QBurst | A High AI-Q™ Company



Transforming Retail Release Cycles with Unified AI-Powered Quality Engineering

Replacing fragmented QA tools with a single AI-driven quality engineering platform to deliver 100% in-sprint automation and instant release confidence.

Overview

QBurst unified the retailer's entire quality engineering lifecycle onto the High AI-Q™ QE Platform, consolidating functional, non-functional, and automation workstreams into a single environment.

- **AI-Accelerated Quality Engineering:** Automated test authoring directly from user stories, embedded parallel non-functional testing (Accessibility, Performance, SEO, Link Validation), and established a real-time AI Release Readiness Index (RRI).
- **Measurable Release Outcomes:** Reduced test authoring effort by 60%, achieved 100% in-sprint automation coverage, cut overall release cycle times by 30%, and reduced QA operational costs by 40%.

50+
Sprints per year across product teams

500+
Test cases managed per release cycle

100%
Client mandate for automation coverage

3+
Disconnected tools in the QA stack



Client Profile

A leading US-based discount closeout retailer with supermarkets that offer discounted, overstocked, and closeout products from name-brand and private-label suppliers.

Mismatch Between AI Build Velocity and Legacy QA

While AI-assisted development compressed feature creation from months to weeks, the retailer's QA processes remained stretched across three simultaneous operational fronts.

- **Manual Authoring & Dual-Track Automation:** QA teams spent 3–4 days per sprint manually drafting test cases while struggling to meet mandatory in-sprint automation targets, leading to doubled work and delayed delivery.
- **Siloed Test Assets & Visibility Gaps:** Testing assets were scattered across legacy tools, spreadsheets, and repos, forcing leadership to rely on delayed, manual status reports.
- **Isolated Non-Functional Testing Workstreams:** Critical retail checks—such as WCAG accessibility, page performance, SEO health, and broken links—ran on separate tools and schedules, creating a pre-release scramble.
- **Fragmented Release Signals:** Go/no-go release decisions required days of manual data gathering across Jira, functional QA tools, and separate NFT reports, leading to recurring release delays.

Solution: High AI-Q Unified QE Platform

We deployed the High AI-Q QE Platform, replacing the retailer's fragmented toolchain with an integrated, end-to-end quality engineering ecosystem.

- **AI-Powered Test Case Authoring:** Leveraged the High AI-Q QE Platform to generate comprehensive test cases directly from user stories within minutes and automatically create automation scripts. This streamlined the journey from requirements to automated test coverage, enabling QA engineers to complete in-sprint automation goals faster while eliminating manual test creation and duplicate scripting effort.
- **Centralized Historical Asset Import:** Consolidated legacy test cases and spreadsheets into a single unified repository, preserving past QA investments.
- **Concurrent Functional & NFT Pipeline:** Executed accessibility (WCAG), browser-level performance, client-side metrics, SEO, and link checks in parallel with functional testing within the same sprint cycle.
- **Real-Time Release Readiness Index (RRI):** Implemented an AI-driven RRI model that aggregates functional defects, NFT signals, and requirement coverage into a single weighted confidence score.
- **Unified Stakeholder Dashboards:** Replaced static status emails with live dashboards delivering real-time execution health to developers, QA leads, and executives.

Technical Highlights

- **Unified QE Platform Architecture:** Consolidated 3+ disconnected QA platforms into a single environment, eliminating tool sprawl and integration overhead.
- **AI Requirement-to-Test Authoring:** Leveraged generative AI to translate user stories into structured test cases and executable automation scripts in real time.
- **Parallel Non-Functional Execution Engine:** Integrated WCAG accessibility scans, performance checks, SEO audits, and link validation into the primary CI/CD test runner.
- **Traceable Defect & Requirement Mapping:** Established end-to-end traceability linking user stories, test designs, automated executions, and Jira defects within a single pane of glass.

Impact: Faster Releases at Lower Operational Cost

- **60% Reduction in Test Authoring Time:** Cut test authoring effort from 3–4 days per sprint to just hours.
- **100% In-Sprint Automation Coverage:** Eliminated lagging automation backlogs by building scripts concurrently within the active sprint.
- **30% Faster Release Cycles:** Compressed total time-to-market across all annual retail sprint releases.
- **40% QA Operational Cost Savings:** Reduced software licensing fees and manual overhead by sunsetting redundant QA tools.
- **50% Faster NFT Execution:** Cut non-functional testing timelines by running checks concurrently within the functional pipeline.
- **Zero Recurring Release Delays:** Replaced manual data gathering with an automated, single-score release decision framework.