“In-The-Wild Testing”: The Missing Link in the QA Chain

An Interview with Matt Johnston, CMO, uTest

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“In-The-Wild Testing”: The Missing Link in the QA Chain

Does it ever seem that no matter how much time, effort and money your QA team spends improving and refining software testing processes that some sort of defect is always found in the application, website, or mobile app after launch? Surprisingly, it has little to do with your organization’s in-the-lab testing – whether in-house or outsourced, manual or automated. In fact, it’s likely due to the fact that the lab environment you’re testing in cannot adequately replicate real-world conditions (real users, real devices, diverse locations, imperfect connectivity, not to mention a range of devices, operating systems, browsers, etc.).

And thus, companies test extensively in the lab, launch their apps into the real-world conditions of users, and we’re all surprised when these products don’t perform as expected. But what kind of testing can fill this gap effectively and affordably? It was out of this persistent question that uTest and crowdsourced testing was born. And the by-product of this was a new category of testing which has become a must-have for mobile, social and local apps known as “In-The-Wild Testing.”

“In-The-Wild Testing” (ITWT) is an effort to educate tech leaders about how to help QA teams and organizations launch higher quality software, quicker, faster, and cheaper. The idea of in-the-wild testing is about providing organizations with the real-world testing data necessary to make informed decisions about releasing products to market. According to Matt Johnston, Chief Marketing Officer for uTest, “Don’t be fooled by the word ‘wild’ when it comes to testing software. When you think of the term ‘In-the-wild testing’ think of it as ‘real-world vs. laboratory conditions.’”

This is not outsourcing or beta testing, and it’s definitely not suggesting you replace the QA teams or solid processes you have in place within your test lab. Rather, this is about complementing, scaling, and aligning professional testing resources with your in-house or outsourced QA team.

I predict that this concept will explode in the next five years. But the first step is to understand what ITWT is (and isn’t).

I sat down with Johnston for a detailed discussion about their In-the-Wild Testing educational campaign, and most importantly, what this new concept will mean to the future of QA and the testing world. I want to be clear, I’m not a tester. However, as a person with more than 30 years of business experience supporting IT professionals, I can see that this concept is a strategic initiative that businesses have to consider if they recognize the value of testing as a crucial business driver. In fact, the ITWT concept seems so practical for filling an obvious need that I am surprised it has taken this long. But sometimes it takes time for new models to develop.

In-The-Wild Testing is definitely a new model and new concept that derived from the need to get to market faster and with the quality, reliability and ease-of-use that today’s consumers expect from new technology and software. It’s a concept that has been embraced by more than 1,000 organizations, from Fortune 500 to SMBs and startups, who are using this concept to supplement their QA teams. According to Matt, “It’s a cost-effective, efficient way to improve the quality of software releases while protecting brand credibility. For about the same cost as hiring one additional QA Engineer, companies can...
complement their current in-the-lab testing efforts with a full year of in-the-wild testing performed by 15-20 professional testers, working outside the lab under real-world conditions.”

My goal for this article is to facilitate a conversation that I believe is important, not just in the software testing and quality world, but as a matter of practical business sense in the real world. As I deliver my thoughts on this new concept, I encourage testers to engage their business colleagues in the discussion. After all, as Matt explains, “The goal of in-the-wild testing is to empower QA and development teams to make good decisions based up comprehensive results, which can only be gained by testing beyond the firewall and outside lab.”

We hope you will comment on this concept at the Software Test Professionals website (www.softwaretestpro.com). For more detailed information about In-The-Wild Testing, I encourage you to visit www.inthewildtesting.com.

The complexity of the environment:

Whether it’s testing the basics of mobile and web applications’ performance and functionality, or ensuring that confidential corporate data remains secure on employees’ devices, everyone agrees that the world of app development has become extremely fluid and complex. No argument here. As we analyze the importance of software and websites to the productivity and profitability of the business, we can also agree that creativity, speed to market, efficiency, scalability, functionality, and usability all have the potential to impact your company’s profits and reputation.

The expectation of the consumer for software to “just work” is higher than it ever has been. It is what I often call the curse of “IT magic.” IT professionals have succeeded in making software and hardware appear to work together so seamlessly that customers don’t realize how complex the web of networks, routers, devices, and software apps have become. I am not sure that is a bad thing until there is a high profile failure that impacts some unlucky organization’s brand and customer satisfaction. It is a testament to quality and testing teams across the globe that there aren’t more failures.

