Is Agile Killing QA?

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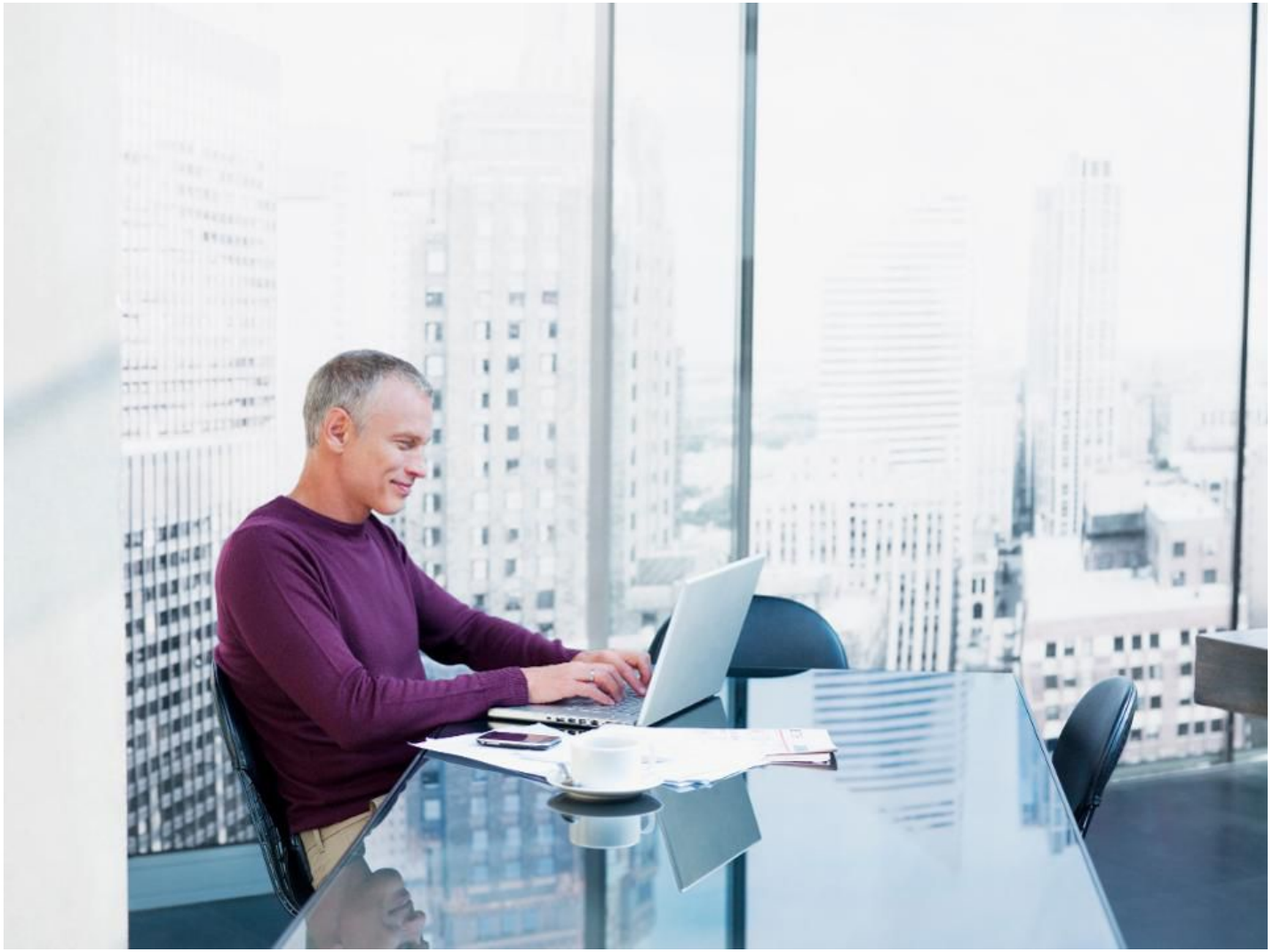

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In this agile world, quality assurance (QA) has changed from “test everything” to “test as fast as you can.” The increasing adoption of agile and DevOps is minimizing the importance of QA for many teams because these ideologies focus on speed, and quality

can become secondary. Even though the agile methodology calls for QA to be part of the sprint team, it poses a unique challenge because proper testing and validation take time.

