



CASE STUDY

Bridgestone Improves Forecast Accuracy by 10% and Reduces Stock Outs with Collaborative Solution



**“Best-in-class companies have realized the need to increase the extent of collaboration in the demand network to improve sales revenue.”**

- Nari Viswanathan, Aberdeen Group, November 2009



**Tire manufacturer relies on aspenONE® Supply Chain — including Aspen Collaborative Demand Manager — to increase accuracy and improve order fill rate by integrating market intelligence into the forecasting process.**

Bridgestone is a global tire manufacturer (US\$34B) headquartered in Tokyo, Japan, with manufacturing facilities on six continents. Bridgestone Americas is the company’s largest subsidiary and is headquartered in Nashville, Tennessee. They have 55 production facilities and more than 2,300 retail stores.

Bridgestone Americas has used aspenONE Supply Chain solutions since the early 1990s. Their in-house team develops, manages, and maintains supply chain models for demand management, planning, and scheduling for several business units. Because they are a make-to-stock business, their forecast drives downstream functions such as planning and scheduling, making forecast accuracy critically important.

**CUSTOMER PROFILE - Bridgestone Americas - Tire Manufacturer**

**CHALLENGE**

Inaccurate forecasts and a lack of integration between customer data and the demand management process

**SOLUTION**

Aspen Collaborative Demand Manager creates a single unified statement of demand between manufacturer and retailer.

**BENEFITS**

- Increase forecast accuracy by 10 percent
- Improve customer service levels
- Reduce stock outs of critical products
- Improve supply chain control and efficiency

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By incorporating collaborative forecasting into their existing demand management process, Bridgestone was able to improve forecast accuracy by 10 percent. Given this level of success, Bridgestone is poised to roll out collaborative forecasting to the remainder of their North American tire division.

### THE RIPPLE EFFECT OF POOR FORECASTING

Bridgestone Americas' main problem was poor statistical forecast accuracy. There was too much variation or "noise" in the statistically generated forecast, largely due to forecasting at the wrong level of detail. Although they had an existing demand management process, they had no way to integrate customer data into their forecast.

Because Bridgestone operates in a make-to-stock environment—where production plans are based on historical demand information and sales forecasts as opposed to actual customer orders—the forecast drives all other supply chain planning activities. Without an accurate forecast, Bridgestone Americas was unable to create an optimized supply plan or executable schedule.

### A PARTNERSHIP BETWEEN MANUFACTURER AND RETAILER

Bridgestone Americas needed to create a single unified statement of demand with input from its retailers. To do this, they incorporated the collaborative forecasting piece of Aspen Collaborative Demand Manager into the existing demand management process. Many of their retailers have more accurate forecast data and are now able to provide it to Bridgestone for inclusion in a common demand plan. Establishing this partnership with retailers improves Bridgestone's overall supply chain control and efficiency and gives early warning of large demand changes.

This added visibility allows them to:

- Quickly adjust production
- Perform capacity and inventory checks
- Avoid stock outs
- Improve delivery performance

### COLLABORATIVE FORECASTING IMPROVES THE EXISTING PROCESS

Bridgestone Americas was able to increase forecast accuracy by 10 percent by taking steps to integrate market intelligence into the forecasting process. In addition, they gained greater control and efficiency in their supply chain, leading to an improved order fill rate and reduced stock outs of critical products while maximizing inventory efficiency.

In addition to these measurable benefits, Bridgestone also improved communication with their retailers and was able to save significant time in their demand management process through the elimination of manual work. Having all information in a single, easy-to-access location and the ability to quickly compare forecasts enables them to provide better feasibility to retailers regarding supply issues.

AspenTech is a leading supplier of software that optimizes process manufacturing — for energy, chemicals, engineering and construction, and other industries that manufacture and produce products from a chemical process. With integrated aspenONE® solutions, process manufacturers can implement best practices for optimizing their engineering, manufacturing, and supply chain operations. As a result, AspenTech customers are better able to increase capacity, improve margins, reduce costs, and become more energy efficient. To see how the world's leading process manufacturers rely on AspenTech to achieve their operational excellence goals, visit [www.aspentech.com](http://www.aspentech.com).

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