Development and Testing for Compatibility

Application: Marketing Software & Analytics

Services Offered: Application Product Development | Compatibility Testing

Tools: The actual devices and the various OS platforms

Client

A cloud-based behavioral marketing software and analytics firm from New York

Application Overview

The company caters to e-commerce, publishing companies and brand builders, providing them with a solution that and help them target their target audience effectively and efficiently.

Key Highlights

Domain:
IT Marketing

Duration:
Ongoing

QA Team:
7

Technology:
JavaScript and Eclipse

Challenges

Development, which involved both page types integration and event tracking, were to be done on multiple platforms. Some of the code snippets that were delivered would work on web platforms but not on mobile or tablet. This was handled at the initial stage itself, so that cross browser supported mobile access as well as web browsers.

Page types - Some of the sites were projected as E-commerce, but on further exploration, would turn out to be Publisher types. This needed code appropriate modification to resolve incompatibility.

Event and Item Tracking - Some events even after the code was updated would not get reflected in the site. This needed further tweaking to suit mobile browser requirements for smooth functioning.

Testing too had to be done across platforms, browsers and devices. The Java front end had to be delivered across hundreds of sites. Based on the OS, the Java script behavior could differ, which was not acceptable.

Indium developed a process-based streamlined approach to develop the script that factors in the variations and developed a standard code to meet the client standards.

Requirement

Client was looking for a partner that could QA its solution to ensure compatibility across platforms for better reach for its customers. Soon, the client also needed a partner to outsource a part of its development activity.

Indium QA & Dev Capabilities

Indium, which has nearly two decades of experience in testing, including for compatibility, and has a lab equipped with all representative devices including 120+ devices and browser combinations. This enables it to test software solutions on actual devices and OS platforms for better and accurate results.

For the development requirements, Indium was able to offer the services of developers from Noah Data, which is now part of Indium. Noah Data has nearly 15 years of experience in pilot-to-production professional services, having built data intensive, high bandwidth Big Data and Analytics applications that process Terabyte scale multi-structured data. Big data engineering, analytics, blockchain development and product development are some of its areas of expertise. Its experience as well as Indium's delivery processes gave the client confidence to deepen its relationship and outsource the development process to Indium.

Pilot to Production

The client gave Indium a 10-day pilot. Satisfied with its approach and capabilities, it has been engaging Indium for its subsequent releases month on month along with the specifications for which the testing has to be conducted. Seven different types of compatibility testing in the given URLs that Indium undertook include:

- ✓ Ads firing tests
- ✓ Page types tests
- ✓ Email clicking tests
- ✓ Custom variables tests
- ✓ New ID testing
- ✓ Graph coverage testing.

These tests are done to ensure that the website behavior is as per the business requirement. Indium shares metrics, reports and findings with the client as part of its deliverables.

Our Solutions

The customer outsourced two back end functions to be developed to Indium – event and item tracking, and page integration.

Event tracking involves capturing the actions performed by a user on a site and storing it such that it can be used to analyze user behavior. Captured in an image format, it is sent to a server as a transparent gif of 1 pixel.

Item tracking involves providing a unique URL for every image being uploaded for each product under specific categories in e-commerce sites. The important elements such as the price, whether the product is in stock, etc. are defined and a code used to capture and store that information in the server. This helps in improving stocking and tracking of product performance on the site.

Certain features can be accessed from multiple routes on any site. Their behavior should remain consistent regardless of how it was accessed. Indium development team was tasked to ensure that the feature performance adhered to its original purpose independent of the navigation path.

Our testing team assessed the requirements, tools, and processes involving Load/ stress testing for the Web based applications / Back-office systems.

Impact

The code snippets delivered by Indium/Noah Data had a good turnaround time with less process accumulated on the client platform. This made the access to the sites 10X faster than earlier.

The process based approach in testing also enabled shorter turnarounds and faster time to market.

Secondly, the client was able to improve the output of its analytics tool based on Indium inputs. This helped in driving more traffic and transactions on its site.

Though it is hard to put numbers to the actual impact due to compatibility being part of a larger process, the client considered the Indium testing team an extension of its development team and sent the members T-shirts with its logo to endorse this.