THE MOBILE APP REVOLUTION

8 STEPS TO BUILDING MOBILE APPS FAST IN THE CLOUD
People use hand-held devices for everything from communicating and playing games to shopping and surfing the Internet. In fact, it’s nearly impossible to pry the phone out of some people’s hands. The shift to mobile devices offers exciting new ways for businesses to engage with customers and employees quickly, continuously, and cost-effectively. And yet, many companies are struggling to take advantage of these opportunities. They worry about security and scalability. Or they don’t have experienced developers. Don’t wait. Your customers and employees are already mobile. And you need to be too.

If you don’t enable your employees to communicate or access their data from anywhere, your best ones might be heading for the door. If you don’t share customer information on-the-go with partners, distributors, and suppliers, your growth will stall. And if you don’t connect with customers to provide the best possible experience, they’ll find someone who will.

The challenge for today’s IT departments is to quickly develop the mobile apps businesses demand. Connecting with customers, employees, partners, and products requires a mobile strategy that keeps up with them. This e-book shares 8 ways to help you develop mobile apps faster. Don’t get left behind. The mobile revolution waits for nobody.

### TABLE OF CONTENTS

| #1 Embrace mobile design principles | 03 |
| #2 Leverage new platforms | 04 |
| #3 Scale to millions, safely | 05 |
| #4 Turn users into believers | 06 |
| #5 Free your customer data | 07 |
| #6 Mobilize every developer | 08 |
| #7 Democratize mobile app development | 09 |
| #8 Get on the fastest path to mobile freedom | 10 |
Step #1

EMBRACE MOBILE DESIGN PRINCIPLES

With mobile, businesses can engage more closely with their consumer and corporate customers, employees, and partners. When you plan your app development strategy, think about how you can extend your data to build connections. Don’t just make cool event- or promo-driven apps that don’t help your business. Create apps that are meaningful – both for consumers and for employees.

Mobile’s greatest value is making data available on the go. Mobile apps can give shoppers the ability to see information on past purchases, support tickets, or upcoming deliveries – anywhere, on any device. They let businesses deliver offers based on a customer’s location, or build products that signal maintenance needs in real time. And, mobile apps let employees access data and workflow processes anywhere, anytime, so they can get more done in less time.

It’s a paradigm shift for IT departments. User experience and user interfaces are now equally or more important than app architecture.

“It’s predicted that there will be 4.4 billion mobile app users worldwide by 2017.”

Portio Research March 2013

Before you decide which concepts to push from your whiteboard into your customers’ hands, consider these aspects of your app:

- **PURPOSE**: Is the app for communication, transactions, or entertainment?
- **USER EXPERIENCE**: What’s the end-to-end experience?
- **SOCIAL**: How can social media enhance the experience?
- **DEVICE**: Should the app be native, hybrid, or HTML5?
- **DATA**: What data needs to be delivered and how fast is it refreshed?
Many of today’s on-premise software systems were created before social and mobile took over the world. Legacy technologies require complex software stacks and frequent upgrades, along with ongoing hardware maintenance. And, their user interfaces don’t translate easily to mobile, if at all.

Smart IT departments realize they don’t want to be in infrastructure maintenance mode. They are moving to the cloud so they can focus on solving business issues, not infrastructure ones. Cloud platforms instantly deliver services that can take weeks to build out on legacy systems.

With cloud platforms like Salesforce, developers never have to install servers, data centers, databases, or software stacks. Instead, they move straight to the business logic and user experiences that differentiate brands and innovate for customers.

Cloud platforms include these services out of the box:

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<th>INFRASTRUCTURE</th>
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<th>MOBILE</th>
<th>SOCIAL</th>
</tr>
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<tbody>
<tr>
<td>Hardware, software stack, and storage</td>
<td>APIs, security, search, and identity</td>
<td>Geo-location APIs, REST APIs, and native SDKs</td>
<td>Feeds, profiles, status updates, and file sharing</td>
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“The traditional model for enterprise application distribution and deployment is quickly being obsoleted by the cloud PaaS app store model.”
Designing apps for millions of connected devices creates new scalability and security challenges. Although it’s usually — but not always — easier to predict the number of users for business apps, a good consumer app can easily overwhelm a data center, and your brand can take a big hit. Services like Instagram and Twitter process millions of posts each minute. And Google fields billions of unique searches every day. Prepare yourself for success. A cloud-based solution puts you in the position to capitalize, not crash, if your wildest expectations are exceeded. Managing scalability issues is another way the cloud is winning.

When company and customer data is accessed on mobile devices, you need to know it is secure. You want a platform with certifications for all major worldwide security and data privacy standards, covering all IT systems (including third-party ones). You also need to be sure all standard requirements are met for security, availability, integrity and confidentiality.

“There will be more than 10 billion mobile connected devices by 2018.”

Cisco, Feb. 2014

A platform that scales successfully should have:

- **SECURITY STANDARDS**
  - AICPA, ISO27001, VeriSign, and SysTrust

- **DATA PRIVACY COMPLIANCE**
  - Meet even the strictest requirements (including those from Germany, the rest of the EU, and Japan)

- **GOVERNMENT APPROVAL**
  - For all US agencies

There will be more than 10 billion mobile connected devices by 2018.

Cisco, Feb. 2014
To engage with customers and employees, you need a mobile-first experience that keeps them coming back for more.

