IMPROVING OPERATIONAL EFFICIENCY TO PROVIDE A SUPERIOR PASSENGER EXPERIENCE FOR LONDON GATWICK

The airport's fixed size presents an ongoing challenge for London Gatwick’s Business Systems team as it looks to increase revenue and grow business. This is only achieved by making better use of existing resources. It's about making operations as efficient as possible, whilst still delivering exceptional customer experiences. Gatwick relies on a host of partners to make this happen - including fuel providers, ground service companies, catering businesses and anything else needed to keep planes and passengers moving.

Collaboration is key - and data empowers it.

THE IMPORTANCE OF INFORMATION

Relevant and timely information enables partners to serve passengers even better, for less cost. Communication is personalised, processes are integrated, and interactions are faster.

This supports the European Community's A-CDM project, which encourages all European airports to improve aircraft turn-round and pre-departure sequencing processes, to reduce delays and optimise on-ground resources so overall air traffic can run more fluently.

Historically, Gatwick provided information to partners using legacy communication systems which were slow to setup and operate. They used a physical VPN connection using cables running into the airport site. A Microsoft BizTalk platform shared mission-critical flight data internally, but external access was not viable in case partner systems were compromised.

Gatwick's Business Systems team needed a way to keep all parties updated in real-time, securely. It decided to migrate operations to the cloud.
MAKING AIRPORT OPERATIONS EVEN MORE EFFICIENT

Solidsoft Reply proposed a hybrid solution, using the Microsoft Azure platform to build a new Service Bus called the Azure Message Exchange (AME) and a Management Reporting Portal. The solution draws on Microsoft Azure’s inherent resilience, high availability and safety.

By extending Microsoft BizTalk to the cloud, the airport could easily onboard new partner 'subscribers' and distribute flight information as necessary. Secure routing and filtering made sure subscribers only received information relevant to them, to prevent DOS attacks and other cybercriminal activity.

Using Microsoft Azure Service Bus Queues and a user-friendly management portal, Solidsoft Reply created a platform as fast as it was flexible. Almost limitless subscribers can be onboarded, with no loss in performance.

'We chose Solidsoft Reply because they were a Microsoft Gold Partner. We liked how quickly they responded to our requests, and their flexible support.' – Chris Howell, Head of Business Systems, Gatwick Airport.

Solidsoft Reply’s solution delivered several valuable benefits from day one. 12 partners have already subscribed to the new data distribution system. Microsoft Azure’s cloud platform gives it the capacity to add many more. Indeed, the current plan is to double the number of partners in the next 12 months.

Having access to Microsoft specialist support - whenever needed - is crucial in maintaining optimal platform performance. Potential partners can get started quickly and easily, without the Business Systems team having to involved at every stage of the process, which leaves more time to focus on performance improvements.

BUILDING A BETTER PASSENGER EXPERIENCE

This is already demonstrably improving the travel experience for Gatwick’s passengers. For example, Easyjet’s Mobile Host system gives fliers everything they need to know via a convenient mobile app. Sharing arrival times helps UK Border Force to manage immigration desks, and staff up for peak times according to actual arrival numbers. Up-to-date take-off and landing schedules enable baggage handlers to prepare planes to leave as punctually as possible, every time.

‘Our partners are getting access to the same flight information we’ve been collecting for years, and it’s been made a lot easier to provide thanks to Microsoft Azure.’ – Chris Howell, Head of Business Systems, Gatwick Airport
Because it's technology agnostic, the platform allows Gatwick's partners to connect using their preferred applications and approaches. It also runs through two datacenters, to guarantee resiliency and uptime and meet required SLAs.

For Gatwick, the objective remains to increase traffic through the airport. Solidsoft Reply's solution gives them the tools it needs to hasten the flow of passengers from one destination to another, and reduce the time planes spend waiting for instructions, queuing for takeoff and sitting on the tarmac.

With these new processes in place, and the seamless flow of updated information they provide, the airport is able to manage more flights - and therefore make more revenue. Designed to handle over 1 million messages per day, it connects Gatwick to all its key business partners and meets the objectives set out in the European Community's A-CDM initiative.

CONCLUSION

London Gatwick's Microsoft Azure cloud platform enables unprecedented communication between the airport and its network of partners, to streamline operations, increase passenger and plane throughput and improve overall service levels. Microsoft specialist support maintains optimal performance and makes it easy for new partners to get onboard and involved. This is already demonstrably improving the travel experience for Gatwick's passengers across the board.

**Key technologies included:**

- Microsoft Azure Service Bus
- Cloud Services: Web roles, Worker roles
- Azure table & blob storage
- Azure SQL Database
- Azure Active Directory
- Azure Access control Service
- BizTalk Server 2013 including the Azure Service Bus Adapter
- SQL Server 2012
- Windows Server
THE CUSTOMER

Gatwick Airport is the UK’s second largest airport and the most efficient single-runway airport in the world. Serving more than 200 destinations in 90 countries for over 40 million passengers a year on short and long-haul point-to-point services, it manages 55 air traffic movements every hour. Gatwick is proud to be ‘London’s airport of choice’.

‘I have a finite amount of space, power and cooling available. But, by using Microsoft Azure, I never have to worry about size, or any other complexities that arise when building data systems internally.’ – Chris Howell, Head of Business Systems, Gatwick Airport.

Solidsoft Reply is the Reply group company creating enterprise strength solutions on-premises and utilising the Microsoft Azure cloud platform. A global award winning Microsoft Gold certified partner, Solidsoft Reply specialises in: System Integration on the Microsoft platform, including BizTalk Server and Microsoft Azure PaaS; Custom Application Development on the Microsoft Azure platform; Business critical application support; Azure operational services and Application Lifecycle Management. A published thought leader and trusted advisor to Microsoft, engineering innovative solutions since 1993, Solidsoft Reply has helped over 500 enterprise clients succeed. www.solidsoftreply.com

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