

# True Demand: The Difference Between Assuming and Knowing

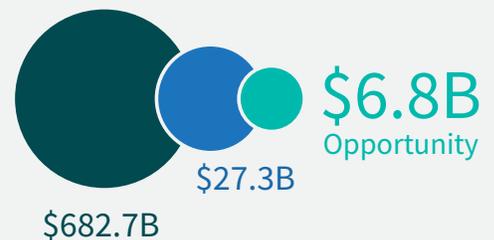
When visibility stops at the distribution center (DC), it can lead to empty shelves and lost sales at the store level. DC demand, or sell-in, is really only a proxy for true demand. The best demand signals come from actual shopper purchases—a specific SKU at an individual store.

Taking a granular approach to understanding inventory and sales is the difference between *thinking* your operations are running efficiently and *knowing* that the specific product variation a shopper wants is available for them to buy when and where they want it.

**Here are three reasons why analytics at the store and SKU level make a real difference that impacts business decisions and results.**

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## The Real Cost of Out-of-Stocks for Supermarket Sales



According to data from Progressive Grocer Magazine, there are 38,571 supermarkets in the United States that exceed \$2M in annual sales, and they do about \$682.7B in total revenue. Past studies have estimated that lost sales are generally equivalent to about 4% of revenue—in this case, that would be \$27.3B. If we can prevent even a fourth of lost sales by decreasing stock-outs, that would amount to an extra \$6.8B in revenue every year, and that's just for grocery stores!



## 1. Averages Hide Issues and Opportunities

When measuring supply chain performance, averages are not your friend. Aggregate metrics (e.g., averages across products and stores) obfuscate the important variation that leads to actionable insights. Assuming a normal distribution, half of your stores, SKUs, or whatever you're measuring are performing below average, and should be the targets of optimization to avoid lost sales. Or if there are just a few severe underperformers bringing down the average, you would want to know which those are too. Different opportunities that exist at the store level due to local consumer preferences, promotions, or other demand drivers do not come through either.

As a basic example, imagine that you're a manufacturer of shampoo, and you sell it at a retailer with 3 stores: Store A, Store B, and Store C. You have 18 bottles in stock at Store A, 25 bottles in stock at Store B, and only 2 bottles in stock at Store C. If you only had a high-level dashboard to look at, you would see you have an average of about 15 bottles per location and think everything is fine. However, this average is very misleading—Store C is nearly out of stock! Your team should be talking to the replenishment manager and buyer for that retailer about how to avoid a stockout at Store C, as well as placing larger future orders to meet the higher consumer demand that you're seeing.

Here's another example:

	FRIDAY	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	AVERAGE IN-STOCK
	85%	99%	98%	100%	100%	100%	100%	97%
	97%	97%	97%	97%	99%	95%	99%	97%
	100%	99%	99%	95%	97%	97%	95%	97%
	100%	100%	95%	95%	95%	95%	100%	97%
	100%	80%	100%	100%	100%	100%	100%	97%
	95%	90%	100%	100%	100%	100%	95%	97%
	100%	99%	97%	97%	97%	97%	95%	97%
	95%	95%	95%	95%	95%	100%	100%	97%

*Real issues exist even when average performance is strong*

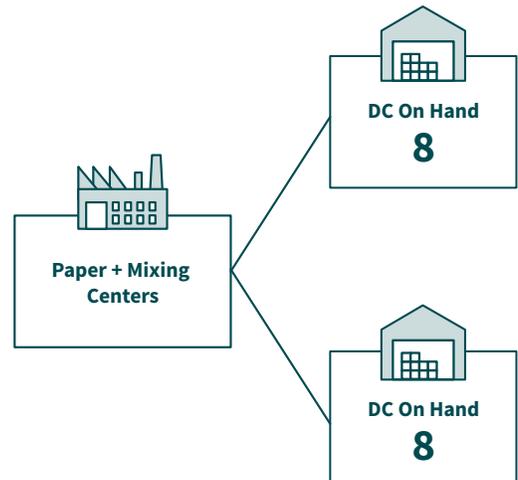
These examples are simple, but the same principle applies to companies selling thousands of SKUs across hundreds of different retailers. When companies rely on averages, they lose the nuance of local insights, and that can easily result in lost revenues because of missed optimization opportunities.

## 2. High-Level Data can be Misleading

If visibility stops at the distribution center level or higher, it can create a false sense of security when it comes to On Shelf Availability. It takes much longer for consumer demand signals to propagate back to the manufacturer, hampering the company's ability to respond in time to current sales trends and opportunities at a local level.

