



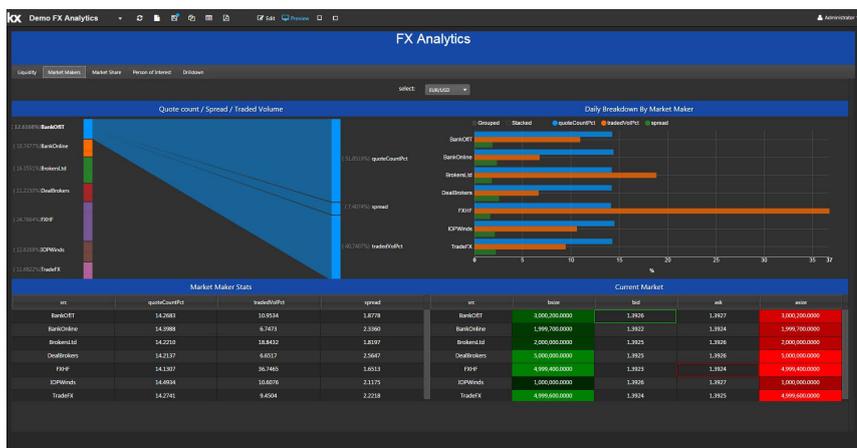
it's about time

# Kx for FX Analytics

**Real-time, streaming and historical FX analytics powered by kdb+**

Kx for FX Analytics customers can leverage the power of kdb+ to gain deep insight into their FX business. The solution captures all of your market and transaction data from disparate, industry-wide platforms, including internalized data, typically capturing billions of records per day, to provide actionable business intelligence enabling you to optimize liquidity, order execution, and profitability across your business. The kdb+ database technology underlying Kx for FX Analytics is widely used to power data capture and analytics platforms for the world's top banks, brokers, and ECN's.

Kx for FX Analytics provides a completely customizable out-of-the-box analytics suite that eliminates the time and expense of building it in-house. It enables clients to standardize, industrialize and distribute analytical tools across the organization to support critical business insights and drive profitability. Pre-built analytics for profitability analysis, best execution or TCA can be deployed faster and cheaper than the typical effort and expense of custom or in-house development.



**Performance** – Kx's leading database technology, kdb+, has been widely used by global financial institutions for over two decades and has consistently outperformed all other technologies in the capture and processing of large volumes of data.

**Flexibility** – Both the underlying analytics and the accompanying visualizations are highly customizable. The kdb+ programming language, q, is extremely concise and comes with hundreds of built-in statistical functions. Operations such as temporal joins (e.g. market snapshot at time of trade) become trivial and can be achieved in a single line of code.

**Simplicity** – Kx for FX Analytics solution can be hosted by Kx or deployed in your environment. With either option, the implementation will not intrude on the operation of any existing software. The system can be configured to consume data from your platform(s) using a variety of protocols and formats. A robust feedhandler layer makes integration easier and reduces time to market.

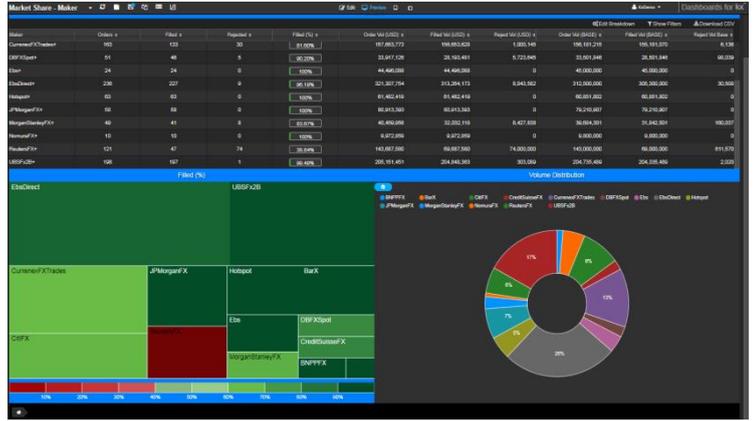
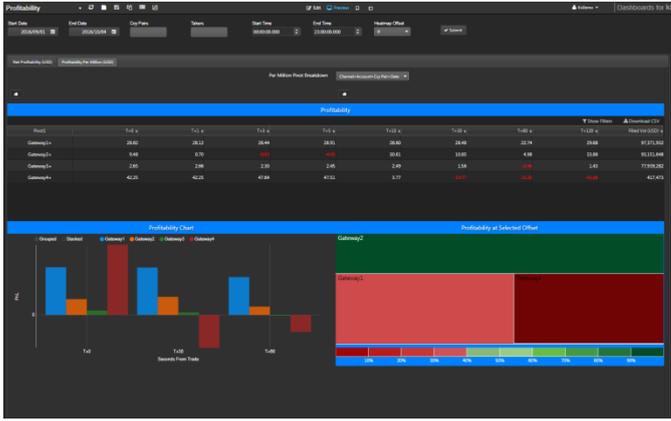
## At a Glance



