



**ADVANCED ANALYTICS SOLUTION AND MOBILE APPLICATION DEVELOPMENT FOR A MOBILE ADVERTISING COMPANY**

## Client Overview

Our client is a Social, Local and Mobile (SoLoMo) Advertising company headquartered in Europe. Our client's distinctive proprietary technology platform leverages the idle screen of mobile devices by allowing enterprises to send targeted promotional messages to effectively engage their targeted audience and allowing subscribers to avail rewards and loyalty points. This permission based platform helps enterprises to deliver timed rich media content and instantaneous videos to its target audiences who have subscribed for the service. The platform helps brands increase reach and profitability and the subscriber in turns gets opportunity to monetize their idle screen.

## Engagement Situation

In today's technology centric environment most of the consumers are using mobile devices to work, socialize, read etc. for an average of 3-4 hours a day, thus making marketers to rethink their marketing strategies. Marketers who are approaching their customer with SoLoMo marketing approach are delving into new territory with several opportunities. Our client's platform helps its customers to tap new opportunities by allowing them to send promotional messages to subscriber's mobile screen and subscriber's in turn earn rewards and loyalty points by performing actions on the messages.

Our client initially was facing some challenges with their legacy system. Earlier, our client was using Ad serving engine which took lot of time to serve HD quality ads on mobile devices. The server I/O was also huge and it needed continuous monitoring to overcome the issue. There was a need to create analytics and event management engine to capture all the information of user interaction on App as well as server side. There was also a need to create automated reports for analytics and referral partner for further analysis. Our client also wanted the facility to create in app surveys and a functionality to collect the data offline.

Xoriant with its extensive experience in Mobile Application Development and Analytics made it an ideal choice for working on the technical engagement.

## Key Requirements :

- Develop Ad serving engine platform on Android and iOS operating Systems
- Develop Ad uploading process which can send the information to ad serving engine
- Create web portal/interface for agencies to upload ads and view reports
- Develop analytics engine to capture analytics and view reports
- Create cross platform app, so that the same code can be used on Android and iOS
- Add capability to serve videos and surveys on unlock for Android devices and via notification on iOS devices
- Modify and customize the default video player
- Integrate payment gateway with the app
- Build capability for Geo location based targeting to serve ads/videos/survey

## Xoriant Solution

Xoriant was involved in complete Software Development Lifecycle process in building the application, following SCRUM as Agile execution methodology to meet demands of evolving requirements without much compromise on time to market goals.

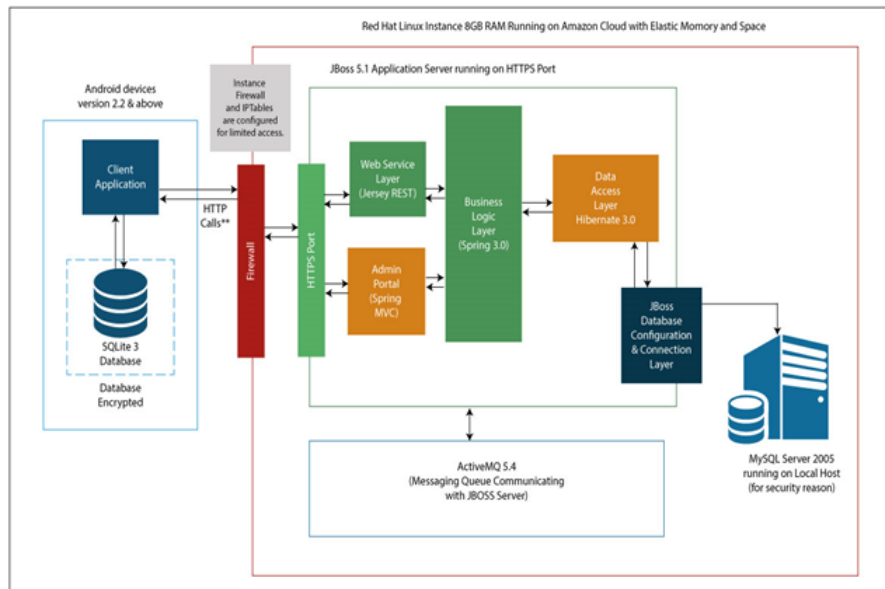
Xoriant team leveraged our multi-technology and multi-platform expertise to deliver an innovative solution to our client that offered seamless user experience for customers coming through the state-of-the-art web portal and app for Android and iOS platforms. Reviewing the client requirements, available technologies, potential growth plans, and budgets, Xoriant team then created a modular design/ development framework.

Xoriant team ramped up teams on Ruby/Rails, Flex, Android, iOS, Xamarin, Java, Spring, Hibernate, Maven and web services to re-architect the app. Xoriant team is currently managing the enhancements and bug fixes, creating POC's for multiple customers/business partners of the clients using the rich technology skillset.

## Xoriant Key Contribution

- Developed Ad serving Engine using Spring, Hibernate, RESTful web services, JBoss 5.x, Amazon Cloud Instance, MySQL , Maven and ActiveMQ
- Created a systematic deployment process by creating build and deployment scripts
- Modified and customized the default video player using Android and iOS default video library
- Developed Ad uploading process using Spring, Hibernate, RESTful web services , JBoss 5.x, and Amazon Cloud Instance, which can send the information to ad serving engine
- Integrated Amazon Content Management with client's platform to deliver ads seamlessly across the globe
- Developed RESTful web API services to be connected with mobile devices using RESTful web service, Spring, Hibernate, JSON, JBoss 5.x and MySQL thus enabling mobile devices to exchanging data through it
- Created web portal for agencies to upload ads and view reports using Spring, Hibernate, RESTful web services , JBoss 5.x, Amazon Cloud Instance, MySQL , Maven and ActiveMQ
- Integrated payment gateway to accept payments using PayTM, PayPal, Oxygen and Yes wallet
- Developed analytics engine to capture analytics and view reports
- Built capability for Geo location based targeting to serve ads/videos/survey on Android and iOS devices using Google maps and iBeacon
- Created cross platform app using Xamarin, so that the same app can be deployed on Android and iOS

## Architecture Diagram



## Tools & Technologies

- Java 1.6
- MySQL 5.0.x
- Spring 3.0
- Hibernate 3.0
- Amazon s3
- Amazon Cloud Front  
(content management system)
- Maven3
- JBoss 5.0.x
- ActiveMQ
- RestEasy
- SVN
- Junit
- Sonar
- JavaScript/Ajax
- Android
- iOS

## Business Benefits

- Reduced Ad serving time by 70% and improved ad serving experience by using Amazon content management system with S3 services
- Automated the process of user registration on reward portal thus eliminating the redundant process of user registration on reward portal
- Automated the reward point redemption process thus making the application easier to use and manage user account
- Created a configuration to control the app from server side like serving of ads and showing intraday timed ads