How a Regional Grocery Operator Achieved 18% Inventory Accuracy Improvement and 12% Shrink Reduction with Real-Time Supply Chain Visibility

Reporting → Descriptive Reporting & Real-Time Dashboards

At a Glance

The Problem

- Inventory data 24–48 hours stale across both DCs
- Two DC systems and three POS platforms not connected
- Shrink and phantom inventory invisible until month-end
- Out-of-stock events only surfaced after store manager escalations

The Solution

- Unified real-time inventory visibility layer
- Sub-30-minute data refresh across both DCs
- Automated anomaly detection on stock movements
- Role-specific KPI dashboards (DC, category, ops level)

The Result

- 18% inventory accuracy improvement in 10 weeks
- 12% shrink reduction in Year 1
- 22% reduction in out-of-stock incidents
- 40% improvement in planner decision time

Business Context

A regional grocery operator running 75 stores across a single territory faced a growing gap between what their systems showed and what was physically on shelves and in distribution. With 12,000+ active SKUs spanning ambient, chilled, and frozen categories, planners were making restocking decisions on data that was 24 to 48 hours old — a lag that, at grocery margins, has an outsized impact.

The shrink was going undetected until month-end reconciliation. Phantom inventory was inflating reorder points. Out-of-stock incidents only surfaced after store managers escalated complaints — by which time the lost sale had already happened. For a business operating on thin margins with no visibility buffer, this invisible cost was becoming structural.

Client Profile

Industry:
Food & Beverage

Geography:
North America — Single Region

Scale:
75 stores, 2 Distribution Centres

Revenue:
$280–450M annual revenue range

SKUs:
12,000+ active SKUs (ambient, chilled, frozen)

The Challenge In Depth

The business was running two separate DC management systems, three POS platforms, and a legacy ERP syncing overnight. No single system held a complete, current picture — and the consequences of that gap were playing out daily across the store network.

- **Data Latency:** 24–48 hour batch cycles meant planners were ordering against yesterday's numbers — generating an estimated 12% out-of-stock rate during high-velocity promotional windows.
- **Undetected Shrink:** Perishable shrink across produce, dairy, and bakery was invisible in real time; losses only surfaced at monthly stock counts when corrective action was weeks too late.
- **Phantom Inventory:** Items showing as in-stock on the system but physically absent were inflating replenishment triggers, resulting in systematic over-ordering estimated at $300–500K annually.
- **No Network View:** Without a unified picture across both DCs, inventory imbalances — excess at one location while the other ran short on the same SKUs — went undetected and unresolved for days.

Our Approach

1. Building a Single Inventory Truth Across Both DCs

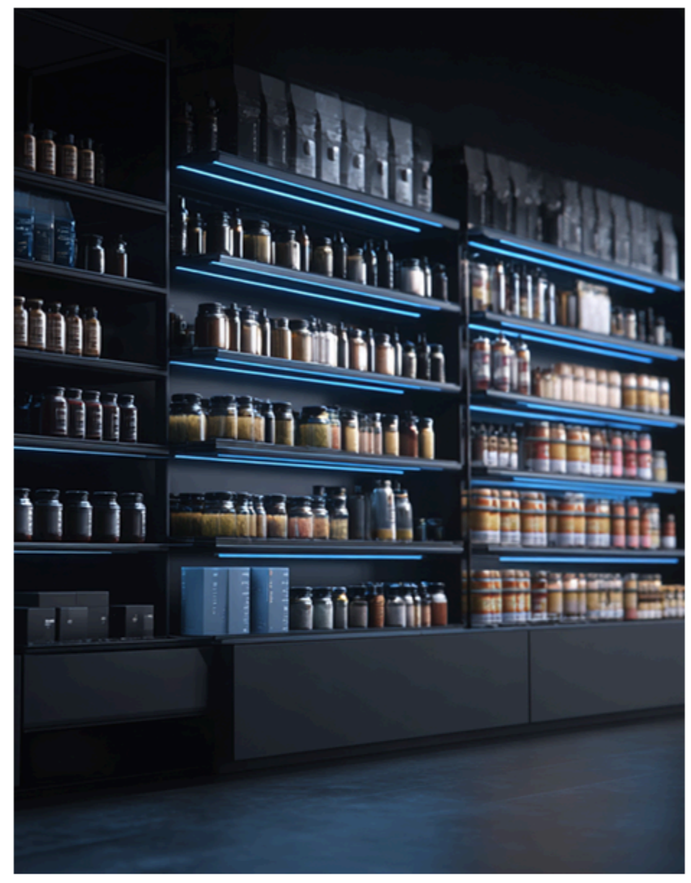
Axlian implemented a unified real-time visibility layer consolidating both DC management systems, three POS platforms, and the ERP into a single source of truth. Data refresh cycles moved from overnight batch to sub-30-minute updates, closing the planning blind spot that persisted across the entire store network.

