

# The path to AI implementation in wholesale distribution

A practical guide for distributors,  
from the order to the dock.



Run Smarter. Grow Faster.



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In wholesale distribution the pressures are specific: thin margins, high order volumes, complex pricing, and a constant push to move more without adding cost. AI can help with all of them, but only once you know where to begin. This guide lays out a practical path, from a first honest look at readiness to lasting value, written for distributors from the order to the dock.



# Charting a clear course for AI in wholesale distribution

Ask a procurement lead, a warehouse lead, a fulfilment lead, and a finance lead where AI should start, and you will hear four different answers: sharpen the forecast, lift lines per hour, hit fill and OTIF, price to true cost to serve. The opportunity runs from the order to the dock, and so does the temptation to chase all of it at once.

What is usually missing is a route. Deciding to use AI is not the same as knowing which problem to solve first, which order, inventory, and cost data to trust, or how you will recognise a result on the floor.

This guide gives distribution leaders that route. It moves through the journey in order, from a candid read of where you stand to the work of holding on to value once a programme is live. None of it is abstract. Each stage reflects how distributors actually run.

Along the way you will see where Hudace and Xenon AI fit across procurement, inventory, warehousing, fulfilment, and finance, so the path stays practical rather than theoretical.



## Evaluating your AI readiness

Start with an honest picture of your orders, your warehouse, and your data.

AI rewards preparation. Before the first model or agent, understand how order, inventory, warehouse, and finance data flow, and how high volumes and tight margins shape what is possible. A grounded readiness check turns interest into progress.

### Find your starting point, not a score

Readiness is less about owning the newest tool and more about the conditions around it: leaders aligned on the goal, data you can rely on from order to dispatch, and teams, on the floor and at the desk, willing to work in new ways. This is not a test to pass. It is a way to see where you are strong and where you still need to build.

A few signs you are ready to take the next step:

- You can tell apart what your people are ready for and what your systems are ready for.
- You can name specific tasks AI could take on: demand forecasting, stock positioning, pick and route optimisation.
- You know whether order, inventory, and cost data are reachable, accurate, and current.
- You have a real sense of the skills you hold, from operations to data, and the ones to add.
- You can put rough numbers on the time and budget involved.

Done early, this spares you stalled projects later, and lets you scope from facts rather than hope.



### How Hudace helps

Running procurement, warehousing, and fulfilment on Hudace means you already have a connected view from order to dock, which is a real head start in spotting where AI adds value.

A short readiness session with our team ranks AI opportunities by location, customer, and line, so your first projects are the ones most likely to pay off. [Talk to Hudace.](#)



## Defining strategic AI goals and expected ROI

Tie every AI effort to a number distribution already lives by.

AI earns its place when it moves a number that matters: fill rate, OTIF, lines per hour, cost to serve. Set goals that are specific, owned, and measurable before the work starts.

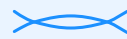
### Clear goals turn effort into outcomes

The most useful projects open with a plain statement of what should change and by how much: a higher fill rate, more lines per hour, a tighter cost to serve. Anchor it to a priority, name who owns it, and the work stays focused.

**The question is rarely whether AI can do the task. It is whether you have decided what a good result looks like, in throughput, in service, in cost, before you start.**

Worth settling early:

- The outcome you are after, written as a number you can track by location or customer.
- The specific problem, not the broad theme, you are solving.
- A shared view across procurement, warehousing, fulfilment, and finance on what is feasible.
- Metrics you are willing to revisit each quarter.
- A first ROI range, held loosely enough to adjust.



### How Hudace helps

Hudace helps you put numbers behind the ambition. Because order, inventory, and cost data already live in the platform, goals and ROI ranges come from what is really happening across your locations and customers.

That makes the case for investment far easier to stand behind, and to revisit as throughput grows.

### 18% more

throughput at the same headcount at Meridian Distribution, after connecting procurement, warehousing, and fulfilment on one platform.

[Read the story.](#)



## Building your internal AI coalition

Adoption runs through procurement, the warehouse, fulfilment, and finance alike.

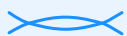
The best forecast in the world stalls without owners. Progress depends on a small group, drawn from across the business, who share both the goal and the responsibility for reaching it.

Early on, gather a group that reaches well beyond IT: procurement, warehouse operations, fulfilment and transport, sales, and finance. Their job is not only to comment. It is to own a piece of the change, so it never rests on one team.

This is the group that connects intent to execution. They know which problems are worth solving on the floor and at the desk, and their involvement carries a project past the first quarter.

