



Fixing the Hidden Layer Holding Back Fresh

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Technology is finally strengthening it for what's next.

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For decades, fresh buying has relied on instinct and spreadsheets. Today, technology can finally match the pace of perishables.

The Grocery Industry's Blind Spot

Fresh buying is the backbone of grocery—the invisible engine that keeps perishables moving from suppliers to shelves. Every display of crisp lettuce or perfectly stocked seafood case reflects hundreds of high-stakes decisions that shape margins, service levels, and customer satisfaction.

Yet, behind that precision lies a daily reality that's anything but seamless. Buyers juggle late trucks, QA holds, fluctuating demand, and scattered data—making judgment calls that ripple downstream into waste, out-of-stocks, and lost profitability.

Despite fresh departments now driving **roughly 42% of total store sales**, most technology still treats them as an afterthought. Tools designed for shelf-stable products can't keep pace with the volatility and perishability of fresh—and so buyers have turned to manual, makeshift methods just to keep up. They stitch together spreadsheets, email threads, and gut instinct to bridge the gaps left by systems that were never built for their world.

For decades, this has been the norm—not because grocers haven't tried to modernize, but because the technology simply wasn't built for fresh.



42% of total store sales comes from fresh departments

yet technology continues to overlook them.

¹ FMI State of Fresh Foods Report

But that's changing.

Developments in AI and connected data platforms are transforming how fresh buyers work, bringing precision, automation, and visibility to one of grocery's most complex, high-impact roles. For the first time, teams can move beyond manual guesswork to operate with real-time confidence and control.

Fixing the Hidden Layer Holding Back Fresh explores how fresh buying got stuck in the past, why modernizing it matters more than ever, and how leading retailers are using fresh-first technology to close the gap—turning buying from a manual grind into a competitive advantage.

In a multi-billion-dollar supply chain, spreadsheets and gut instinct shouldn't be the most advanced tools fresh buyers have.

Inside the Buyer's Desk: A Closer Look at Daily Realities

Every merchandising or supply chain leader knows their DC teams are stretched thin. But until they sit next to a buyer for a full day, it's hard to grasp just how relentless the work really is.



6:45 a.m. — Produce Buyer

Coffee in hand, the buyer opens a flood of overnight vendor emails while updating spreadsheets. A weather alert in California just triggered a potential delay for citrus. A QA hold came through for peaches. And the category manager just added a surprise avocado promotion. Every tab on his computer—forecasts, inventory, orders, vendor notes—is already outdated before he's halfway through it.

9:30 a.m. — Meat Buyer

The morning looks fine until a key supplier calls: a 20% short on tenderloins due to processing limitations. The fresh buyer immediately goes into problem-solving mode, reaching out to alternate vendors to secure enough product before the daily cut window closes. If she can't find a solution within hours, that single shortfall could cascade into hundreds of empty shelves across stores.

Across every buyer's desk, the pattern is the same: hundreds of decisions to make a day, utilizing data scattered across emails, spreadsheets, vendor portals, and disconnected systems.

The constant scramble to make it through their day leaves little room for foresight. Instead, they spend the majority of their time reacting instead of driving strategy, missing opportunities to strengthen vendor partnerships or find new products.

Why Every Tech Wave Overlooked Fresh Buying

Grocers have invested in automation, ERP modernization, and AI initiatives for years. So if fresh buying is so critical, why hasn't it been fixed?

The reasons are systemic—the solutions in the market weren't built to match the reality of perishables.

👁️ Fresh doesn't fit ERP logic

Legacy systems were built for predictability, requiring stable lead times and products with long shelf life. Fresh doesn't play by those rules. Perishability, vendor performance, and growing regions are dynamic, changing daily, often without warning. A two-day delay or a temperature swing can shift everything. Using an ERP system for buying simply can't adjust to that kind of volatility in real time.

Data lives in silos

A buyer's world runs on variables that never talk to each other: store demand, crop conditions, vendor reliability, QA holds, and aging inventory. Without full platform integrations, every decision is made with half the picture.

High risk, zero margin for error

When dealing with perishables, there's no such thing as a soft landing. A bad buy doesn't just tighten margins, it empties shelves or fills dumpsters. Buyers can't afford to make mistakes, which means there is limited to no user adoption of tools that aren't proven to work.

Fresh data is messy

Fresh data is often too fragmented, inconsistent, and incorrect, which prevents the successful implementation of most technology. By the time data is cleaned and consolidated, the conditions on the ground have already changed. Until now, no system has been able to make sense of the chaos, let alone automate decisions on top of it.



For decades, institutional knowledge filled the gap. Veteran buyers knew which vendors to call, how weather patterns would impact demand, and when to hedge a load. As those experts retire, their knowledge also retires with them, leaving younger teams without a safety net or a legacy of expertise.

How to Fix Fresh Buying With Fresh-First Tech

For the first time in grocery, technology is being designed specifically to match the speed and complexity of Fresh Buying. Legacy ERP and traditional forecasting tools were not built for this volatility. Modern platforms must break that mold by using probabilistic modeling and AI agents to automate what was long considered manual-only.

