



it's about time

# Kx for Oil & Gas

## Fueling your digital journey with advanced and predictive analytics

The convergence of big data, analytics and intelligent systems within Oil & Gas is paving the way for new, emerging solutions that drive data and predictive analytics into the edge, the data center, and the Cloud. Companies are continuing to pursue digital transformation journeys in pursuit of growth, productivity and efficiency across their operations.

The continued adoption of IIoT devices equipped with sophisticated sensors across the Oil and Gas infrastructure is generating vast amounts of data across a variety of types - sensor data from upstream, midstream, and downstream operations, geological and geophysical, drilling, weather, geolocation, about the device, service, vibration, motion, and output quality.

Rich real-time analysis of this data presents significant opportunity for optimizing business operations, asset management and predictive maintenance.



## Delivering the Digital Oilfield

To fully implement the Digital Oilfield with embedded analytics, the Oil and Gas industry must overcome limitations in today's infrastructure and systems. Next generation, real time analytic platforms require fresh thinking on how data processing, acquisition infrastructure and analytics platforms are deployed and optimized. This is where Kx comes into play.

Contact us at [sales@kx.com](mailto:sales@kx.com) to find out how we can help you on your digital journey.

## At a Glance



Kx for Oil & Gas is an integrated analytics solution that enables O&G companies to do the things they already do, but faster and with enhanced flexibility to extract full value and insights from their "digitalized" industrial and corporate assets.

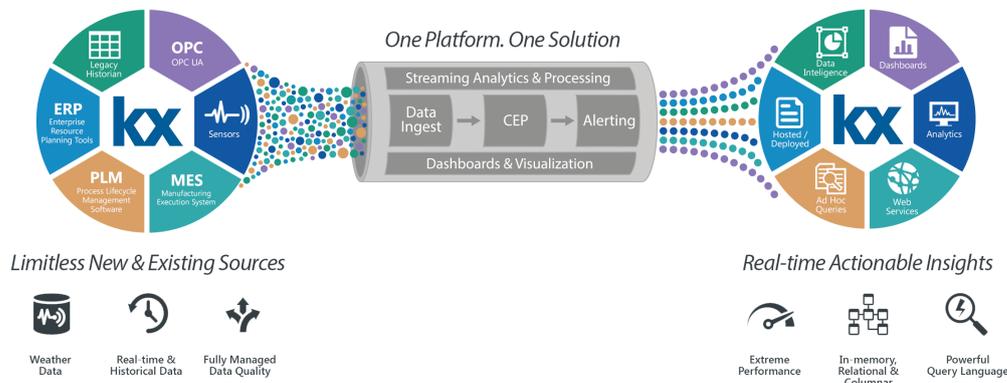
## The Kx Advantage

- One platform for data processing, storage and analytics
- Augment existing systems to support massive increases in sensor data
- Stream processing platform with in-built Complex Event Processing
- Deploy on premises or in the cloud, across multiple storage technologies
- Rich customizable visualization through integrated dashboards enabling self-service
- Extremely efficient and optimized with a low TCO - fewer demands on hardware and energy consumption

## Use Cases

- Historians
- Sensor data processing, analysis and management
- Fault and anomaly detection and prediction
- Settlement and reconciliation
- Data marts and data access
- Surveillance and monitoring
- Trading and risk management

## Kx for Oil & Gas



### Analytics

Kx can capture, analyze and store high frequency time-series data from thousands of sensors to compare with historical data for fault detection to improve production cycle time and production yield.

It can support any sensor measurement, measurement frequency, tags and attributes, with nanosecond precision and time-based aggregations.

Assess the performance of rigs, plants and machines in real-time and enable statistical process control and performance management systems.

### Interoperability

Use Kx to integrate with legacy systems and multiple data sources, enabling you to augment or replace existing historians and manufacturing execution systems. Transition from your current historian to the world's fastest; overcome current latency, volume and velocity issues with the sheer power of Kx.

### Visualization

Our out-of-the-box Dashboards product provides feature rich visualization and control tools including powerful OLAP drill-down features and query builders. Dashboards can be effortlessly customized and extended for specific testing, monitoring and research requirements. Dashboards can be shared across user groups or entitled to individual users.

### 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.

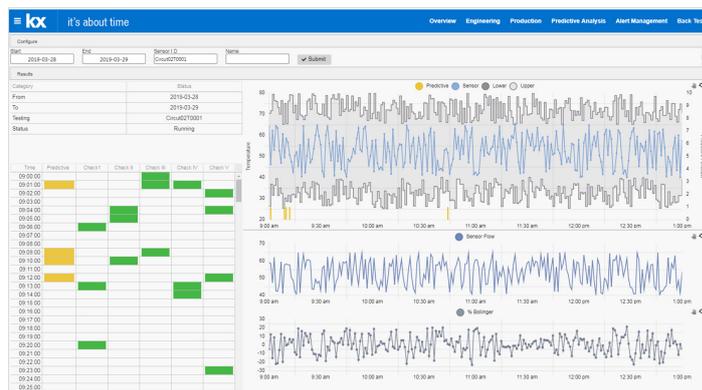
### Asset Health Maintenance

Improves awareness of production facilities and assets, networks and services by analyzing, correlating and visualizing data from devices, sensors and events in real time, generating alerts and triggering business process actions.

### Edge

Perform analytics at the edge - directly at tool level where Kx's small footprint enables Complex Event Processing (CEP) on all tools with sub-millisecond latencies.

Data can then be forwarded securely to a centralized location for consolidated analysis and situational awareness.



### Kx in Action

#### Visualize and Explore Data

- Kx Dashboards
- Kx Analyst

#### Industry Solutions

- Finance
- Manufacturing
- Utilities
- Automotive
- Telecommunications
- Gaming
- Space
- Retail

#### Control, Deploy & Monitor

- Control for Kx
- Stream for Kx
- Kx for Monitoring

#### Head Office

3 Canal Quay,  
Newry,  
BT35 6BP  
N. Ireland  
+44 (0)283 025 2242

#### London

Cannon Green Building,  
27 Bush Lane,  
London EC4R 0AN  
United Kingdom  
+44 (0)207 337 1210

#### New York

45 Broadway,  
NY 10006  
USA  
+1 (212) 447-6700

#### Singapore

One Raffles Quay,  
North Tower #30-03,  
Singapore  
048583  
+65 6592 1960

#### Sydney

22 Pitt Street,  
NSW 2000  
Australia  
+61 (02) 9236 5700

#### Toronto

31 Lakeshore Road  
East, Suite 201,  
Mississauga, On,  
L5G 4V5  
Canada  
+1-289-329-0636

#### Tokyo

Sanno Park Tower,  
2-11-1 Nagata-cho,  
Chiyoda-ku,  
100-6162  
Japan  
+81 (0)36 205 3494