Mobile Software Testing
e-Guide

Mobile technology isn't a fad. The emergence and continued expansion of mobile phones, tablets, and their associated applications have created an environment where every major company is racing to deliver the best offering. The need for testing and quality assurance continues to grow as businesses tie their names and reputations to companion apps, and while we continue to see improvement in the design and functionality of these offerings, thousands of stones remain unturned. It's a technological gold rush, but there are new challenges to consider when testing mobile apps, as well as unique coding languages born from on-to-go devices. Even if the landscape has changed, the need for guides detailing best testing practices remains strong.

In This Mobile Testing e-Guide

Five Sins of Mobile Testing

By Josh Galde • Keynote

The demand for mobile devices in all aspects of everyday life is growing exponentially. Whether your organization is adopting "bring your own device" (BYOD) and is rolling out a new internal mobile application or distributing mobile devices to drive employee efficiency, organizations need to meet the on-demand need for mobile apps, websites, and services. The job of IT is now to fulfill its traditional requirements and to meet the demand of mobile growth, without additional resources.

Many enterprises have focused on monetizing and driving revenue by expanding what they do on the web to include mobile. But, some businesses are not prepared to expand to mobile. At times, upper management may make the executive decision to expand its mobile offerings without considering the time and manpower constraints that developers are limited to. Tight deadlines drive IT teams to rush through the development process of mobile apps and websites, leaving greater room for error.

The growth of mobile has presented a new wave of complexity to development because of the increasing device diversity and OS fragmentation. Choosing the best platform to develop your mobile app has become increasingly complicated. The complexities in mobile continue to grow and create new hurdles for selecting and rolling out the right mobile strategies on the right devices. Fragmentation has created the need to build several versions of the same app or mobile website to conform to its variations (like size of the screen, screen resolution, OS, firmware, etc.).

To help the process along, there are some key best practices that can be followed in order to develop and produce a successful mobile app that's user friendly and reliable. Simply avoiding these five sins can save valuable time, resources, and strain while developing a finished product that's functional and reliable, allowing you to bring your mobile strategy to market with confidence and assurance.

Sin #1: Relying Solely on Emulation Software

In the world of mobile, there are multiple platforms, OS versions, form factors, and carrier/ manufacturer customizations. It can be difficult to obtain all of these to properly create scripts and test for bugs or malfunctions. Developers often turn to emulated devices

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as an answer to their problems.

While viable, especially in time and resource crunches, testing teams must take caution and understand that even with the most up-to-date software, certain quirks of mobile devices cannot always be replicated. This leaves room for error, especially while testing the behavior of an app on multiple devices. While emulation software can be helpful for basic functional testing, such as screen resolution, it falls short when trying to test one's app or website over a real carrier network.

The best solution to yield more accurate test results before pushing your app to market is to test on real devices. The hybrid approach of using the cloud to run scripts through real, connected devices may best suit developers who need to test against a multitude of handsets but just don't have physical access to them. Using a service that gives remote access to real devices allows developers to receive more accurate test results than using emulated software. Interactive manual testing of consumer-facing mobile apps can provide an easy, cost-efficient way to test functionality, usability and performance for both native and web-based mobile apps.