The following principles define the necessary design shift required for grocers to move beyond basic inventory management and use technology to act strategically, with chain-wide precision.

Connect every fresh signal

Fresh performance is driven by variables most systems ignore: vendor fill rates, quality holds, transit time reliability, weather impacts, and item perishability. A modern platform connects these signals into a single live data layer, allowing buyers to see and act on the whole picture.

That means buyers could log in to see not just inventory and forecast, but which suppliers are trending late, which products are aging fastest, and which stores are trending up — all in one screen. Each recommendation, then, clearly outlines its rationale and impact, fostering trust through transparency.

✔ Automate routine, optimize decisions

Fresh buyers navigate an endless stream of variables, so modern technology can automate predictable work and prioritize exceptions. AI agents synthesize live data across the supply chain to identify the highest-impact issues and model recommended actions—such as reallocating product between regions after a heatwave, adjusting orders when yields fall short, or rebalancing the supplier mix to protect margins.

When the path forward is clear, technology should execute automatically. When trade-offs are nuanced, it should engage the buyer with context, recommended actions, and projected outcomes.

✔ Model uncertainty, not certainty

Data shouldn't be treated as absolute. A modern, fresh-buying system is able to model the probabilities of all inputs and outputs, accounting for shifting weather, vendor reliability, and promotional activity to help buyers know when to order tightly and when to hedge.

When a storm threatens a growing region or a trusted supplier proves dependable, the buying decision can adjust in real time, guiding buyers toward the right balance between freshness, service, and margin. This will give them clearer visibility and faster feedback to make the best call.

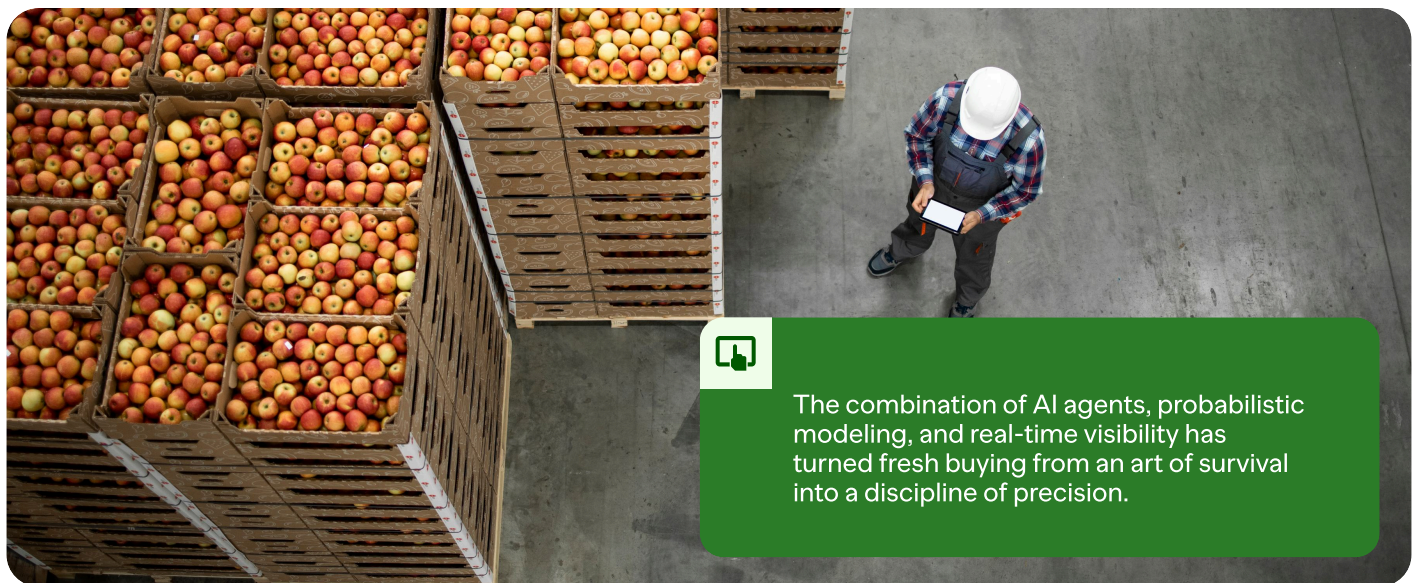
✔ Work at fresh speed

Perishables don't wait for daily batch updates. A fresh-first system recalculates in real-time, allowing buyers to adjust on the fly as conditions shift.

When a truck is delayed or a crop failure hits, the system immediately re-forecasts supply and recommends reallocation.

✔ Bridge the DC and store

The final breakthrough: connecting demand from store to DC into one unified signal. Instead of operating on separate forecasts, buyers and store teams are aligned on the same projected demand, which is updated in real-time. That single demand signal breaks the bullwhip effect, dramatically reducing over-ordering and waste.



When the Buyer Desk Works, the Whole Chain Wins

Fixing the fresh buyer desk doesn't just help buyers—it changes the performance of the entire supply chain. The ripple effects are measurable, immediate, and wide-reaching.