With consumer expectations at an all-time high, attention spans shorter than ever, the IT infrastructure increasing in complexity, the introduction of new devices like the iPad, Android, and a host of other mobile devices daily, the question becomes: how do we address the issue of quality and testing in the ever increasing complexity of the environment? Add to this already complex environment a host of mobile operating platforms, network providers, multiple languages in a shrinking global marketplace and you can start to understand that the issue isn’t how to set up our labs to test, but rather how to replicate real world conditions?

Traditionally the answer to delivering quality has been to test inside the lab (both manual and test automation) and to do our best to parallel the end user experience. It has often been done behind the firewall, but according to Matt Johnston, “these complex environments cannot be duplicated in the lab.” He quickly adds, “That does not mean the lab environment will go away anytime. On the contrary, lab testing and the concept of in-the-wild testing closely align to create a more powerful testing environment, producing the greater likelihood of launching world-class products.”
As an executive team, we need to be confident that the company’s products when delivered have been tested in an environment that closely resembles the real-world environments our consumers will use them in. But this is not just a “Beta Program.”

**Beta vs. In-the-Wild Testing:**

At the most recent Software Test Professional’s Conference, Matt Johnston discussed the differences between Beta and In-The-Wild Testing. He challenged the audience with this concept: “We should be very careful about using our users as guinea pigs. In beta programs, we’re often asking our most valuable customers to endure the frustration of an incomplete and/or not fully tested product.”

The term “beta” has also been used to the point that it has a connotation of perpetual testing that’s never complete. Moreover, executives need to consider what this method of testing does to the reputation of the brand. In pure dollars, it may be a less expensive way to test, but at what cost from a brand perspective. For some companies, like social media platforms, it may be perfectly acceptable to ask users to beta test your products. But for others representing different technology and different industries, your customer base may not be tolerant in the least about beta testing. In highly regulated industries, beta isn’t even an option.

Beta testing does bring the testing process closer to the real-world conditions in which users work, live and play, but is our consumer the best tester? They may know it doesn’t work or that there are bugs, but are consumers willing and capable of clearly communicating the issues they encounter? If they are, do they report back using descriptive terminology that helps the quality team? To wit, Matt used an analogy, “My mother knows when something doesn’t work, but her most technical description will be ‘The thingy on the screen doesn’t work when I press one of those buttons on the keyboard thing.”

True, In-the-Wild Testing, like beta testing, is done in the environment where the product is expected to perform. But in the former, the application is being tested by professional testers, trained in the art and profession of software testing. Instead of exposing all your warts to your best customers in a beta testing project, the test process includes qualified testers, based on their area of testing expertise; device(s), platforms and technology used; geographic location; and sometimes language spoken. The last two variables—location and language—come in particularly useful for one natural extension of in-the-wild testing: localization.

**Localization:**

Why is it important for executives to understand localization testing? “If you are an organization that competes globally, conducts business in multiple geographic regions of the world, in multiple languages, then knowing your products will improve your brand image and profitability is priceless,” according to Matt.

I couldn’t agree more with this statement. Because every country’s language, culture, currency, taxes and standards—not to mention technology infrastructure-- are different, localization testing is critically important in the quality process. And because in-the-wild testing uses testers who are geographically
situated within the country or region, they’re naturally experts at validating whether an application is culturally accurate and sound.

“IT infrastructures differ depending on the country. So when you take into account the complexity of the hardware and software, then add to that a user that speaks another language in another culture, you can imagine the risks,” warned Matt. At the conference he talked about an iPhone application that was created for the Professional Golf Association (PGA) by a group of developers in another country. To paraphrase the story, they made a simple change to the UI that shortened “under par” to “UP.” If you’re a golfer, you can understand how that could be a problem. There’s more than a little difference between Tiger Woods being “1 under par” and “1 UP.” That’s the value of incorporating in-the-wild testing into your localization efforts.

It’s a simple example, but if you multiply all the opportunities there are for your product to walk the gauntlet of these dilemmas in the real world, in-the-wild testing offers a much less risky way to validate cultural differences and technical issues.

Is In-the-Wild Testing the Same as Outsourcing?

“Outsourced testing typically means you have another organization, either onshore, offshore, or a combination of both, doing the testing for an organization,” says Matt. Outsourcing generally doesn’t change the way an organization would have tested in-house. It basically leverages organizations that focus exclusively on QA and test processes, but most importantly, the testing is still done inside the sterile confines of a lab environment. Outsourcing does not increase the ability of the organization to test “in the wild.” You have similar limitations if you test exclusively with an in-house or outsourced QA team. Basically, the differences between outsourcing and in-the-wild testing are the same as in-house QA and in-the-wild testing.

