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# Why mobile application testing is critical to success

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Mobile apps must be functional, efficient and performant

**Testing a mobile application has similar goals to web app testing – ensuring the application software for quality, functionality, and usability**

Fifty percent of consumers won't consider using apps with a three-star rating, while 85% will skip apps with two-star ratings. Consumers are demanding a reliable experience from the applications across their many devices, with poor reviews on the App Store or Google Play representing the equivalent of film critics panning a new release.

It's therefore vital to mobile application success, and indeed an organisation's customer engagement strategy, to deliver high quality. Mobile apps must be functional, efficient and performant. Superior mobile experiences, along with great web experiences, will mean higher customer satisfaction, increased revenue, less churn, and foster a positive reputation against a demanding business backdrop.

**The challenges of a fragmented environment**

But achieving this superior experience is easier said than done when testing teams must contend with near-endless scenarios across a very fragmented environment – from new operating systems and modern devices to far more dated versions and everything in between. According to Apple, over 40% of app rejections are for its Guideline 2.1 – Performance: App Completeness. This guideline helps make certain that an app is ready for use. Common reasons for rejection include crashes and bugs, broken links, a substandard user interface, and placeholder content.

These issues could be mitigated with sufficient mobile app testing. In fact, the top eight iOS shopping apps are tested against a matrix of 41 unique devices, including various OS versions, manufacturer types, screen sizes, and more, while 24 devices are used for the top 15. But to ensure the testing process is both smooth and successful organisations must ensure that mobile is treated with the same level of priority as web app testing rather than as an afterthought.

**Solving mobile testing challenges**

Testing a mobile application has similar goals to web app testing – ensuring the application software for quality, functionality, and usability. But that's where crossover ends. Mobile testing brings its own set of challenges for achieving these goals, and specific best practices to address them:

**Challenge #1: Device sprawl –** If mobile testing teams were to test all available devices, they'd be working 24/7 all year long. From the complexity of developing and testing apps across iOS and Android. to the numerous hardware variations and software releases. Testing teams therefore need a straightforward device management approach that works for multiple devices, mobile operating systems and versions. Using a mobile test automation platform cuts down on the manual testing many teams rely on to test multiple mobile devices.

**Challenge #2: Frequent changes create broad testing needs across multiple frameworks**
There are a variety of mobile development frameworks that help accelerate application development. But those frameworks change quickly and it's hard to ensure those changes don't break something on your existing app. Making changes to scripts and maintaining standards across current and emerging frameworks is time-consuming and inefficient for testing mobile applications. Codeless testing solutions can often abstract the framework specific changes in a way that reduces the need to modify tests between updates. That also enables the creation of mobile tests in the same way as UI and API tests are made — just drag and drop. No complex setup or scripting required.

**Challenge #3: Aligning localisation and internationalisation testing with global market needs**

Preparing an app for release on the global market cannot leverage a one-size-fits-all approach. With 195 countries worldwide, roughly 6,500 languages, and an estimated 3,800 cultures, what works for an application will vary across regions.

Many teams focus localisation and internationalisation testing towards the end of the testing process but it should be at the forefront - aligning with an organisation's goals and strategies for the app. Who is the user? Where are they predominantly located? What language do they use? Time zone and time and date formats, keyboard layouts, address and telephone formats, weights, measures and currencies must all be taken into account.

**Challenge #4: Bottlenecks for continuous integration and delivery caused by lack of real devices**

Actual devices are a rarity for testing teams, and even if a real device is available, it may not be functioning properly or have the operating system required. This hinders the ability to conduct consistent and continuous test automation for CI/CD. Without powerful and flexible app testing options, testing is slowed and results in bottlenecks.

Purchasing every single device on the market isn't feasible or economical. Testers should try speeding up testing by using cloud devices, either physical or virtual (emulators or simulators). This cloud grid method will remove the burden of procurement, setup, and maintenance and enables team to run tests as part of every build in their pipeline.

**Challenge #5: Realising the importance of usability testing**

According to Google's research, 66% of consumers will have a quick negative reaction if an app isn't functional, efficient, or has performance issues. Whether they immediately go to a competitor's mobile site or app (40%) or are less likely to purchase products from the company in the future (28%), these red flags all relate back to the need for mobile usability testing.

Teams should test how real customers interact with the mobile app to remove issues before it hits the market. Are the app's frequently used sections easily accessible, for example? Does the user hold the phone close or far away to view the text and graphics? Is the user more likely to hold the mobile device vertically or horizontally? All these questions will offer helpful insights into an app's ability to ensure a successful customer experience.

**Eliminate mobile testing constraints**

Although these challenges may be unique to mobile testing, they still resonate with the wider goal of testing teams: to deliver the best quality product to the end user. The best practices we have

shared here all aim to accelerate releases while eliminating errors and reducing costs. By incorporating mobile into every business process, organisations can ensure quality across web, mobile and desktop applications - and make significant gains in customer reach, revenue, and reviews.

## Video of The Week

Explore some related information to above article at following link.

https://www.youtube.com/watch?v=93jA_phwIEg&list=PLsjUcU8CQXGGn8G-50-LEs7MVUIBSijFM

https://www.youtube.com/watch?v=fFpQOMkZHYg

https://www.youtube.com/watch?v=wZxwq9lXF2E

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https://www.youtube.com/watch?v=53vo-HxzVaQ&list=PLZKyog6KJXfuHna0UkhuoJPwHhViHaH3U

## News of The Week

### WhatsApp bans more than 6.5 million accounts in India under new IT rules

Meta-owned, WhatsApp banned over 6.5 million accounts in India in the month of May 2023. The company took action to comply with the new IT Rules 2021

The Meta-owned instant messaging app, WhatsApp, has announced that it has taken action against over 6.5 million problematic accounts in India during the month of May, in adherence to the new IT Rules 2021.

