



# 4 Steps to Creating a Mobile Development Strategy

How many times have you wondered ...  
"What did I ever do before the web?"

Soon you'll be asking the same thing about mobile.

At Appcelerator, we help the world's  
biggest and best brands create and execute  
mobile strategies on our Titanium platform.

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## Table of Contents

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### **The Mobile Opportunity**

Bigger, Faster, Better than the Web.....3

### **A Model From the Web**

Exploration, Acceleration, Innovation.....4

### **Case Study**

Mobile Innovation at eBay.....6

### **Step 1**

Decide how you want to interact with your mobile customer.....5

### **Step 2**

Prioritize your platform development.....7

### **Step 3**

Evaluate your development resources.....8

### **Step 4**

Choose a scalable development technology.....9

# The Mobile Opportunity

## Bigger, Faster, Better than the Web

The web revolution created the next generation of giants — companies like Google, Amazon, and eBay went from nothing to multi-billion dollar market caps in less than a decade. Today, mobile is helping fuel a new generation of giants — companies like Facebook, Groupon, and Zynga have reached multi-billion dollar valuations in half the time of their predecessors ... and all without an IPO.

Companies now have a window of opportunity to think about how mobile can transform their business as radically as the web did. By making mobile a part of their overall digital strategy, companies can transform their relationships with their customers in even greater ways than they did with the web.

The mobile revolution will be like its web predecessor with two important exceptions:

- Mobile will be more transformative than the web ... because mobile devices are always with your customer.
- Mobile is going to evolve at a much faster pace ... because we've learned a lot from the web. In fact, mobile shipments outpaced desktop/laptop shipments last year. The race is on.

The initial effects of this mobile revolution are already being felt. The iPad single-handedly killed the netbook market. Apple's massive success with the iPhone and iPad has presented a significant threat to established mobile giants like RIM, Nokia, Microsoft, and Motorola. Companies are now allowing employees to bring their own devices into the workplace — a concept that would have been unheard of just a year ago — and new mobile-based ventures are receiving staggering amounts of money from Silicon Valley venture capital firms.

**MOBILE**

**WEB**

# A Model From the Web

## Exploration, Acceleration, Innovation

Remember the first generation of websites? They were basically informational sites that put the company’s brochureware on the web. Companies took what they already had — sales collateral — and hired a consultant who knew HTML to create web pages that could be accessed by anyone who had a computer. This was the **exploration phase**.

Once companies figured out how to make information accessible on the web, they then wanted to interact with their customers.

Remember the first time you checked your bank balance online? Or went to the web for driving directions? This was the **acceleration phase**.

The next natural step was to use the web to transform their relationship with their customers. Now a store could not only provide an interactive store locator, but now they could put their catalogs online and let customers buy their products over the web. This was the **innovation phase**.

### WEB MATURITY MODEL

	Exploration	Acceleration	Innovation
Customer Experience	Inform (brochureware)	Engage (interactive)	Transform (commerce, cloud services)
Development Staff	Outsourced	Mix	In-House
Technology	Web servers	App servers	EAI-type products

**How does a company create a mobile strategy that will get them into the mobile market quickly, and provide a scalable plan for the future?**

# 1

## Decide how you want to interact with your mobile customer

Mobile apps are following the same maturity path as the web. Simple brochureware apps that inform or entertain soon become engaging apps that make use of location, social, and cloud services.

As the customer experience evolves, so do application sophistication, customer expectations, business transformation

opportunities, and the underlying business models. Applications can now make use of cloud services like Twitter, advertising, and in-app purchasing. At this stage, apps are combining mobile features with cloud services to transform their relationship with their customers.



**How does mobile enhance your customer relationship?**

**What digital assets do you have available to deliver over mobile (information, data, web apps)?**

**What use cases make the most sense for your customer (mobile apps have been said to either save time or waste time)?**

## CHALLENGE

eBay wanted to equip their 16,000+ employees with access to corporate information like the company directory, campus map, calendar and stock feeds. Since much of this information was behind the corporate firewall, eBay was concerned about data security within the application.

## SOLUTION

The company chose Titanium as their mobile development platform. Within four weeks of development time, they were able to create a full-featured corporate information app for iPhone.

