

Client Speaks

As a startup in the rapidly growing, changing internet video space, it is key that our partners be agile, flexible and responsive. In QAIT, as we call QA InfoTech internally, we have found this critical combination. The QAIT teams plays a key role in our development efforts and when events call for it the team goes above and beyond working the demanding hours of a startup. Working with QAIT is more like working with an in-house team than with an outsourcing vendor.

Manager Engineering – Quality
A leading product company in the online video technology, analytics and monetization space

Client

The world of internet is evolving with new and sophisticated technologies and architectures. Web 2.0 has far reaching capabilities and its implication can do wonders for any business that builds Rich Internet Applications (RIA). Our Client is a leader in online video technology, analytics and monetization. Their comprehensive online video platform gives content owners the deep insights that drive increased viewer engagement and better earnings from video content. They serve hundreds of global media companies and marketers and have created a new interaction and monetization platform for online and offline video.

Challenges

The client was facing issues around product comprehension and feature testing with its current vendor. The client also saw customers reporting issues on the videos embedded on their websites. The vendor had a solution in place to test the customer videos on staging environment but they were not quick and precise in isolating the root cause. Due to this issue, customer satisfaction was at high risk and almost at the stage of the client losing its customer business. The other challenges they were facing included:

- The quick ramp up, training and establishment of processes and systems for a large team
- Frequent releases
- With the growing OS/Browser/Flash support that client was providing to their customers, manual testing on all supported configurations was a big challenge
- **Packet Loss and Bandwidth Throttling:** Client provides ABR (Adaptive Bit Rate) while streaming their videos. Their video player detects the bandwidth and system specifications for each user automatically, and then adjusts the delivery bit-rate to minimize buffering and maximize quality. Testing the system in different bandwidths was another big challenge.

“Software companies have had to dramatically change their approach to quality to create the more usable and higher quality product that consumers are now demanding”

Mukesh Sharma
CEO, QA InfoTech worldwide

Solution

QA InfoTech suggested having a test bed to replicate customer scenarios on which we could run several tests helping fasten the issue isolation and root cause analysis processes. Our team suggested creating a Test Harness, which is a tool that allows us to embed any video from the customer site to enable testing. We can also embed the video as a JavaScript embed or as a Flex Embed, thus giving total flexibility to mimic customer websites. After all the analysis and brain storming on the granular details, our solution included the following additional pieces, to address our client’s challenges:

1. We suggested a framework that would help execute all the tests on all the supported platforms in a very short span of time. We proposed the idea of creating DIAT (Distributed Intelligent Automated Test) that provides an end-to-end solution for compatibility testing with a much faster turnaround
2. We suggested a solution to vary the bandwidth and test the videos on low and/high bandwidth. We created scripts in Fiddler and Charles that would vary the bandwidth on an XP system. This allowed us to vary the bit rate and verify if the video adapts to it and delivers the best quality output. On Mac, we created python scripts to provide the same solution.

We also had newer test methodologies for web 2.0 testing, wherein we started testing the client’s video delivery using the iPhone Simulator even before their launch on iPhone. This approach helped us find out iPhone compatibility bugs well before iPhone was released in the market and thus we were able to support our client in releasing a bug free product to the customers highlighting that its iPhone compatible. Seeing the success from our iPhone simulator testing, we used the same approach before the launch of iPad, thus making the product iPad compatible.

Client Benefits

Through our newer solution, our client started seeing lower cost of manpower as well as cost of other investments on research their ROI and profits started showing considerable increase; more importantly customer satisfaction started soaring.

We are currently involved in testing the product using HTML 5 technology. With inputs from our R&D team, the technology and test value we were able to offer our client through our proactive solutions, have helped us make this a success story for our clients, their customers and for us.