

Amazon found that every 100ms of website latency cost them 1% in Sales. More than 50% of new user-facing applications are event-driven applications.

- Source:

Gartner – “Event-Driven Programming Models Will Disrupt End-Use Applications”

Capital Markets and Investment Banking

Corporate and Commercial Banking

Private and Retail Banking

FinTech Solution Providers

Specialist Software Developers and System Integrators

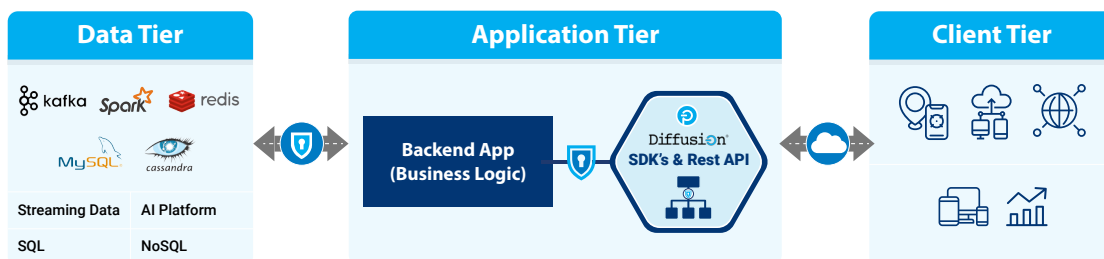
Event-Driven Architectures in Financial Services

Solution Brief

Financial institutions aspire to reach new customers, open new markets and increase their value to existing clients. According to a McKinsey article “Five themes for transforming wholesale banking operations and technology” most operations and technology functions are looking for opportunities to achieve greater delivery speed and outcomes, increase efficiency, and ensuring regulatory and compliance deadlines are met. However, some organizations spend up to 25% of revenue on operations and technology, making profitability a challenge. Fortunately, new operating models and technology is enabling growth, coupled with leaner operations.

Diffusion Data’s Diffusion Platform addresses the five core challenges that Financial Services organizations are facing:

- Build the bank faster and run the bank more efficiently.
- Deliver secure, agile, stable, and scalable solutions.
- Modernize existing systems to align to enterprise data architectures.
- Supporting low-code, rapid application development methods.
- Support hybrid cloud platforms.



Diffusion is a low-code, Intelligent Platform that includes everything you need to consume, enrich and deliver real-time event-data to power your mission-critical applications. Diffusion resides in the Application Tier with the customer backend application. The three major functions within Diffusion are:

- **Data Gateway** allows easy consumption of raw event data from a variety of sources in any size, format and velocity. Imported data is organized into hierarchical topic trees.
- **Data Wrangling** of data within a flexible data structure. This allows, without coding, the dynamic enrichment and transformation of data to suit the client applications and business logic.
- **Data Distribution** sends topic elements tailored to specific client needs. Data can be distributed to millions of clients, at internet scale, in a reliable, efficient manner, with more than 90% bandwidth savings using the Diffusion real-time event broker.

Use Cases

Capital Markets

A major Exchange wanted to modernize an existing platform and integrate new FX and Fixed Income asset classes for data delivery over the internet, globally. Diffusion was selected to power this new consolidated on-line trading platform.

By reducing network bandwidth requirements by more than 90%, the exchange can serve a global client base, securely over public internet connections. Remote clients with overloaded connections benefit from Diffusion's ability to send delta updates containing just the changes. Since adopting Diffusion, the exchange has been able to provide leased-line Quality-of-Service with security to remote customers over shared, public internet connections.

Commercial/Retail Bank

Consorsbank was founded in 1994, headquartered in Paris as a BNP Paribas subsidiary focused on Germany.

The Consorsbank trading application needs to provide a responsive, high-speed and quality of internet connected clients across Germany. Their trading application often impose high loads on the back-end servers that need to be fast, reliable and resilient.

