

Petrochemical Price Forecasting

Objective

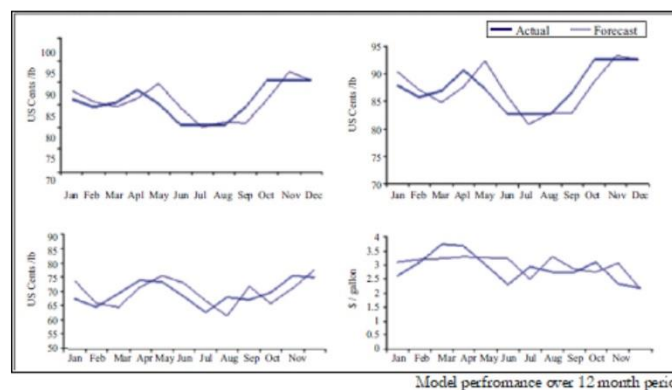
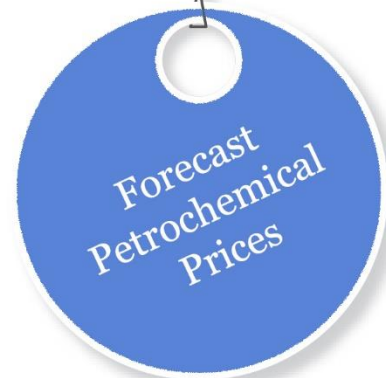
Developed advanced forecasting models for petrochemical prices to enable well-informed planning decisions and hedging against price volatility in a largely unregulated market for industry business intelligence publication arm of one of the world's leading media publishing houses.

Approach

A long series of industry investigation and analysis and interviews with experts and other price forecasters informed the experimentation process. Experiments were undertaken with a large number of statistical modeling techniques to form the basis of the forecasting models. In order to maximize both short-term (1 month) forecasting accuracy and to develop a reliable view of long-term (10-12 months trends), a rigorous testing methodology was developed. In addition to the advanced models drawn from financial market practices, an experimental Market Sentiment Index was developed to attempt an increase in accuracy of predicting changes in direction of price evolution.

Solution

A combination of sophisticated univariate and multivariate forecasting models formed the basis for publishing future prices and for editorial commentary in the published reports.



Benefits

Exceptionally accurate forecasts (greater than 95%) were generated for all products along with a price driver based understanding of price movements.