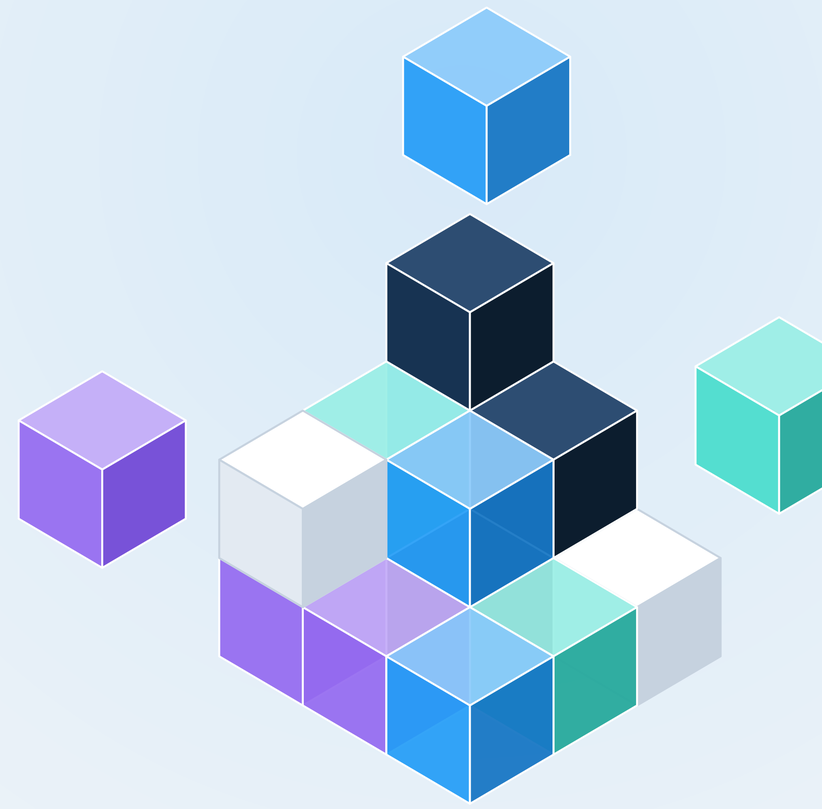
SUPPLY CHAIN & LOGISTICS

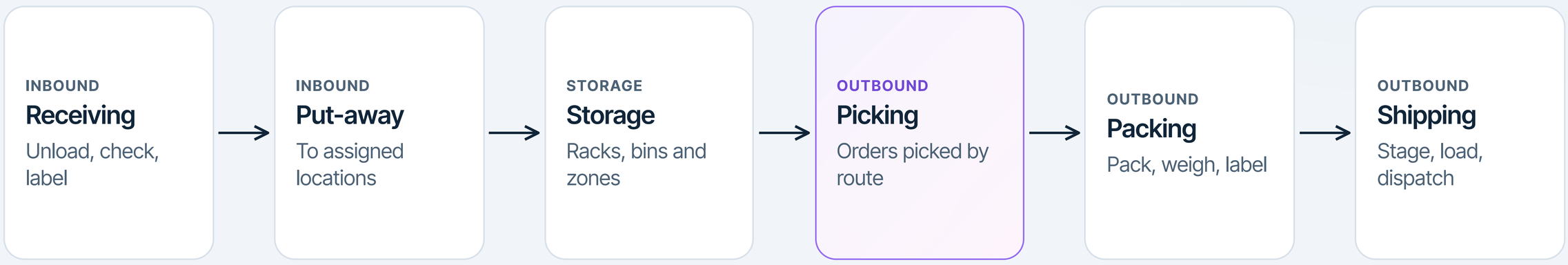
Warehouse Material Flow



Warehouse material flow is the path goods take from the receiving dock through storage and picking to the shipping dock. Its layout drives travel, touches and errors.

01 THE CORE MODEL

FLOW SCHEMATIC · INBOUND TO OUTBOUND



Inbound

Receiving and put-away: check, identify and store correctly.

Picking

Often the most labor-intensive step; layout and slotting drive it.

Outbound

Packing and shipping: right order, right carrier, right time.

02 DESIGNING THE FLOW

Travel distance and touches per order drive most warehouse cost.

MANY TOUCHES — DIRECT FLOW

POOR FLOW

- Inbound and outbound paths cross
- Fast movers stored far from shipping
- Goods handled several times

GOOD FLOW

- One-way flow, no crossing traffic
- Fast movers near the pick front
- Each item touched as few times as possible

03 WORKED EXAMPLE

SPARE-PARTS WAREHOUSE · RE-SLOTTING FAST MOVERS

ANALYSIS — Pick frequency
per item, last quarter

→ **FINDING** — Fast movers far away
long walking routes

→ **ACTION** — Re-slot top items
near the pack station

→ **EFFECT** — Shorter routes
more lines per hour

04 MANAGEMENT TAKEAWAYS

01 — Slot by velocity
Place the most picked items closest to packing.

02 — Keep flows one-way
Avoid inbound and outbound traffic crossing.

03 — Count touches per order
Each extra handling step adds cost and error risk.

05 COMMON MISTAKE

LIMITATION

Designing for storage, not flow

Maximizing rack density can lengthen pick routes and raise total cost.