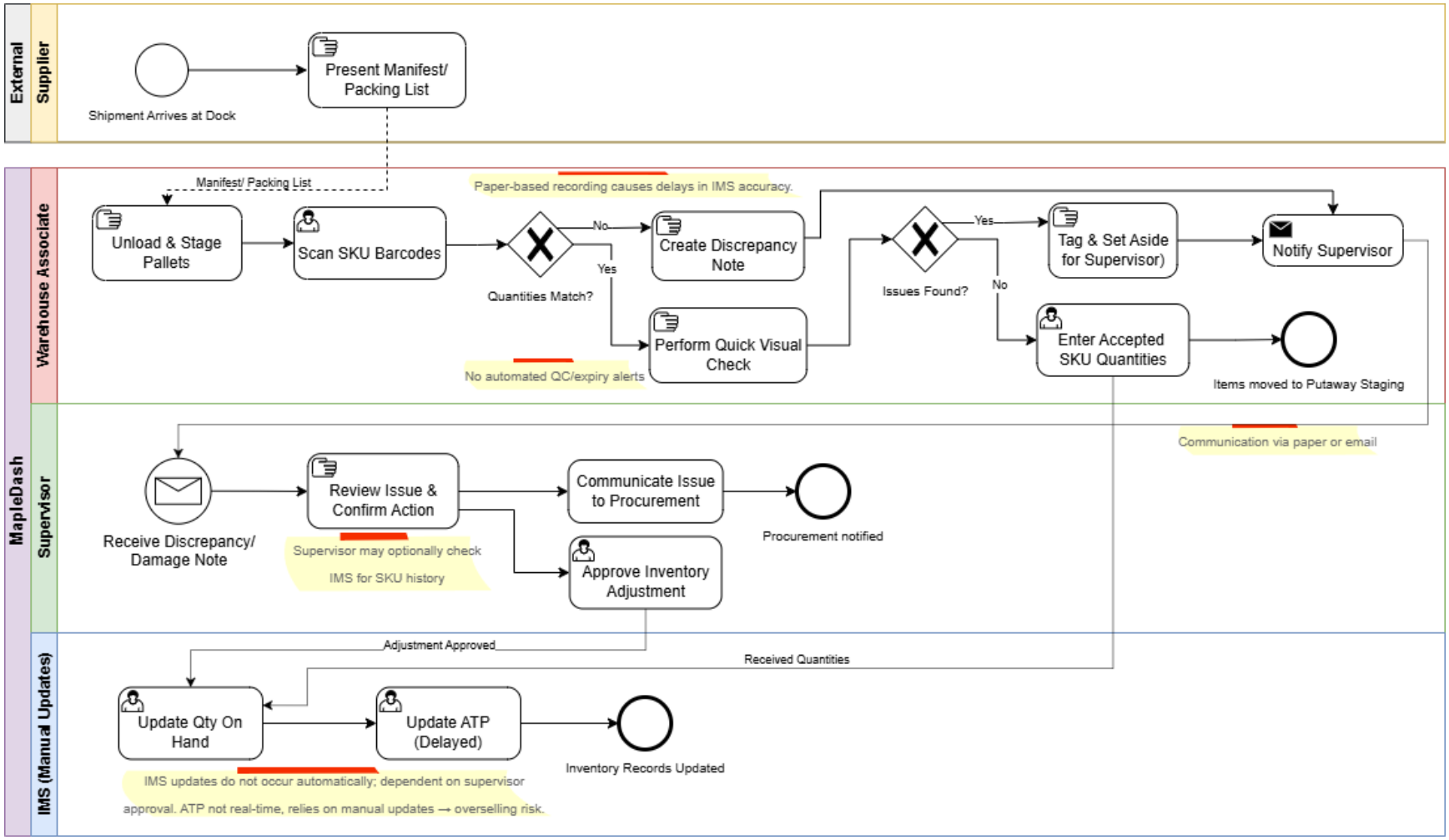
INBOUND PROCESS – AS-IS



What this process does (end-to-end context)

The inbound process governs how supplier shipments are received, validated, and introduced into MapleDash's inventory. It is the first physical inventory touchpoint, meaning any errors here propagate downstream into Putaway accuracy, Replenishment signals, ATP reliability, Picking success, and Customer order fulfillment. Inbound accuracy directly influences Inventory Accuracy, ATP Overselling %, Days of Cover, and Replenishment Stability.

How the AS-IS process works

- Supplier arrives with paper-based manifest or packing list
- Warehouse associate unloads pallets and manually scans SKUs
- Quantities are visually checked and manually compared
- Discrepancies are recorded via notes or emails
- Supervisor reviews issues manually
- Inventory updates (QOH and ATP) occur late and inconsistently, often after approvals

Bottlenecks

- Paper-based receiving and delayed validation
    - No system validation at receipt
    - High risk of data entry errors
- Manual discrepancy creation and escalation
    - Slow supervisor response
    - No standardized tolerance logic
- Delayed inventory updates
    - QOH and ATP updated hours later
    - Creates overselling risk

