

# Success Story

## Cloud-based Automation QA Framework and Test Toolsets for Electronic Trading Platforms of Global Company

Our client is a leading global brokerage offering a wide range of alternative investment products including fixed income securities, foreign exchange, equity derivatives, commodities, futures, and structured products. The firm's customers include many of the world's largest banks, broker dealers, investment banks, governments, and corporations.

Digiterre partnered with the firm to develop a cloud-based technical test infrastructure to automate the entire quality assurance process for their complex and mission-critical trading platforms and applications. Digiterre's ability to rapidly onboard and adapt to the firm's requirements, deep cloud expertise and highly-collaborative team working have delivered a state-of-the-art trading platform test infrastructure for the firm, enabling outstanding business transformation by reducing time to market for brokerage innovation.

The key challenge was to transform the internal quality assurance (QA) process for developing pioneering electronic data generation platforms and product applications. QA is mission critical for trading platform success and therefore also for enabling future business growth in highly demanding and fast-moving trading markets. QA involves the entire end-to-end performance of a platform and its applications, ensuring all platform trading opportunities and trades perform and transact successfully, as well as identifying and reducing as much risk as possible.

### Challenges

- To provide rapid development and delivery of a new, automated, QA test infrastructure.
- To give predictability to the firm's internal product and commercial teams, of the timing of software releases developed and delivered by Client Facing Technology.
- To enable shorter times to market for the firm's business platforms and service innovation.

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## Solution

- Cloud technologies using AWS Lambda 'serverless architecture'.
- A bespoke test infrastructure that operates on the firm's main technical platform for running several separate trading systems.
- A cutting edge, lean, iterative development methodology, requiring joint, highly collaborative team working over the project duration.
- The ability to run detailed testing of many different operating scenarios, such as significantly increasing the load of user access, simulating multiple traders.
- Establishing a core QA framework foundation that all projects of the firm can now leverage, including best-in-class QA testing and quality methods.



***We required a very strong partner to help us speed up our delivery and time-to-market for our new product and technology initiatives, in a highly competitive industry. Digiterre were very adaptive to our needs and requirements which sets them apart from other consultancies. They really do listen, with a real passion to solve these problems.***

***Digiterre have been particularly strong for us in front-end development, cloud-based IaaS concepts and test automation. They brought the deep technical expertise and excellent cultural fit we required with the right people and the right skill-sets. They were exceptionally flexible and accommodating.***

**Managing Director and Global Head**

Client Facing Technology

## Key Benefits of the Project

- Shorter, faster feedback loops between QA and developers which mean:
  - 1 Issues in quality are detected earlier, meaning quality is delivered earlier in the development cycle.
  - 2 Continuous regression testing through automation, building up a repository of positive and negative scenarios for quality assurance.
  - 3 The firm's developers have maximum focus and concentration on a particular task and thus platform and application development output quality is consistently high..
- Establishment of a solid performance testing infrastructure, supported by Digiterre's experience in performance testing to quickly identify issues, flexibility in adapting existing technologies to the business's needs, and innovation in identifying the crux of issues and reaching solutions.
- Shorter time between the firm's innovation ideas and market entry. Improved efficiencies in the brokerage platform for more transparent, seamless, and integrated workflows.
- An expanded list of instruments tradeable on the platform.