



Mobile Application Solution



SQL Notification Services - Case Study

The Summary

As a leading private airline of the country, our client with its extensive operations and highly mobile customer base saw a huge opportunity to increase customer satisfaction and cut costs through innovative use of mobile messaging technology. They wanted to provide value added services to their customers, particularly business travelers and frequent flyers, and differentiate their offerings in an intensely competitive industry. So, the client turned to AG Technologies to develop a mobile services platform that integrated seamlessly with their internal CRM system, the SABRE Travel network and the company Portal. This solution has significantly improved customer satisfaction and retention, reduced operating costs and improved access to information for customers.

The Client

The client is a leading player in the Airline industry. The client is the biggest success story and is one of the fastest growing airlines in the world. The client is known for its innovation and has been receiving awards for its services consistently.

The Business Requirement

In today's Information Technology age where each person expects information to be available at the press of a button, they are in the process of developing and introducing a much-advanced mobile application, which would provide the users with up to date information at the press of a button. In case when a flight is delayed / cancelled, waiting at the airport for the airlines patrons, especially business travelers can be quite tiresome and often very time consuming. Therefore to save some of airlines patron's valuable time and make things a little more convenient, they initiated the Mobile Application service.

Project Summary

Industry: Airline

Client Profile One of the largest private airlines in India

Business Requirements:

Wanted to create an extensible and scalable platform that would provide mobile services to customers

Solutions:

Used Microsoft technology to build an integrated and seamless platform delivering personalized mobile services to the airline's customers

Solutions Benefits:

- Reduction in operating costs
- Improved pre-flight experience
- Improved access to information
- Improved branding
- Increased customer satisfaction and retention



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The Solution

A Mobile Application was developed to enable the customer to check flight information on their mobile phone, at places where this service is being provided. They can use this Mobile Application for information on Flight Schedules, Flight Status or to set Flight Alerts.

The working of the Mobile application has been divided into 3 different modules, namely:

Push Services:

This service is used to proactively push messages to the passenger.

All flight schedule updates are made to the FOS (Flight Operating System), which is physically present at the airport. The reservation office then picks up these updates and calculates the delays. In case the delay is more than 30 minutes, the Sabre multi host will provide the PNR information of the entire passenger traveling by the flight.

To communicate the delay to the users, the system will search for the mobile numbers of all the passengers. The system will identify the Privilege members and check for their mobile numbers from their profile in the portal database. The mobile numbers of the Non-Privilege members is fetched from the PNR database, which contains the contact number, obtained from the passengers at the time of booking.

The Client Mobile server creates the messages to be sent to the user and queues the same to the Orange messaging gateway for delivery. The SMS will then be delivered to the respective service providers who would in turn deliver the messages to the user's mobile device.

The push service of Jet Mobile will provide following features:

- Flight updates
- Account update alert (Alert sent every time the miles are added or deducted from a user's account)

Pull service:

This service will allow the customer to fetch information about:

- Fetch flight status
- Fetch flight schedule
- Set flight alert for flight status push
- Cancel flight alert
- Fetch booking status
- Fetch account information (Miles available)
- Subscribe to Mobile alerts
- Unsubscribe to Mobile alerts



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The messages sent by the customers will be a combination of keywords assigned by the Client along with some dynamic information e.g. Flight number etc.

Mobile Web Application

The web interface of the Mobile application will be used to perform the following activities:

- Cancellation of flights for short date range – This feature will help the system receive updates from the planning and operations department every time they cancel/combine flights on a sector.
- New flights updates/alerts – This feature will allow the Client to compose messages manually on introduction of new flights or any such activity and send SMS to selected band of users.
- Sabre alert report – This report will list down the messages generated for a particular flight on a given date with the status of the message. Status being Q (in queue), D (Delivered) or E (Error).
- Delay message summary report – This report will show the number of PNRs captured, mobile numbers found, successfully delivered, error and pending delivery.

All messages to be delivered are queued on the Client's Mobile server and then forwarded to Orange for delivery of messages to the end user. The messages are then delivered to the specified mobile numbers and a delivery notification is returned to the Client's Mobile server.

For all kinds of alerts, the Mobile application will try to send the message for maximum 3 times. On continuous failure of delivery of the messages, the system will try to figure out the reason for the message delivery failure.

Technology and Tools:

The solution was built using the following technologies:

- Microsoft .Net Framework
- Microsoft SQL Server 2000

The Solution Benefit

By providing the mobile services platform, our client has garnered significant gains in brand recognition by launching a first of a kind mobile services offering in the country.

- **Reduction in operating costs:** The client has reduced call center costs due to improved access to information and automation of mobile alerts.
- **Improved pre-flight experience:** Automated mobile alerts in case of flight disruptions and delays have greatly reduced airport wait-times.
- **Improved access to information:** Customers can now access relevant information anytime, anywhere.



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- **Improved Branding:** Being the first to launch the mobile services offering in the country helped differentiate the brand from other competitors.
- **Increased Customer Satisfaction:** Value added services to frequent flyers and business travelers have improved customer satisfaction.
- The Mobile service is now available across the network and is compatible with all the service providers.