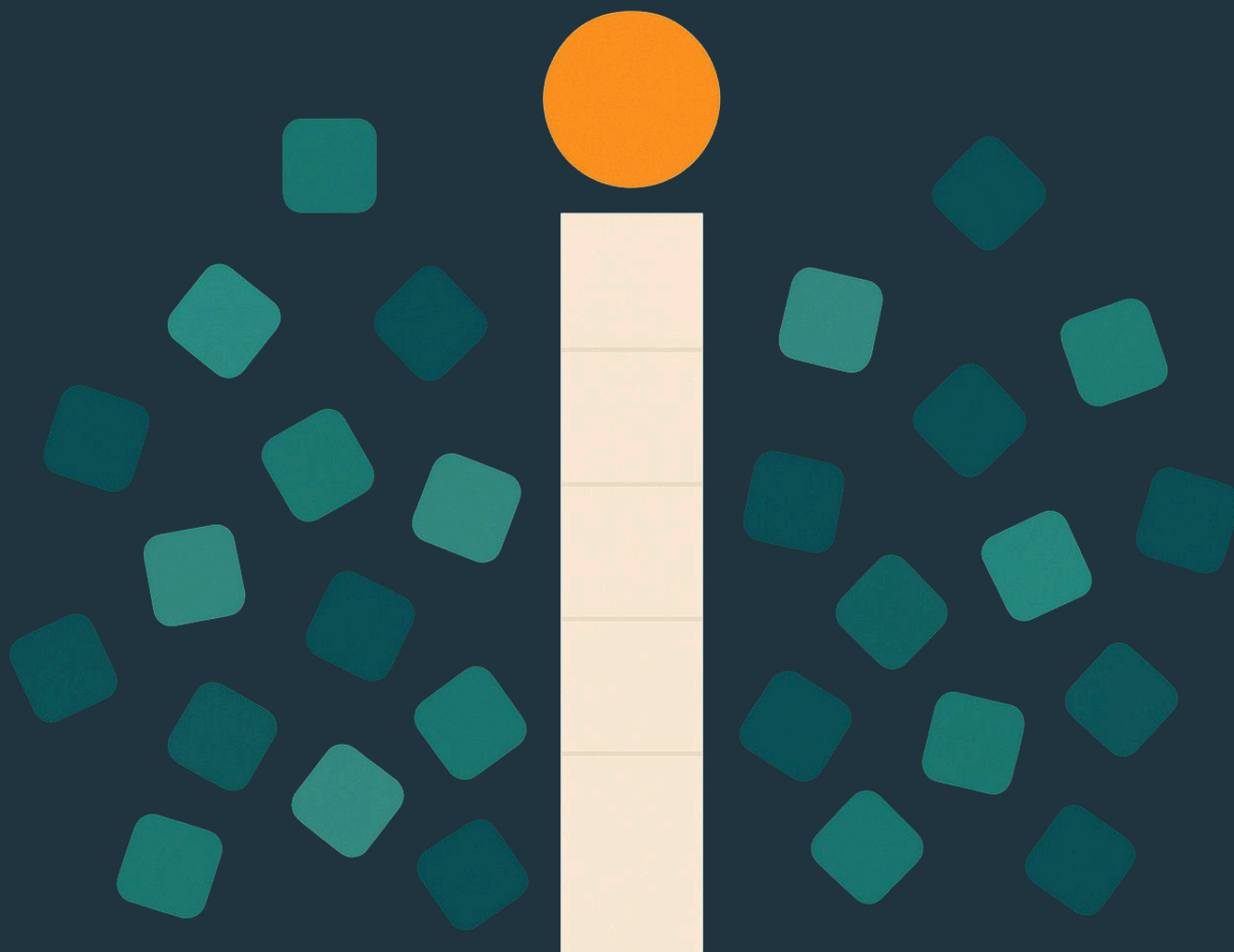




INDUSTRY SOLUTIONS

# Operational AI for Wholesale Distribution

A guide to the recurring work inside a distribution business,  
and the AI roles that can take it on.



