



SmartBear + Triquestra

Infinite Innovation



In its twenty years in the global retail industry, Triquestra has distinguished itself with a reputation for innovation that combines flexibility with certainty. Because it's driven to evolve without compromising on functionality or quality, Triquestra keeps its customers one step ahead in today's ever-changing, on-demand retail environment. It does this with help from its enterprise retail system, Infinity RMS.

With multiple regional awards under its belt, Auckland-based Triquestra has clients based primarily in Australia, New Zealand, and the Pacific Islands, and has gained footholds as far afield as the US and the UK.

Harnessing the Potential of Retail

The ever-expanding Infinity platform consists of over 150 unique software applications. It includes everything from its core point of sale and inventory management systems, loyalty and gift card systems, online sales channels, and integrations into various payment platforms.

Infinity is a "Unified commerce platform and fully-integrated POS that enables retailers to engage with their customers when, where, and how they choose," says Head of Delivery, Greg Cantlon.

Rapid Expansion Problems

When asked what drives Triquestra and the expansion of Infinity, Cantlon says, "Our aim is to revolutionize the shopping experience through trusted expert know-how and a partner ecosystem."

The expansion of Infinity is inevitable given the company's approach. "We don't build custom software. All of the features we build into the platform become standard and are made available to all of our customers."

Keeping Quality Among Chaos

Triquestra faced a challenge: make shorter development and regression times while still rapidly delivering personalized solutions. They had to help their customers cope with increased online business opportunities – all while maintaining the quality they were known for.

To streamline design and development, the plan was to expose Infinity's existing rich functionality in the form of an ever-growing suite of microservice APIs. The rationale for implementing API microservices being, according to Cantlon, "that it minimizes the scope of each API, which reduces the regression and allows us to move fast."

Reining It In With SwaggerHub

For Triquestra, having SwaggerHub serve as a single source of truth for API definitions helped to foster developer collaboration and reinforce API standards. "By taking a design-first approach in SwaggerHub, our designers could start with a customer requirement and create an API specification, then have it reviewed by architects, developers, testers and customers, all before publishing and beginning development," Cantlon explains.

The “design-first” strategy allowed Cantlon and the team to establish an API framework that was “well thought through” and maintained consistent structure and naming.

Investing time to design the API first produced an added benefit. A definition they could virtualize and test prior to any code being written, which was more cost-effective than writing code first. “Using SwaggerHub, we spend more time on the design process, and catch issues before development starts, which is a much cheaper place to fix them.”

ReadyAPI Seamlessly Blends In

To complete their API strategy, Cantlon’s team turned to the ReadyAPI platform because it was a part of the trusted SmartBear ecosystem. “We’ve had TestComplete in our business for a number of years already, and ReadyAPI integrates with SwaggerHub.”

By using ReadyAPI to test during the build-out or testing of complex or flagship features, the team is later able to automate those tests once the feature is locked down, saving substantial time in future release cycles.

While he admits it’s still early in the team’s adoption of ReadyAPI, and all its capabilities, Cantlon is pleased with the results. “In the area of APIs that are stable, we have examples of regression testing being reduced from two days to one hour.”

Early Catches, Increased Performance

Cantlon’s team also relied on ReadyAPI to catch performance issues early. “When we’re designing a new API, we look at what the expected peak load is, and use the ReadyAPI Performance module to generate a test to simulate that. Within the tool, we

import our test scenarios from the ReadyAPI Test module and create a load profile.”

The team can then take that test to the customer’s environment, also with ReadyAPI, to execute on their systems. By doing this, Cantlon says his team gets “a true rate of performance so we can have confidence moving into production.”

TestComplete Eliminates a New Bottleneck

Simultaneously, they needed to address the final pain point – a testing bottleneck all the new design and developments. Mostly because of feature branches merged into a release candidate.

Cantlon explains, “we could only have one release candidate for each product at a time, so while one project release is regression testing, other projects have to wait in line.”

The Triquestra team used TestComplete to decrease the regression cycles for the testing of each release candidate. It reduced what he calls “air pockets,” where the delivery teams were unable to keep working while their release was stuck in the testing queue.

Their approach is to quickly identify higher-risk areas, and then use TestComplete to automate time-consuming and highly repetitive or complex tasks. As an example, Cantlon points out that the “manual regression testing of rules-based pricing takes around three days. By automating it, we’re able to test it in three hours.”

The team has been able to easily expand TestComplete users from test automation specialists to additional test analysts and developers. Cantlon adds, “We’ve been careful to make the tests as modular as we can, so we can reuse them across multiple tests,” which is easy to do in the tool.

Because of their distributed architecture, a single test may need to be run across several machines. They use TestExecute, the parallel testing engine for scaling TestComplete tests, to execute some parts of their desktop and web application tests on other devices.

As an additional benefit, automated testing with TestComplete mitigated the team's dependency on individual knowledge, ensuring consistent testing across all features, every time. "It's the savings on the sanity of a test analyst and allows them to focus on more valuable tasks."

Benefits and Results

For Cantlon, and Triquestra, the results speak for themselves across each of the SmartBear products.



Ensures APIs conform to internal standards, are well documented, easy to read by customers and partners, and align to OpenAPI Specification.



Enables substantial time saving testing APIs and ensures API performance is met.

About SmartBear

At SmartBear, we focus on your one priority that never changes: quality. We know delivering quality software over and over is complicated. So our tools are built to streamline your process while seamlessly working with the products you use – and will use. Whether it's TestComplete, Swagger, Cucumber, ReadyAPI, Zephyr, or one of our other tools, we span from test automation, API design, collaboration, performance testing, test management, and more. Whichever you need, they're easy to try, easy to buy, and easy to integrate. We're used by 7 million developers, testers, and operations engineers at over 24,000+ organizations – including world-renowned innovators like Adobe, JetBlue, FedEx, and Microsoft. Wherever you're going, we'll help you get there. Learn more at smartbear.com, or follow us on [LinkedIn](#), [Twitter](#), or [Facebook](#).



Guarantees 100% consistency in UI testing and shortened regression testing cycles for their desktop and web applications.

Final Impressions

When asked to comment on Triquestra adopting the SmartBear ecosystem, Cantlon quickly responds. "Much like our own system, I really like the platform approach that SmartBear has taken. The products integrate with each other and are easy to use."

He adds that the most significant benefit is that "the tool set has allowed us to deliver high-quality software and save time on our projects."

Most significantly, Cantlon concludes, "With the entire suite of tools in play, we are improving release quality and receiving positive customer feedback."