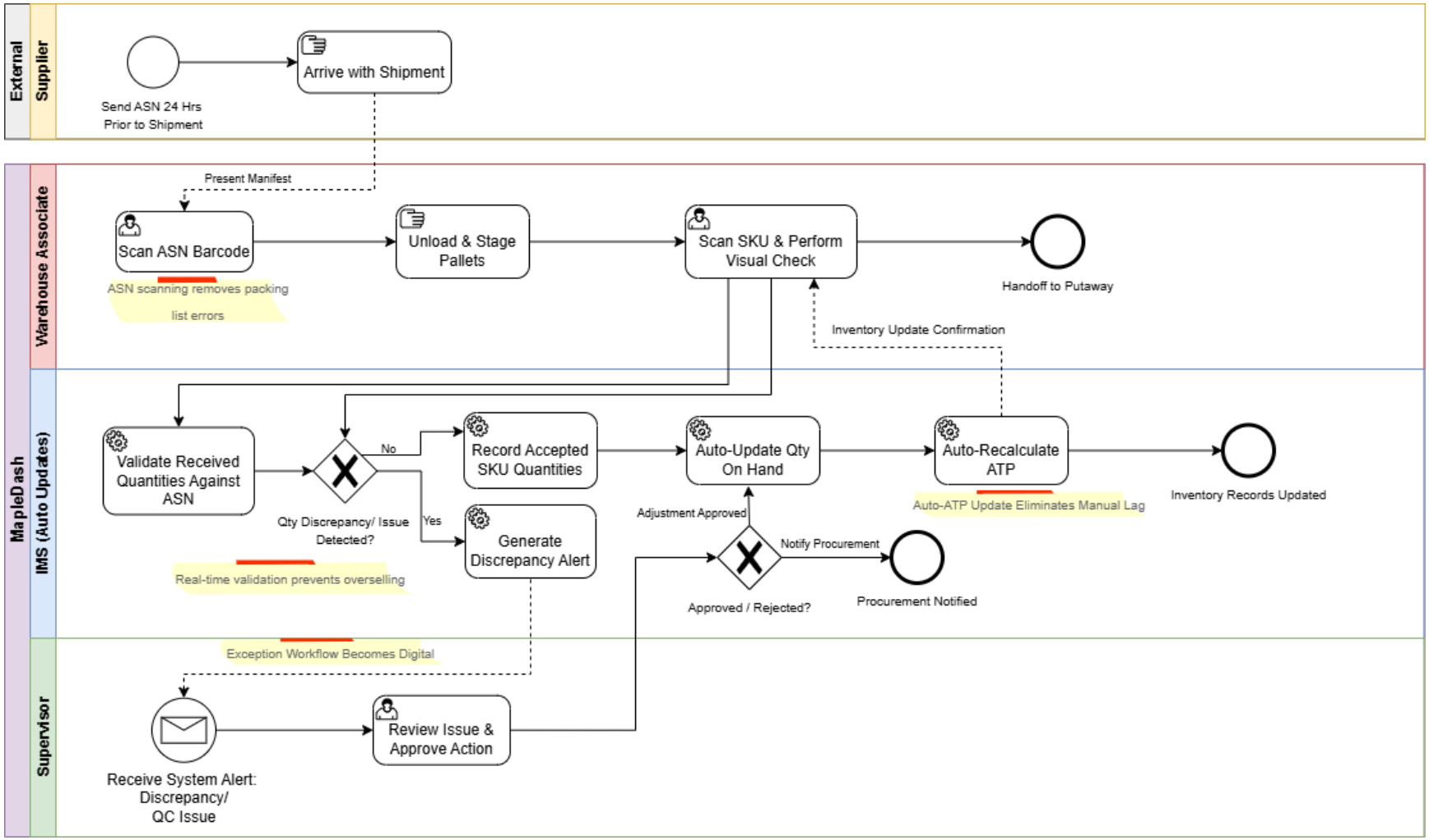
Business impact

- ATP shows stock that is not yet validated
- Partial or late receipts distort replenishment logic
- Picking starts against inaccurate inventory
- Supervisors spend time firefighting instead of managing

KPIs affected

- % SKUs Oversold (ATP < 0): Delayed QOH/ATP updates cause the system to promise stock that is not yet validated.
- Total ATP Qty: ATP temporarily inflates due to premature availability.
- % SKUs Below ROP: Replenishment reacts to incorrect stock signals.
- On-Time Delivery %: Orders promised based on incorrect ATP fail downstream.
- Avg. Lead Time (Days): Manual exception resolution delays inbound availability.

INBOUND PROCESS – TO-BE



What this process becomes

The TO-BE inbound process transforms receiving into a system-validated control point instead of a passive recording step. The IMS now enforces discipline at receipt while allowing flexibility via exception thresholds.

How TO-BE fixes AS-IS issues

- ASN-based receipt validation
    - Shipment scanned against ASN
    - Quantity discrepancies detected immediately
- Real-time discrepancy detection
    - Exceptions generated automatically
    - Supervisor alerted only when tolerance breached
- Automated inventory updates
    - QOH updated post-approval
    - ATP recalculated immediately

Benefits and downstream impact

- ATP is protected until receipt is validated
- Replenishment responds to actual received stock
- Picking sees accurate availability
- Supplier performance issues become visible without manual effort

KPIs improved

- Reduction in % SKUs Oversold (ATP < 0)
- More stable Total ATP Qty
- Lower % SKUs Below ROP due to accurate signals
- Improved On-Time Delivery % (indirect, via ATP reliability)