A forward-looking supply chain using demand forecasting

Tomorrow’s demands, forecasted today
Forecasting demand has never been easy, especially when it comes to businesses like restaurants, hospitals and universities. During the height of the COVID-19 pandemic, it became even more challenging as entire supply chains came to a screeching halt.

But where some see challenges, others see opportunities. A leader in the marketing and distribution of food products saw a chance to reimagine its supply chain. Like most companies, the organization had been leveraging historical data to forecast demand.

However, it had become clear that trying to predict the future based on the past wasn’t the most effective method. A new approach to demand forecasting, and supply chain management more broadly, had become necessary in the wake of COVID-19.

And so, the company asked itself, “How can we leverage new data and modeling techniques to inform demand sensing and be better prepared for future disruptions?” The answer came in the form of a partnership with Accenture.

Accenture introduced the idea that by combining Unified Demand Sensing, the company could develop a supply chain that not only anticipates but pivots around the future. By bringing internal data together with new external data that had emerged during the pandemic, the company could gain the visibility and flexibility needed to outmaneuver any disruption to its supply chain.

What’s more, the company would be able to scale this new solution across all of its operational sites to better inform inventory position and supply-side dynamics. This would not only future-proof the company’s operations but would also give it an edge over competitors.
Stepping towards the future

*Given the immediate need for change, the project was laid out in multiple phases.*

In the first phase, Accenture proposed a five-week engagement to prove the value of Unified Demand Sensing by focusing on analytics and insights. Accenture explored and combined internal data (like sales and inventory) and external data (like weather and restaurant reservations) an AI-driven solution that could easily forecast and improve demand sensing. This quickly showed that the potential benefits of Unified Demand Sensing could exceed the $70M mark through a reduced scope for agility involving a single but representative operating site.

In the second phase, supported by Accenture’s Solutions.ai AI for Supply Chain solution, Accenture replicated and expanded Unified Demand Sensing to additional sites while live piloting the solution against the company’s existing supply chain process and system. The expansion and the pilot preparation took an additional five weeks while the pilot itself also lasted five weeks. In the end, the benefits of Unified Demand Sensing spoke for themselves. Savings surpassed the $100M mark through inventory cost reduction and lost sales recovery.

From there, Accenture moved into the third phase: solution design. With a new roadmap taking shape, Accenture provided the company with the specific steps needed to implement Unified Demand Sensing—from design flow to staffing to project timeline and beyond. The new roadmap enabled the company to introduce Unified Demand Sensing into other operating sites and move away from traditional demand forecasting toward a more forward-looking supply chain management process.
Today, the Unified Demand Sensing forecasting model is an AI-powered solution that can inform demand forecasting and better prepare the company for the future.

After piloting Unified Demand Sensing across several sites, the company discovered that it could improve forecast errors by roughly 6-8 points, which in turn leads to $100-$130M in potential benefits through inventory, cost saving and incremental revenue.

In addition to the monetary benefits, Accenture brought operational excellence to the table by introducing AI-enabled exception-based management. In other words, AI can identify the most important tasks and prioritize them. Consider the tens of thousands of stock-keeping units (SKUs) the company faces in each iteration. The new solution enables planners to focus solely on the most critical SKUs, saving time and making the process more robust.

Before the collaboration, the company had been looking to introduce advanced analytics into its supply chain. Working with Accenture, the company got a behind-the-scenes look at how data, science and business can come together to achieve substantial, speedy results. It’s a classic “teach a man to fish” situation, where the company gained the knowledge needed to not only leverage these advanced analytics tools but stand up its own analytics division.

Thanks to the successful implementation of Unified Demand Sensing, the company’s leadership has looked for other areas to innovate, which has led to a culture of continuous learning.

By combining internal and external data and making it available in near real time, Accenture and the company have proven that when it comes to planning for the future, there’s no better place to start than the present.
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