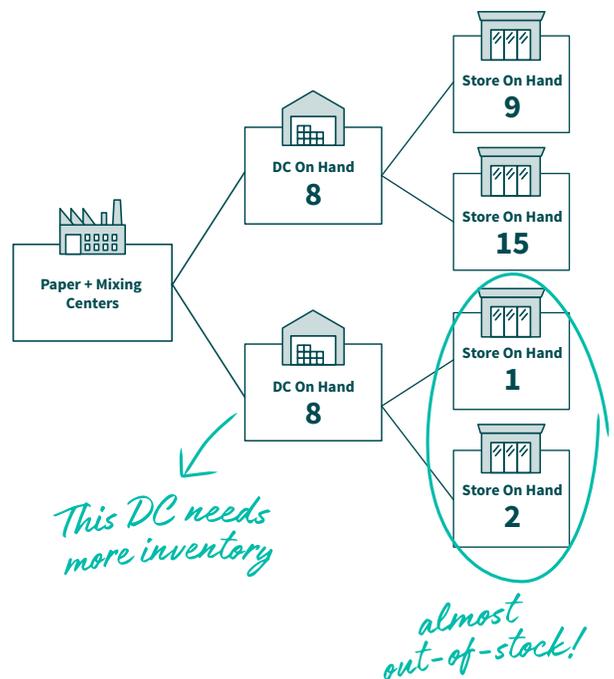
Take this example of two distribution centers: each has 8 available units on hand to supply the stores it services, so it would seem that the DCs are on equal footing when it comes to handling inventory.

Since the number of DCs for each retailer a manufacturer works with is vastly smaller than the total number of stores, it's feasible for the supply chain manager or account manager assigned to that customer to keep an eye on metrics at the DC level. In this case, they would assume the DCs are evenly matched when it comes to dealing with a possible surge in sales—both have 8 additional units for restock.



However, stopping analysis at the DC level is misleading here. In reality, these two DCs are not equally well-prepared to manage inventory: the one on the bottom is about to be in trouble, because inventory levels at the stores it services are dangerously low, and it only has 8 units on hand. While the top DC also only has 8 units, its two stores have more inventory on hand, meaning that a stockout in the near future is unlikely.

It clearly makes sense to keep tabs on inventory levels for every SKU and every store, but that level of granularity is too much for any human to handle if you have more than a few products. That's why automation is a key feature of true demand analysis. With automation for gathering, organizing, cleaning, and analyzing large amounts of detailed data, true demand analysis is an efficient way for teams to make highly-informed decisions and move with agility.



### 3. Effective Root Cause Analysis Requires Access to the Roots

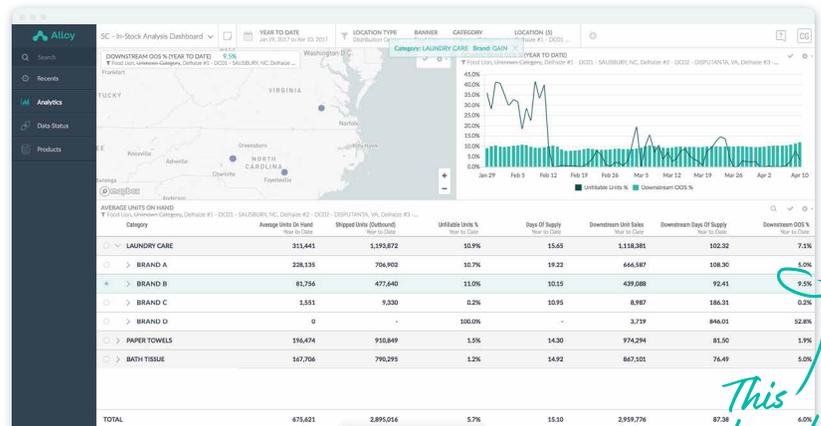
A final proof point for the value of measuring and analyzing true demand is root cause analysis. To use a medical analogy, it's important when problems manifest in your supply chain to treat the core disease, and not just the symptoms. Tracking true demand enables companies to trace problems back to the right source each time, and thereby ensure a complete and effective solution.



In a presentation at the 2018 TPA Supply Chain conference, Procter & Gamble (P&G) Customer Supply Chain Manager Ula Iriarte shared a real-life illustration of this point. P&G sells several brands of laundry detergent, and received a notification from one of their retailers that “laundry detergents,” as a category, were having out-of-stock issues. “Treating the symptom” would have meant simply increasing the order of all laundry detergent brands for that retailer.

However, P&G had experienced prior stock-out issues with a particular top-selling brand, and initially assumed this brand was the likely culprit—after all, it represented a large percentage of overall laundry sales, so a small disruption would have a large effect. With this historical precedent and without easy access to current data, it would be logical to think this brand was the cause of the problem.

But when P&G looked at their current, granular sales data, what they found surprised them: the top-selling brand was not to blame. Another brand, which had a smaller percentage of overall sales, had a very high stock-out rate, which caused it to influence the overall category of “laundry detergents.” Had P&G simply sent more of their top-seller, or more of all their laundry detergent brands, to the retailer, the problem would not have been solved.



*This brand is the surprise culprit!*

## How Alloy Can Help

Consumer goods brands no longer need to rely on demand proxies, averages, or historical precedent to understand sales and supply chain performance. Alloy removes the constraints of manual collection, cleansing, harmonization, and analysis for data down to the store and SKU level, so teams can efficiently use true demand to guide their actions.

In addition to presenting granular sell-through and inventory information in friendly dashboards, Alloy proactively alerts the right people about predicted out-of-stock situations and facilitates a coordinated response. Teams have the information they need to identify the root cause of issues, as well as to address potential problems before they arise and prevent lost sales.

Ready to experience the true demand difference?

Learn more at [www.alloy.ai](http://www.alloy.ai) or share your needs with us at [inquiries@alloy.ai](mailto:inquiries@alloy.ai).