MANUFACTURING · MATERIALS PLANNING OPERATIONS

Inventory management and reorder points

This workflow automatically monitors inventory levels, calculates optimal reorder points, and generates purchase orders when stock falls below safety thresholds. It reduces stockouts while minimizing carrying costs through intelligent demand forecasting.

01 WORKFLOW TRIGGER

Inventory level for any material drops below the predefined reorder point threshold

BLUEPRINT OVERVIEW

What this workflow accomplishes

This workflow connects SAP inventory and purchasing, Oracle Manufacturing Cloud demand forecasting, and Epicor safety stock modeling into one replenishment loop. Automation watches reorder points, runs the demand and lead time math, builds the requisition, and retunes thresholds. Materials planners, buyers, and the controller keep authority over supplier selection, expedite decisions, and any spend above the auto-approval ceiling.

01

OUTPUTS

Purchase orders transmitted to suppliers, Revised reorder points and safety stock, Replenishment and delivery tracking schedule, Requisition with EOQ order quantity

02

SUCCESS MEASURES

Stockout frequency, Inventory carrying cost, Requisition to PO cycle time, Supplier lead time variance

03

CORE SYSTEMS

SAP, Oracle Manufacturing Cloud, Epicor

HOW TO USE THIS BLUEPRINT

Materials planners: confirm the reorder point and safety stock logic per part class before the workflow goes live.

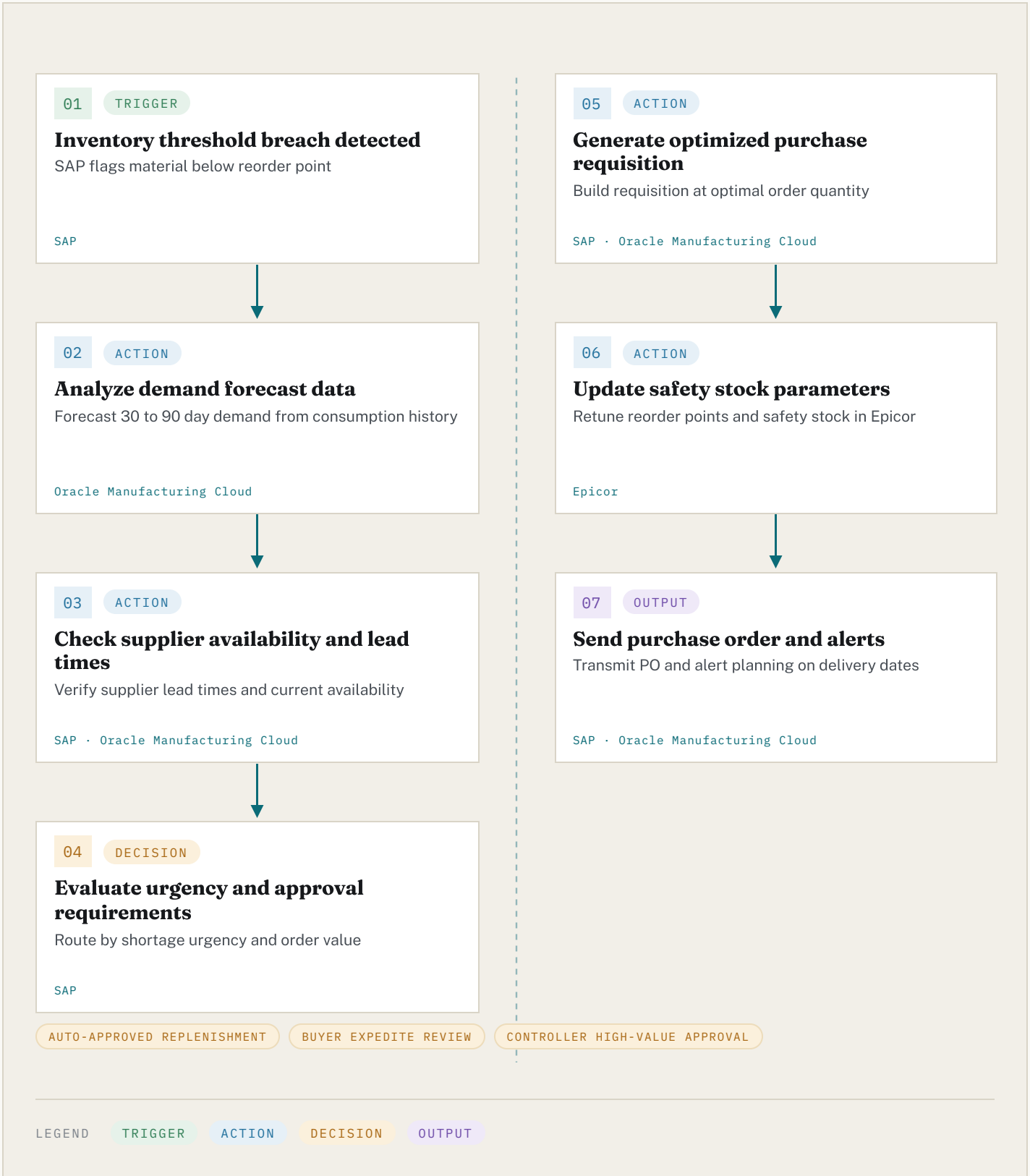
Procurement leads: set the auto-approval spend ceiling, preferred supplier hierarchy, and expedite routing rules.

