

Software Engineering Firm Derisks & Simplifies Development for Global Investment Banks & Exchanges, with Diffusion®



Quick Facts

Baker Technology, a specialist software engineering firm, builds bespoke trading applications for global investment banks and exchanges. They partner with DiffusionData to use the Diffusion Intelligent Data Platform as a single, secure, solution for consuming, enriching, and delivering trading event data to their Internet trading platforms built in HTML5. Diffusion eliminates the development time to write the network stack event data consumption, transformation and delivery Baker's front-end Internet trading platforms.

Industry

Financial Services

Challenges

- Access to real-time data feeds over the Internet into HTML5 clients,
- Reducing project technical delivery risk,
- Increasing speed of development,
- Real-time event-data management.

Solution

The Diffusion Intelligent Data Platform

Benefits

- Single platform to consume, enrich and deliver trading application data,
- Multiple browser-to-server protocols with transparent switching depending upon network availability,
- Seamless failover management among different server nodes,
- Easy test environment set-up with permissive development licenses,
- Simplifies and speeds bespoke application development.

Overview

Baker Technology specializes in user interfaces built in HTML 5. All of their development is done in London, allowing them to work extremely closely with their clients.

The firm's experience has demonstrated that their London teams consistently outperform offshore or client-internal teams due to the company's high level of financial services domain experience and efficiency of development and delivery.

The Challenges

Since the firm's founding in 1997, Baker Technology has specialized in building bespoke trading systems. Baker Technology's reputation is based upon deep knowledge of the trading business and efficient delivery of real-time front-end systems.

With clients demanding platforms that are ever more technically challenging to build, the company must minimize project complexity and maximize development efficiency to provide competitive advantages to their clients. The Diffusion Intelligent Event Data platform for consuming, enriching and delivering event data in real time, helps them meet this goal.

The Requirements

Baker Technology first encountered Diffusion in 2011 when working with a large international investment bank. Baker Technology was engaged to build the front-end of a large, Internet-facing, FX trading platform. Since then, the company has successfully delivered a wide range of

projects for other organizations.

Baker's core business includes:

- Single-dealer platforms,
- Internal sales platforms,
- Exchange trading platforms,
- Real-time business intelligence platforms.

These platforms span a wide range of financial products including FX Cash, Money Markets, FX Options, Bonds, and Repos.

Across these platforms, Baker Technology has identified some common themes:

- The need to access and manage data from multiple services and third-party systems,
- The need to provide event-data distribution over the "last mile" to users on the Internet,
- Projects have high levels of technical complexity,
- Challenges around testing the user interface with high volumes of real-time data,
- Aggressive time to market required by the clients.

*"Using the **Diffusion Platform** derisks & simplifies our development. With Diffusion, we eliminate a high proportion of technical risk in a project"*

David Bull, Director
Baker Technology

“With Diffusion, our development teams don’t have to worry about the network stack. As an intelligent, event-data platform, Diffusion handles the complexity of accessing and consuming data from the services on the back-end, enriching the data in-flight, and delivering the data in real time to our front-end trading applications.”

Peter Baker, Director, Baker Technology

“The Diffusion Intelligent Event-Data Platform is a big benefit for us because it provides a common gateway into our clients’ micro services via a single API to consume and transform event data. It also manages fan-out, scaling, and high availability of event data delivery for the large global systems that we build. Diffusion reduces both complexity and development time for our User Interface teams.”

David Bull, Director
Baker Technology

The Solution

Efficient, high-performance, and highly scalable data management and distribution is a key component of Baker Technology’s bespoke trading systems development projects.

The Diffusion Intelligent Data platform provides a secure, unified method of distributing and synchronizing data models between the server and the client tier.

By using Diffusion as an edge tier, the Baker Technology development teams are relieved of the time and effort they would otherwise have to invest in programming to:

- consume data from the disparate back-end sources,
- enrich and transform the data in-flight,
- distribute the data to their bespoke front-end applications.

A key part of any development project is thorough testing. With Diffusion, Baker can easily stub out the back-end and use a simulator to connect to the Diffusion API to run their rigorous functional and performance test cases - automatically as part of the build pipeline. The ease of testing with Diffusion, allows the company to build higher quality systems with more predictable performance and failure/recovery profiles.

Today & Tomorrow

An important ongoing benefit of the Diffusion platform is that teams start with a known platform for handling the data distribution. This reduces delivery times for new applications by allowing developers to concentrate on business deliverables rather than low level technical infrastructure.

Following the 2011 project for the large international investment bank customer, Baker Technology has been engaged to rebuild the bank’s FX trading system twice, as business needs have evolved. They rebuilt the application in HTML5 in 2014 with a complete UX refresh in 2016.

David Bull, a Director at Baker Technology, says,

“With Diffusion in place as an event-data consumption, enrichment and distribution layer, we were able to completely re-platform the user interface without changing the services on the back end. The bank was able to deliver a new experience to their clients, while leveraging the existing investment in their core services.”

Today Baker Technology continues to work with Diffusion on new projects for their global financial clients.

The Diffusion platform gives my team a solid, well-known platform on which to build the complex event-driven systems required by our clients.”

David Bull, Director
Baker Technology

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