### What a strong coalition gets right

- It brings the right people in at the start, with a real stake in the outcome.
- It agrees how decisions, risk, and oversight will work before issues arise.
- It leaves room to question, test, and learn out loud.
- It funds the unglamorous parts: enablement, communication, and time.



### How Hudace helps

If alignment is the hard part, a Hudace discovery session gives your group a structured place to surface use cases across the network and agree on priorities, turning scattered opinions into a shared plan.

When the focus shifts to skills, [Hudace Learning](#) offers practical paths so everyone, from the pick face to finance, feels ready for the change rather than unsettled by it.

## Data, fulfilment, and infrastructure

Good AI depends on good data, from the order to the dock.

AI is only as good as what it runs on. Real-time, trustworthy data, joined across orders, inventory, warehouse, and finance, is what separates a promising pilot from something dependable. In distribution, that data is also how you see one stock position across every location.

### Lay the groundwork for intelligent action

Xenon AI can only reason over what it can reach and trust. That means moving away from data trapped in separate systems toward a connected foundation: orders, inventory positions, warehouse activity, and cost, unified and current enough to act on.

Where to focus:

- Data quality: are order, inventory, and warehouse records clean enough to use without heavy rework?
- One view: can you see one stock position and one cost to serve across locations?
- Infrastructure: can your environment flex through peak order volume?
- Ownership: IT keeps systems ready, but procurement, the warehouse, and finance share it.
- Budget: plan for integration, migration, data quality, and training.

None of this slows you down in the end. It is the difference between AI that demos well and AI you can run a shift on.



### How Hudace helps

Hudace gives Xenon AI one governed, real-time view across orders, inventory, and fulfilment, so forecasting, positioning, and dispatch work from a single source of truth.

Still untangling older systems? [ACE with Hudace](#) shortens the path to a modern, connected core.



# Navigating change across the warehouse and the desk

Bring people with you, from the pick face to the sales desk.

AI changes the shape of work, not only the tools. The distributors that get the most from it treat the human side as the main event: building skills, adjusting how work is done, and giving people a reason to lean in.

## The technology shift rides on a human one

New capability brings honest questions. Will my role change? What happens to the judgement I bring on stock, on price, on a route? Will I keep up? Left unanswered, those questions quietly turn into resistance.

Handled well, this stage is where a planner or a team leader stops bracing against AI and starts using it, because it makes their own call sharper.

What helps the shift land:

- Map the skills that are changing and offer real paths to build them.
- Talk early and often, especially where daily work in the warehouse or at the desk will look different.
- Be straight about changing roles, with AI assisting expertise rather than replacing it.
- Set expectations on pace, shift by shift.
- Back it with budget for learning, champions, and the culture work that sticks.



## How Hudace helps

[Hudace Learning](#) gives your teams structured, hands-on paths to grow confident with Xenon AI, from the why through to daily use in the warehouse, on the desk, and in planning.

The result is people who feel ready for the change instead of caught out by it, whatever their role.

## Measuring success and scaling AI

A pilot proves the idea. Measurement decides what scales across locations and customers.

Getting one thing working, in one warehouse or one customer segment, is the start, not the finish. The distributors that scale well look hard at what worked and why, then carry that evidence into the next location and the next quarter.

### Let the evidence choose your next move

Useful measurement is not a box-ticking exercise. It is how you learn what really happened, build the confidence to expand, and avoid scaling something for the wrong reasons.

What to track once a pilot lands:

- Measures that reflect real use: fill rate, OTIF, lines per hour, cost to serve.
- Actual ROI against what you expected, and the surprises along the way.
- Whether the approach travels to other locations and customers.
- The resourcing, so people and systems are ready for peak volume.
- What you learned, written down, so the next rollout starts further ahead.

Scaling is not simply doing more. It is doing more of what is proven, with a clear idea of what good looks like.



### How Hudace helps

Hudace shows you how Xenon AI is used across the business: which locations, which customers, how often, and to what effect.

That visibility keeps your attention on the work that pays back, and makes the case for the next investment concrete.

## Risk, compliance, and responsible AI

Value and trust have to grow together, all the way to your customers.

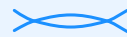
AI does not remove human responsibility. It raises the stakes on it. Biased data, errors, and weak controls are margin and reputation risks. As AI spreads through your operations, the guardrails have to spread with it.

### Make trust part of the design

Whether AI is forecasting demand, setting a price, or routing a load, the same questions apply: is it secure, is the data protected, can you explain the call? Answering them is the job of clear governance, with operations, finance, legal, and IT deciding together how AI is run and watched.

