



With Trifacta, PepsiCo Accelerated the Preparation of Retail Partner Sales Data By 90%, to More Accurately and Quickly Forecast Sales

Company Background

PepsiCo products are enjoyed by consumers one billion times a day in more than 200 countries and territories around the world. Headquartered in Purchase, New York, PepsiCo was established in 1965 with the merger of Pepsi-Cola and Frito-Lay. The company has since expanded, acquiring household brands such as Tropicana, Quaker Oats, and Gatorade.

With 271,000 employees and global sites in 30 countries, PepsiCo's mission is to "provide consumers around the world with delicious, affordable, convenient, and complementary foods and beverages."

Data Challenges

PepsiCo's CPFR (Collaboration, Planning, Forecasting, Replenishment) team is the backbone of effective retail sales management. The team is responsible for collaborating with large retailers to supply the right quantities of product for their warehouses and stores. For PepsiCo, it's a delicate balance—supply too much product and they risk wasted resources, supply too little and they lose profit (and must reconcile with unhappy, empty-handed retailers). Not supplying enough product also risks consumers choosing a competitor in lieu of PepsiCo's empty shelf, which has extremely harmful long-term effects. In order to strike the right balance and meet its products' razor-thin margins, PepsiCo must continually refine sales forecasts.

The biggest challenge for PepsiCo was churning out these sales forecasts fast enough for management to steer course on sales. Each new report required the CPFR team's analysts to build a CPFR tool that combined all retailer sales data and PepsiCo supply data, which could take as long as several months. The team primarily worked in Excel and Access and manually transformed and blended the data, which was inefficient and highly susceptible to errors.

It wasn't just an inefficient process, but the large quantities of messy data that made wrangling incredibly painful and time consuming. Each customer provided PepsiCo with reports that included warehouse inventory, store inventory, and point-of-sale inventory, while PepsiCo reconciled incoming data with their own shipment history and the number of products on order. Each customer had their own means of standardizing data which didn't correspond with other customers (let alone PepsiCo's own system). For example, PepsiCo relied on UPC codes to identify each product, while customers created their own internal numbers. PepsiCo analysts knew that their ability to quickly standardize data across all retailers—and speak the same language as their customers—was critical to preparing data faster for their forecasting and planning efforts.

CUSTOMER PROFILE

**Company:**

PepsiCo

Industry:

Food & Beverage

Headquarters:

Purchase, NY

Size:

271,000 employees

URL:

www.pepsico.com

Trifacta Solution:

Trifacta Wrangler Enterprise

“Now, we're not taking our time putting the data together; we're spending our time analyzing the data, telling the story, and finding problems.”

MIKE RIEGLING,

Supply Chain Data Analyst, PepsiCo

“Trifacta learns our patterns, which means as we build these CPFR tools it actually becomes faster because the tool knows what we're trying to accomplish.”

MIKE RIEGLING,

Supply Chain Data Analyst, PepsiCo

Trifacta Solution

PepsiCo sought out a department-wide platform that would allow them to easily productionalize the report creation process and execute visualizations in Tableau for management.

The preparation process had previously required PepsiCo's analysts to download reports off of PepsiCo's servers, run those reports through an Access database, and eventually run them again on PepsiCo's servers. For greater efficiency and scale, PepsiCo decided to implement Hadoop as a landing and staging environment for this variety of data. At the same time, the CPFR team recognized they needed a user-friendly interface that analysts could leverage to access and transform this data. This led to the evaluation and implementation of Trifacta as an analyst-facing application for working with the retail sales data in Hadoop.

Results

With Trifacta, PepsiCo has streamlined its process, dramatically reducing the time spent on data preparation and the overall quality of the prepared data used in analysis. Now the reports run directly on Hadoop (without involving multiple Access and PepsiCo servers), enabling analysts to directly manipulate data using Trifacta and publish the prepared data sets to Tableau for visualization and broader consumption.

With Trifacta, PepsiCo has reduced the end-to-end run time of this analysis by as much as 70%. Now analysts now spend the majority of their time analyzing and telling the right story about sales data instead of manually putting that data together. In addition, the build time for creating these reports has been reduced by as much as 90%. With Trifacta's ability to notice and reproduce patterns, building CPFR tools has become a more efficient and automated process. Each build becomes easier as Trifacta recognizes what analysts need to accomplish.

With the ability to preview transformations, errors and flaws in the data are more easily recognizable. PepsiCo analysts can check each and every step along the way to ensure that their process is sound. If issues arise, they can easily undo transformations and correct mistakes before causing any bigger problems downstream.

The ability to gain insight from customer data faster than ever has not only enhanced PepsiCo's process to offer its customers best-in-class service, but has also given PepsiCo a huge competitive advantage over other CPG businesses. Before the majority of its competitors, PepsiCo can predict trends, adjust sales, and ultimately sell more of the right product to improve their bottom line.

Benefits Using Trifacta

- With the ability to respond to sales trends faster, PepsiCo maximizes its inventory potential and gains a competitive advantage amongst retailers
- PepsiCo can easily identify mistakes, such as duplicate or missing orders, for more accurate inventory planning. In turn, this keeps PepsiCo products on the shelves and keeps consumers from reaching for its competitors
- End-to-end reporting time has been reduced by 70%
- Analytic build time has been reduced by as much as 90%. Whereas CPFR tools had taken up to six months to build, with Trifacta, they only take one day

“Customer data has been so much easier to wrangle, which gives us a competitive edge. We're able to turn customer data around and present it to the rest of our company in a way that everyone can understand, faster than our competitors.”

MIKE RIEGLING,
Supply Chain Data Analyst, PepsiCo

About Trifacta

Trifacta, the global leader in data wrangling software, significantly enhances the value of an enterprise's big data by enabling users to easily transform and enrich raw, complex data into clean and structured formats for analysis. Leveraging decades of innovative work in human-computer interaction, scalable data management and machine learning, Trifacta's unique technology creates a partnership between user and machine, with each side learning from the other and becoming smarter with experience. Trifacta is backed by Accel Partners, Greylock Partners and Ignition Partners.

For Additional Questions, Contact Trifacta:

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844.332.2821

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