Out of these 6.5 million accounts, around 2.4 million accounts were proactively banned even before receiving user reports.
WhatsApp, which is one of the most popular messaging applications and has more than 500 million users in India, banned 7.4 million accounts in the month of April.

During the month of May, WhatsApp received 3,912 grievances reports, which also includes an appeal for unbanning from Indian users. The app took remedial action on 297 reports. The company's user safety guidelines outline the complaints WhatsApp received and the corresponding action taken by it to combat the abuse of the platform.
The government started a Grievance Appellate Committee (GAC), which aims to address appeals made by users against the social media platforms' decisions regarding content or other related issues.

The government aims to strengthen digital regulations and hold big tech companies accountable. The Ministry of Electronics and IT made amendments to protect the rights of Indian citizens in the digital realm.

WhatsApp has also started rolling out QR code chat transfers for its users. This latest feature will allow users to transfer chats from one device to another. This technique is best used when the user switches from an old device to a new one, and his chats will transfer in no time. The catch here is the QR code will work only if both devices work on the same operating system.

Meta CEO Mark Zuckerberg shared a Facebook post about the update of the latest WhatsApp feature. He wrote, "If you want to move your WhatsApp chats to a new phone, you can now do it more privately without your chats ever leaving your devices."

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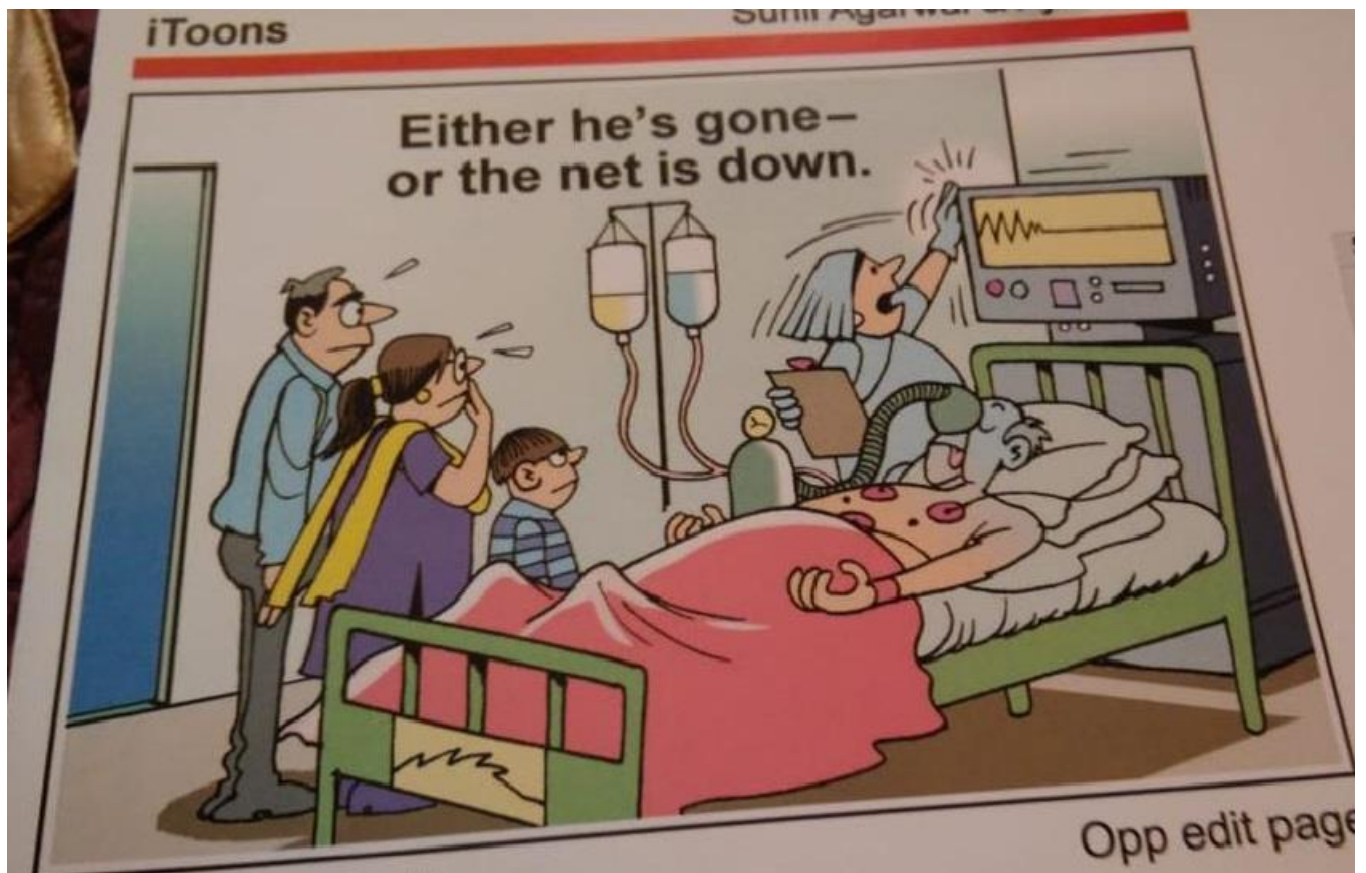
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