Kony Solutions   Write Once, Run Everywhere Mobile Technology

Kony
Solutions

THE SIX GOTCHAS:

COMMON MISCONCEPTIONS IN MOBILE APPLICATION DEVELOPMENT

Overview

Companies recognize opportunities to reach new customers and improve the customer experience with mobile applications. The company who succeeds in having their service literally "in the pocket" of their customer gains a distinct advantage in building customer loyalty. But developing mobile applications requires an investment of time and resources that few businesses can afford. Kony Solutions provides a unique approach to application development, distribution and maintenance that reduces costs and time-to-market, while "future proofing" the application against the inevitable updates and refinements to mobile devices and operating systems.

The Six Gotchas: Common misconceptions in mobile application development

Smartphone technology is changing the way we work, the way we spend and how business is done. With fast changes in the mobile marketplace it's hard to keep up with the latest device not to mention new technologies and development methods. The challenges of developing, launching and maintaining mobile applications are daunting and make organizations vulnerable to costly mistakes. Common challenges faced by businesses today include:

• Developing applications that reach customers across the many operating systems driving literally thousands of device types. Consumers expect applications to run on every type of mobile device they own, and they are unforgiving if the application doesn't run flawlessly.

• Providing applications that are available to both new and legacy devices. Keeping up with connection management, version control, device detection, security, logging and reporting, API/data integration issues can cripple an enterprise's ability to further enhance their offering. Future proofing an application against updates in operating software can require enormous resources on an ongoing basis.

• Frequent changes of the application's client requirements as new and refined services are developed and launched. Service provider sites such as airlines, travel, hotels, car rental, insurance, banking and investment firms expect extremely fast response to marketplace needs in order to maintain and expand their customer base in a highly competitive and fickle market.

With a trend toward growth in the mobile market chances are good that your company is actively developing a mobile strategy. This white paper outlines the most common "gotchas" other organizations have experienced when facing these challenges and how to avoid them.

Gotcha #1: The best apps are built one at a time.

Building applications one at a time is one way to insure ideal correlation between hardware features, OS requirements and your application's user interface. This method results in a unique, customized application for a given device and operating system. It could, for example, integrate the device's photography capabilities to help describe a car insurance claim. Or perhaps take advantage of the device's GPS to aid in a traffic mapping service.

Consumers expect your application to work flawlessly on all their devices. But building a single app is painstakingly slow, development cycles are long and the cost and the delay in time-to-market multiplies as each additional device and operating system is added to the launch. The days of launching an application on a single device are long gone; customer expectations have meanwhile grown to expect comprehensive availability.

To be successful in the marketplace your new application has to be simultaneously available and fully functional on at least the five major operating systems, Apple iPhone, BlackBerry, Symbian, Android and Microsoft at the time of launch. Any OS your application does not support abandons users who are potential customers. Maintaining and supporting all these one-off application versions becomes an unending cycle of redevelopment as new hardware and updated software versions are continually introduced.

Building applications one at a time requires dedicated resources that few organizations can afford. One-off application development is too inefficient to satisfy consumer demands, often taking months between successive platform launches.

Gotcha #2: Wrappers are apps, right?

Wrappers are mobile web or hybrid tools that some companies implement to overcome the cost and development time issues inherent in building customized applications. A wrapper application can get your brand name in front of the customer in a shorter amount of time, but if its performance doesn't measure up to the user's expectations it might do more harm to your brand than good. Wrappers don't often take full advantage of the device's native features and wrappers are always dependent on connectivity to the Internet. A bad connection means user frustration. User frustration while using your branded application is bad for your brand.