In many instances, organizations with large customer bases forgo QA altogether. Or, as is often the case, testing is only done on the outputs of each sprint team or piece of work. This approach doesn't test products in the context in which they will be used and doesn't even test the product as a whole, just a portion.

In its current form -- with traditional lab and outsourced testing -- QA is indeed being killed by agile. That's because traditional lab and outsourced testing are too slow to keep up with agile sprint and release cadences.

Traditional Testing Methods Are Failing

I've seen firsthand why this is the case, having spent my career in engineering and currently serving in an executive role at a company that has succeeded in moving away from traditional testing methods toward a crowdsourced testing model. First, there is a perception in many companies that QA is just a pitstop on the journey to a more glamorous job, such as scrum master, developer or product manager. This leads to a talent shortage where small QA teams aren't able to test at the speed and scale of software being developed. In Capgemini's World Quality Report, 42% of survey respondents list a lack of professional test expertise in agile teams as a challenge in applying testing to agile development.

With limited resources, internal QA teams can't achieve the test coverage necessary to ensure bugs don't make their way into production. The diversification of platforms -- browsers, mobile devices and operating systems (Android, Windows, iOS, etc.) -- and new devices like voice assistants pose significant challenges for internal QA teams. These experiences require dedicated teams with broad skills and bigger budgets -- things few internal QA teams have to spare.

Offshore models haven't had much more luck keeping up with the demands of an agile environment. Though they can be a cheaper alternative to traditional labs, they can't account for real-world use cases. They can also take a while to get started and don't fit well in the SDLC. Overall, they provide only a sliver of the test coverage enterprises need.

QA Can Make A Comeback

Agile is killing traditional QA. But that doesn't mean all QA is dying. Many companies have evolved their strategies, blending in-house and outsourced testing with automated, real-world and beta testing.

• **Automated testing:** Test automation has quickly become a popular option for companies. In fact, its use grew 85% from 2015 to 2017 across all industry domains, according to KPMG. Automation is not a complete replacement of internal testing, but it does augment the strategy by taking on lower-priority tests (smoke and regression testing, for example) that don't require a human touch.

Smaller teams are usually better off starting with an off-the-shelf enterprise solution so they can get up and running quickly and have the support to handle software bugs along the way. More mature testing teams may benefit more from an open source automation framework. This approach provides increased flexibility and customization, but it requires advanced technical expertise and a longer runway to build the solution as even mature teams can have trouble managing an automation solution at scale.

When that human touch is required, real-world and beta testing can help fill in the gaps.

• **Real-world testing:** Real-world testing tests with real users on personally owned devices in their home environments, enabling brands to uncover edge use cases and functional problems that only exist in the real world. Testers can be segmented by demographic (age, location, device, etc.) and expertise (QA, security, usability, etc.). This testing can be started quickly and scale at a moment's notice, helping agile teams add more testers on-demand to account for peak periods.

Real-world testing is a valuable solution for brands looking to expand test coverage or those that don't have the resources to replicate real-world scenarios themselves. The key to getting started is finding a fully managed partner with the scale to match desired customer personas, devices, locations, languages and even payment instruments in order to take the pressure off internal teams and augment existing processes.

• **Beta testing:** Beta testing releases a product to a subset of users prior to the full launch and is a common practice for many companies. This approach gives companies a large test base with which to work. The big drawback is that it can be inconsistent and

disorganized because testers aren't vetted and duplicate bugs are shown. All brands can benefit from beta testing, but those with more loyal users will get more feedback and therefore better results. Brands can implement beta testing by dedicating internal resources to the task of setting up the tests and managing responses or by working with a partner to manage the process.

By giving agile teams additional outside resources that easily scale, each of these testing approaches keeps developers moving quickly and able to adjust to the high demands of customers. Each method works best when managed by a dedicated resource who can integrate testing into the team and ensure bugs are handled correctly, allowing testing to shift further left in the SDLC and become a true part of the agile process.

QA is still critical in delivering the best experiences possible to today's demanding customers. Consumers expect their digital products to improve over time, and with each new update, their expectations rise. If they are disappointed, the cost of switching software is basically zero. With no space for error, brands can turn to automated, real-world and beta testing to ensure they can keep quality high even as development moves faster.

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