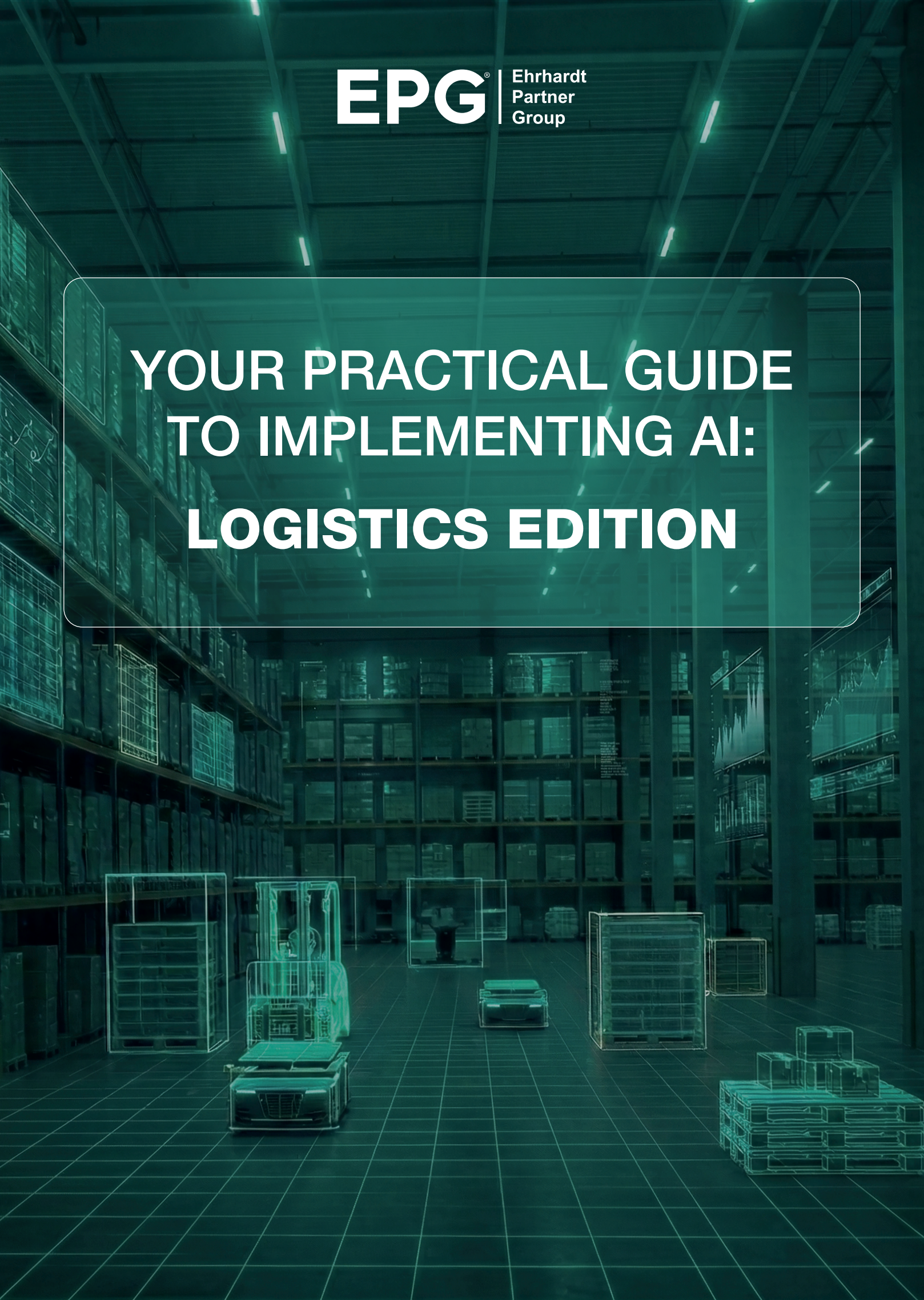
EPG® Ehrhardt Partner Group

YOUR PRACTICAL GUIDE TO IMPLEMENTING AI:

LOGISTICS EDITION



DESIGNING AI FOR REAL-WORLD LOGISTICS

AI is no longer a trend in supply chain. It's become a structural requirement for operating at scale under volatility. Every boardroom agenda focuses on a future of agentic logistics and warehouses that think for themselves. The vision is clear, but for many logistics leaders, the roadmap to get there is not.

AI isn't a magic switch. The software delivers value when embedded in real processes, supported by reliable data, and aligned with how people actually work on the floor and behind the screens. Without that foundation, AI initiatives disappoint.

This is especially true when AI is positioned as a replacement system. Swapping out your WMS or TMS won't automatically solve decision bottlenecks. In many environments, introducing an AI layer on top of stable execution systems accelerates value while minimizing operational risk.

