Gatwick Airport's Six Sigma Team Improve Customer Experience

Simulation, where real life events are mirrored using computer software is something airports have been familiar with for decades.

These systems are put in place to ensure aircrafts are safely navigated, to spot potential problems and determine the most efficient flight paths. Gatwick has applied this same approach, which has been so successful for managing aircrafts, to also manage passenger services. However the data that is used is different, with simulation taking into account historical data, passenger behaviors and service capacity in order to accurately replicate the performance of airport facilities in different scenarios, such as increased throughput, new terminal layouts or contingency planning.

Gatwick Airport

By using SIMUL8's process improvement simulation software, Gatwick has achieved many benefits:

Using SIMUL8 also provided Gatwick the ability to advise airlines on how to make operations more efficient without increased investments.

Gatwick's Programme Manager Mike Goacher stated "using simulation has reduced the ripple effect of disruptions that could possibly affect passengers in other areas of the airport. We understand that all areas of the airport connect, and it's important to manage the flow of activities". Making changes to security lanes could affect the amount of time passengers spend in the lounge. Therefore, each area has been considered when trying to improve the passenger experience across the board.

For example, Gatwick's redeveloped security area in the South Terminal has 19 lanes allowing passengers to be processed quickly by simply scanning their ticket. Using SIMUL8 along with new security technology has changed factors such as wait times and staff numbers, helping to determine how many staff members are needed at a given time, as well as reducing queue times bottlenecked areas was the most effective approach.

Better Results

By using SIMUL8, Gatwick gained significant and meaningful results with their simulations of the check-in process and lounge areas that included real flight schedules and airline information. The ease of use and accessibility of SIMUL8 ensured Gatwick utilized all capabilities, and helped minimize queue times while maximizing throughput – ensuring a successful customer experience.

Improved Flexibility

At any airport no two days are ever the same, passenger numbers fluctuate, flights can be delayed and many other influences such as seasonal variation will come into play. If the team want to test multiple check-ins with multiple different airlines – each with its own imported passenger profile – they can do that.

Better Communication

Simulation is a great tool for assisting communication among staff as it provides a common visualization of newly implemented processes, as well as making sure all capabilities are utilized. For example, if SIMUL8 has shown that only a certain number of security personnel are needed at a given time this can be communicated to head of security to help implement changes and reduce wait times for passengers.

Robust systems testing and avoidance of critical failures

Gatwick simulates layouts and passenger flows to prevent disruption to customer services. If passenger numbers increase, or if new timely security measures were introduced testing these types of scenarios and communicating solutions in a highly visual and interactive manner helps Gatwick avoid critical failures.

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>
> **Mike Goacher**
> Gatwick Airport

A solution to help everyone

With the air travel industry being affected by factors like increased security measures and busier flight schedules, it has become apparent how difficult it is for airports to please everyone. In spite of these factors, Gatwick Airport has been using SIMUL8 to help maintain a successful passenger experience.

Using SIMUL8 has also changed their way of working by offering an increased flexibility of testing scenarios within a safe environment before implementing changes in real life.

Key Facts

- Improved the check-in process by reducing wait times
- Reduced disruption to passengers
- Improved airline efficiency without increased investment
- Assisted communication among staff by offering visualization of processes
- Reduced queue times