

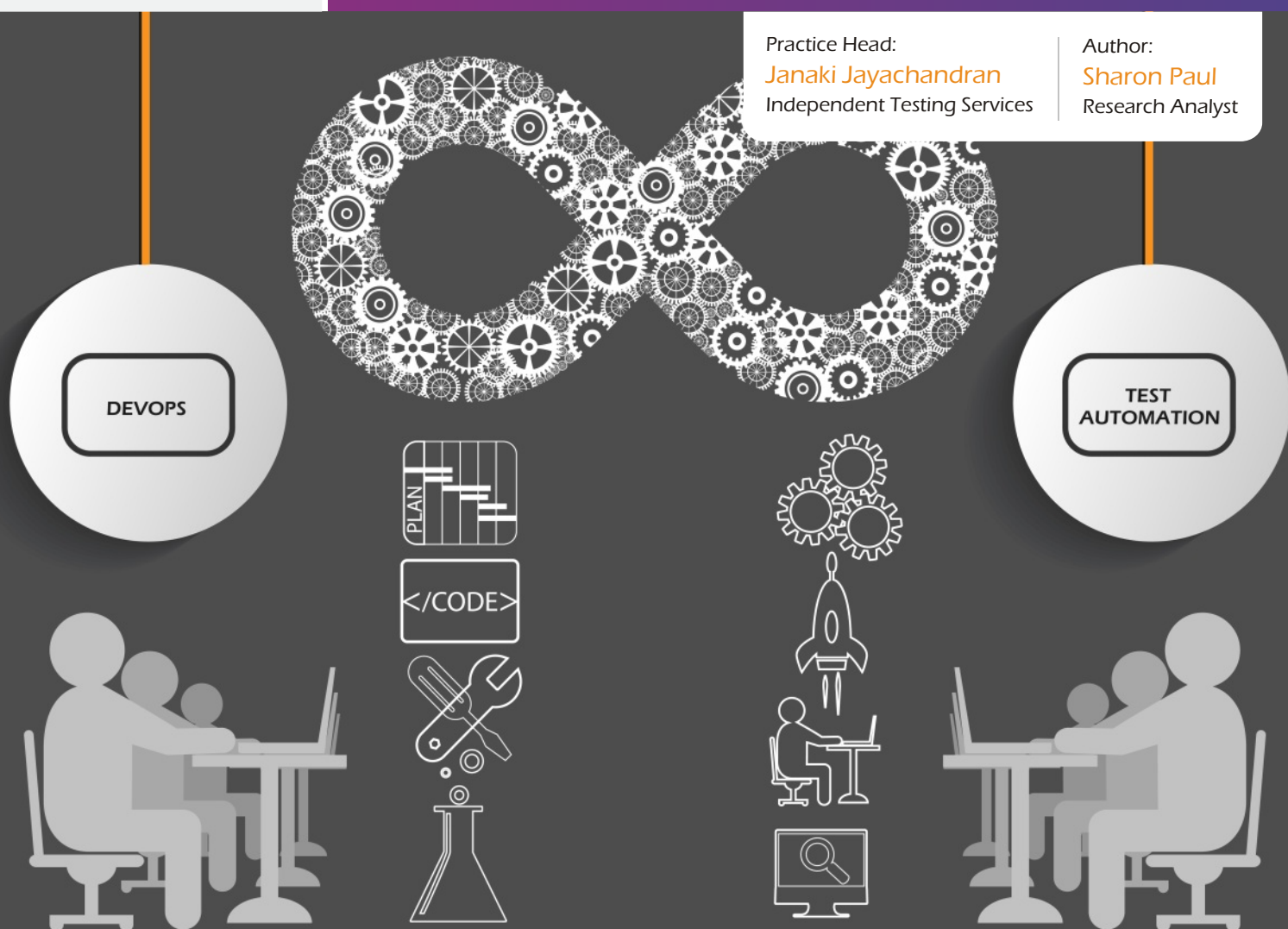
Marrying DevOps and Test Automation - Is It The Right Thing To Do?

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We are all aware of the indifferences among the IT operations and other software development communities that prevail right from the traditional IT era. When developers, operations and testing teams work on different independent silos, focus on individual objectives and performance indicators, they fail to understand the importance of being accountable for any unplanned outages that causes production deployment failure and heavy loss to the company.

There had to be a methodology or a practice that facilitated continuous improvement of the delivery cycles by enabling members across the IT and operations feel responsible and accountable for quality of their work. This thought gave rise to the concept of DevOps that fosters cross functional collaboration in order to speed up the delivery cycles through regular customer feedback.



How DevOps Culture Impacts Product Quality?

DevOps is simply an extension of agile methodology which became quite popular since 2009. It was the solution that resulted due to a series brainstorming sessions by few agile experts who wanted to end the dysfunction in the IT industry. The key reason for the dysfunction was found to be a lack of accountability in terms of quality among the different operations and IT team.

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Elisabeth Hendrickson, founder of Quality Tree Software, presented an interesting paper, where she clearly cites a real life scenario of how developers develop a sense of negligence towards quality and they focus more on pushing their features into 'test' without taking an effort to evaluate them. It emphasizes on developers scheduling time for bug fixing and testing on their own codes because the more developers were involved in testing, fewer unknown bugs were detected.

This is similar to the DevOps concept where everybody is accountable and responsible for their work. A survey points out that companies practicing DevOps culture, noticed 30 times faster deployment and 60 times fewer production failure.

DevOps leads to better organizing and a transparent workflow across the IT system. When each department takes responsibility for their activities, they collaborate and talk to each other which lead to increased focus and quality of the product. Hence, the core idea boils down to identifying further testing opportunities and securing the quality by adapting DevOps and agile testing strategies.



Disruption of QA

According to the World Quality Report 2016, there is a rapid integration of different IT architectures and operations, thanks to DevOps and agile methodologies. Because of this, the IT environment challenges the QA and testing for securing the quality across all layers. This means QA and testing will be disrupted by intelligence-led approach for validation and verification of technologies like Internet of Things.



DevOps & Test Automation Unite for Continuous Software Delivery

Increased innovations in products impact the test volumes and the pace at which they are delivered. DevOps has proved to be the most compatible and intelligent approach when paired with any operations or software development divisions because it facilitates test automation. When QA and testing activities are enabled in a DevOps environment, it results in the ability to efficiently manage the test velocity by maintaining the product quality because DevOps is all about continuous testing, integration and delivery. Regular test automation facilitates Continuous Testing in a DevOps environment resulting in:

Detection of errors in the early developmental stage that ensures reduced risk because it caters to a tight feedback loop from the customers where changes are simultaneously made to enhance the build-test-deploy cycles.

- ➡ It saves both time and time cost of development and testing cycle because when your product is continuously built and automated regularly, it means cleaner code and faster time to market due to continuous delivery.
- ➡ Consistent quality across the development and test cycle.
- ➡ With Digital transformation there will be increased experimentation of high end technology-embedded products. This brings in a lot of challenges to the QA and testing because they need to upgrade their testing skills, strategies like data based, predictive analysis and intelligent-led approaches. QA and testing can attain such a maturity level only by beginning with DevOps as it fosters a unified, collaborative and transparent system in test automation that enables innovative strategies.

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To sum up, for the growth of the digital landscape, only platforms that support smart solutions powered by automation will survive. QA and test automation will only become more challenging in the future and it should be able to sync and support development with technological advancements. But by embracing DevOps, there lies vast opportunities to improve and focus on the product quality at each touchpoint that ultimately leads to increased customer satisfaction.

Can there be more reasons for DevOps to be the rightful partner of Test automation in the digital landscape?



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