TIBCO Spotfire in Energy Trading

CHALLENGES IN ENERGY TRADING

Energy trading has changed significantly in the past decade driven by global financial forces, dynamic global demand and an increasingly stringent regulatory environment. Sophisticated trading strategies such as the use of derivatives, forwards, futures and options has added to the complexity. The result is a fiercely competitive and volatile business environment with diverse products, complex financial instruments and a multitude of locations and exchanges.

In this environment, energy trading companies need to proactively monitor, capture, and analyze proprietary and market data to properly hedge their portfolios, identify and take advantage of market opportunities, identify threats and mitigate risks, all while ensuring operations are within regulatory boundaries.

WHY SPOTFIRE?

TIBCO Spotfire® helps energy trading organizations to uncover valuable insights in large volumes of data, frequently comprised of multiple data types: structured and unstructured, historic and real-time. These insights can dramatically impact the bottom line as well as provide an early warning system for risk and regulatory threats.

Spotfire enables end users to analyze the data they want in the time frame they require. They can perform pure ad-hoc analytics driven on-the-fly by their own knowledge, intuition and desire to answer the next question.
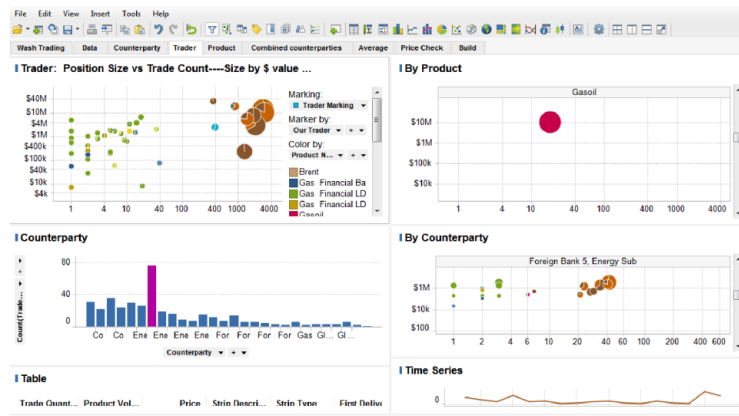

Figure 1. Analysis showing position size versus trade count with drill down to product type and counterparty

Spotfire does this by letting users interactively query, visualize, aggregate, filter and drill into datasets of virtually any size. Users develop insight faster and bring clarity to business issues or opportunities in a way that gets all the traders, managers and finance decision-makers on the same page quickly. For companies trading in multiple commodities Spotfire can be deployed as a single analytics platform that brings a consolidated view of risks and positions, compliance and results.
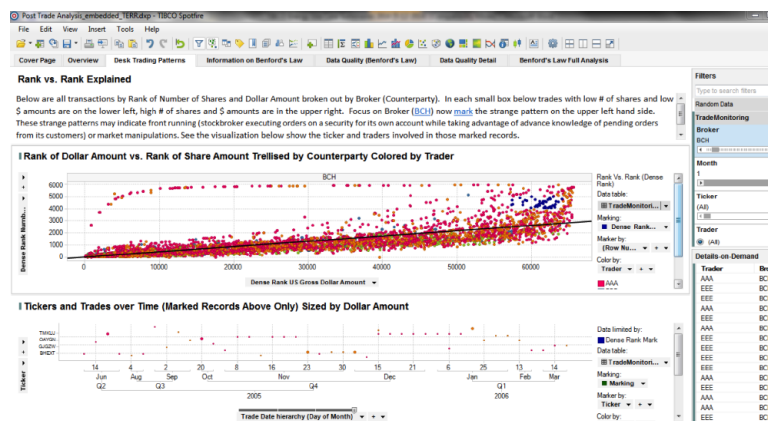
Figure 2. Post trade analysis.

Spotfire also supports predictive and event-driven analytics, all from the same enterprise-ready platform, enabling users to perform "what if" forecasting and see trends in real-time streaming data as it moves through the trading process. The analysis and reports created can be quickly and securely shared across multiple functions and groups.

- **Pre-Trade and Post-Trade –** Spotfire enables traders to use data from multiple sources to create visually rich, interactive and dynamic analysis that helps them develop better trading strategies. Traders can perform scenario analysis and backtest and visualize the results of potential trading strategies.

- **Risk –** Spotfire brings greater clarity to complex risk data to provide better understanding of the risk profile and better management and control of risk. The ability to mashup market fundamentals (weather, production estimates, sales volumes etc.) can provide a fuller picture of risk and potential price movements.

- **P&L Attribution –** Spotfire provides the flexibility, aggregation and drill-down capability to more easily and thoroughly analyze P&L results to spot trends and outliers in profitability by product, region, trader and other key variables.

- **Transaction Monitoring and Compliance –** Spotfire helps analyze and explore transaction and trade amendments - all the activity of a trading desk - to assure compliance with internal and external requirements, and help discern potential rogue trading. Spotfire analytics will highlight unusual trading patterns and behaviors before they affect the P&L, unwanted tax exposure and the attention of regulators. The monitoring of streamlining transactions against expected patterns allows for the real-time creation of analytics to provide an early warning system for risk managers. Combined with the active prediction of future outcomes, Spotfire can help foster proactive management of any projected threats to regulatory breaches and potential defaults.

BEYOND ENERGY TRADING

Spotfire is used extensively in the upstream and downstream energy industry in areas as diverse as production optimization, well surveillance, machine maintenance and reliability, and health and safety analytics. TIBCO Spotfire helps users of all kinds improve decision-making and use analytics to generate and share critical business insight.