A recent study* showed that 37% of users experiencing a malfunction in a mobile application are very likely to leave the application and never return. 25% of those surveyed report that they would have a more negative overall perception of the entire brand.
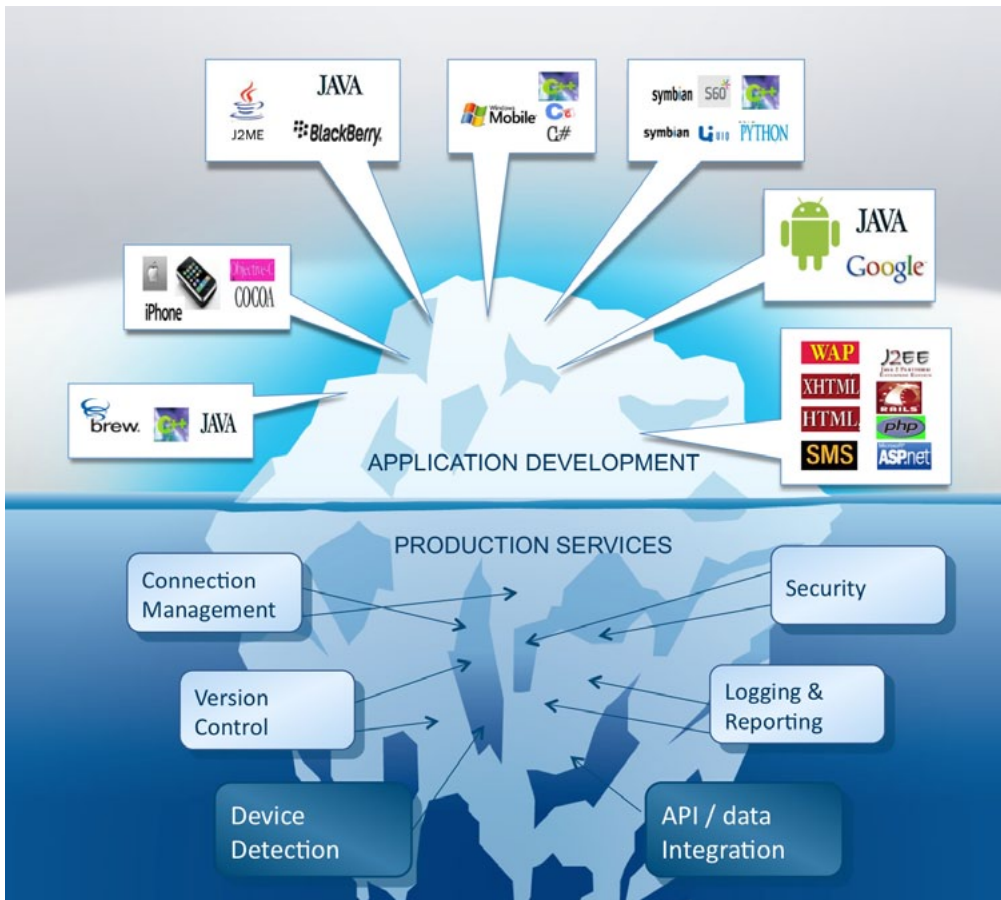 *PhoCusWright, Inc. survey conducted in July 2010

When smartphone users were asked* how they would likely react to a malfunction on a mobile website or application their answers were revealing. 41% said they would switch to a computer to visit the company's website, 38% said they would call. But 37% said they would be less likely to use that application or site again and 28% said they would find another mobile website to use.

Gotcha #3: Once you write a mobile app, you're done

You have gone through the exacting processes to define your application; you've designed a user interface and worked through the programming, testing, refinement, and retesting cycles. You have launched the application amid fanfare and press releases and now you are ready to sit back and relax, right?

Perhaps not. Connection management, version control, device detection, security, logging & reporting and API/data integration make the initial development issues seem like just the tip of the iceberg. The reality is that a mobile application is a living entity and as new devices come online, with updated software and evolving mobile client requirements, maintaining your application is now your number one priority.