Users can customize the app with a “Quick List” that pulls together practical information such as contact numbers for security and passwords for guests who want to log on to the company’s Wi-Fi network.

The most popular feature has been a conference room scheduler, which allows employees to locate, schedule, and get directions throughout the company’s eight building campus. The app also includes videos and messages from eBay’s chief executive, John Donahoe.

## COMPANY



eBay is the world’s online marketplace.

## APPLICATION

eBay is using mobile to increase productivity of its 16,000+ employees through an iPhone App.

## BENEFITS

The app was created and launched within four weeks. By building on Titanium, the company is able to rapidly release new functionality such as purchase order approval, company store and café transaction processing, etc.

The company is able to provide secure access to corporate data through Active Directory, providing secure access to the company’s huge data stores.

“The goal of our mobile app is to increase employee productivity.”

**Steve Yankovich**

eBay’s vice president of mobile



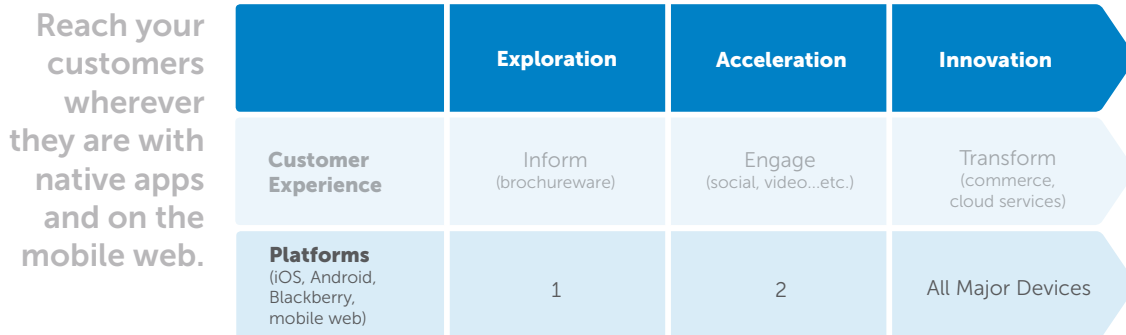
# 2

## Prioritize your platform development

Mobile brings with it an additional complexity that the web did not have — developing for multiple platforms. There was one major vendor in the web world, Microsoft. Today there are multiple OSes and multiple device types, each with their own native capabilities.

An iPhone app has become the “must have” entry point for mobile applications. But the question is — where to go next? It depends on how you want to engage your customer.

For example, broadcast companies and publishers may opt for an iPad or Android tablet implementation next because the larger screen lends itself a better user experience. On the other hand, retailers may decide to expand to Android phones in order to engage the largest number of customers before, during, and after they transact. Enterprise apps may want to tap into business users and expand to Blackberry. In the third innovation phase, a business is thinking about possibilities across all major platforms and devices.



**Which form factors work best for your customer interaction (phone vs. tablet)?**

**What platforms are best suited for your customers (iPhone for the best user experience, Blackberry for business users, Android for most open ecosystem)?**

**What is your device roll-out plan (iPhone first, then Android for expanded phone-to-phone reach, or tablet for a better user experience)?**

# 3

## Evaluate your development resources

Just as early web pioneers had to go outside their company to hire HTML programmers, many companies outsource their initial iPhone app development to third party Objective-C developers. Outsourcing that project has time-to-market advantages, but as you look to scale to other devices with multiple apps, this model becomes problematic.

Outsourcing Objective-C and Java programming is expensive. And, depending on how many devices you're supporting, you could have multiple development teams all developing the same app for different devices (iPhone, iPad, Android phone, Android tablet, etc.). In addition to the cost, you're losing control over what is a key part of your digital strategy — mobile.

There is a better alternative: use your own in-house web developers to create your mobile apps. They have a wealth of institutional knowledge about your company, your products, and your customers. Put that expertise to use executing your mobile strategy.

Does this require you to retain your developers on Objective-C or Java? Not at all. By using a JavaScript-based mobile development platform like Appcelerator Titanium, you can create native mobile apps using your JavaScript programmers. Your mobile strategy now becomes part of your overall digital strategy, and leverages your existing talent and web technology investments.