A practical reference for distribution leaders deciding where AI is worth building and where it is not.

**6**

representative AI  
roles mapped

**45 min**

AI Workforce Review  
to find the first role

**50**

open-source workflow  
patterns published

RECURRING WORK · AI ROLES · SYSTEMS · OVERSIGHT · VALUE CASE · FIRST ROLE



# Start with **the recurring work**, not the technology.

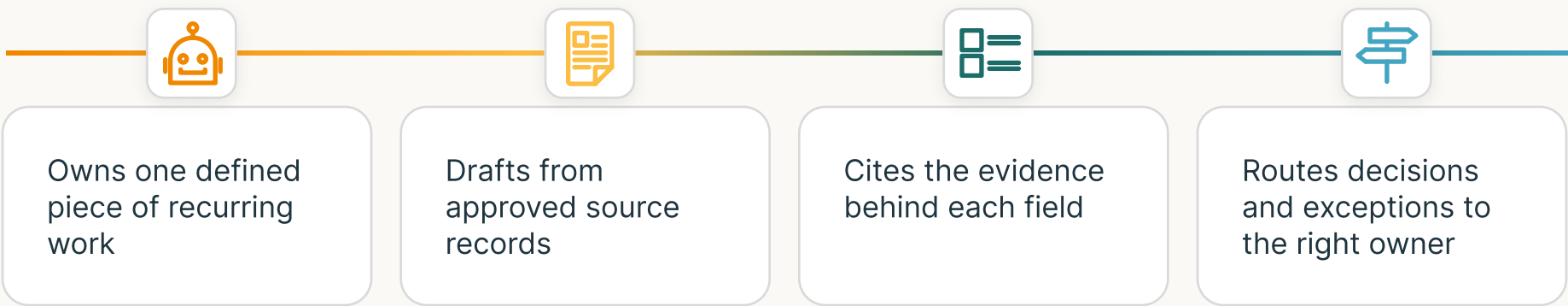
In distribution, margin disappears one exception at a time. The easy orders already flow. The cost sits in credit holds, short stock, price overrides, and disputes that bounce between sales, credit, purchasing, and operations while each team builds its own version of the answer.

Four recurring patterns appear across distribution operations:

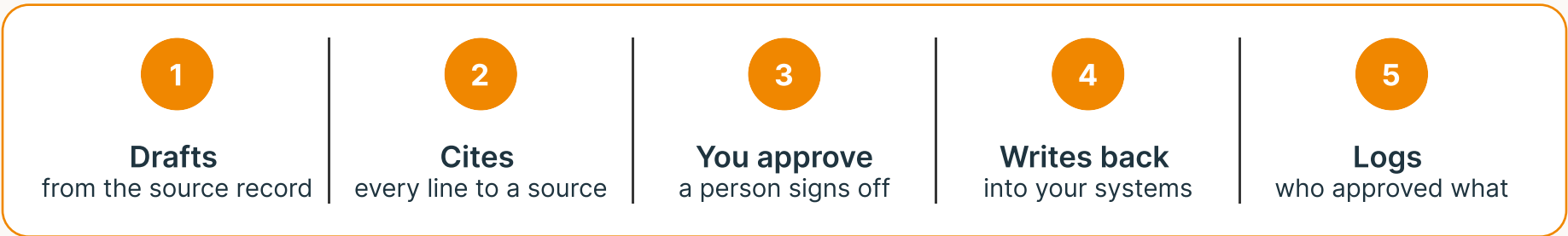
|                                                                                                                                                                                                     |                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Order holds that turn into scavenger hunts</b></p> <p>A credit hold or stock split stops an order, and four teams each pull a different piece of the answer before anyone can release it.</p> | <p><b>Supplier promises that never reach the plan</b></p> <p>Confirmations sit in email and portals, so the backorder dates customers hear are already stale.</p>      |
| <p><b>Short supply allocated in meetings</b></p> <p>When demand outruns stock, priorities get set in spreadsheets and calls, and the decision arrives after the trucks are loaded.</p>              | <p><b>Disputes that age while evidence is argued over</b></p> <p>Short-pays and claims wait while teams debate who owns the proof of delivery, price, or quantity.</p> |

## How an AI role responds

The work keeps moving while accountable people remain in control.



