Buyer Beware: Not All Mobile Apps are Created Equal

A White Paper

Sponsored by Kony Solutions

Overview

Beyond providing a practical use for consumers, mobile applications have become an integral part of nearly every organization's business strategy. Done right, deploying a mobile application can not only introduce new markets and consumers, but the mobile experience can drive a steady increase in adoption rates and customer retention.

But it's not that simple. The enormous sales and branding opportunity comes with the potential pitfalls of choosing the wrong mobile strategy or technology, which can put your brand and business at risk. Still in its infancy, the mobile application marketplace is constantly changing and highly fractured in regards to device types, operating systems, and mobile carriers. In addition, the approaches to delivering mobile applications and other channels vary in methods, technology, user experience, and results.

Not All Mobile Applications are Created Equal

At first glance, all mobile applications may seem to be the same, but in fact they are not created equal – and certainly not equally effective. Today there are two types available. The first type of application, a "wrapper", in many ways is the same as a mobile website, with the addition of a shell to primarily get past App Store certification without actually writing a native application. Like a browser and website working together, a wrapper still requires a connection to the web server to transmit the user interface (UI) in addition to the data. Functionality is limited to capabilities typical from a mobile browser, unlike the rich experience of native applications.

The second type of mobile application, the "on-device native application", is downloaded once and is completely resident on the device. Just like the built-in camera on your phone, the on-device application can work with or without a network connection. Since the mobile application resides directly on the device and requires little to no transfer of data, users can enjoy high-performance functionality of the application, including the ability to use the advanced features of the mobile device – with or without a network connection.

Mobile Wrappers: Unpredictable, Slow and Disappointing

With mobile wrappers, 99% of the actual application is hosted on a mobile website. During high traffic, or when relying on a poor Internet connection, users will experience unpredictable or poor performance. And as mentioned previously, when users are offline and not connected to the server, they won't be able to use the mobile application.

Another problem with wrappers is their limited use of the device's native functionality. While wrappers can access some general device features, they can't efficiently enable much of the on-device functionality. As such in many cases users have to abandon the application they were trying to use in order to access a phone feature.

Last because of their dependence on a constant connection, wrappers limit the performance and functionality of data storage, security, and notifications/alerts – all which damages the application's perceived value, decreases adoption rates and erodes brand perception.

Native, On-device Mobile Applications: Always Available, Fast and Feature-Rich

Because a native on-device application is stored entirely on the actual device, its UI performance is unaffected by network congestion or server traffic issues. People can operate the mobile application in on- and off-line environments, including collecting and storing user data for later use. For example, in offline mode someone can collect information at a traffic accident, including GPS location, photos and contact information of drivers and witnesses, and then submit the insurance claim as soon as he or she is back online. Even the transfer of information and photos goes quickly since the native application requires no program instructions and UI to be communicated at the same time.

Unlike with a "wrapper" application, he can intuitively use the device's features and capabilities without having to exit the application. For example, the application is able to turn on the camera, collect the accident photos, store them with the rest of the accident information, and package it as part of the subsequent insurance claim. And all this can be completed from within the native application. The application can even provide him with the ability to call his agent using the phone, or remotely collect and store the ongoing status of the claim for convenient viewing online or offline.

The Mobile Application Platform: The Most Effective Way to Develop and Manage Rich Mobile Applications

Powerful native on-device applications can now be rapidly developed for all types of mobile devices when using the extensive capabilities provided by a mobile application platform. Today's leading mobile application platforms provide a complete mobile infrastructure that include an intuitive development, testing and delivery environment, easy integration to back-end systems and third-party content, secure data technology for the most stringent environments, and extensible clients for all types of devices. Companies can now provide applications in a manner that completely addresses the requirements of multiple mobile operating systems and devices - all without needing device specific expertise, and without having to perform constant and costly device updates.

The right mobile application platform allows companies to quickly design and develop a mobile application just once, in a device-independent manner and then automatically generate device-specific rich clients, device-optimized mobile websites and SMS/MMS channels for use on all devices. With this platform, for the first time ever, enterprises can offer truly ubiquitous mobile application delivery that accommodates new devices as they come to market, and up-to-date with the latest capabilities, while maintaining a lower total cost of ownership.

A Look Inside the Mobile Application Platform

Today's leading mobile application platforms are designed as a fully integrated environment, intuitively advancing mobile offerings through all aspects of their life-cycle: from design to deployment to ongoing support and maintenance as the mobile operating systems and devices constantly change. All this must be provided in both a technology and process manner that maintains a low total cost of ownership while still delivering high-value mobile offerings that create user delight.

Mobile application platforms are the combination of 1) an integrated development environment (IDE); 2) a mobile server, and; 3) extensible clients, providing a complete suite of capabilities required to produce, operate and deliver a robust mobile experience.

The **IDE** provides the required components to develop and test the application design, and then generate each of the unique run-time applications for certification and acceptance by the growing number of application stores.

The **mobile server** is the run-time environment organizing and operating all the various aspects of the server-side components required to support the different types of mobile clients. These components include external system integration, application and data security, campaign and advertising management, device detection and management, and usage reporting.

The **extensible clients** are individual interaction channels that provide the rich and intuitive experience for the mobile user, as well as some desktop users. These are specifically designed and tuned for the unique requirements and environment of the user. The rich on-device application discussed earlier is one of these clients. Others include mobile websites, SMS/MMS services, web gadgets and desktop applications. All take into account the unique aspects of the device, such as display specifications, memory configuration, and connection speed.

The Benefits of the Mobile Application Platform

While stand-alone mobile wrappers deliver slow performance and a poor user experience, the offering of rich native applications provide speed, complete functionality of all device functionality and perform in both online and offline environments. And by using a mobile application platform to develop and maintain your rich native applications, you can now:

- Address the needs of multiple devices from a single development platform – all without needing expertise in each mobile operating system.
- Increase speed-to-market for the mobile application.
- Significantly decrease total cost of ownership required to individually develop and support multiple applications and mobile devices.
- Deliver a robust user experience, regardless of their choice of mobile device or the constant technology and market changes.

About Kony Solutions

Kony Solutions provides a mobile applications platform with Write Once, Run Everywhere technology that delivers mobile presence and commerce for consumer-facing enterprises. Delivering on the vision of mobile faster, better and at lower total cost of ownership, Kony Mobile Application Platform uses a single-code base to develop rich native mobile applications, device-optimized mobile websites, and extensible clients (SMS/MMS/Gadgets). Headquartered in San Mateo, Calif., the company also provides pre-built vertical applications, which are customizable and ready to be deployed, hosted and managed via Kony 360 services.

www.konysolutions.com

USA: 1-650-375-2557
India: 91-40-2354-5305