

NICHE-SEARCH

WORKSHEET 4 OF 9

Layout Redesign Worksheet — New SKU Mix

Use when a significant product portfolio change (new supplier, discontinued line, new product category) means the existing layout no longer reflects actual movement patterns. Run this before moving anything.



Complementary worksheet for
Warehouse Management Essentials
by Ibrahim Anwar

What This Is For

A warehouse layout built for one SKU mix becomes a liability the moment that mix changes substantially. The slotting logic that put the right goods in the right zones for last year's portfolio will put the wrong goods in the wrong zones for this year's — and the mismatch compounds every working day through slower pick times, pickers improvising placements, and fast-moving new SKUs stuck in the back because they arrived after the zones were full.

This worksheet is for the operator who has just onboarded a new supplier, discontinued a product line, or added a new category — and knows the current layout is now wrong, but wants to redesign it with data before moving a single shelf. The discipline here is sequence: classify first, assign zones second, then estimate repositioning effort so the relay layout can be planned as a deliberate two-day event rather than a chaotic weekend scramble.

Benefits

What you get when you actually run this worksheet on a real situation:

- Forces a data-driven classification before any goods are moved, preventing the relayout from recreating the same ad-hoc arrangement in a different configuration.
- Produces a repositioning sequence ranked by impact — Fast and high-value SKUs move first, everything else follows.
- Estimates total repositioning effort so the relayout can be scheduled as a deliberate event, not squeezed into available gaps between deliveries.
- Creates the new slotting baseline that the weekly utilisation check and quarterly revision will measure against.
- Surfaces Non-moving SKUs that may not need to be repositioned at all — they may need to be liquidated.

Framework To Use

— FSN × ABC Priority Grid

Nine cells, one repositioning sequence. The cell a SKU lands in determines where it goes and how urgently it needs to move.

FSN × ABC Repositioning Priority (1 = highest)

	Fast	Slow	Non-moving
A (high value)	1 – front zone, golden level	2 – front-mid zone	5 – evaluate for liquidation
B (mid value)	2 – front-mid zone	4 – mid zone	7 – furthest zone
C (low value)	3 – front zone, any level	6 – mid-far zone	9 – furthest zone, top/bottom shelf

How To Use

Follow these steps in order. Each one builds on the previous.

- 1 Pull three months of outbound records. List every active SKU in the table. Use data from the most recent three months, not a historical average that predates the portfolio change.
- 2 Fill Outbound Freq/Month for each SKU. This is the transaction count, not the quantity shipped — frequency determines picking effort, not volume.
- 3 Calculate Stock Value as cost per unit multiplied by current quantity on hand. This is the ABC input.
- 4 Assign FSN Category: top 20% by frequency = Fast; next 30% = Slow; remainder = Non-moving.
- 5 Assign ABC Category: top 20% of SKUs by value = A; next 30% = B; bottom 50% = C.
- 6 Look up Recommended Zone from the FSN × ABC grid. Record it in the table.
- 7 Estimate Repositioning Effort in hours per SKU: how long to physically move the current stock, relabel, and update the master list. Use 0.5 hours for a single pallet, 1.5 hours for a full zone.
- 8 Sort the table by Recommended Zone then by Outbound Freq descending. That sort order is the repositioning sequence. Start at the top.
- 9 Sum the Repositioning Effort column. Over 16 hours: split into two phases — Phase 1 for all Fast SKUs, Phase 2 one week later for Slow and Non-moving.

Example Use

A hardware distributor adds a new power tools line from a Taiwanese supplier. Forty-two new SKUs arrive across three deliveries. The existing layout was built for hand tools and fasteners. Power tools are already outselling the legacy fast movers.

The owner pulls three months of outbound data. The 42 new power tool SKUs have no history — they only arrived two weeks ago. She uses the supplier's stated velocity data and the first two weeks' actual sales to estimate Outbound Freq/Month.

Eight SKUs (angle grinders, drill sets) are already selling at a rate that puts them in the Fast category. Their Stock Value (cost × qty on hand) puts six of the eight in Category A.

Six Fast-A SKUs: Recommended Zone = Priority 1. They belong in the front zone, golden level (0.5–1.5 m), nearest the shipping door. Currently they are sitting in Zone C (back of warehouse) because they arrived when no front-zone space was available.

She fills the Repositioning Effort column: 0.5 hrs per SKU for the Fast-A group, 1.0 hr each for the Slow-B power tool accessories that need a mid-zone slot. Total: $6 \times 0.5 + 14 \times 1.0 = 17$ hours.

