

# REDUCING TIME TO MARKET WITH DEVOPS

Stories of technology enabling transformation of organizations are plenty, with Amazon arguably topping the list. There are other success stories of companies like Uber and Airbnb that didn't exist a decade ago and have today become global names with valuations running into tens of billions of dollars. However, the technology muscle that these companies have had to build to scale and support such gigantic growth has been less talked about.



According to the findings of a recent study by Greyhound Research, a leading global analyst firm, 78% of large organizations surveyed cite the need to scale quickly and improve customer experience as challenges they are struggling to cope with. Specifically, these organizations struggle with building products that can leverage the latest advancements in technology without being bound by the limitations of existing architecture.

The same study by Greyhound Research found that while 92% of organizations agree on the need to use agile methodologies for Engineering and DevOps implementation, only 32% have the in-house expertise to meet these business requirements.

#### THE NEED FOR AGILE IMPLEMENTATION AND DEVOPS

This reflects the fact that while organizations recognize the need for software products and platforms that **are responsive and adaptable to change** to win in today's competitive and fast-paced business environment, most do not have the expertise available to implement the new technologies by themselves.

A major US retailer, an Infosys client, urgently needed to reduce the timeto-market for their own e-commerce business in order to compete against online rivals and retain customers. However, it was facing several challenges. This included 80-plus environments for development, QA, and testing which were resulting in higher costs, manual effort required to deploy services, and the **lack of a trackable workflow for code fixes** being applied and shipped. These internal challenges were hurting the frequency of new releases, and also risking the quality and stability of releases. The client, therefore, wanted to bring in automation to ensure both **quality and faster time-to-market**, and DevOps seemed to be the way forward.

### ENABLING CLIENTS TO 'NAVIGATE THEIR (DIGITAL) NEXT'

In line with our strategy of enabling clients to 'Navigate their (Digital) Next', **Infosys Engineering Services** have developed robust software products and platforms for enterprises across industries. Our approach includes:

- API-led platforms
- Cloud strategy
- Omni-channel, social collaboration, and product telemetry
- Data-first approach

To ensure the success of the engagement with the retailer and consequent business benefits, we used **a two-pronged strategy** – putting an Agile methodology in place, and a DevOps implementation. Activities were carried out in **timebox tracked via sprints** to gain speed and agility in the deliverables and to release features as soon as they were ready, instead of having releases six months apart. A **dashboard in JIRA**, which allows bug tracking and agile project management, enabled senior and mid-level managers to track the status of sprints and tickets, and how they were progressing.

Another key task championed by the Infosys team was the phased **migration from TFS to GIT for source-code management**, which helped align the code management process and integrate with JIRA, while also bringing down costs. We also brought in **code quality parameters**, like SonarQube - a tool for code quality analysis - to prevent obvious misses or failures at the end of the production process. Further, to ensure traceability of feedback, we hooked all tools into Jenkins, a continuous integration (CI) orchestrator. Lastly, the deployable artifact was kept in Nexus, a repository for artifacts required for development, to keep track of what had been built and which version was going to be deployed in which environment. Our solution drastically cut the time for releases to under two minutes, while the previous manual scheduling of releases with Control M used to take up to about 4 hours at a time, helping the client save tens of thousands of dollars per deployment. The client also got improved visibility, and streamlined and more aligned environments for development, testing, and QA. Our solution also reduced the time taken to discover and recover from potential issues, such as those occurring during heavy sales on the client's e-commerce websites, due to the feedback mechanism available on the change log dashboard. With code quality being tracked right from the developer stage, the number of defects coming through to production reduced drastically.



#### REDUCING TIME TO MARKET WITH DEVOPS: THE FIVE KEY TAKEAWAYS

- 1 Identify tasks and processes which are manual and need to be automated
- 2 Create processes to manage development and release activities
- **3** Move to time-box activities tracked via sprints, versus big bang releases, for speed and agility in delivery
- **4 Monitor** code quality through tools and parameters to prevent obvious misses or failures at the end of production
- **5** Detect and fix issues faster through feedback mechanism on change log dashboard

## **BIG LEARNING:**

DevOps in the digital age is having a near-profound impact on organizations with bold aims of being technology-led and delivering exceptional customer experiences and other business benefits. However, it's also an area that is often seen as 'things that IT teams talk about behind closed doors' and 'not an area that needs the attention of business leaders'. Both are misnomers. DevOps is like oxygen in the air – the pressure is felt only once there is little of it.

## WE DID THIS FOR THEM. WE CAN DO IT FOR YOU.

To learn more about the business benefits of DevOps, reach out to us at <u>askus@infosys.com</u>



For more information, contact askus@infosys.com

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