

CASE STUDY

Transforming the TSA experience

Myrtle Beach International Airport is one of the busiest airports in South Carolina, with more than 2 million passengers served each year. The Gateway to the Grand Strand is the main airport serving Myrtle Beach, a city which accomodates more than 15 million tourists each year.

The Challenge

Myrtle Beach International Airport struggled with long lines for TSA screening during its busiest times of the year.

Travelers had grown frustrated with the wide variations in the length of wait times at the TSA screening checkpoint. Wait times in the facility were wildly inconsistent due to a lack of staffing and TSA screening lanes for the amount of passengers in the facility, especially during the summer.

Management in the facility tracked wait times by hand to gather data on the increased wait times, but sought a more comprehensive solution using technology.



67%

More than two-thirds of travelers say they would travel via airplane more often if the airport and pre-flight experience was significantly improved.

(Mobile Travel Technologies, 2015)

Our Solution

Myrtle Beach International Airport approached Archetype SC about a solution to track TSA wait times for its their travelers. After discussing the challenges in tracking in the space and budgetary constraints, Archetype SC worked to develop and deploy A2 Analytics, a solution that would be affordable, accurate, and durable.

The technology combined sensors, machine learning algorithms, software, and reporting capabilities into one package to deliver deep insights. The device is housed in a heavy plastic case, which is locked to prevent tampering, to track thousands of data points per second within inches of the signal source.

Through passive tracking of the data from mobile phones and hundreds of other electronics devices, A2 Analytics tracked the precise movement of nearly every individual passenger.



“From the time I first met with Archetype SC I was impressed. The team’s expertise allowed them to develop and roll out A2 Analytics ahead of schedule and within budget. Based on the success of the launch of A2 we have contracted for additional services.”

Kirk Lovell

Director of Air Service & Business Development

The Results

After deploying A2 Analytics technology, Archetype SC tracked wait times at Myrtle Beach International Airport to within seconds of hand-recorded times during one of the busiest travel seasons on record for the facility.

Airport staff used data gathered by A2 Analytics in a presentation to TSA, which resulted in an investment in the facility by the agency. TSA placed two additional screening machines, an extra lane for general TSA screening, additional staff, and the allocation for an additional percentage of overtime for staff.

Going further with its investment in A2 Analytics, Myrtle Beach International Airport now has TSA wait times information embedded on the homepage of its website, giving visitors to flymyrtlebeach.com information on the wait times for TSA PreCheck and general screening lanes.

1.2
MILLION

Number of enplanements at Myrtle Beach International Airport in 2018

10
MINUTES

Average wait time at TSA screening area after adding A2 Analytics

2

Number of new screening machines since implementing A2 Analytics

CASE STUDY

Bolstering baggage vendor services

Myrtle Beach International Airport serves the part of South Carolina's coast known as "The Grand Strand" — a tourism hub that sees more than 15 million visitors per year. With an ever-growing number of travelers arriving at its terminal, the airport handled more than 1 million bags in 2018.



The Challenge

To provide baggage service to its passengers, Myrtle Beach International Airport has several contracts in place with vendors who move bags from the aircraft to the terminal building.

Over time, management had come to doubt the effectiveness of these third-parties, having received complaints from travelers about wait times for bags. The service at baggage claim was especially bad during the busy summer season when nearly half of the airport's 1.3 million annual deplanements occur.

Seeking a solution for the inconsistent delivery of baggage and longer than normal dwell times for passengers, management needed to create a system of checks and balances for its vendors.

60
MINUTES

At peak ineffectiveness, visitors coming through Myrtle Beach International Airport were experiencing baggage claim wait times of more than an hour, well beyond the target time of 15-60 minutes for larger facilities like Atlanta's Hartsfield Jackson International Airport

Our Solution

Having already seen positive effects of A2 Analytics on the customer experience in its TSA screening area — where our technology led to added infrastructure and staffing — Myrtle Beach International Airport once again relied on Archetype SC to provide a solution.

This time, our staff deployed A2 Analytics technology in the baggage claim area to track the movements of arriving passengers using passive data from electronic devices including mobile phones, fitness trackers, Bluetooth headphones and smart watches. Here, our robust system of reinforced, secure sensors monitored thousands of data points, while our patented software and machine-learning algorithms turned this data into knowledge.

In the end, Archetype SC's team of data experts was able to deliver in-depth reporting and analysis of how long passengers spent standing around waiting for their bags.



