INTRODUCTION

Zipcar is a leader for cars-on-demand and offers an alternative to the costs and hassles of owning or renting a car. Accordingly, they are always looking for opportunities to facilitate an “on-the-road” driver experience.

THE CHALLENGE: GETTING FROM IPHONE TO ANDROID

Initially, Zipcar developed a native iPhone app in partnership with a third-party contractor. Through this outsourced model, Zipcar produced a successful user-friendly iPhone app that was chosen as one of Time Magazine’s “50 best iPhone apps for 2011.”

Zipcar looked to their customers to tell them where to go next in mobile. The company’s December 2010 customer survey indicated that over 40% of Zipsters had an Android phone and over 80% of that demographic wanted a Zipcar app. It was clear that Zipcar needed to expand to Android.

COMPANY

Zipcar is the largest car-sharing service in the world, with locations in 49 U.S. cities in addition to Vancouver, Toronto, and London. There are currently 15 million people within a block of a Zipcar location.

APPLICATION

Zipcar customers can use the app to manage their Zipcar reservations, lock and unlock the car, view available Zipcars on a map relative to their current position, and get directions to their Zipcar.

OBJECTIVE

Enable iPhone and Android users to choose, reserve, locate, and unlock a car on the go.

TITANIUM BENEFITS

- Code Reuse: Re-used 75% code between Android and iOS implementations
- Outperformed Native Apps: Replaced natively-developed (Objective-C) iPhone app with higher performing Titanium app
- Rapid prototyping: 14 days to develop prototype; 2 months to develop production-grade app

BENEFITS OF MOBILE

- Create, view, extend and cancel reservations while on the go
- Uses GPS and Google Maps to direct users to available cars
- Sound the car’s horn, lock and unlock the car doors
As they evaluated their next steps in mobile, two things were clear:

1. Although they had outsourced their iPhone development, Zipcar wanted to bring development in-house to iterate rapidly and to take control of their own mobile future.

2. Creating an Android app natively would require writing new code completely from scratch, an effort the company did not relish.

THE OPTIONS: NATIVE DEVELOPMENT, HTML5, MOBILE DEVELOPMENT PLATFORMS

Zipcar’s team began investigating their options for developing an Android app.

Native development using the Android SDK
Mobile was becoming a strategic part of Zipcar’s business, which meant that they wanted to bring development in-house and manage mobile as part of their overall digital strategy. The Android SDK was an initial option, but maintaining both a Java and Objective-C codebase did not seem like the best solution.

HTML5
The team considered developing a rich mobile website (Zipcar had and continues to maintain a basic mobile site), which would provide broad reach to any smartphone. Zipcar users were young and tech-savvy, however, and they wanted “an app for that.” A mobile website would fall short in delivering the native app experience their users were accustomed to, and would limit Zipcar’s ability to use upcoming native features like NFC. Result: Not feasible.

JavaScript-based development platforms
The company evaluated several third party development platforms, including PhoneGap, Rhomobile, and Appcelerator Titanium. These companies would allow Zipcar to use their in-house JavaScript team to create the app, while also using the same code base for both iOS and Android apps. Result: Appcelerator Titanium.

DEVELOP ANDROID ON TITANIUM
... THEN PORT IT TO IPHONE

Titanium’s rapid development capabilities allowed the mobile development team to launch their Android app after 3 months of development time. The Android app had the same functionality as their award-winning iPhone app, and was developed in-house using their existing web team. This was a huge leap forward in their ability to manage and scale their mobile strategy.

“Appcelerator was the most compelling mobile platform. We tried all of them and we were able to get the furthest with Appcelerator in the least amount of time.”

-Goss Nuzzo-Jones, Mobile Development Lead at Zipcar
Once the team saw the development and performance benefits of Titanium, they decided to port their Android code to iPhone. They were able to re-use 75% of the Titanium Android code in their Titanium iPhone app, making the iPhone development time only a month.

CREATING A LONG-TERM MOBILE STRATEGY WITH APPCELERATOR TITANIUM

Maintaining one code base
Zipcar’s development team consists of three developers who shared mixed responsibilities for iPhone, Android, and other development projects at Zipcar. By having both iPhone and Android on Titanium, they can now maintain both apps efficiently.

Achieving higher performance with Titanium
Using Titanium, Zipcar’s iPhone app incorporates all the functionality of the native version (reserve, find cars on a map, honk/lock/unlock, extend and cancel, as well as introducing the long awaited list results feature). After re-architecting the app, the Titanium version is higher performing than its native counterpart in terms of startup time, responsiveness and stability. “All of the existing native iPhone features were available in Titanium. By redeveloping it in Titanium, we were able to improve the app’s performance.”

Scaling and managing all development in-house
By choosing Titanium over native development, Zipcar is able to manage its mobile strategy as part of its overall digital strategy, leveraging shared assets and resources.

FUTURE PLANS

Mobile is becoming an increasingly important part of Zipcar’s business, with 20% of reservations currently being made on a mobile device. This trend will likely continue as the company further integrates the in-car experience with mobile, and adds app features such as in-car navigation, gas station finder, and a Zipcar locator.

“We wanted to have only one code base to maintain across iPhone and Android. With Titanium we can update and improve our mobile apps easily with a single team.”

-Goss Nuzzo-Jones, Mobile Development Lead at Zipcar

“The response to both of our apps has been fantastic. We’ve been able to improve user experience on both platforms at a far more rapid pace than before.”

-Winson Wu, Product Manager at Zipcar