The Diffusion platform met the performance, security and resiliency requirements of the Consorsbank mobile banking and trading application which runs seamlessly on a broad range of mobile devices. Diffusion won a comparison test against a pub/sub alternative by delivering a superior user experience, increased performance, faster response times, and reduced network payload due to the platform's state-of-the-art data optimization and communication technology.

Consorsbank !

by BNP PARIBAS

"With Diffusion Data's Diffusion Platform, we have delivered a reactive, event-driven application experience to our customers - quickly & easily"

Use Cases

Corporate and Commercial Banking

Lloyds is the UK's largest digital bank and financial services group. Lloyds Bank plc is a British retail and commercial bank with branches across England and Wales. It has traditionally been considered one of the "Big Four" clearing banks in the UK. Lloyds offers Personal, Business, Private and International Banking.



Lloyds needed the ability to provide real-time currency pricing to thousands of commercial banking users in real-time, securely and efficiently.

Today, Diffusion is used to push data to Corporate Treasury platforms such as those used for Money Markets and FX dealing applications. Diffusion powers the Lloyds Arena application. The benefits for the Bank include more granular role-based security, code-free, on-the fly enrichment of data feeds tailored to individual traders and more efficient use of bandwidth.

Inter-Dealer Broker

Founded in 1959, Tradition is one of the world leaders in the IDB (Interdealer broker) sector of financial and non-financial products.

Tradition needed a scalable event-broker that could securely send hundreds of thousands of messages per-second over private and shared Internet connections.

Diffusion was selected to deliver real-time pricing data, research reports, trade alerts and risk reports for Tradition's new cloud-based data and & analytics SaaS offerings. Diffusion scales to meet the trade volumes Tradition needs, with lower compute and network capacity demands.



"Diffusion is a secure, robust, fast & flexible real-time platform which supports our Electronic Trading Platform & the features within our GUI"

- Yann L'Huillier, Group CIO, Tradition

Investment Banking

Founded in the 1800s, IHS Markit serves 50,000 business and government customers, including 80 percent of the Fortune Global 500 and 85 percent of the Fortune U.S. 1000. 2020 revenues exceeded \$4 billion. IHS Markit needed a way to disaggregate, blend and distribute this data to their growing client base more efficiently.



With Diffusion, IHS Markit now scales to greater message volumes, have improved network bandwidth efficiency and are able to bring new services to market faster.

Use Cases

Trading Platform

Founded in 2018 and headquartered in Munich, GRATISBROKER, offers free trading of more than 3,600 stocks, around 180 ETFs and over 2,100 funds. It was one of the first, free, online German trading platforms, securely processing trades in real-time for hundreds of thousands of customers.

To manage high-volume, live, event-driven information in real-time to many thousands of customers online, the GRATISBROKER platform had to be secure, reliable and easily scalable to support the constant ebb and flow of trading volumes. The previous event-management technology was limited to web socket communications with no fallback protocol.

The new platform, built on Diffusion, provides customers with live trade information with a high quality-of-service, has a more responsive front-end and scales to meet demand peaks.



GRATISBROKER

"We have set-up a completely cloud-based infrastructure and we can develop, test, and go into production with Diffusion Cloud for free – a huge benefit for a young company"

- Philipp Roeben, Co-Founder & CIO

Trading Research and Analysis



Signal Centre was formed in 2007 as an independent research firm to serve professional clients' central need for trading signals. The Signal Centre challenge was to increase the speed and deliverability of their Trading Platform research & analysis data. Diffusion now underpins the event handling and messaging for their trading platform.

"With Diffusion, we saved 4-6 months of development time, eliminated our 2-3 hours of costly weekly downtime, and we experienced a 5X growth in our major client base. Now we can focus on market analysis for traders around the globe."

- Steve O'Hare, Managing Director, Signal Centre

Get Started With Diffusion Today!

www.diffusiondata.com

UK +44 (0) 20 3588 0900

US +1 844 449-DATA (3282)

Ireland +44 (0) 20 3588 0900