

## Problem- Wrong Stock Levels

They order:

- Too much → Spoilage (\$605/day waste)
- Too little → Stockouts (\$450/day missed sales)

Symptom	What Happens	Daily Loss
Overstock	Milk expires in back cooler	\$605/day spoilage
Understock	Popular yogurt sells out by 2PM	\$450/day lost sales

## Milk Stock Problems Explained Simply

Westin: Orders 25 milk/day but sells only 15 → 10 units expire in back cooler (\$24.50 waste/run). This drives the full \$605/day spoilage across all pilot sites (milk leads at ~40%, rest yogurt/sandwiches).

Bldg80: Same pattern—orders excess, sells steady 15/day Mon-Fri → back cooler expiry. Fix: Send Westin excess here mornings (milk-run) → sells before expiry.

Brandt: Lower demand (~10/day) + poor rotation → weekend spoilage piles up. Fix: Front-display old milk daily (FEFO) → clears fast.

Yogurt.

## Site-Specific Issues

Site	Weekday Demand	Issue	Daily Loss	Fix
Westin	25 yogurt/day Mon-Fri	Sells out 2PM + weekend excess spoils	\$200 lost + \$8 spoil	Order 30 Mon, 20 Sat
Bldg80	25 yogurt/day Mon-Fri	Same pattern, transfer source	\$250 lost	Receive Westin excess mornings

Brandt	Lower (~15/day)	Weekend spoilage only	\$16/run spoil	Internal FEFO rotation
--------	-----------------	-----------------------	----------------	------------------------

### Yogurt Stock Problems Explained Simply

Westin: Orders too little weekdays (sells out by 2PM, loses \$200 sales) + too much weekends (excess spoils, \$8 waste). Fix: Order 30 yogurt Mon-Fri (covers all sales), drop to 20 Sat-Sun (no expiry).

Bldg80: Same weekday sell-outs (\$250 lost sales), but has extra to send others. Fix: Take Westin weekend excess every morning via milk-run → sells before expiry.

Brandt: Lower sales (~15/day) but still spoils weekends from poor rotation. Fix: Move old yogurt from back cooler to front display daily (FEFO) → sells fast.

**Turkey Sandwiches** (Bldg80): Excess 50 units sit → expire before milk-run transfer to Westin/Brandt. Fix: Move 50 to high-sales sites mornings → sells fast, no expiry.

**Ginger Ale** (AVR00149, Westin): Back cooler stock spoils → front display move clears it. Fix: Daily rotate 1-2 units to front → \$25 saved/run.

**Diet Dew** (Westin): Same back cooler issue (1 unit/run confirmed spoilage). Fix: Front display rotation like Ginger Ale → clears before expiry.

### Per-SKU Fixes by Micromarket

Westin Long Beach (High sales, poor rotation):

- Milk PC16264: Order 18 Mon-Fri (sells 15) → 7 spoil gone (\$24/run)
- Ginger Ale AVR00149: Back→front daily x2 → \$25 saved
- Diet Dew: Back→front x1 daily → spoilage zero
- Yogurt: Order 30 Mon-Fri → no 2PM stockout (\$200 sales)

Bldg80 (Excess source, weekday stockouts):

- Turkey Sandwiches: Send 50→Westin mornings → \$550 unlocked
- Milk PC16264: Receive Westin excess x7 → sells fast
- Yogurt: Order 30 Mon-Fri + Westin excess → \$250 sales

Brandt Russell Guthrie (Low sales, weekend expiry):

- Milk PC16264: Order 12/day + FEFO rotation → no weekend spoil
- Yogurt: Order 18 Mon-Fri → covers 15 sales
- Turkey Sandwiches: Receive Bldg80 x20 → extra sales

Your Fix (Transaction Reports → ARIMA)

See "Yogurt sells 25/day Mon-Fri"  
Forecast: Order 30 Mon, 20 Sat

Result: Milk-runs move excess → No spoilage + No stockouts

Example: Westin sells 15 milks/day but orders 25 → 10 spoils. ARIMA predicts exactly 15 → \$0 waste [user-information].

Export Transaction reports → Get forecast code → \$1K/day saved.

**Problem: Expiry milk/yogurt sits in back cooler → spoils**

Problem: Expiry milk/yogurt sits in back cooler → spoils

Model-Milk-run Solution (LIVE today):

Westin back cooler → Westin front display (Ginger Ale x1, Diet Dew x1)  
OR

Westin excess → Bldg80 shortage (tomorrow's top 10)

Transaction List + Product Transaction needed

## Problem-Shrinkage Theft Problem + Status

Problem	Root Cause	Daily Loss	Status
High-risk operators unchecked	No prioritization, everyone audited equally	\$214/day/site (Westin baseline)	<input checked="" type="checkbox"/> PARTIALLY SOLVED

What risk\_scores\_day1.csv Does

```
# K-Means clustered Sep-Nov data →  
HIGH: OperatorX@Westin = 40% of shrink  
MED: OperatorY@Bldg80 = 15%  
LOW: OperatorZ@Brandt = 2%
```

Audit 3 operators (80% loss) vs all 30.

Did You Solve It?

YES - risk\_scores\_day1.csv LIVE = operators know "HIGH-risk = daily checks".