

Insights gained through analytics can assist in breaking down silos in the supply chain to better manage the entire ecosystem, and can help deliver millions in cost savings.

Analytics Enabled

Getting value from every link

Even in many organizations with mature sourcing and procurement (S&P) functions, changes in one or more parts of the increasingly-complex supply chain ecosystem can have a ripple effect throughout the company—and significant economic consequences.

The supply chain is generally highly susceptible to external pressures such as rising commodity prices, raw material shortages, supplier manufacturing limitations, supplier consolidation, and obscured value chains. These pressures can create a constant push-pull effect, often generating inefficiencies and value erosion. Internal issues, ranging from a lack of operational integration to poor communication and collaboration among functional areas, can drive costs up.

These sticking points can prompt painful cost pressures and containment issues—upstream and downstream—that could negatively impact margins and customer satisfaction. In response, a growing number of manufacturers are applying analytics to continually evaluate their supply chains with an increasing degree of accuracy. Integrated analytics across supply chain disciplines and functions can help companies not only identify weak links in the supply chain, but also achieve improved visibility and collaboration across the enterprise.

Pinpointing opportunities and causal factors

The challenge for one leading beverage producer involved sustained cost increases for primary packaging used in many of its product lines, a problem made worse by difficulties in communication and collaboration across siloed processes.

While the S&P organization understood that many of these underlying causes for increasing cost pressures were upstream in the supply chain, the company had been unable to identify the appropriate corrective action. Without a unified, holistic view of the supply chain, the company's product and supplier value chain would remain vulnerable.

The company looked to team with Deloitte for addressing its immediate challenges and growing the organization's own analytics capabilities. The goal? To better serve constituents across all functions and supply chain disciplines, and to reduce the risk of future issues. The company decided to apply analytics to its operational and cost reduction challenges in an effort to improve transparency and better evaluate the impact of decisions across the supply chain.

Mining and modeling

Using exploratory analytics techniques designed to uncover the most fundamental problem areas, the company was able to take the first step in uncovering actionable opportunities that could deliver results in the near-term. This involved the use of both visual and advanced quantitative analytics.

The company relied on Deloitte's Analytics Answers[™] approach to thoroughly identify, dissect, and address the company's supply and value chain issues.

Impact of analytics insights

- Millions in actionable annual savings
- Efficiency gains across the supply chain ecosystem
- Improved collaboration and decision-making



Analytics play an important role in providing tools, skills, and capabilities to pinpoint places and decisions in and across the supply chain that can have the greatest impact, and multiply the benefits internally, as well as externally.

The findings from the exploratory analytics methods revealed deeper issues that required further investigation and analysis. Thorough, advanced optimization algorithms enabled the company to evaluate 1,800+ variables and meet and control 750+ constraints designed to uncover issues at their core—with confidence in the actions needed to capture value.

Domain specialization and advanced analytics capabilities enabled the company to integrate supply chain processes across disciplines and constituents. These included multi-dimensional modeling techniques that drew on data collected from supplier manufacturing locations, client production locations, product specifications, inventory, and other key production-related factors.

Saving millions

For this company, the two-pronged approach reaped immediate and long-term benefits.

Performed over six weeks, the company's exploratory analytics effort uncovered a number of opportunities that could be addressed immediately, generating \$5.2 million in actionable benefits.

The more complex business issues uncovered through "deeper-dive" methodologies involved additional detailed analysis across multiple supply chain disciplines. Using this additional data, the company's decision makers were able to determine the most appropriate supply chain model for each machine and facility in the supply chain ecosystem.

This led to collaboration throughout both the company's supply base and internal functions that resulted in an understanding of design, manufacturing, transportation, inventory, and sourcing decisions—with another \$13 million in actionable annual savings.

As a result of the project, the company is now poised to sustain benefits and operational improvements.

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S&P is the natural intersection for all of these internal and external supply chain processes; a holistic approach means that if you drive efficiencies in one area, those efficiencies can replicate across the supply chain.

