

Dallas/Fort Worth International Airport improves the customer experience with real-time flight status

COMPANY PROFILE

Dallas/Fort Worth (DFW) International Airport is the world's third busiest, offering around 1,750 flights per day and serving more than 57 million passengers a year, of which 60% are connecting passengers. It provides non-stop service to 140 domestic and 40 international destinations worldwide operated by 18 domestic and seven foreign-flag airlines.

DFW is located halfway between the cities of Dallas and Fort Worth, Texas and supports more than 300,000 jobs in the region. Every year since 2006, passenger surveys conducted by Airports Council International have ranked DFW in the top five for customer service among large airports worldwide.



Situation

In 2005, DFW opened its globally acclaimed International Terminal D. Integral to this was the installation of state-of-the-art technology systems including the Airport Operational Database – known internally as AODB.

From the inception of AODB some four years earlier, one of the critical deliverables was to automate the collection, processing and communication of flight arrival and departure information for the many thousands of passengers using the airport every day.

The construction of Terminal D was also the catalyst for introducing a new flight information display system (FIDS). Together, AODB and FIDS were set to revolutionize the way DFW utilized and communicated flight status information within the airport campus.

Automation was crucial. Flight operations and passenger numbers were growing, putting real pressure on the terminal managers to maintain and enhance operational excellence and customer satisfaction – the cornerstones of DFW's success. Among their many responsibilities was the task of manually updating the FIDS. Every flight detail for a gate change or delay had to be re-entered manually. For an airport the size and stature of DFW, this was a huge undertaking for the terminal managers.

Data reliability was also an issue. Information of variable quality was flowing in from a number of disparate sources. This made their task even more complex and time-consuming, with the potential risk of inaccurate information inadvertently being passed on to travelers and other airport customers.

The airport's executives wanted to relieve their terminal managers of this labor-intensive chore and to improve the information communicated to passengers via the FIDS displays. They needed an automated solution that would provide a real-time consolidated view of accurate flight status data about every airline using the airport.

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*John Parrish
AVP Terminal Systems
DFW International Airport*

Solution

DFW's search for a data partner who could match its demanding standards for quality and reliability led to OAG's door. OAG, already recognized as the world's most comprehensive and accurate source of global schedules, had recently integrated a new flight status database into its solution portfolio.

In 2005, DFW became the first major airport in the world to take a direct feed of OAG's flight status data, furthering its track record as an industry leader in adopting innovative technical solutions to improve its operational efficiencies. An important factor in the airport's decision to take OAG data was that few other sources were able to supply consolidated future schedules giving a complete view of all flights into and out of the airport for six months ahead. This was – and still is – a critical information source for DFW's operational planning.

OAG supplies DFW with a single XML feed of real-time flight status data spanning 48 hours prior to scheduled departure and 24 hours after actual arrival time. As soon as a status change is received by OAG, it is sent directly to the airport's operating database. The live feed is automatically integrated with other relevant data stored on the AODB, processed and instantly available for transmission to the FIDS screens located throughout the airport.

Flight status feeds from OAG provide real-time data including delays for arrivals and departures, actual on-and-off-block times, actual airborne and touchdown times, and flight diversions or cancellations.

OAG's processing and distribution capabilities enable the company to integrate the latest flight status data with the timetable information for which it is renowned, such as carrier and flight number, code-share information, scheduled arrival and departure time, terminal and equipment details.

Results

The people who manage DFW's five terminals and 175 gates no longer have the burden of manually updating the status of the numerous flights arriving or departing each day. Their time is more productively focused on driving operational excellence and customer satisfaction.

"We know exactly when passengers will arrive and how long they'll be in the airport. This knowledge really helps us improve the passenger experience," said John Parrish, AVP Terminal Systems at DFW.

With all the flight status information readily available, the terminal managers use it to optimize available resources and services. They plan operations around the projected volume of passengers on a day by day, hour by hour or even minute by minute basis. Armed with this knowledge, they can ensure enough resource is allocated at any given time. For example, the optimum number of cleaning staff, availability of concession facilities and catering services, even advertising rosters to maximize revenues and return on investment for the airport and its customers.

Shuchi Agrawal, DFW's ITS Systems Integration Manager with responsibility for the AODB and the OAG relationship, sees the benefits every day. "With the real-time feed, we have all the flight status data at our disposal and available to our staff and – more importantly – our customers."

Passengers have easy access to the most up-to-date information about their flights, with FIDS screens located throughout the airport including the Skylink rail stations, baggage claim areas and rental car centers.

"The number of people being misdirected has been drastically reduced since we started integrating the OAG information. It has virtually eliminated the risk of error and has helped to make us greener, too, by cutting our dependency on paper and fax communications," added Agrawal.

The airport continues to invest in its infrastructure to maintain its leadership position. In addition to the substantial Terminal Renewal and Improvement Program (TRIP) to renovate and refurbish its four original terminals, DFW is replacing its AODB. One of the benefits of the new operational database system will be an improved ability for the team to utilize OAG data for strategic planning purposes. They will be able to run a variety of reports to identify trends and opportunities gleaned from flight activity, on-time performance and utilization metrics.

DFW has recently renewed its contract with OAG for flight status data and the bi-annual seasonal flight schedule files. Said Parrish, "We need the reassurance of a reliable supply of accurate flight status data to keep our productivity high, our operations efficient and customer satisfaction levels ahead of our competitors."

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