AI IS NOT:

- A **replacement** for experienced supervisors or stable systems
- A **one-time** software installation
- A **fix** for broken processes

AI IS:

- A **decision-support** layer
- A **system that learns** from outcomes over time
- An **enhancement** that works across existing WMS, WCS, TMS, and ERP environments

IT'S TIME TO TURN AI MOMENTUM INTO OPERATIONAL ACTION, SO LET'S JUMP IN.

STEP 1

START WITH AN HONEST ANALYSIS

Start with the problem, not the platform. It's tempting to begin with vendor demos and bold AI promises. But too often, organizations invest in intelligent tools before they fully understand what needs fixing. When that happens, results are limited.

AI accelerates whatever already exists. If the process is clean, it gets sharper. If the process is messy, it gets messier. Before you evaluate tools, look at how operations work on a Tuesday afternoon during peak volume.

AI is most effective when it supports decisions that are frequent, time-sensitive, and dependent on incomplete information. Locating those points creates a map for everything that follows.

AI READINESS QUIZ:

ARE MY OPERATIONS READY FOR AN AI LAYER?

Answer each question with Mostly Yes, Somewhat, or Mostly No.

Do all core execution systems (WMS, TMS, MFC, workforce tools) share data automatically?

- ○ Mostly Yes
- ○ Somewhat
- ○ Mostly No

Can supervisors see real-time status without calling or walking the floor?

- ○ Mostly Yes
- ○ Somewhat
- ○ Mostly No

Are decisions based on system recommendations rather than personal experience?

- ○ Mostly Yes
- ○ Somewhat
- ○ Mostly No

Do planners trust system outputs enough to act on them without manual rework?

- ○ Mostly Yes
- ○ Somewhat
- ○ Mostly No

Can the system adapt plans during the day when conditions change?

- ○ Mostly Yes
- ○ Somewhat
- ○ Mostly No

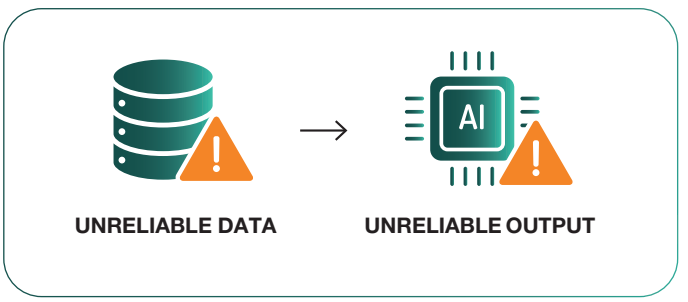
Results:

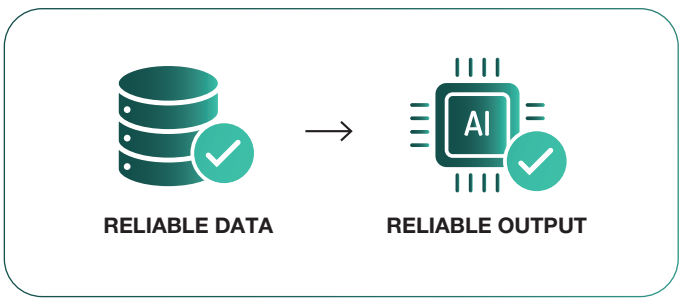
Mostly Yes
→ You're AI-ready in places. Start with targeted pilots.
Somewhat
→ Focus on decision mapping and data cleanup first.
Mostly No
→ Pause. Stabilize foundations before layering intelligence.

STEP 2

FIX YOUR DATA

AI's effectiveness depends on the quality of the data it consumes. Before introducing agent-based systems, ensure that core operational information is real-time and consistent across systems. Without data cleansing and data normalization, even well-integrated systems will produce unreliable insights. If your WMS says an order is picked, your WCS shows it still in process, and your workforce system logs something different, AI can't help. You don't need to replace your systems. Simply take the time to prepare your data intentionally. Integration should ensure that systems speak the same operational language in real time sto that you can see what's happening on the floor, at the dock, and on the road at any point in time.





AI READINESS CHECKLIST: IS MY DATA DISCIPLINED?

- ☐ The same event is formatted the same across systems
- ☐ Orders, SKUs, and shipments use unified identifiers
- ☐ Master data has clear ownership
- ☐ Duplicate and outdated records are removed
- ☐ Units, timestamps, and values are normalized
- ☐ Real-time status reflects what's happening on the floor

ONCE DATA REFLECTS REALITY IN A SHARED OPERATIONAL LANGUAGE, AI CAN INTERPRET IT MEANINGFULLY.