2. Anomaly Detection That Flags Problems Before They Become Losses

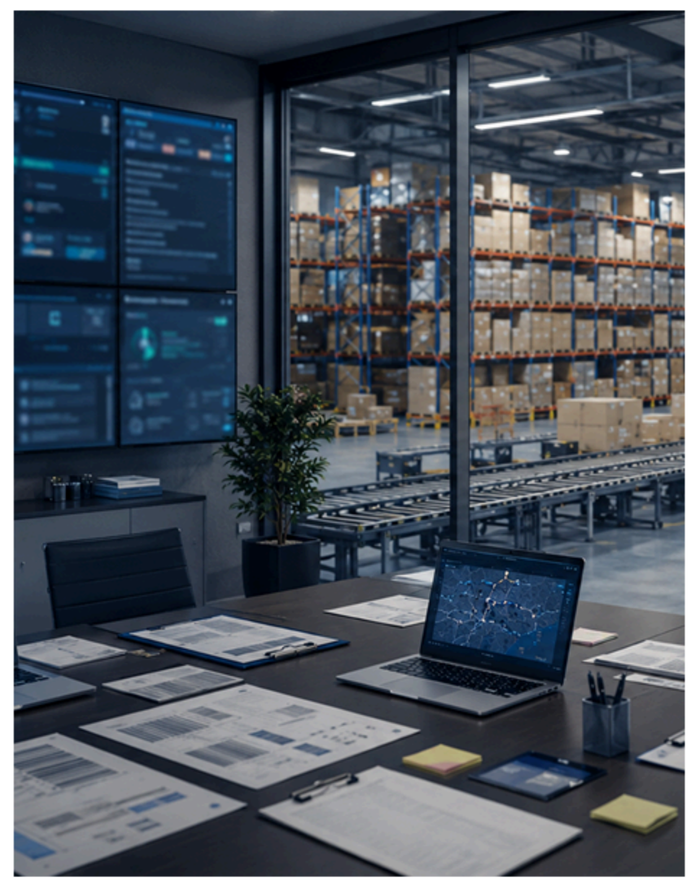
Statistical baseline modelling automatically flagged inventory movements deviating from expected patterns — early indicators of shrink, phantom inventory, or fulfilment errors. Planners received same-day alerts enabling immediate investigation rather than month-end discovery. In the first four weeks, over 200 anomaly events were detected and resolved that would previously have gone unnoticed until the next stock count.

3. KPI Dashboards Built for How Planners Actually Work

Rather than generic reports, role-specific dashboards were built for DC managers, category planners, and the ops leadership team. Decision latency dropped from days to hours across all planning levels — freeing planners from manual exception management and returning time to proactive category work.



Replenishment on demand, delivered timely using our platform



Results and Impact

Within ten weeks of deployment, inventory accuracy improved 18% — the highest level the business had recorded since opening its second DC. Year-one shrink reduction of 12% translated to approximately $380K in recovered margin. Out-of-stock incident rate saw a 22% improvement, directly lifting basket completion rates. Planners, freed from manual exception firefighting, redirected 40% of their working time to proactive category planning.

What Happened Next

- **Weeks 1–10:** Real-time visibility layer deployed across both DCs and all 75 stores; sub-30-minute data refresh achieved.
- **Month 4:** Anomaly detection thresholds tuned to category-specific shrink patterns; false positive alert rate reduced significantly.
- **Month 6:** Supplier visibility extended to top 20 vendors, enabling collaborative replenishment planning on high-velocity SKUs.
- **Currently:** Evaluating demand forecasting integration to close the loop between real-time visibility signals and automated replenishment triggers.

18%

Inventory Accuracy Improvement (10 Wks)

12%

Shrink Rate Reduction (Year 1)

22%

OOS Incident Reduction

40%

Planner Decision Time Improvement

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Axlian helps retail teams make faster decisions, reduce inventory costs, eliminate stockouts, and protect margins; so retailers never fall behind.

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