The seen and the hidden challenges. Launching an application is dramatically complicated by maintenance and housekeeping issues

*PhoCusWright, Inc. survey conducted in July 2010

Gotcha #4: BlackBerry is dead

Far from it. BlackBerry products account for 35% of the smartphone market, by far the largest share of the smartphone market segment. Research in Motion is actively promoting their BlackBerry OS and as recently as August 2010 RIM introduced the BlackBerry Slider 9800 (aka "BlackBerry Torch"), with updated software and a sliding keyboard, in response to demands from a particularly dedicated installed user base.

The fact is that no single company has a larger piece of the market than BlackBerry, but a number of companies do enjoy significant market share. A forward-thinking mobile strategy simply cannot afford to concentrate on a narrow range of devices. Success in the mobile marketplace is an "all or nothing" undertaking; consumers expect all mobile devices to run all applications and are disappointed if this is not the case. If you can't reach your customers on the device they choose to use, a competing application probably can.

The best approach is to meet consumer expectations with an application that works across all platforms, all operating systems (new and legacy) and that is "future proofed" to update automatically as soon updated software or new mobile devices become available to users. With users often lined up to buy new mobile devices, never has time-to-market been more instantly relevant than in the mobile marketplace.

No single company has an overwhelming share of the market

- BlackBerry 35%
- iPhone 28%
- Windows Mobile 19%
- Android 9%
- Palm OS 4%
- Linux 3%
- Symbian 2%
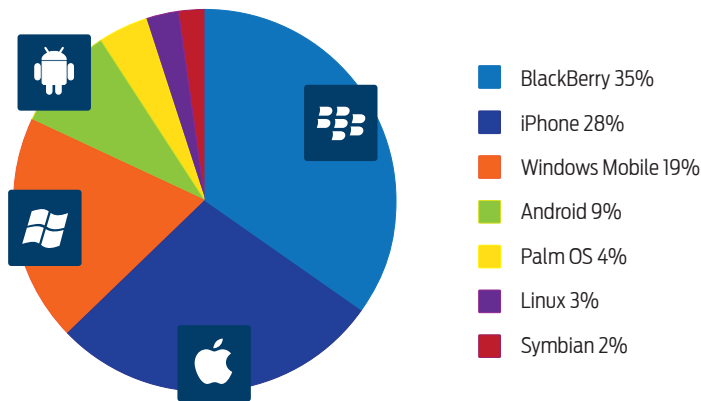
Gotcha #5: Mobile web is enough

Some companies reason that since mobile web reaches most users, more elaborate applications are not actually needed. It's true that mobile web is relatively easy to implement and supports many devices, but the limitations imposed by the need for a web connection do not result in a friendly user environment, or even a reliably functional one. Mobile connections are not fully reliable for people on the move. Just the delay and uncertain performance of moving every page over the web results in customers who are less inclined to do transactions or make purchases from the mobile web; they prefer native applications.

## Gotcha #6: Third party development costs are manageable and predictable

The fees and pricing structure to manage mobile application maintenance and support through a third-party vendor are highly variable and often unpredictable. Every time a new device is introduced or the OS is updated, your application has to be adapted and revised. It is difficult to negotiate costs with your vendor because nobody can say with certainty how much time and effort will be required. There is an opportunity to make a profit when these update events occur, which is why third-party vendors are in the up-date business. With individually designed applications these opportunities are frequent.

Many companies find themselves charged with unexpected and significant fees, even after a diligent effort to discover in advance all applicable usage fees, transaction fees and additional development costs.

Getting mobile right

Kony Solutions identified these "gotchas" several years ago and has developed an integrated development environment to overcome these and other common challenges. Kony's "Write Once, Run Everywhere" technology begins with a single application definition and from that common base Kony generates native rich client applications that run on roughly 8,000 different devices. These rich clients enable advanced phone features, offline capabilities and are device optimized to deliver an unparalleled user experience. At the same time it generates OS-optimized mobile web browser apps in all 15 major mobile browsers. The same single code definition creates SMS versions of the application as well. Also iGoogle gadgets, Facebook, MySpace, Twitter apps and even SysTray level mini applications for delivery of user alerts and commercial opportunities.

