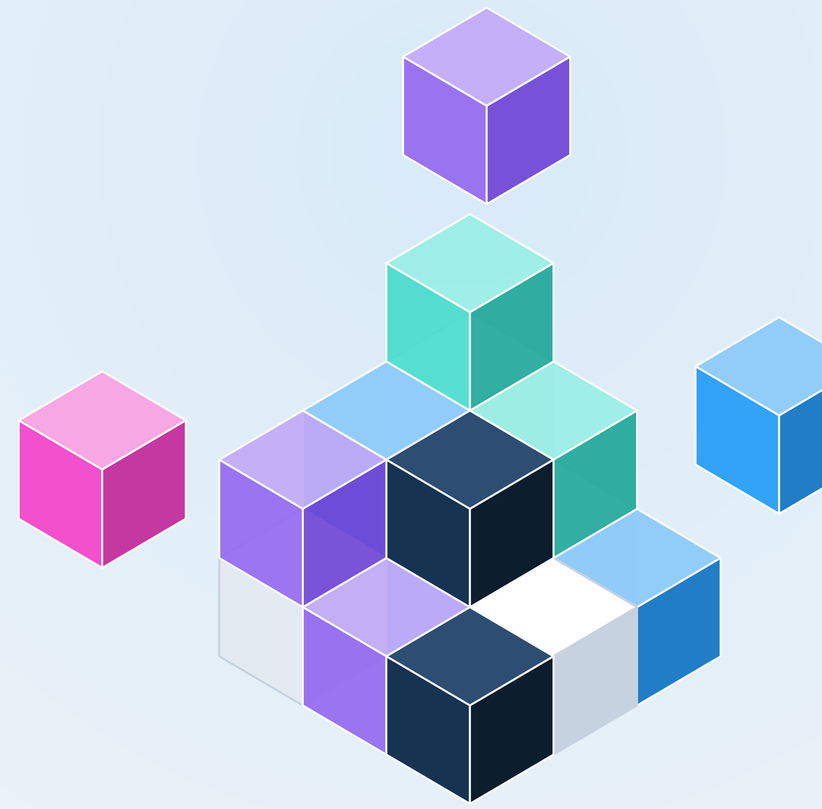
LEAN FOUNDATIONS

Push vs Pull Systems



A push system releases work based on a forecast or schedule. A pull system starts work only when downstream consumption signals a real need.

01 THE CORE MODEL

TWO RELEASE LOGICS · SAME FACTORY

Push
Forecast releases work

Forecast plan → Stage A → WIP pile → Stage B → WIP pile → Customer

Long queues
stock builds up

Pull
Consumption triggers work

Stage A → Capped supermarket → Stage B → Kanban signal → Customer order

Short queues
WIP capped by cards

- **Push**
  Work is released by a schedule or forecast, regardless of downstream status.
- **Pull**
  Work starts only when downstream consumption sends a signal.
- **Supermarket**
  A capped buffer whose depletion triggers upstream replenishment.

02 WHEN EACH FITS

Most plants combine both: push to a decoupling point, pull after it.

PUSH — PULL

PUSH FITS

+ One-off, engineered-to-order items
+ Long lead-time parts planned by MRP
− Forecast errors turn into stock or shortages

PULL FITS

+ Repetitive items with steady demand
+ WIP is capped by design
− Needs stable processes and short setups

03 WORKED EXAMPLE

BRACKET PRODUCTION · REPLACING THE DAILY SCHEDULE

SIGNAL — Empty bin returns — from the welding cell
→
KANBAN — Card to press shop — replaces the daily plan
→
PRODUCTION — Exactly one bin — refills the supermarket
→
EFFECT — WIP capped — by the number of cards

04 MANAGEMENT TAKEAWAYS

01 — Cap WIP before you pull
The number of kanban cards is the real control knob; set it on purpose.

02 — Push only to the decoupling point
Plan long lead-time items, pull everything that follows.

03 — Stabilize before switching
Unreliable machines and long setups make pull loops starve.

05 COMMON MISTAKE

LIMITATION

Pull by name only
If kanbans are created from the forecast instead of real consumption, the system is still push with extra paperwork.