The Results

Following a review of wait time data gathered by A2 Analytics technology, the airport was able to prove that vendors were not meeting the terms of their contracts. Due to poor service and passenger experience issues, two baggage service vendors were replaced, as they did not perform up to agreed upon contractual obligations.

Management also met with corporate representatives the poorly-performing airlines, offering the data as a resource for the companies to improve their efforts at the facility.

With a better knowledge of the facility's baggage needs, thanks to the rich data provided by A2 Analytics, management is now able to provide accurate analytics on vendor performance. These numbers help provide a system of checks and balances for holding vendors to their contracts, improving customer experience and reducing travelers waits and dwell time throughout the baggage area.



Future use potential

Along with the monitoring of baggage claim averages, airports can use A2 Analytics to determine when delays in baggage service occur in real time, allowing airport management to intervene and alert passengers.

With real-time dashboards, management can see if staffing or weather may cause a delay for passengers and offer alternatives to waiting in the baggage claim area, such as a reception area with refreshments, coupons to in-house concessions, or discounted area attraction tickets to help keep the passenger experience positive throughout the facility.

CASE STUDY

Reinventing Retail with Big Data

Whether in an airport, at a mall or in a standalone shop, retailers and concessioners everywhere share many of the same issues. They want to deliver the best possible shopping experience but only have limited information about what customers want and how they behave while shopping.

The Challenge

Traditionally, without a reliable way to track customers moving in and around a retail space, it's been difficult for retailers to know when to bolster staffing, where to allocate resources and how to attract more business.

But recently, more and more retailers are embracing location-based analytics as a way to transform the customer experience and create "click history" in the real world.

By studying where a customer spent the longest amount of time in a store, a retailer can deploy a staff member to help complete a conversion with the customer.



\$16.3 The location analytics market is expected to grow from \$8.2 billion in 2016 to \$16.3 billion by 2021.

81% Percentage of retailers gather some sort of insights on shoppers while in-store

Our Solution

Archetype SC's approach to solving the retail problem is to provide our clients with as much data as possible about their customers.

By placing our inexpensive, yet robust system of sensors throughout a retail location, we can passive track devices such as phones, smart watches Bluetooth-connected tech. This safe and non-invasive tracking can pick up thousands of data points from each customer, providing a rich cache of data to be analyzed by our patented combination of software and machine-learning algorithms.

Using A2 Analytics, we can monitor the movement of individuals within a given space, showing where people are and how long it took them to get from Point A to Point B.

Our technology can also provide retailers with information including location heat mapping which can tell you what items are popular, what routes customers take inside a store and how long it takes them to find what they need.

You can also check on customer conversion rates with insight on where customers are coming from, how many individuals walked by the storefront without stopping and how many of those who enter end up converting to a sale.

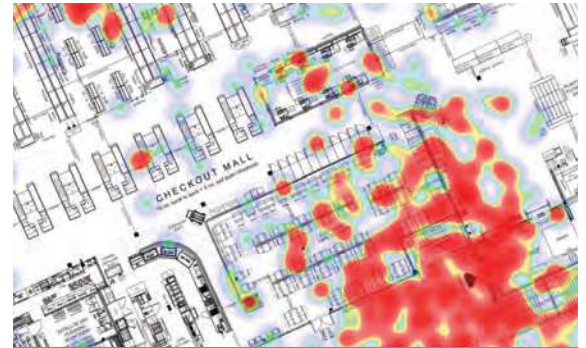
The Results

Using the data gathered by A2 Analytics, retailers can optimize their shop's layout and customer experience in a variety of ways.

Our custom dashboards can monitor sales made and compare it to the number of customers entering the store, as well as delivering reporting that offers insight on ways to increase customer engagement

With help from our data experts, your team can get in-depth analysis of shopper dwell time and session duration to learn more about customer behavior allowing you to enhance the shopper's experience, increase conversions, and boost customer loyalty.

82% Percentage of smartphone users that use their phone to influence a purchase decision while in a store.



Tracking Advertising Effectiveness

In addition to tracking customers, A2 can also be used for tracking your advertising's effect on potential customers. With full heat mapping of a facility, retailers can find optimum placement for advertising to reach the most customers.

A2 Analytics dashboards allow for real-time analysis of a facility, showing if more customers enter beside a movie theater or food court, giving store owners information about where to place staff and marketing materials, how long customers spend in a given section of a facility and how many visitors view specific ads.