This answers the consumer's expectation of comprehensive, device independent avail-ability and reliability of the applications they depend on to make their lives easier and richer.
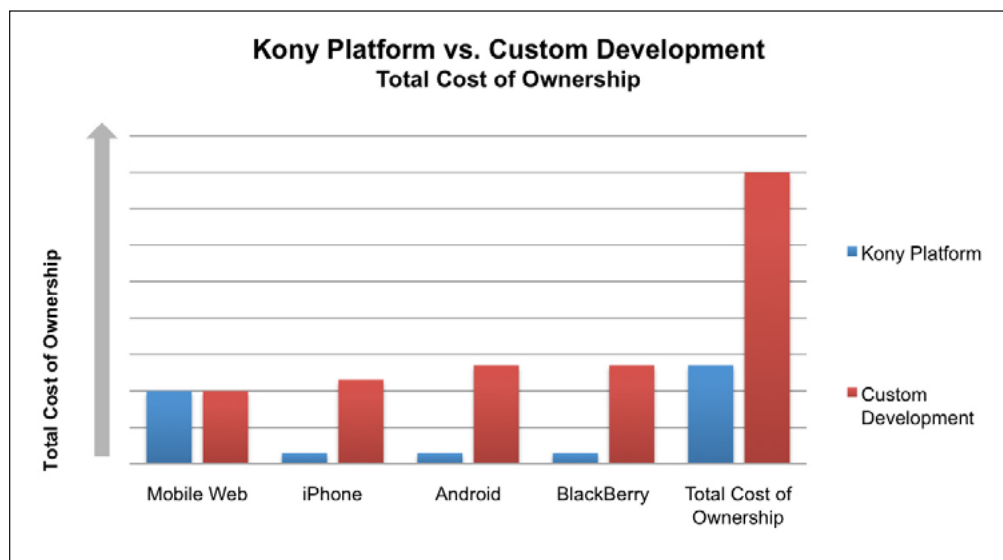
Manage futue development costs

Once the single application definition is generated deploying the application to new devices only requires testing, greatly reducing development costs.

Kony also effectively addresses the cost of application development and greatly reduces the costs of updating applications to work on new devices and with updated software. "Write Once, Run Everywhere" also means "Change Once, Change Everywhere". Since we continually update our integrated development platform, OS updates are virtually automatic and new device specifications are in the works well in advance of the device's launch date. So your users can use the applications they want as soon as they have their new smartphone. This means that the cost of maintaining your new application is kept low and predictable.

Continuous support

Kony Solutions doesn't begin and end with delivering device and feature specific code. Kony's expertise starts with helping a business identify market opportunities and providing comprehensive application development assistance as well as optional hosting, technical support and usage monitoring reports and analysis. Kony services clients are looking for more than software; Kony's 360 Services team is positioned to deliver full consulting services, stage by stage, to create a rich and satisfying user experience, minimize project risk, accelerate time-to-market and maximize ROI.

Kony Solutions

Kony Solutions, Inc.
1825 S. Grant Street, Suite 450
San Mateo, CA 94402
Tel: 1-650-645-2200
Toll free: 1-888-323-9630
Fax: 1-650-645-2201

About Kony

Kony and the Kony Mobile Application Platform™ enable Fortune 500 companies to offer consumers and employees feature-rich mobile applications in less time and at lower costs than any other solution. Leveraging a Write Once, Run Everywhere single application definition, applications are designed and developed just once, in a device-independent manner, and deployed across multiple channels, including native applications, device-optimized mobile web, SMS, web gadgets, kiosks, and tablets. Kony's unique platform is proven to future-proof a company's mobile investment by enabling applications to be changed once for all channels, ensuring faster adoption of new operating systems and standards as they are introduced, while eliminating maintenance, upgrade and future development costs.

More information can be found at www.Kony.com