Over 16 hours: two-phase plan. Phase 1 Tuesday — move 6 Fast-A SKUs from Zone C to Zone A. Estimated 3 hours. Phase 2 Wednesday — move 14 Slow-B SKUs to Zone B. Estimated 14 hours (two staff, 7 hours each).

Legacy hand tool SKUs displaced from Zone A by the Fast-A power tools are reclassified: most have dropped to Slow based on recent data. They move to Zone B. Two have had zero movement in 90 days: marked for liquidation evaluation before Phase 2.

Reflection Prompts

After filling in the worksheet on the previous page, work through these.

1. Sort the completed table by Recommended Zone, then by Outbound Freq within each zone. The top rows are your repositioning sequence — start there and work downward. Do not try to move everything at once; a zone-by-zone approach over two days avoids creating temporary access problems.

2. Sum the Estimated Repositioning Effort column. If total exceeds 16 hours (two full working days), split the relayout into two phases: Phase 1 repositions all Fast SKUs; Phase 2 repositions Slow and Non-moving SKUs one week later. Fast SKUs are the immediate throughput win.

3. After the relayout is complete: document the new slotting baseline — SKU code, assigned zone, date of repositioning decision, and the name who approved. Without a baseline, the next quarterly revision has nothing to compare against.

Tips and Traps

TIPS

- For new SKUs with no outbound history, use supplier velocity data or the buyer's purchase forecast as the Freq/Month estimate. Mark the cell 'ESTIMATED' so the next quarterly revision knows to replace it with actual data.
- Non-moving SKUs in the table are a liquidation conversation, not a repositioning task. Before spending effort moving them to a new zone, ask whether they should be in the warehouse at all. Their space may be needed for the incoming Fast SKUs.
- Update the master location-code list the same day each relay layout phase is complete. A relay layout that finishes without an updated master list creates a three-day window where pickers direct themselves to old locations. That window is where new errors form.
- Photograph each zone before and after Phase 1. The before-and-after comparison is the most effective way to show staff why the change was made — and the most effective training tool for the next time a portfolio change triggers a redesign.

TRAPS

- Classifying new SKUs as Fast because the first two weeks of sales look good. Two weeks is not enough data for a stable classification. Use the classification, but flag those SKUs for reclassification at the six-week mark.
- Running both phases on the same day to 'get it done.' A single-day full relay layout creates a window where the master list is partially updated and pickers cannot trust either the old or the new locations. Two deliberate phases is slower but safer.
- Letting staff choose their own repositioning sequence on the day. Without a pre-sorted list, people naturally move what is easiest to reach, not what generates the most throughput benefit. The sort order in this table is the sequence — enforce it.
- Skipping the repositioning effort estimate. Estimates do not have to be precise — but without them, a 17-hour relay layout gets scheduled into a 6-hour window and finishes at 9 PM with half the goods in temporary positions that then become permanent ones.

Appendixes

Appendix A – New-SKU Classification Bridge

When new SKUs have no outbound history, use this bridge to assign a provisional FSN category. Replace with actual data at the 6-week mark.

Source of velocity estimate (in order of reliability):

1. Actual sales data from the first 2-4 weeks in your warehouse
2. Supplier's stated sell-through rate for similar distributors
3. Buyer's purchase forecast (units/month)
4. Analogous existing SKU in the same category

Provisional category assignment:

- If estimated Freq/Month \geq 80th percentile of existing SKUs → Fast (provisional)
- If estimated Freq/Month is 50th-80th percentile → Slow (provisional)
- If estimated Freq/Month $<$ 50th percentile → Non-moving (provisional)

Mark all provisional classifications with "(P)" in the FSN Category column.
Review at 6 weeks. Reclassify with actual data. Update slotting if needed.



WHERE THIS WORKSHEET COMES FROM

Warehouse Management Essentials

Control What Enters, What Is Stored, and What Leaves Your Warehouse

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This worksheet is one of nine in the *Warehouse Management Essentials* companion worksheet pack. The full pack is grouped into three categories: high-volume worksheets you can run weekly, niche-search worksheets for rare but high-value situations, and specific-case worksheets that walk you through a single concrete scenario.

Every framework, decision filter, and figure used in these worksheets is drawn from the chapters of the source book. The book sets the diagnosis, the worksheets give you the form to act on it.

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