



Prōlifics[®]

Forget Performance Testing - You Need Performance Engineering

CLIENT | CHALLENGE | ACTION | RESULTS



Our Client

Our client is a major provider of automotive aftermarket parts for both professional mechanics and do-it-yourself customers. They have thousands of locations throughout North America and a solid online presence.

Challenge

As with many retailers, the pandemic generated a large boost in online sales and overall online activity. This activity remained high even after the pandemic's end, as more and more consumers became used to online shopping. However, our client ran into issues as they developed more application program interfaces (APIs) to connect, for example, webpages to their order management system. They experienced slower performance, meaning there were hidden bottlenecks affecting that performance. The client's prior vendor would conduct performance testing later in the process, so when there were performance issues it would take a lot of turnaround time for the developers to identify and fix the issues. The client brought in Prolifics to correct this problem.



Action

The Prolifics performance team developed a structured performance engineering framework. The team introduced a “shift left” approach and started early performance testing at the component level. They were able to detect the performance issues much earlier in the process. For example, as soon as an API was developed, the team tested its performance to ensure it met its service level standard (SLS). Once the APIs were integrated into different other systems, their performances remained stable. One issue our team found, and helped the client correct, was that there were missing indexes on database tables, meaning some queries would just run for a long time, creating slower overall performance.

This missing-indexes issue highlights an important differentiator between Prolifics and most of our competitors. While they offer performance testing, which just identifies when something is not performing as it should, Prolifics offers performance engineering – we identify the performance issue and provide the solution.

Jagadeeswara Reddy Katamareddy is a Prolifics Senior Test Manager. “So, performance testing looks at the system with 500 users, 1,000 users, or 10,000 users, gives the results and says, ‘Okay, here is your performance.’ But performance engineering at Prolifics goes one step ahead and says, ‘This is where your logic is wrong; this is where your query is wrong – this is where the index is missing.’ We also review the architecture and tell clients whether they have the right infrastructure to scale – for a peak load or a peak period. We not only identify the performance issues, but we’ll find the root cause and give the proposed solution. So, for our client the missing indexes meant the query was doing a full table scan, searching for a record but unable to retrieve it.”





Result

Because of the Prolifics performance engineering team, the client reduced their overall development and testing efforts. Once code was pushed into production, the system was able to handle it seamlessly, because it had been thoroughly tested. Based on our work, the client is expanding its testing work with us to include automation testing and potentially data testing.



About Prolifics

Prolifics is a global digital engineering and consulting firm helping clients navigate and accelerate their digital transformation journeys. We deliver relevant outcomes using our systematic approach to rapid, enterprise-grade continuous innovation. We treat our digital deliverables like a customized product – using agile practices to deliver immediate and ongoing increases in value.

We provide consulting, engineering and managed services for all our practice areas – Data & AI, Integration & Applications, Business Automation, DevXOps, Test Automation, and Cybersecurity across multiple industries – at any point our clients need them. Visit prolifics.com to learn more.