Service levels rise

With better signal visibility, buyers can anticipate issues before they hit stores. Late truck? The system recalculates routes and reallocates inventory within minutes. DCs become proactive instead of reactive, keeping shelves full even when upstream variables shift.



Shrink drops

When ordering decisions are driven by confidence intervals and connected demand, over-ordering naturally declines. The outcome is less waste, longer-lasting freshness, and stronger alignment between sustainability and profitability.



Continuity builds

Every buyer's judgment call, adjustment, and insight is logged and learnable. Institutional knowledge becomes an integral part of the system itself, rather than being stored in notebooks and memories. That means continuity even as teams change.



Visibility expands

Merchandising, operations, and stores can work from the same live view of inventory, demand, and supply. With shared data signals, teams can plan promotions, replenishment, and vendor negotiations in sync, rather than in silos. The constant back-and-forth of "what's really happening?" disappears, replaced by collective confidence in a single source of truth.



Time shifts from firefighting to strategy

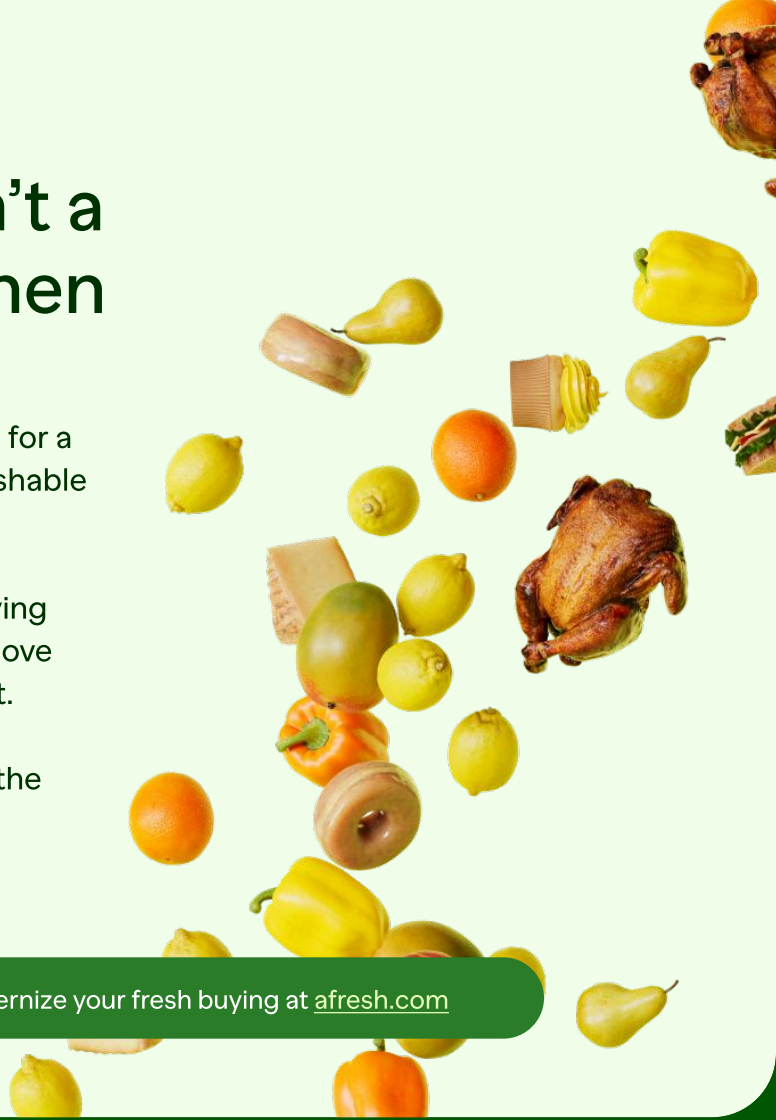
When routine recalculations and processes are automated, buyers reclaim the bandwidth to focus on higher-value work, including: improving vendor terms, exploring local sourcing, or optimizing category mix.

When buyers transition from a reactive to an AI-orchestrated approach, every downstream team feels the difference. From steadier warehouse operations to smoother store deliveries, and fuller, fresher shelves for customers.

Modernizing fresh isn't a question of if – it's when

The retailers who act now will define the standard for a faster, more intelligent, and more connected perishable supply chain.

Afresh's **Fresh Buying** brings that future to life, giving retailers the visibility, intelligence, and speed to move from reactive decisions to proactive management. Buyers spend more time strengthening supplier relationships and improving performance across the operation and less time reconciling data.



 Talk to our team to see how Afresh can modernize your fresh buying at afresh.com

Key Takeaways



Fresh buying has remained manual for decades because technology wasn't built for its volatility.



The combination of AI agents, unified data, and probabilistic modeling now makes true automation possible.



A connected, AI-driven buyer's desk enhances visibility, minimizes waste, and increases margin.



Retailers that act now will set the pace for a faster, more intelligent, and more resilient fresh supply chain.