Profiling the User and Tester:

In order to test your product effectively in real-world conditions – particularly for usability – it’s not only the geographic and technical conditions of the environment that are important; you need to mirror your end user base, and this means matching your testing to the demographics of your users. Matching the user profile of the tester to your consumer is important because it brings the testing process even closer to the real-world conditions of your users. That is, the tester is chosen based on the profile of the person ultimately using your products (by age, gender, education, location, hobbies, industries, etc).

Similar to beta testing, the people testing software in-the-wild should have an interest in the product and the way it functions. That’s why, according to Matt, “If an organization is testing a gaming application, testers that are game enthusiasts will be handpicked for the project.”

The user’s qualitative experience can be a very valuable piece of feedback in the testing process. “This allows changes to be made to the product before release that improves the experience of the end user.
It gives the testing process more breadth and depth when you use testers who have a personal interest in the product being tested.”

**Extending Coverage:**

In assessing the risk of releasing a new web or mobile application, one of the things that gives both testers and executives anxiety is the eternal question of test coverage. Did we test enough? Did we test the right things? Did we test in the right locations? As the decision is made to move forward with the release, there is always apprehension or even fear. If testing is done only in a lab environment, it limits the quality team’s ability to test for as many scenarios, environments and locations as they would like to in order to feel confident about their application. In-the-wild testing provides the additional data required to give stakeholders added assurance that the application is ready for primetime.

Even though it’s called “in-the-wild testing”, there’s really nothing wild or out of control about it. Quite the opposite, it actually improves the QA team’s ability to control the tests they believe are important to the organization. “It is a supplement to the in-the-lab testing efforts, not a replacement. Both the lab and real-world testing environments are needed to release a higher quality product to market,” according to Matt.

“In-the-wild” describes the world in which your users live, work and play, as well as the complex landscape we face every day as business executives and QA professionals. The environment we expect our products to work in is the “wild” part of the equation. In-the-wild testing actually gives QA more control because it’s testing prior to release. It gives us the opportunity to see how products will perform under these rigorous and sometimes unknown environments, with the devices most likely to be used by consumers.

By introducing the ability to improve our testing coverage, while at the same time increasing the control of the real world circumstances which will lead to higher quality and improved efficiency, In-the-wild testing offers an innovative new testing model for the QA team. Is it the missing link in the QA process? As time goes on and QA teams incorporate in-the-wild testing into their internal processes, we’ll have the data necessary to answer that question.

**Conclusion:**

As I listened to Matt introduce this concept, I found myself intrigued by the simplicity of the process in such a complex industry. Don’t get me wrong, testing software of any kind is not simple. But understanding the value of in-the-wild testing to the QA organization is simple enough for even the non-technical executive to understand. It offers options to QA and testing teams that improve the testing process by asking a simple question: what percentage of our testing should be done in the lab, and how much of our testing should we push out into the wild, to catch issues before our users do?

In the end, the result will be a better quality product being delivered to the market. Having the ability to augment the in-house QA team with in-the-wild testing will also increase speed to market and improve coverage of and confidence in a software release.
Testing will only get more complex, and as we know, mobile and web applications permeate nearly every aspect of our lives in one way or another. Having the ability to improve quality in an ever changing environment is something every technology executive needs to think about.

No matter how much effort and resource any organization spends on QA, the real world cannot be replicated in a manner that allows QA to test every combination unless in-the-wild testing is employed. As Doron Reuveni, CEO of uTest, explains, “There’s a fundamental link missing in the QA chain.” That link could well be filled by in-the-wild testing. Time will tell, but there are some compelling arguments to support the concept.

For executives, improved quality can mean improved efficiency or profit. For testers, improved quality elevates the reputation of the testing industry, which translates into respect, longevity, and career stability. For consumers, improved quality means more “magic.” After all, our consumers don’t need to know how complex the applications they’re using from a technical professional’s perspective. They just have to work.

In the end, it seems to me that in-the-wild testing is as close as we can get to replicating the technical landscape, cultural and geographic nuances, and user experience. As Matt made clear many times in our discussion, “In-the-wild testing is a model that can deliver beyond what the lab can replicate while maintaining control, improving coverage, and in the end improving quality in the testing process.”

I believe it is a concept worth test driving within your organization. If you agree, you can learn more by visiting www.inthewildtesting.com.
About uTest

uTest provides in-the-wild testing services that span the entire software development lifecycle – including functional, security, load, localization and usability testing. The company’s community of more than 50,000 professional testers from 180 countries put web, mobile and desktop applications through their paces by testing on real devices under real-world conditions. Thousands of companies – from startups to global brands – rely on uTest as a critical component of their QA processes for fast, reliable, and cost-effective testing results.

More info at http://www.utest.com or http://blog.utest.com

Matt Johnston, CMO of uTest, has more than a decade of technology, product & marketing experience at companies ranging form startups to global enterprises.

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