Every Metacto AI role follows the same operating loop.





# What an AI role in distribution **actually** does.

Illustrative example: a held order prepared for release

order release desk ai role · so 40718

✓ ANATOMY OF AN AI ROLE

✓ EVERY LINE CITED

1 TRIGGER

Credit hold · ERP · 10/14 · SO 40718

Order held. Customer over credit limit; two lines short.

No decision yet. The customer expects the truck Thursday.

2 Release case RC-311 · SO 40718

SHIPS THURSDAY

ORDER RELEASE DESK

Credit · payment received 10/13

Stock · 2 lines short, 40 units

Margin · line 4 below floor

Order value

cited: AR aging, remittance 10/13

cited: on-hand DC2, PO 55120 ETA 10/17

cited: price list Q4, quote Q-8812

\$7,800 cleared

split ship

-1.2 pts

\$46,300

3 CREDIT DECISION

Approve

awaiting credit

edit · override · reject, all logged

4 WRITE-BACK

written back

SO 40718 released as split shipment · approved by your credit manager · timestamped

! EXCEPTION

No payment evidence? The order stays held, and the question goes to your credit team.

✓ HUMAN IN THE LOOP

✓ ASKS, NEVER GUESSES

✓ MEASURED TO A BASELINE

Success metric: Order-hold age, measured from hold to release.



# The same standard, across the work that moves an order.

Each AI role is deliberately narrow: it owns one repeated piece of work, uses approved records, cites its sources, and routes decisions to an accountable owner.

|                                 |                                                                         |                       |                         |
|---------------------------------|-------------------------------------------------------------------------|-----------------------|-------------------------|
| Order Release Desk AI Role      | Triages credit holds and stock splits into one release case.            | SO 40718 · case ready | Order-hold age          |
| PO Promise Chaser AI Role       | Follows up unconfirmed supplier lines and updates the plan.             | 12 lines unconfirmed  | Confirmation latency    |
| Allocation Planner AI Role      | Builds short-supply options and priorities for operations to decide.    | Item 4410 · 3 options | Allocation time         |
| Price Exception Desk AI Role    | Preps quote requests and margin reviews before pricing approves.        | Q-8812 · ready        | Quote turnaround        |
| Customer Status Builder AI Role | Traces backordered items and their dependencies into a customer update. | 6 updates in review   | Repeat status inquiries |
| Credit Research AI Role         | Matches short-pays against shipment and pricing evidence.               | Short-pay · matched   | Dispute age             |

Any work that recurs across orders and accounts and carries real cost in margin, fill rate, or cash may be a candidate. Before funding a build, evaluate it against the Five Conditions of a Fundable AI Workflow:

## THE FIVE CONDITIONS OF A FUNDABLE AI WORKFLOW

|                 |                        |                  |                    |                     |
|-----------------|------------------------|------------------|--------------------|---------------------|
| Business impact | Workflow repeatability | Source readiness | Decision ownership | Implementation path |
|-----------------|------------------------|------------------|--------------------|---------------------|

Do not automate everything at once. Start with one AI role that has a credible baseline, a clear owner, and a measurable outcome.



# AI roles work **inside the systems** you already run.

An AI role should not create another destination for your team. It reads and writes at the record level inside approved systems, using role-based access, explicit approval gates, and controlled write-back.