Worth getting right:

- Naming the risks plainly: skewed data, unexplained decisions, pricing errors at scale.
- Holding AI to the standards you set, and enforcing them.
- Meeting the rules on data, trade, and safety that apply to you.
- Giving compliance, finance, and model checks a clear owner.
- Treating customer and supplier data with the same care as your own.



### How Hudace helps

Keeping operations on one platform means less data scattered across systems to defend. Hudace adds granular access controls and built-in compliance at every level.

[AI Agent Governance](#) gives you the policies, monitoring, and oversight to keep Xenon AI trustworthy as it grows.

## Sustaining value as you scale

Launch is a milestone. Lasting value is the work that follows it.

Going live is the easy thing to celebrate. Keeping value flowing as volumes, customers, and costs shift is the harder, more rewarding work, and it favours distributors that stay curious.

### Keep the momentum, and the direction

Maturity does not arrive on launch day. It builds through small iterations, shared learning across locations, and a willingness to revisit what worked last quarter. Staying ready for what is next takes both the mindset and the systems to support it.

How to stay ahead:

- Watch how AI performs across locations and customers, and tune where the numbers point.
- Keep your processes loose enough to adopt what comes next.
- Stay close to warehouse and sales teams, and keep learning shared.
- Pair quick wins with the slower investments that make scale possible.
- Keep a habit of small, structured experiments as new options appear.

Lasting value comes from staying adaptable without losing the plot: a leaner, more reliable, more profitable distributor.



### How Hudace helps

Hudace helps you keep sight of where Xenon AI earns its keep across the network, so your focus stays on the work that matters.

With [Xenon Studio and the wider Xenon AI platform](#), your teams extend AI at their own pace, and the [Hudace Community](#) keeps fresh practice within reach.



## Metrics and formulas that matter

AI earns trust when it shows up in numbers you already manage. These are the measures worth instrumenting from the first pilot, with the formulas behind them, so progress is easy to prove and easy to question.

### Order fill rate

$$\text{Fill rate \%} = (\text{units shipped} / \text{units ordered}) \times 100$$

How completely you serve demand straight from stock.

### On-time in-full (OTIF)

$$\text{OTIF \%} = (\text{orders on time and in full} / \text{total orders}) \times 100$$

The clearest read on the service your accounts feel.

### Lines per labour hour

$$\text{Lines per hour} = \text{lines picked} / \text{labour hours}$$

Throughput without adding headcount, the heart of distribution.

### Inventory turns

$$\text{Inventory turns} = \text{COGS} / \text{average inventory}$$

How hard your stock is working through the year.

### Days sales outstanding

$$\text{DSO} = (\text{accounts receivable} / \text{net credit revenue}) \times 365$$

How quickly shipped orders turn into collected cash.

### Gross margin

$$\text{Gross margin \%} = (\text{net sales} - \text{COGS}) / \text{net sales} \times 100$$

Whether the volume you move is actually paying its way.

Pick two or three to start. Tie each AI pilot to one, set a baseline before you begin, and review it each quarter.



# Putting Xenon AI to work

A workflow worth starting with, and the questions your teams can ask.

## More throughput without more overhead: a continuous loop

- 1 Sense**  
Xenon AI reads orders, inventory, and warehouse activity across locations into one view.

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- 2 Plan**  
It forecasts demand and positions stock to cut split shipments and travel.

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- 3 Optimise**  
It sequences picking, routing, and fulfilment to lift lines per hour.

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- 4 Act**  
Owners approve, the platform updates orders, inventory, and dispatch, and the loop learns.

### Ask Xenon AI

“ Where will we miss fill or OTIF this week, and what should we expedite or reallocate?”

“ Which orders are at risk of split shipments, and how do we consolidate them?”

“ Show lines per hour by warehouse and shift, and where productivity is slipping.”

“ Recommend stock positioning across locations to cut travel and shorten delivery.”

“ Show margin and cost to serve by customer, and where it is below target.”

Every answer runs on your governed data, so it reflects what is really happening across your operations.



# Your AI journey starts at the order

The next step is closer than it looks.

You do not need every answer to begin. You need a sensible first move, the right people beside you, and support you can lean on. Followed in order, the steps in this guide take a distributor from a first honest look to results you can measure, in throughput, in service, in cost.

One location or your whole network, the shape is the same: a path that grows with you, where every quarter teaches you something worth carrying into the next.

Hudace stays with you across that path, from the first readiness conversation to AI working quietly across procurement, inventory, warehousing, fulfilment, and finance, with Xenon AI built into the platform rather than added on.

When your orders, your data, and your goals point the same way, the results tend to follow.



### Learn more

See AI-native ERP for wholesale distribution at [hudace.com/industries/wholesale-distribution](https://hudace.com/industries/wholesale-distribution).



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