STEP 3

MOVE FROM DASHBOARDS TO DECISIONS

Most organizations already have dashboards. KPIs are tracked. Reports are shared. But analytics alone don't drive action. AI lifts the burden of interpreting data and offers guidance.

Traditional process mapping shows how goods move. AI cares about how decisions move. Every warehouse runs on thousands of micro-decisions each day:

- **Should this order be expedited?**
- **Can this wave be delayed?**
- **Where should labor go right now?**

Some of these decisions are formal, embedded in systems and workflows. Others are tribal knowledge, existing only in people's heads. Instead of reporting metrics, AI reports what's likely to happen next, how different decisions will impact the outcome, and what the best course of action is based on current conditions.

Instead of:

> **"Picking productivity is trending down."**

AI says:

> **"Zone 3 congestion will impact outbound in 45 minutes, so resequence work now."**

AI shifts analytics from hindsight to foresight.

Start small. Identify one decision where better guidance would improve the shift, like labor reallocation, wave sequencing, or dock scheduling. Build intelligence there first and watch trust grow as teams see fewer surprises and smoother execution.

AI READINESS CHECKLIST:
IS THIS DECISION WORTH EXPLORING WITH AI?

- ☐ Happens dozens (or hundreds) of times per day
- ☐ Impacts service, cost, or labor
- ☐ Time-sensitive
- ☐ Relies on experience or gut feel
- ☐ Hard to standardize with static rules

IF YOU CHECK 3 OR MORE, AI IS WORTH EXPLORING. IF YOU CHECK FEWER THAN 3, IMPROVE YOUR RULES FIRST.

STEP 4

INTRODUCE AUTONOMY GRADUALLY

Agentic AI enables systems to act independently within defined boundaries. This capability is powerful, but it requires careful implementation.

Importantly, autonomy doesn't require handing control to a brand-new system. It can evolve within your current environment with an AI layer across your WMS, WCS, or TMS.

Adopt the turtle mindset for this race. A gradual progression allows organizations to gain confidence and refine governance before giving AI free rein. Let your organization acclimate and gain trust in agentic workflows over time.

Despite popular narratives, AI doesn't replace the human role in logistics. It simply changes it.

Well-designed AI systems lighten the cognitive load and provide smart options earlier. People remain responsible for monitoring.

When users understand why a recommendation exists and how it was generated, they're more likely to follow it. Transparency matters, and so does the ability to override or question system behavior. When teams feel supported, AI adoption flourishes. We're aiming for a healthy, symbiotic relationship here.

Autonomy should progress in stages.

1. Observation:
AI monitors and detects patterns

2. Recommendation
AI suggests actions

3. Assisted execution
AI performs tasks with approval

4. Controlled autonomy
AI acts independently within rules

3-MINUTE EXERCISE
SET YOUR BOUNDARIES

1. Write down one daily decision (example: labor reallocation mid-shift)

2. Now answer honestly: Would I let AI…

- ☐ Just monitor and alert me?
- ☐ Recommend what to do?
- ☐ Execute with my approval?
- ☐ Execute without asking me?

WHERE YOU HESITATE IS YOUR TRUST BOUNDARY.

STEP 5

MEASURE IMPACT

AI success should be measured in operational outcomes. Your control room can rival Batman's lair, but even a hundred dashboards can't capture the full scope of AI's impact.

Meaningful success shows up in day-to-day warehouse floor functionality. Decisions happen faster. Exceptions are resolved earlier. Assets are used more effectively. Avoid vanity metrics like "number of AI models deployed" and focus instead on how daily work improves. "X% more orders filled per day" or "X% fewer errors" will matter more during quarterly reviews.

If it doesn't change behavior, it doesn't count.

New dashboards ≠ **new outcomes**

New algorithms ≠ **new results**

LOOKING AHEAD

AI can feel like a shiny warehouse utopia. But it's simply better decision support.

The organizations that benefit most will be those that implement thoughtfully. As the logistics industry evolves toward autonomous systems, platforms designed to embed governed intelligence across existing execution environments will matter most.

With solutions like EPG AURA, intelligence becomes an integrated layer connecting data, systems, and decisions in a continuous cycle of insight and optimization. EPG AURA extends the EPG ONE Supply Chain Execution Suite by embedding AI directly into operational workflows, helping organizations leverage practical, layered intelligence.

The next era of supply chain performance will not be defined by who adopts AI first. It will be defined by organizations that translate AI theory into operational action, and scale it with discipline.

You now have the five steps. The advantage comes from execution.

If you're ready to pressure-test where AI can create measurable impact in your environment, our team is ready to have that conversation.

LET'S DEFINE YOUR FIRST MOVE!

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