A North American airline finds new ways to keep customer satisfaction high

IBM delivers rules-driven real-time customer notification; passenger traffic rises 7.8 percent

Overview

The need
A North American airline wanted to extend its thoughtful customer service, especially during flight cancellations or delays, by sending customers personalized, rules-generated email or text messages.

The solution
A rules-based travel notification system uses IBM Operational Decision Manager, IBM Integration Bus, IBM® WebSphere® MQ, IBM WebSphere DataPower® and IBM Tivoli® Directory Integrator.

The benefit
With millions of messages sent, the travel experience is improved, passenger traffic is up 7.8 percent, 60 percent of passengers click for more information and just 0.5 percent have opted out.

Promising a high level of service at a low cost, this North American airline launched its service in 1996 with just three planes. Now, it fills more than 100 planes, carrying 50,000 guests a day on more than 450 flights to 85 destinations throughout North America, Central America and the Caribbean.

Notifications reduce stress
One of the airline's main focuses has been to provide an exceptional guest experience, whether interacting with them in person on the front lines or using technology to enhance their travels. The company goes the extra mile to promote a stress-free experience. One way it does that is with a notification system that reaches guests via a preferred channel such as email, voicemail or text. It would offer a flight reminder three days ahead of departure, an opportunity to check-in online 24 hours in advance and prompt notification of any changes, including flight cancellations or delays, gate changes or insight into the entertainment or amenities available on the aircraft.

"IBM helped lay the foundation," says the technical advisor. "IBM Software Services for WebSphere helped us map requirements and build this out, ensuring that whenever we develop rules, we were gathering the right information." Says the technical architect: "I honestly feel that IBM is a partner. They are as invested in our success as we are."

Solution components

Software
- IBM® Operational Decision Manager
- IBM WebSphere® MQ
- IBM WebSphere DataPower® Integration Appliance XI52
- IBM Integration Bus (formerly WebSphere Message Broker)
- IBM Tivoli® Directory Integrator

Services
- IBM Software Services for WebSphere

The system would help helps the airline grow—serving guests 24 hours a day—yet retain the personal touch that guests love.

How the system works

The key to the notification system is that IBM WebSphere software enables seamless interactions between many different information resources. As an example, a gate change triggers a message stored on IBM® WebSphere® MQ, our messaging backbone. The message is run through the rules engine in IBM Operational Decision Manager, and IBM Integration Bus (WebSphere Message Broker) provides an orchestration layer between multiple systems, including identity databases. "We must understand the flight, the passengers on the flight and then go into the frequent flyer reward system and understand who each individual is," says a senior technical advisor for the airline.

IBM Tivoli® Directory Integrator looks up the preferences of each guest, and IBM WebSphere DataPower® helps secure, centralize and optimize access to internal and external web, mobile and API workloads to make the system work. "Complex orchestration is taking place," the technical advisor explains, "and the end result is an enriched guest experience."

Notifications are generated fast. An event might trigger between 10 and 390 rules, depending on whether a flight has multiple legs. "We've seen a complete flight, with 174 passengers, process in about 100 milliseconds," says a technical analyst at the airline. "The end-to-end notification process can take up to a minute. We are able to monitor the outgoing emails and messages to ensure that our guests are receiving the correct data."

When rules need to be changed, the system is flexible. "If we need to create a rule to satisfy an event that is occurring, we can do that in real-time without taking an outage," says the analyst. "That's a huge benefit."

Signs of success: more passengers on board

Guests love the notification system. "In the past five months, we've sent out two to three million different notifications," the technical analyst says. "Just 0.5 percent of guests have opted out, and more than 60 percent are actually clicking links within the notifications to get more information. Guests are tweeting about how much they appreciate the system."

Changes that might be stressful are easier to take. "Guests like to get notifications as early as possible and have the opportunity to take their own measures," adds a guest experience advisor for the airline. "Flight crews also love the system because it saves them from having to repeatedly answer the same question, and lets them focus on making guests feel welcome and well cared for."

Passenger traffic is up 7.8 percent compared to the prior year. "Not only have we caught up, but we're actually surpassing what our competitors do," the guest experience advisor says. "It's a differentiator."

Enabling more insightful interactions The team plans to expand the service to include personalized links and offers, such as discounts tailored to a guest's preferences if a flight must be cancelled. "We gain a competitive edge from integrating technology," says the airline's senior technical architect. "We have a picture of each guest in real time—the things they like and don't like, along with their purchase patterns. We can drive more meaningful interactions, based on their preferences."

For more information

To learn more about IBM WebSphere software, please contact your IBM representative or IBM Business Partner, or visit the following website: **ibm.com**/websphere

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