Signal Centre needed to assure fast, reliable delivery of their Signal Centre Trading Platform research & analysis data to a high volume of traders worldwide and around-the-clock. Their team encountered development challenges until they selected the Diffusion Intelligent Data Platform to address their challenges and fulfill their requirements.

Industry
Financial Services/Trading
Challenges
• Reliably scale to meet demand and end down time.
• Unlock & access information stored in back-end systems.
• Simplify & speed development of the Signal Centre Platform.

Solution
The Diffusion Intelligent Event-Data Platform.

Benefits
• Simpler & faster platform development for Signal Centre.
• Meet high-volume trading customer demand by delivering an Enterprise quality experience on the Signal Centre Trading Platform.
• Provide an always available, trade idea and analysis solution for the company’s clients.

Overview
Signal Centre was formed in 2007 as an independent research firm to better serve institutional clients’ asset research needs. Today, the company’s Signal Centre Trading Platform is an innovative progression from the original analysis delivered to fund managers, hedge funds, and central banks worldwide.

Signal Centre offers daily trade ideas in over 120 of the world’s major financial markets, packaged in five asset groups: FOREX, commodities, stock indices, and, more recently, single stocks and cryptocurrencies. Signal Centre users can subscribe to individual markets by selecting or deselecting markets on the platform’s customizable dashboard to easily view the desired trading signals.

Since inception, Signal Centre has continued to develop and grow by employing analysts with extensive financial market knowledge, experience, and technical analysis ability gained at major UK financial institutions. The company’s proprietary and innovative research has produced a strong track record of trade ideas across asset classes. The firm has received numerous awards for their research based upon their intuitive and easy to use Signal Centre platform dashboard and the high-value, timely research and analysis that they deliver.

The company required a data management platform that would effectively manage trade recommendation and analysis data from their back-end systems and reliably deliver the information as they scaled their global customer base.

The Challenge
While building the Signal Centre Trading Platform, the development team realized that traditional polling of back-end systems was far too time consuming, and would not scale, either for the anticipated number of users on the system or for the additional functionality planned for the future.

“With Diffusion, we can focus on our skill of analyzing markets, instead of worrying about reliably delivering our information to traders around the globe.”

Steve O’Hare
Managing Director
Signal Centre
“Today, our Signal Centre Trading Platform easily scales, & provides fast response time & reduced network payload due to Diffusion's state-of-the-art data optimization & delivery technology.”

Steve O’Hare, Managing Director, Signal Centre

Signal Centre required a platform that could isolate the company's back-end systems from the load generated by tens of thousands of trading clients working around-the-clock. This is important because the trading analysts continually monitor and assess market conditions and each trading strategy, and they post updates in real-time - an integral part of the company's service.

Lastly, Signal Centre wanted to simplify their platform development and improve performance. Their existing platform could not manage back-end system data in a timely and reliable manner when receiving requests from thousands of trading clients. This resulted in unacceptably low-performance.

The Requirements

Signal Centre, like many organizations, had to build business application to easily scale and run optimally over the Internet. However, addressing the unknowns of the Internet is difficult and affects delivery of a reliable, resilient, and high performance application.

Many factors can influence performance including: the speed and quality of the network, load on the network, variable and high load on the back-end servers, time to process/distribute/store data on the back-end, latency sending data to end-user devices, and the volume of data sent. Signal Centre had to address these unknowns in order to deliver their valuable analysis and trade ideas in a scalable, efficient, and reliable way to their customers - whenever and wherever needed.

The company also faced the additional challenge of presenting their trade ideas to customers in multiple languages around the globe.

"With Diffusion, we saved 4-6 months of development time, eliminated 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

The Solution

Signal Centre learned of DiffusionData’s Diffusion Intelligent Data Platform after attempting to enhance the Signal Centre Trading Platform on their own in order to handle their back-end scalability and speed issues. The company then turned to the Diffusion Platform to address these challenges.

Signal Centre clients can access the platform trading data and analysis in a variety of ways including via a widget that lets them embed the data on a web page in their in-house trading systems. Users may also elect to receive follow-up emails. The emails are tailored to each individual user’s requirements and contain user-selected information in the language of the user’s choice - for example, only send FX data in German.

The variety of data delivery mechanisms, coupled with the multiple language requirements across thousands of traders, unduly burdened the company's back-end system and made data delivery slow.

With the use of the Diffusion platform to manage and deliver the data, the constant polling of their back-end database has been eliminated from the equation using Diffusion’s proprietary delta-data streaming technology which only sends updates when the data has changed. Today, the updates are easily sent to all subscribers in real-time.

Today & Tomorrow

With the Diffusion Intelligent Event-Data Platform, Signal Centre quickly eliminated the data management and delivery challenges faced by their development team. They can now assure a reliable, high-performance Signal Centre Trading Platform experience for all of their clients.

As Signal Centre evolves and changes their back-end systems in the future, the use of the Diffusion platform delivers the ongoing benefit of minimizing the impact of those changes on the Signal Centre Trading Platform.

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Signal Centre’s success led to the company’s acquisition by Acuity Analytics, the parent company of financial technology firm Acuity Trading, on March 23, 2021.