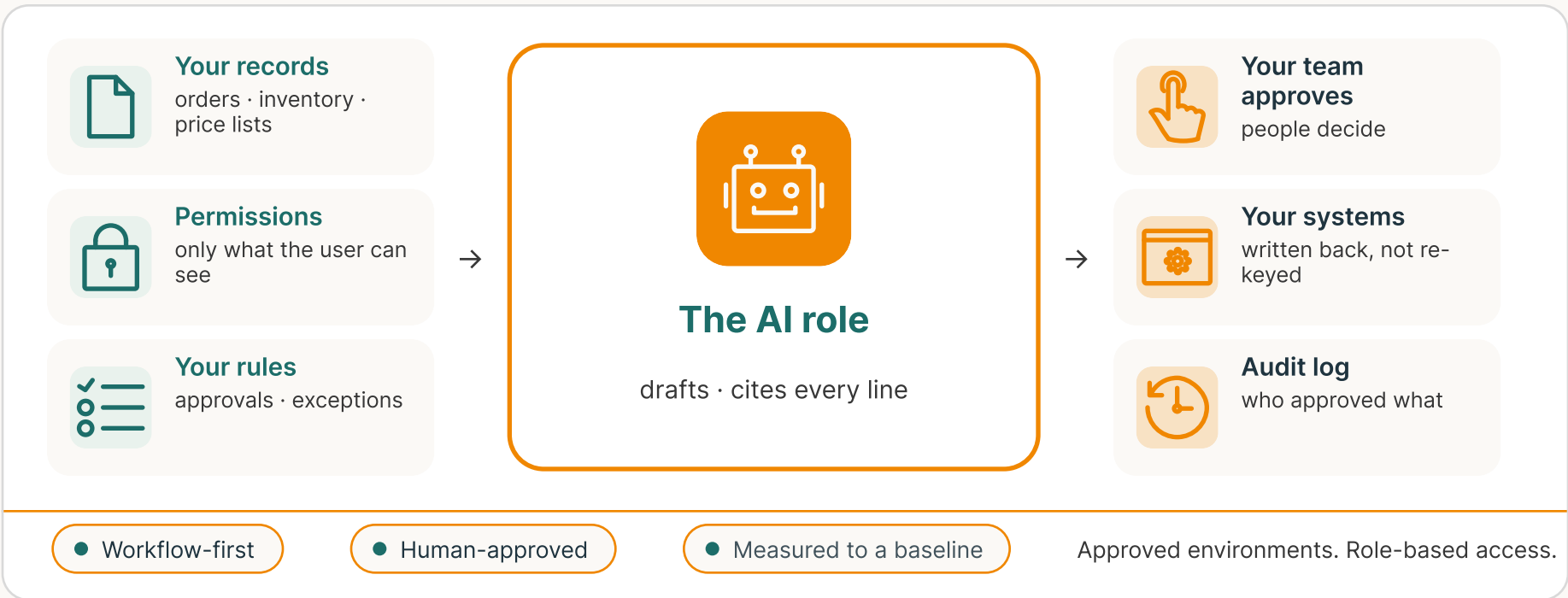
## Common system categories

| ORDERS & INVENTORY                               | CUSTOMERS & SUPPLIERS                                 | PRODUCT & DATA                                        |
|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| <b>ERP</b><br>sales orders, POs, credit          | <b>CRM</b><br>accounts, quotes, contacts              | <b>Product data</b><br>items, attributes, substitutes |
| <b>WMS</b><br>on-hand, picks, transfers          | <b>Supplier portals</b><br>confirmations, price files | <b>eCommerce</b><br>web orders, inquiries             |
| <b>Pricing</b><br>price lists, contracts, floors | <b>AR &amp; credit</b><br>aging, limits, disputes     | <b>Data warehouse</b><br>demand and margin history    |
| <b>EDI</b><br>orders, ASNs, invoices             | <b>Transportation</b><br>shipments, freight, PODs     |                                                       |

Categories only. The specific systems, access, and write-back path are confirmed during the AI Workforce Review.

## Governance & risk controls

Production AI requires explicit boundaries: what the system may read, what it may draft, who must approve, where the result is written, and how every action is recorded.





# Establish **value** before you build.

The business case should begin with the workflow baseline, not a generic estimate of AI ROI.

