locations, and general layout to improve the retail tenancy mix and maximize revenue. By analyzing patterns, retailers are provided with valuable information on how to improve and optimize services, such as resource allocation, product placement and variety as well as performance bench-marking, to ensure optimum revenue.

With BlipTrack, managers are able to review the flow
of individual passengers to retrieve information about specific patterns, such as entrance and exit usage, walking and shopping patterns, service use, time spent, waiting times, boarding procedures, travel destination and much more—from the moment they enter the airport, to exiting, and everywhere in between.

The solution provides key information on the use of retail and facilities, enabling managers to optimize each and every area to operate optimally. It also enables them to understand passenger behavior, and to understand how disruptions or changes affect standard behavior.

Management are able to extract any combination of data, both real-time and historically, to provide the desired output. For example, airports can review how long a typical passenger spends in duty-free shopping areas. This pattern can be averaged over a day, a week, a month, as well as a specific time of day, a specific holiday, etc. These statistics can be measured in any area of the airport: check-in, security, restaurants, retail, and more. The statistical combinations are as general or precise as the management wishes it to be for review and optimization purposes.
BlipTrack Queue Measurement Solution

For many, the most stressful part of catching a flight is waiting in line at the airport. As air travel is continually on the rise and airports often have limited space to expand, the pressure on authorities to balance security with a good passenger experience grows. This leads to significant bottlenecks, with delays that frustrate travelers.

The uncertainty around how long airport processes, such as check-in, security, border control and immigration, weighs heavily on the mind, particularly when confronted with what appears to be a lot of travelers in line in front of you.

Several airports around the world are trying to make it less frustrating - by displaying accurate wait times, on screens and mobile applications.

Daryl Jameson, vice president at the company JFKIAT, which runs Terminal 4 says: “People like to know how long they are going to wait in queues. Nobody likes to wait in lines and signage helps to manage expectations.”
The wait times are driven by BlipTrack sensors that monitor passenger’s mobile devices as they move through the airport.

The solution works by measuring individual travel times, from queue entrance to exit, and the number of people in line. With the two measurements, predicted wait time, for people entering the line, can be calculated and displayed. Most airports also display the wait times on their mobile apps and online.

Besides being able to provide passengers with wait times, the airports also use the collected data from the sensors to give early warning if lines are becoming congested. This allow management to response promptly and effectively to irregular operations and disruptions, to ultimately reduce processing times.

“The predictive data has proved to be very accurate, and is used by the staff to monitor the operation and is also the queue time that is displayed on our mobile application and monitors around the airport”, says John Seely, Technology Projects Manager at Dublin Airport.
BlipTrack sensors are not iBeacons

As the BlipTrack sensors automatically, and without interaction from the travelers, detects mobile devices with enabled Bluetooth or WiFi, the penetration rate is significantly higher (40%) than with iBeacons (1%). In order for iBeacons to work as a tool to optimize queue and monitor flow, the technology require that passengers download a mobile app. However, recent studies show that very few travelers download these apps, which significantly affects the penetration rate negatively, in order to provide trustworthy queue and flow data.

A recent Expedia survey found 94% of leisure traveler’s travel with a mobile device. Considering that 64% of American adults now own a smartphone, monitoring mobile devices, using passive Bluetooth/WiFi sensors, is an accurate method for monitoring, examining and predicting passenger traffic.

According to a 2014 study, passengers are willing to spend up to EUR 1,00 per minute in airport concession, once he/she passes the security process. Same study shows that an extra 10 minutes spent in a security queue reduces a passenger’s spending
on retail by 30 percent on average. Consequently, managing queues and flow, becomes an important tool to generate more non-airline revenue for the airport.

Ensuring that travelers experience a quick and easy passage will significantly increase the opportunity for a positive experience, with more satisfied and recurring travelers as a result.
BlipTrack delivers reporting capabilities to managers with live and historical information in a web-based, intuitive user interface with compelling visualizations and real-time insights. The solution enables data extraction in any combination and is exportable in various formats, allowing quick and efficient integration into existing management systems.

Visualized data, from multiple sources, accessible from a single interface, provides decision-makers the necessary tools to easily interpret, maintain and optimize all aspects of an operation.
BLIP Systems is a privately-held information technology company near Aalborg, Denmark. The in-house designed BlipTrack solution consists of various high-tech sensors, a sophisticated analysis platform with compelling visualizations and real-time insights.

BLIP Systems continue to develop BlipTrack to meet the ever-growing needs of their clients. A key difference in the approach is the development of quality hardware and a high level of expertise relating to data filtering, which has been built from a real-world application of proprietary systems.
THESE AIRPORTS RELY ON US

- Sydney Airport
- Toronto Pearson
- Schiphol
- Aeropuerto de Barcelona-El Prat
- Copenhagen Airports
- Oslo Airport
- Brussels Airport
- Milano Malpensa
- Milano Linate
- Helsinki Airport
- Christchurch Airport
- John F. Kennedy International Airport
- Finavia – for smooth travelling
- Aeroports de Montreal
- Geneve Airport
- Brussels South Charleroi Airport
- Bristol Airport
- Flughafen Berlin Brandenburg
- KEF
- Aalborg Airport
- Edinburgh Airport
- Auckland Airport
- Birmingham Airport
- San Diego International Airport
- Let's Go
- CVG
- Cincinnati/Northern Kentucky International Airport
- Billund Airport