

KIRA Use Cases

The Converged Elastic, High-Performance **Analytics Platform** that changes the way to extract value from your data

Financial

Gain
breakthrough

Enable near-real-time

Run complex
workloads

The financial services industry is experiencing a wave of innovation enabled by big and fast data at a time of unprecedented regulatory pressure, margin compression and fraud and security-related challenges.

This translates into the need to create both offensive and defensive business strategies enabled by advanced technology:

- **On the offensive side**, big data can improve customer segmentation and service; fast data can also improve real-time risk analytics and high-frequency trading.
- **On the defensive side**, streaming data can revolutionize the accuracy and responsiveness of firms to cybersecurity issues like anti-money laundering (AML), fraud or trader surveillance, reducing false positives and improving reaction to new attack methods.

The A3Cube's supercomputer platform can drastically improve anomaly detection to increase the quality of response to fraud while enabling steep improvements in compliance department productivity. The same technology can also be used to significantly improve quantitative model creation and back testing, to ultimately increase confidence in trading strategy returns.

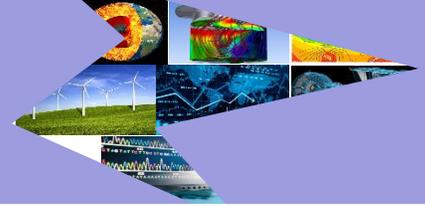
As the financial services marketplace grows more complex and competitive, companies need to generate higher returns while keeping the same risk profile. The firms that win will be those that can act quickly enough to make the best decisions in the right timeframes.

For example, in the area of risk management, firms are looking to move their highly parallel value at risk (VAR) workloads to more real-time execution via platforms like Spark™, but this requires high bandwidth, high throughput, concurrency and any-to-any communications with an underlying high performance computing capability.



(*) Different configurations to fit your needs





Key Capabilities for Financial Services Firms

A3Cube brings standard Hadoop/Spark tools and unique integrated appliances with dense compute and memory and a versatile parallel file system.

Gain breakthrough insights by combining multiple big data workloads from Hadoop and Spark for massive, variable data and iterative demands to complex graph analytics for hard-to-find patterns into a single workflow, avoiding data movement.

Run complex workloads like Comprehensive Capital Analysis and Review (**CCAR**) stress testing and quantitative analytics (e.g., algorithmic trading, portfolio/position risk assessment or complex asset valuation) on one unified platform rather than siloes of inefficient machines.

Enable near-real-time analytics/discovery in areas like pattern matching, market sentiment analysis, credit valuation adjustment (**CVA**) or counterparty risk.

KIRA ensures your analytics infrastructure is built on an open framework, with standard software and integrated design, that reduces complexity and resource requirements and can evolve as new analytics technologies and regulations emerge.

KIRA Family systems provide an elastic analytics platform with an unprecedented combination of versatility and speed to tackle your most complex business challenges. It fuses the power of supercomputing with an open, enterprise-standard framework for breakthrough insight, blazing-fast results and business agility.

Benefits for Financial Services Firms

Stronger cybersecurity, fraud detection and surveillance

The A3Cube's supercomputer system enables analysts to find anomalous activity with greater speed and generate fewer false positives than traditional rules-based systems.

Reduced latency/faster model development

The A3Cube's supercomputer platform delivers massive speed benefits.

For example, traders can see how the factors at play (currency value, value of other stocks, **S&P** benchmarks, etc.) compare to historical trends and determine the relationships between various transactions to accurately forecast a stock's value or identify undervalued equities.

The A3Cube's supercomputer system can significantly reduce latency of **CVA**, counterparty risk, pattern matching and other factors.

Improved accuracy

Firms can create smarter algorithmic trading strategies, executing deeper testing of complex models to improve the degree of confidence in strategy performance.

With the A3Cube's supercomputer platform, firms can easily adapt to changing data sources, business questions and analytical approaches and be prepared for future demands such as Basel IV.

