

#### CASE STUDY

# AIQ Rapidly Responds Under Deadline Pressure to Rescue App Debut for Big Box Retailer

## Problem

A popular “big box store” developed a new online ordering system partly in response to Covid but mostly for the convenience of its members. The reputation of this store is very high-profile, so quality is essential.

## Solution

In an AI-first adoption, the client was able to see results quickly that showed areas of concern in the application. Immediate results identified slow performing APIs from 3rd-parties and detected mismatches between product descriptions, product names, and product images. In order to effectively conduct online ordering and shopping, these issues needed to be eliminated.

To learn more about AIQ please email us at [info@appvance.ai](mailto:info@appvance.ai)

## CASE STUDY

# AIQ Rapidly Responds Under Deadline Pressure to Rescue App Debut for Big Box Retailer

A leading big-box retail chain with a membership club model developed a new online ordering system in response to the COVID-19 pandemic. They needed to make ordering products online convenient during this stressful period, as the pandemic had limited members' access to physical retail locations. The new website would demonstrate the retailer's concern for its members' health, bolster its brand, and help maintain its reputation as an innovative retailer. Unfortunately, the development team's QA function became a bottleneck in shipping the site on time.

## The Challenge

The agile development team had coded the application in record time. They employed many new features and design elements to create a modern-looking e-commerce web application with numerous advanced features. However, they only tested the site manually, as their existing test automation stack was too slow and unable to keep up with UI changes that were rapidly rolling out. The developers did unit testing and the small test team did functional testing. While results were showing that the application was solid and reliable, their application coverage was estimated to be less than 10%, so their confidence level to ship a workable website was low. With the rollout just a few weeks away, engineering management needed to be certain there would be minimal issues when the site debuted.

## Objectives

The team embarked on an urgent search for a unified software quality platform. Their objectives for the project were to identify:

- ❓ A solution that would not impede the development process but would actually accelerate it.
- ❓ A product that would enable them rapidly respond to the changes COVID-19 presented on a daily basis.
- ❓ With a user experience that would enable the team to onboard the product quickly, with little friction and a minimal need for training.

### Quick Facts

#### Industry

Megastore Big Box Retail Chain

#### Business Size

\$50 Billion

#### Geographies

North America

#### Applications Under Test

Consumer E-Commerce Website

## The AIQ Solution

The customer's system integration partner was an Appvance champion and recommended using AIQ, our AI-native unified software quality platform, to meet the tight deadline. For the initial proof of concept, the customer prioritized areas of the application that represented high reputational exposure, financial risk, and privacy concerns. Through close collaboration between the three parties, AIQ then Blueprinted the application, our process of automatically exercising and testing all the possible user flows.

At the end of only two weeks, the blueprinting was reporting greater than 90% application coverage. AIQ's generative AI capabilities were producing thousands of test scripts. Each one targeted specific, user-critical functional areas of the application. The rapid and almost unlimited scale of AI-native testing meant more of the application could be certified under the tight deadline. QA team staffing levels were not affected, but their response time and productivity increased. While some test cases still had to be manually implemented to satisfy compliance and audit controls, the majority of the testing depended upon the AI.

Not only did the team meet the primary goal of shipping the application on time (and with high confidence), but AIQ delivered to the customer additional unexpected value.

As the COVID-19 pandemic continued to spur shifting protocols and mandates, the QA team finally had the ability to not only keep up with the changes, but the superpower to identify and tackle features affecting users the most. By adopting Appvance's AI-native unified software quality platform, the retailer not only shipped their e-commerce application on time, but put in place a transformative, AI-native software quality methodology built for rapid change.

### Key Results



Reliable visibility into test coverage



QA team was able to keep pace with the development team



Enabled continuous delivery of code