The Client

This New York City-based luxury e-retailer uses cutting-edge technology to reach their elite clientele in ways never before possible. The Client specializes in offering high-end goods from the comfort of their customers' private and charter aircraft, leveraging the latest wireless e-commerce, Web 2.0, and mobile platform technology to deliver a smooth, secure, and enjoyable shopping experience.

The Business Challenge

The Client was looking for an Application Development partner to create a state of the art e-commerce solution and was hoping to take the experience beyond a simple web catalog by allowing for relatively limitless offline browsing. Furthermore, the Client wanted to cater to their diverse clientele by offering a myriad device support, from iPhone and Android apps to desktop browsers and everything in between. The catalog also needed to be 'intelligent'; that is, it needed to be able to automatically adapt to discrepancies in the various listings posted by different vendors. Lastly, and perhaps most importantly, any transactions needed to be handled smoothly and securely.

The specific functions that needed to be accomplished included:

- **Device Interoperability** – Ability to access the catalog in a native application from most mobile and desktop devices.
- **Attractive Presentation** – The catalog needed a user interface to match the goods it was selling.
- **Dynamic Catalog Updates** – As the items listed are expensive and in short supply, the catalog needed to be able to quickly react to changes in availability.
- **Intelligent Catalog Management** – The catalog needed to be able to handle various listing formats from different vendors and present them as part of one cohesive unit.
- **Secure Transaction System** – Transactions needed to be handled safely and, in the event of an offline purchase, secretly and securely stored on the device until the internet becomes available.
The Engagement

The Thapovan team was chosen for its proven experience in building high-performance applications and for its reliable and trusted partnership.

The engagement included the following:

- Dedicated offshore service model
- Defining business requirements and technical specifications
- Designing sophisticated user interfaces
- Development of mobile and web applications and interface
- Seamless interaction with the Client’s business team
- New feature design and development
- Project based and routine application Quality Assurance management
- Ongoing application maintenance and change management

Solution Highlights

The resulting e-Commerce Portal was a multi-faceted solution.

The following are some of the key highlights:

- **Service Oriented Architecture**: A true SOA implementation with 2048-bit encryption providing services consumed by applications running on smart phones, tablets, net books or web browsers.
- **Intelligent Client Device Software**: Among other things, the Client device software autonomously detects an internet connection, synchronizes the catalog listings with the server, and, if necessary, stores orders on the device until a connection is secured.
- **Complete Web e-Commerce Portal**: To complement the handheld device interface, a complete web portal with mirror functionality.
- **Secure Payment Processing**: Solution included credit card payment handling through industry leading secure payment gateway.
- **Automated Services**: Automatic catalog update, internet detection, e-mail notification upon purchase, invoice creation, and airline commission calculation.
- **Administrative Control**: A specialized console is available exclusively to the Client to maintain the catalog listings, vendor profiles, and airline commission information.
Technology Environment

Thapovan used their vast expertise of available and applicable technology solutions to provide the best possible product that meets the Client's cost and quality standards.

- Language: Java (JDK 1.5.0), VB.NET, Adobe Flash CS3, Objective C
- Web Server: Apache
- Application Server: JBoss
- Database: SQL Server 2005, SQLite
- Architecture: SOA
- Framwork: Struts

Target Devices and Platforms:

- Apple iOS
- iPhone; iPod Touch
- iPad
- Google Android
- Multiple Web Browsers

Results Achieved

Highlights of the results achieved by the Client's partnership with Thapovan:

- State-of-the-art cloud-based e-catalog that is secure and easily manageable.
- Optimized catalog for easy access and use during air flights.
- Wide variety of device clients for the broadest possible appeal and reach.
- Intuitive, sophisticated, and secure user experience.
- Accelerated development cycle that allowed the Client to “go to market” in record time.

To learn more about how we can help you achieve your goals in the ever-evolving world of IT and innovation, please visit www.thapovan-inc.com