Implementation teams: map SAP material masters to Oracle forecast items and Epicor parameter records before enabling writes.

THE WORKFLOW

End-to-end stage map

Seven stages carry a material from threshold breach to a transmitted purchase order. The decision point at stage 4 governs whether an order releases automatically or routes to a buyer and the controller for expedite or high-value approval.



IMPLEMENTATION DETAIL

Stage-by-stage breakdown

Each stage states the operational intent, the human control point, and the systems likely to take part. System names are examples, not a required architecture.

01 TRIGGER

Inventory threshold breach detected

SAP system detects that raw material or component inventory has fallen below the established reorder point. Real-time inventory tracking triggers automated review process.

CONTROL POINT

The materials planner for that commodity group reviews the daily breach queue and can suppress false triggers from open goods receipts or misposted consumption.

SYSTEMS SAP

02 ACTION

Analyze demand forecast data

Oracle Manufacturing Cloud analyzes historical consumption patterns, current production schedules, and seasonal trends. System calculates projected demand for the next 30-90 days.

CONTROL POINT

Production planning verifies the forecast against the firm MRP horizon and overrides projected demand where a build schedule has been pulled in or cancelled.

SYSTEMS Oracle Manufacturing Cloud

03 ACTION

Check supplier availability and lead times

System queries supplier portals and procurement databases to verify current lead times and availability. Updates reorder calculations based on supplier performance data.

CONTROL POINT

The buyer confirms quoted lead time against the portal figure and flags any supplier on quality hold or allocation before the quantity is calculated.

SYSTEMS SAP Oracle Manufacturing Cloud

04 DECISION

Evaluate urgency and approval requirements

Workflow determines if this is a critical shortage requiring expedited ordering or standard replenishment. Routes high-value purchases through approval workflow while auto-approving routine orders.

CONTROL POINT

Human control: the buyer owns the expedite call, and the controller approves any requisition above the auto-approval ceiling.

SYSTEMS SAP

COMPLETION AND MEASUREMENT

Closing stages and results

The closing stages retune reorder points against actual demand variability and put a dated delivery commitment in front of production planning.

05 ACTION

Generate optimized purchase requisition

System creates purchase requisition with optimal order quantity based on EOQ calculations, supplier minimums, and storage constraints. Includes preferred supplier and delivery date requirements.

CONTROL POINT

The buyer verifies EOQ output against supplier minimums, pack quantities, and available rack space before releasing the requisition.

SYSTEMS SAP Oracle Manufacturing Cloud

06 ACTION

Update safety stock parameters

Epicor system adjusts reorder points and safety stock levels based on recent demand variability and supplier performance. Machine learning algorithms optimize future threshold settings.

CONTROL POINT

The materials manager reviews proposed parameter changes weekly and locks thresholds on critical or long lead time parts against automatic adjustment.

SYSTEMS Epicor

07 OUTPUT

Send purchase order and alerts

Approved purchase order is transmitted to supplier and procurement team receives notification. Production planning team is alerted to expected delivery timeline.

CONTROL POINT

Procurement confirms PO transmission and acknowledgement, and the production scheduler accepts or challenges the promised dock date.

SYSTEMS SAP Oracle Manufacturing Cloud

DELIVERABLES

- Purchase orders transmitted to suppliers
- Revised reorder points and safety stock
- Replenishment and delivery tracking schedule
- Requisition with EOQ order quantity

KEY METRICS

- Stockout frequency
- Inventory carrying cost
- Requisition to PO cycle time
- Supplier lead time variance

IMPLEMENTATION CHECKS

- Auto-approval spend ceiling enforced
- Write access to SAP material master
- Approval routing to buyer and controller
- Audit trail on threshold changes
- Supplier portal credential refresh

NEXT STEP

Turn this blueprint into an implementation plan.

Map each stage to your own systems, permissions, and approval routing before selecting tools or building automation.

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MANUFACTURING WORKFLOW PACKS AND A FREE ASSESSMENT