

DBA DEMAND DRIVEN PLANNING

How demand driven MRP creates high throughput, efficient inventory, and lean staffing.

1 WHY CALENDAR PLANNING FAILS



1 Forecasts are flawed

Traditional planning fills a calendar with projections, placeholder Jobs, blanket POs, and gut feel.



2 Tentative demand is an illusion

Projected demand changes as real orders arrive, so planned supply quickly becomes wrong.



3 Supply gets misaligned

Jobs and POs created for projections no longer match firm customer demand.



4 Bullwhip effect

BOM explosions and job linking amplify misalignments at every lower level.



5 Constant revisions

Jobs and POs require ongoing realignment, yet lower-level supply may already be received or in process.



6 Overstaffing and silos

Poor visibility leads departments to build defensive workarounds, extra staffing, and higher overhead.

2 THE DEMAND DRIVEN PRINCIPLE

1. REACT TO THE FIRM

- Each item has its own action window.
- MRP reacts only to firm demand inside that window.
- Demand outside the window is tentative and handled later.
- Supply stays aligned with real demand.



Result: fewer shortages, less overstocking, no constant PO and Job revisions.

2. PROTECT FOR THE FUTURE

- Inventory protects against future demand instead of covering forecasts.
- Monthly Potential Demand and replenish time calculate a dynamic reorder point.
- MRP triggers a Job or PO early enough to replenish stock before it runs out.
- New supply only arrives when firm demand pulls it in.



Result: lean inventory, reliable replenishment, and efficient order quantities.



Push planning =
fill the calendar for tentative demand

VS.

Pull planning =
react to firm demand and replenish as needed



Pull planning is widely accepted as the superior method.

3 WHAT YOU GAIN



High throughput

Consistent run sizes and fewer disruptions improve flow.



Efficient inventory

Most companies reduce overall inventory even while stocking strategically.



Faster time to shipment

Lead times and order policies support a deliberate time-to-shipment strategy.



Fewer shortages

Increase the safety factor when more protection is needed.



No bullwhip planning

Each item is planned individually rather than pushed by distorted lower-level demand.



Lean staffing

Transparent settings eliminate silos and reduce the need for defensive staffing.



Demand driven MRP revitalizes small manufacturers by aligning supply with firm demand and using inventory as protection for the future – not as a guess about the future.