Utilize your internal development team

	Exploration	Acceleration	Innovation
Customer Experience	Inform (brochureware)	Engage (social, video...etc.)	Transform (commerce, cloud services)
Platforms (iOS, Android, Blackberry, mobile web)	1	2	All Major Devices
Development Staff	Outsourced	Mixed	In-House

**What is the skillset of your internal development team (Objective-C, Java, JavaScript, etc.)?**

**How do those skills map to your device development priorities established in the previous section?**

**How will you fill the gap between the skills you have internally and the skills you need?**



# 4

## Choose a scalable development technology

Technology started out in the web world with HTML web servers in the exploration phase. As companies moved to more engaging web apps, JavaScript and application servers emerged to support more complex and full-featured server runtime environments to meet scaling requirements. In the innovation phase companies started to see that they could use the web to fundamentally transform their relationships with their customers. The web offerings in this phase were now full-blown applications. Web development was now seen as strategic, so companies moved almost all, if not all, of their web development in-house. Ajax became a very popular technology as web clients started to look and behave more like desktop clients. On the server-side, companies were using enterprise application integration (EAI) products to integrate all of their various internal systems with the web. Integration was key to both time-to-market and a company's ability to innovate.

Mobile is taking the same path. Companies are typically building their first mobile app for the iPhone using Objective-C. However, developers quickly find that using native SDKs can be highly restrictive, as apps must be re-written for each individual device (iPhone and iPad), not just for each OS (iOS and Android). Add to the mix the fact that there are more than 60 Android tablets on the market today, and scaling to all those devices is simply impossible.

Just as web developers used Ajax and EAI products to scale websites, innovative companies are using reusable modules and fully-integrated mobile architecture to scale quickly and easily. This architecture can also integrate with both public and private cloud services to create the optimal user experience.

Match your technology to your development needs

	Exploration	Acceleration	Innovation
Customer Experience	Inform (brochureware)	Engage (social, video...etc.)	Transform (commerce, cloud services)
Platforms (iOS, Android, Blackberry, mobile web)	1	2	All Major Devices
Development Staff	Outsourced	Mixed	In-House
Technology	Native	Reusable Modular Components	Integrated Mobile Architecture, Cloud Services

### The question is what is an integrated mobile architecture and what should it look like?

The best way to answer this question is to look at the problems that are unique to mobile. The most obvious problem is the cross-platform issue. An integrated mobile architecture must do three things to solve this problem:

- Deliver the best user experience possible across all platforms.
- Enable companies to build and deploy mobile applications across multiple operating systems and devices, including the mobile web, while enabling them to reuse as much code as possible.
- Leverage a decade's worth of investment in web development.

Mobile development platforms like Titanium allow developers to create native mobile apps for multiple devices using a single platform. By utilizing JavaScript for mobile app development, companies move from siloed app development to leveraging reusable modular components. This can result in reuse of 80% or more of their code as they port apps from one OS to the next. Reuse of code within the same OS (e.g. iPhone to iPad) is closer to 90%.

On the staffing side, utilizing a JavaScript-based platform allows companies to keep their mobile development in-house and include mobile as part of a complete digital strategy.

Add to this an integrated mobile architecture, and you can scale to tens or hundreds of apps over multiple platforms in an organized, efficient way.

What is your development and launch schedule?

How quickly can you get to market with new apps?

Can you reuse code from one platform to the next?

## Appcelerator is the #1 Mobile Cloud Platform

Appcelerator is the leading enterprise-grade, cross-device mobile development solution on the market today. With over 1.5 million developers worldwide and 20,000+ cloud-connected mobile, desktop and web apps in the wild, Appcelerator is the largest publisher of applications in the iPhone App Store.

The company's flagship offering, Appcelerator Titanium, is the only platform to enable fully native, cross-device development from a single codebase for iOS, Android, and Blackberry.

Appcelerator's customers include NBC, PayPal, eBay, Orange, and Cisco. These companies develop their mobile applications on Appcelerator products so they can decrease time-to-market and development costs, increase customer adoption and revenues, and enjoy greater flexibility and control. **Download Titanium for free at [www.appcelerator.com](http://www.appcelerator.com).**