

# Fuel Price Planning and Optimization:

How analytics can optimize fuel pricing and support strategic decision making

## > Business impact

Fuel Price Planning and Optimization “provides us the ability to watch what’s going on in the marketplace and adjust more quickly and have far more accurate information. We are really pleased with the system and what it delivered.”

Store chain CEO

It’s a big step – buying a new fuel-pricing solution or replacing an existing one. But wouldn’t it be an easier decision knowing that with the right solution you can make on-the-spot price changes based on accurate predictions of the best pricing?

We know customer response to your pricing varies by store, day of week, time of day, fuel grade and season. That makes it difficult to consistently make the right choice for the right location.

And you have other challenges:

- **Managing dozens, hundreds or thousands of locations.** Every location responds to pricing differently. Optimizing your pricing is nearly impossible without powerful, user-friendly tools.
- **Poor predictive capabilities.** Without the ability to predict the results, determining the most profitable pricing strategy limits managers to trial and error instead of what-if analysis of strategic alternatives.
- **Responding swiftly to market conditions.** Reacting quickly to cost changes, competition and consumer behavior is difficult without automation and powerful number-crunching.
- **Volume vs. profit tradeoffs.** Raising prices improves profit per gallon, but it also reduces the number of gallons sold. The effect this has on volume varies by location, day of week and more.

## Set Prices That Will Help You Reach Your Profit and Volume Goals.

Fuel costs change daily. Competitors change prices even more frequently. Traffic patterns differ by day of week and by season at each location. Weather, holidays and other conditions can be factors.

Adding to the complexity are competing goals of market share, earnings, supplier minimums and in-store sales. Managing fuel prices in this complex environment is difficult for every retail fuel seller.

Fuel efficiency ratings are improving, reducing demand and shrinking earnings, which places a greater focus on managing market share. In response, creative managers must better understand local market dynamics. But understanding local demand patterns and competitive influences in hundreds or thousands of locations is a challenge with conventional tools and processes.

## Our Approach

You need a solution that enables strategic planning at the corporate level and optimizes price-setting at the local level. SAS and its partner, First Analytics, approach the problem by providing software and services to help you:

- **Plan your pricing strategy options** and quantify their expected impacts so that you can review them before making final decisions.
- **Anticipate competitors’ responses** to changing fuel costs to predict their price changes and mitigate risk by predicting the impact of future events and causal influences, such as holidays.
- **Account for specific goals and constraints**, such as supplier volume incentives or specific local market objectives.
- **Use powerful optimization engines** to work out the details of maximizing profitability by allocating volume and profitability goals to stores according to location-specific market behavior patterns.

- **Interface directly with enterprise systems and fuel systems** to access data and operationalize pricing recommendations.
- **Enable intraday price changes** to capitalize on rapidly changing market conditions.

Our solution, Fuel Pricing Planning and Optimization, not only provides the best price-setting recommendations but also facilitates strategic planning and decision making. It uses an efficient, user-friendly interface and workflow with the core strengths of SAS® Analytics. This allows you to maximize profitability by intelligently setting price at the store location level by fuel grade multiple times daily.

## The SAS and First Analytics Difference: See How Sales And Profit Will Be Affected Before Making Pricing Changes

With our solution, you can better anticipate the effects of policy or market changes and quickly react to competitive pricing pressures and maximize profitability without compromising valuable market share. We enable you to:

- **Determine the impact of the pricing strategies before executing them.** The system provides detailed forecasts of profit and gallons sold based on your pricing strategies. You will know in advance if your goals and objectives are feasible in current market conditions.
- **Expend less effort on managing pricing.** And you'll improve pricing accuracy by analyzing more data in less time instead of creating detailed store-by-store inputs or spending time trying to segment stores.
- **Account for more factors that affect your business.** Our competitors rely solely on retail prices for their projections and often don't use statistical forecasting at all. Our solution considers prices, costs, day-of-week effects, holidays, weather and other factors to produce its forecasts.
- **Optimize prices based on analytics, not trial and error.** We use the most powerful computation methods for optimization available today.
- **Achieve the minimum volume agreed to for a particular fuel supplier, a particular market and the company as a whole.** Just list the stores that apply in each situation, set a volume target and the system will automatically account for that objective when setting prices.

Are you missing your volume (or profit) goal? Where and when should you change prices to generate more volume? Only our solution can automatically adjust store-level volume goals and prices to find the best solution for your objectives. One more thing: Other systems will not tell you when you have set unobtainable goals. Ours will.

## Case Study: A Large Convenience Store Chain

### Situation

Under increased pressure to improve profitability of its fuel sales and facing soft nationwide demand, a US convenience store chain that operates in more than 1,500 locations wanted to improve profitability without reducing traffic and market share. After several attempts to tune the performance of its existing system, the organization realized it needed capabilities it did not have.

### Solution

Using the forward-looking, scenario-based tools of the Fuel Price Planning and Optimization solution, the chain was able to:

- Assess the enterprise-level effects of strategic pricing alternatives.
- Set prices with optimized recommendations at the store level, by fuel grade, daily or even multiple times per day.
- Collect data reflecting market dynamics and maximize the value of that data to optimize gallons sold and profit per gallon.

### Results

A pre-launch simulation of the system benefits had predicted a quick payback, high ROI and significant bottom line results. After piloting the system in 200 locations, the company's top management confirmed to Wall Street analysts that it was pleased with the results and asked the project team to significantly accelerate the rollout schedule. Since then, the chain has expanded the solution to all of its stores and continues to report profitable results and make favorable comments to the financial press.

### About SAS

Through innovative solutions, SAS helps customers at more than 65,000 sites improve performance and deliver value by making better decisions faster. SAS offers more than 35 years of data mining, predictive analytics and forecasting expertise.

### About First Analytics

First Analytics specializes in the practical application of statistical analysis, predictive modeling and optimization methods to critical business decisions. First Analytics knows retail firsthand. Our team members have held executive and management positions within Fortune 500 retailers in operations, IT, demand planning and marketing.