Cloud-based platform services can help you optimize your app in a variety of ways.

IDENTITY
As mobile apps access more customer and enterprise data, authentication and identity are increasingly crucial. Users are frustrated by a proliferation of passwords, and businesses struggle with security and compliance. Just as consumer social platforms like Facebook can manage consumer identities across multiple websites, companies need a single identity across all their own apps.

CONTROL
Businesses need to be able to easily design roles, permissions, and profiles, restrict access to specific information, and enforce their security policies on mobile apps. They also need to be able to shut down and erase data from lost or stolen devices, or customize different elements that are available in the mobile client.

SOCIAL
If your app doesn’t have a social feed or way to post to a social network, you’re missing out on the best opportunities for engagement and exposure – not to mention the increased productivity employee social networks enable. The benefits of making your app, intranet, or product social are obvious. So look for a platform with social functionality built in.

DEVICES
Mobile device brands, sizes, and screen resolution are evolving faster and faster. Your cloud app platform needs to make it easy to support these devices. Look for robust SDKs that let you build native, hybrid, or HTML5 apps for iOS or Android using wizards, JavaScript libraries, and tooling.
Companies use many different apps to run their businesses, but most don’t automatically work in the mobile world. Data from HR, ERP, financial systems, or custom apps isn’t usually available to employees on their devices. And, customers and partners can’t quickly access information like order status, shipping, or payment processing.

Unlocking your data is critical for enterprise mobile apps, so that employees can access everything they need to do their jobs, and customers can connect to your company. Unfortunately, getting enterprise data onto mobile apps typically involves complex integrations, middleware, and APIs that are challenging to work with.

Put your customer data securely in the cloud and make it accessible via open mobile APIs.

- Built-in enterprise-grade security and identity services to safeguard customer data
- Industry standard RESTful APIs for access to cloud customer data
- Integrate any database in minutes with point-and-click simplicity
- File management including storage and access
- User access permission to secure visibility down to the field level
Developers add value to your business when they create features that help you leapfrog the competition - not when they’re stuck maintaining software stacks or integrating systems.

Cloud app platforms provide services that make it easy to access and protect customer data. Developers can build logic and data integration components with the platform, so the majority of code is device-independent and executes in the cloud. Less time and resources are spent on device customization, so it’s easier to support multiple devices.

Services like these can help any developer develop mobile apps:

**SOCIAL REST APIs**
Quickly transform apps with social feeds and collaboration features

**GEOLOCATION**
Enhance apps with location-based information

**MOBILE REST APIs**
Leverage standard Web protocols to access enterprise data and services, and enforce access, security, and common policy across all device types

**ENTERPRISE MOBILE CONTAINER**
Add enterprise-grade features, including secure offline storage and OAuth 2.0 authentication; data stored on devices is securely encrypted

**MOBILE POLICY MANAGEMENT**
Enforce enterprise security on mobile apps with features like two-factor authentication, device PIN protection, and password rotation; and enable or disable user access

**NATIVE DEVICE SERVICES**
Add camera, location, and contacts into apps using a common set of APIs and easily access native device features or corporate data using simple JavaScript code
What if you could empower your business users to build their own mobile apps?

Behind the current enthusiasm for mobile, there’s a harsh reality for many IT leaders. The gap between business demands and delivered apps is creating a trillion-dollar “IT deficit” that’s growing bigger every day – and it’s only accelerated by mobile.

Given the right governance controls, drag-and-drop development tools, and IT centralized management, business users can solve their own business problems and help close the deficit. A cloud platform lets business users create apps quickly, deploy anywhere, and make updates on the fly, but doesn’t sacrifice IT’s need to control data access.

With just clicks, business analysts can customize their own apps. Anyone who can use a spreadsheet can create apps with drag-and-drop tools, wizards, and forms. With a few clicks, they can build the business logic and automate workflows, incorporate UI components, and automatically generate page layouts.

Securing data, fields, and apps is as easy a clicking as few checkboxes to enable permissions. With built-in analytics, reports and dashboards can be quickly configured. And, in the cloud, they always have the latest data.

“75% of Fortune 500 companies are taking steps to deploy HTML5 mobile apps.”

IBM Worklight 2014
Step #8

GET ON THE FASTEST PATH TO MOBILE FREEDOM

Go mobile now with the Salesforce Platform – and don’t get left behind by the mobile revolution.

Legacy Platform

BUILD & SET UP HARDWARE

INSTALL COMPLEX SOFTWARE

SET UP REPORTING & ANALYTICS

BUILD & TEST SECURITY

DEFINE USER ACCESS

BUILD

APP (6-12 months)

Salesforce Platform

The Salesforce Platform has more than 16 years of cloud experience, and already powers 4.5 million apps for more than 100,000 companies. New mobile services deliver everything you need to quickly build mobile apps for customers and employees. Unlock your customer and back-office data, and run on any device.
If you’re still using legacy platforms to build today’s mobile apps, you’re wasting precious time and valuable resources.

Apps built with this complexity and infrastructure are difficult to scale when usage spikes, hard to update as business needs change, and tricky to make mobile and social. Development cycles for a simple app can take months, and once you plow through the design, core development, testing, and deployment stages, your idea may be obsolete or someone else may have beat you to market with it.

When you build mobile apps on a cloud platform, you can transform your business.

Check out the Salesforce Platform and join the mobile revolution today.