

CASE STUDY

Packaged Foods

FMCG Supply Chain Intelligence

Seasonal overstock causing ₹3M+ in annual write-offs. AI seasonal planning and FEFO enforcement eliminated both the waste and the guesswork.

Regional FMCG distributor · 3 warehouses · 280+ SKUs · Pan-India distribution

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1. Overview

A regional FMCG distributor managing 280+ packaged food SKUs across three warehouses was losing ₹3M+ annually to a combination of seasonal overstock (products ordered in excess of peak demand, requiring markdown or write-off) and expiry-driven waste (products not rotated correctly across the warehouse network, approaching expiry while demand existed elsewhere). Their planning team of four used last year's sales actuals to set this year's procurement targets - a method that was consistently wrong because demand patterns shifted each season.

Two specific pain points had become unmanageable: Diwali gift assortment SKUs were systematically overstocked post-peak (requiring quarterly markdown campaigns), and perishable food products were expiring in the warehouse because FEFO rotation was inconsistently applied across shifts. The total margin impact of both problems combined exceeded ₹3M per year.

2. Key Results

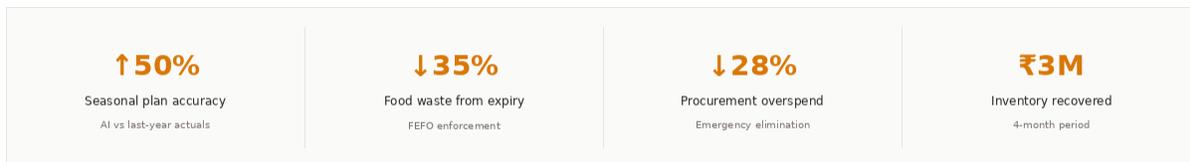


Figure 1: Key outcomes - 6 months post-deployment

3. Challenges



Figure 2: Four challenges in packaged foods supply chain planning

Seasonal Planning from Wrong Data

Festive season procurement targets set using last year's actuals. Every year, demand shifted - new SKUs performing better than forecast, established products declining, promotional mix changing. The planning team was always one cycle behind the market.

FEFO Rotation Inconsistent Across Warehouse Shifts

FEFO (First Expired, First Out) was documented in the warehouse SOP. In practice, newer stock delivered to accessible locations was picked first - because it was faster and easier. Older stock approached expiry unnoticed until it was too close to move.

30% of Food Wasted Globally - Avoidable With Better Planning

Industry benchmark: 30% of food produced globally is wasted in the supply chain. For a distributor, expiry-driven waste represents procurement cost + storage cost + disposal cost with zero revenue offset. Most of it is preventable with timely alerts and systematic FEFO.

Distributor Inventory Invisible Until Sell-Out

Sell-in numbers (what was shipped to distributors) told the planning team what had left the warehouse. They had no visibility into how much of that stock had actually sold through at the distributor level - making demand planning perpetually one step behind reality.

4. Our Solution

We connected to their SAP system and integrated with distributor portals for sell-out data. FEFO logic was enforced across all three warehouses from day one - the system automatically assigned expiry dates at goods receipt and flagged the oldest-expiry stock for each pick request. Seasonal AI forecasting generated per-SKU demand predictions 6–8 weeks ahead of each seasonal peak, with pre-season procurement targets that the team could review and approve.

Modules Deployed

| | | |
|----------------------------------|----------------------------|---------------------|
| AI Seasonal Demand Forecasting | FEFO Inventory Enforcement | Expiry Alert System |
| Distributor Sell-Out Integration | Dead Stock Detection | AI Assistant |

Implementation Timeline



Figure 3: FEFO live in week 1. Seasonal model delivering forecasts by week 2.

Key Capabilities

- **Seasonal AI:** Seasonal ML forecast per SKU - 6–8 weeks ahead of each peak, not last year's actuals
- **FEFO automation:** FEFO enforcement - oldest expiry always picked first, system-enforced across all 3 warehouses and all shifts

- **Expiry alerts:** Expiry alerts at 30, 60, and 90 days - fires to warehouse manager, procurement, and buyer simultaneously
- **Sell-out visibility:** Distributor sell-out integration - real demand visibility, not just sell-in shipment data
- **AI chatbot:** AI Assistant: 'Which SKUs are within 30 days of expiry across all warehouses?' - instant cross-site view

5. Results - Before & After

| Area | Before | With Innovacio |
|-----------------------|------------------------------|-----------------------------------|
| Seasonal accuracy | Last year actuals — wrong | 150% ML per SKU 6-8 wks ahead |
| Food waste | ~30% industry standard | ↓35% FEFO+expiry alerts |
| Procurement overspend | 22% emergency at premium | ↓28% proactive at standard |
| FEFO compliance | Manual — inconsistent | System-enforced — zero violations |
| Dead stock | Regular write-offs quarterly | Flagged 30 days ahead — actioned |
| Distributor fill rate | Gaps — demand mismatch | ↑18% improvement |

Figure 4: Six operational and financial metrics - before and after



Last Diwali was the first one where we didn't have a post-peak markdown campaign. We bought the right quantities 7 weeks before the season. FEFO meant nothing expired that shouldn't have. ₹3M used to disappear every year into write-offs and markdowns. This year it didn't.

- Rajiv Menon, Director of Operations · FreshLink Distribution

6. See It in Your Operation

We connect to your ERP and show you your current expiry risk profile, seasonal forecast, and FEFO compliance gaps - in 30 minutes, on your actual data.

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