Pre & Post Trade FX analytics run across huge data sets powered by the market leading time-series database technology, kdb+

## The Kx Advantage

- The world's fastest time-series database technology, kdb+, provides unparalleled performance for capturing and processing large volumes of data in real time
- Support for real-time, streaming, and historical analytics using one technology
- Feature-rich, customizable HTML5 dashboards for visualization
- Alert engine leverages the built-in CEP (complex event processing) engine to trigger custom alerts in real-time
- Report scheduler for automated reporting in various formats
- Integration with multiple platforms, bringing all data into a centralized environment
- Easy integration with third-party technologies such as Python, R, Matlab, etc.
- Standardized reports including MIFID II - RTS 27-28



## Liquidity

Profile how liquidity providers are performing in terms of pricing, market impact, fill rates, and response time (last look). Drill down to view by currency pair, by client, by time, etc.

## Execution

With real-time reporting on trade executions and profitability, Kx for FX Analytics allows you to best manage trade flow and can be set to alert on aggressive trading behavior.

## TCA and Reporting

Perform transaction cost and best execution analysis for your clients and for your desk. In addition to viewing on interactive dashboards, schedule reports such as RTS 27-28 in your chosen format (e.g. PDF, Excel).

## About Kx

Kx has been the software leader for complex analytics on massive-scale streaming data for over two decades. The Kx technology is an established and trusted standard for trading, surveillance and research in financial services. Kx has emerged as the elegant, integrated solution to the analytic needs of the Pharma, Retail, Utilities and High Tech Manufacturing industries scaling effortlessly to the data challenges of the Internet of Things.

Kx is a division of First Derivatives plc. Listed on the London Stock Exchange [FDP:LN] First Derivatives is a specialist software and consulting organization with a uninterrupted track record of customer success and profitable growth since it was listed in 2002.

## Scenario Analysis

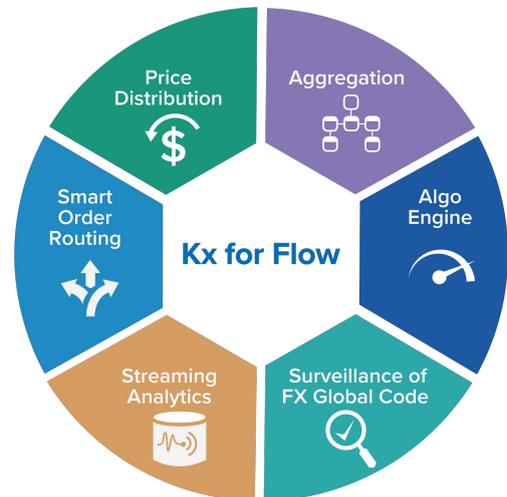
Perform pre-trade "what-if" analysis to determine the impact of various scenarios (e.g. removing a liquidity provider, adjusting algo execution parameters) on your trade executions.

## Visualization

With our HTML5 dashboards, Kx for FX Analytics combines access to all your market data, delivered by the world's fastest time-series database, and elegantly displays the information via a highly intuitive and customizable UI.

## Integration

Kx for FX Analytics enables clients to ingest data from multiple sources to create a single market analytics repository. From this consolidated source, you can derive all of your market intelligence and regulatory compliance reports.



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