

WMS-First Automation Checklist

Automation only removes work when your WMS is the system of record and talks to equipment in real time, with airtight exception handling and clean transactions. Use this checklist to confirm you're automation-ready before steel is ordered and PLCs are tuned.

If you've read our eBook, **5 Automation Pitfalls to Avoid: How to Prepare Your Warehouse for Automation Implementation**, you know automation only performs at scale when your WMS is the system of record. That's where this **WMS-First Automation Checklist** comes in.

Use it as a readiness framework to validate your WMS, network, and integration design before automation hardware is ordered or commissioned. It walks you through the critical checkpoints that separate stable automation from stalled operations.

Apply it at each project phase (discovery, solution design, and go-live) to confirm every component is synchronized, measurable, and recovery-ready.

Who should complete it:

- WMS lead (owner)
- Operations
- IT/Network
- MHE/controls integrator
- Finance

When to use it:

- Once in discovery (pre-vendor selection)
- Again at solution design and pre-installation
- Final pass at go-live readiness

Project: _____ Version: _____ Date: _____ Checklist Owner: _____

How to use it

For each item, mark **Status** (Yes / In Progress / No / N/A), assign an **Owner** and **Due Date**, assign **Risk** level (high, medium, low) and add **Evidence** (link or file).

Gate rule: No “High” risk items allowed at phase exit. Capture mitigation in **Notes**.



1) Pre-flight reality checks

- Facility power capacity, network, and floor space verified.
- Environmental constraints documented (temperature, dust, vibration) with mitigations.

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:



2) Make WMS the system of record

- Inventory and order status authoritative in **WMS** (automation never holds “truth”).
- **Correlation IDs** on every tote/carton/pallet movement for reconciliation.
- Idempotent messaging to prevent double posts and “lost confirms.”

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:



3) Real-time, event-driven integration

- Allocate → start → confirm → divert/route → complete events are **real-time** (no batching).
- Latency SLOs defined (e.g., <1s confirm → divert) with alerts on breach.
- Retry/queue strategy documented for outages and recovery.

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:



4) Exceptions are first-class citizens

- **Cancellations** (order/pick/tote) – single action in WMS resolves both systems.
- **No-read / misread, short/over, location deny, inventory locked** (counts/holds).
- **Machine down / aisle blocked / labor unavailable** with WMS-driven reroute/reallocation.
- Standard **reason codes** (JAM, NO_READ, SHORT, MISSING_LPN, etc.) visible in WMS.

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:



5) Throughput & labor pairing

- Expected machine takt aligned with staffing plan; peak and exception buffers defined.
- **LMS visibility** for human vs. machine work (to balance cells and shifts).

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:



6) Test like it's Black Friday

- Simulate peak +15% volume to validate WMS↔automation performance under real-world pressure.
- Confirm all message flows stay within sub-second latency KPIs, even during peak throughput.
- Run "day-in-the-life" tests that include cancels, inventory locks, no-reads, jams, and blocked picks.
- Verify rollback/retry paths and prove data reconciliation end-to-end.

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:

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7) Go-live observability

- Dashboards for **pick-to-confirm latency, exception recovery time, recirculation/rework, WMS↔MHE sync errors, uptime/throughput** by cell and at order level.
- On-call and escalation playbook published; owners and SLAs confirmed.

Status: _____ **Owner:** _____

Due: _____ **Risk (H/M/L):** _____

Evidence/Notes:

Pass criteria

All sections marked **Yes** or **In Progress** with dated mitigations;
no High risks at phase exit.

Ready to move from checklist to execution?

Reach out to Longbow Advantage for the expertise and hands-on support to make your automation launch a success.