



# AIRLINE POINT OF SALES APPLICATION CASE STUDY

## CLIENT OVERVIEW

Our client is a well-established global provider of onboard store technology and merchandising solutions which help airlines and other travel operators create, manage and control onboard retail environments customized to address the needs of their staff and customers. The company has catered to the needs of big players of the airline industry and has garnered a reputation of being a trusted onboard processing partner for clients across the globe.

## KEY REQUIREMENTS

- The app would pull data in reference with the products' catalogue, flight details, airline and crew information on the flight to the on board customer. The application would enable the flight attendant to identify a passenger from the aircraft's seat map visually
- The app would provide online payment of all types (credit, debit, and coupons etc.) to offer seamless and easy user experience for the flight attendants while making transactions
- Provide the ability for flight attendants to realize the purchases using gift coupons, complementary services and offer discounts
- Provide a key feature for the Airline to capture the feedback from passengers and from flight attendants on the upkeep of the aircraft
- Ensure secured business transactions
- Display transaction details and enable generation of customer information report to enhance the customer service
- Allow online and offline sale of transactions for the flight attendant. The flight attendant can synchronize all the transactions after the flight is completed allowing to perform offline transactions on board. The back office data storage would also have details about the passenger seating and travel arrangement
- The application was to be made extensible across different platforms such as iOS, Windows and Android

## KEY CONTRIBUTIONS

- Application UI was designed as per iOS standards with various factors kept in mind such as usage of app during both offline and online mode and functioning of application during aircraft turbulence
- A feature to present the Aircraft seat map and lay out on the tablet was incorporated with optimal use of the real estate. The seat map description would be made available from XML files
- A feature to display product catalogue was incorporated with a high quality responsive design to enable the flight attendant to easily browse through and search for items. Thus making the application provide a good user experience and allow flight attendants to meet customer requirements efficiently
- Developed design as per requirements of 5" and 7" inch tablets and fully support landscape & portrait orientations
- Implementation of application support for the magnetic stripe reader to be connected and enable seamless integration of credit card payments with the mobile point of sales application

## KEY BENEFITS

- Successful deployment of application for iOS devices supporting both iOS 7 with backward compatibility up to iOS 6
- The engagement has also led to opportunities for porting the application on to Android tablets as well
- The successful usage of Xamarin's cross platform support capabilities enabled access to a reusable backend system, thereby reducing development time and cost
- Improved productivity of flight attendants due to reduction in time for on board customer service

- Real time integration was done for application support with the Airline's existing infrastructure
  - Integrated branding support features for automatic configuration of application name and icon as per the airline's requirements
  - Development of data access components and business components such as:
    - Fetching of data from back office to populate local database with products' information
    - Uploading of sales transactions and reports data to back office
    - Uploading of sales transactions to credit card processor
  - Developed C# wrapper over Objective-C library for sleeve integration and collating credit card data
  - Integrated application to support localization so as to be viewed in different languages
  - Development of informative reporting system in order to cater to the sale of products and customer feedback
  - Stored credit card data in encrypted format in local database
  - Implemented QA testing process of application for ipad mini device
- Served as mode for flight attendants to optimize inventory accounts and sale performance
  - Improved the overall operations by fast as well as easy price and inventory checks
  - Helped airlines to improve customer loyalty and increase ROI

## TECHNOLOGY STACK

- MAC OS X 10.6 and above
- Xcode Designer
- Xamarin Studio for iOS
- Microsoft Visual Studio 2010
- C# 4.0, Objective-C
- SQLite
- Subversion for source control



### About Xoriant:

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