## Value shows up at the workflow level

Each workflow targets a specific operational lever: speed, quality, margin, or risk control.

|                   |                                               |
|-------------------|-----------------------------------------------|
| ORDER HOLDS       | Orders released faster with authority intact. |
| SUPPLIER PROMISES | Backorder dates that match reality.           |
| ALLOCATION        | Short supply decided in hours, not meetings.  |
| PRICING           | Margin reviewed before the quote goes out.    |
| DISPUTES          | Short-pays matched to evidence and closed.    |

### The stakes are concrete, per event

In the illustrative example, release case RC-311 puts the payment, the short lines, and the margin exception for a \$46,300 order in one place for your credit manager. The question is not whether AI can read an order. It is whether the order ships Thursday with its margin intact.

## How the value case is built

In the AI Workforce Review and Launch & Prove, Metacto baselines the selected work using measures such as hold age, overdue supplier lines, unallocated demand, quote turnaround, repeat inquiries, and reopened disputes. That baseline supports a build-or-no-build decision before implementation budget is committed, and it stays in place after launch.

## A credible production workflow has to work for each stakeholder.

|                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>Owner / CFO: Measurable economics</b><br>An explicit baseline, value model, and measurement plan before investment.                                           |  <b>CEO / COO: Operational leverage</b><br>More orders released per person, earlier visibility into supply risk, and fewer margin leaks in exceptions. |
|  <b>Credit / Purchasing / Sales: Process control</b><br>Clear ownership, review gates, and exception handling without removing people from accountable decisions. |  <b>IT / Security: Access &amp; governance</b><br>Role-based access, source citations, audit logs, and controlled write-back into existing systems.    |



# Proof gets built on your work, not borrowed.

There is no borrowed case study here. Every AI role Metacto builds is proven on your own work: a baseline is set first, the role runs behind your review queue, and it scales only when the numbers hold. This is how that looks for a first role.

The test is simple: the first role beats its baseline inside your review queue, or it does not scale.

| FIRST ROLE                 | FUNCTION                      | MEASURED AGAINST                       | PRIMARY USERS                              |
|----------------------------|-------------------------------|----------------------------------------|--------------------------------------------|
| Order Release Desk AI Role | Credit holds and stock splits | Order-hold age and touches per release | Credit, customer service, and inside sales |

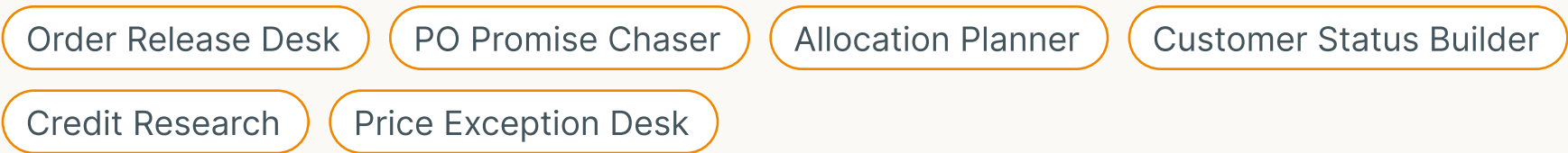
## The starting queue

Most distributors already know where the queue is: held sales orders. An order stops, and credit, purchasing, and sales each chase their piece of the answer before anyone can release it. That is the work the first role takes on.

## The roles mapped around it

Around that first role, six AI roles are mapped across order holds, supplier promises, allocation, pricing, customer status, and credit research. Each one is representative; yours are designed around your business.

Representative roles. Yours are designed around your work.



## What gets measured

| Baseline                                                                 | 01                                                  | 02                                                                | 03                                                                              |
|--------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------|
| set before the build and kept after launch, measured across three tracks | <b>Speed</b><br>Order-hold age and quote turnaround | <b>Quality</b><br>Reopened disputes and repeat customer inquiries | <b>Capacity</b><br>Credit, purchasing, and service hours recovered from chasing |

No results are claimed here. Each track is measured on your own baseline during Launch & Prove.



# What you can check before you buy.

## Open by default

Metactio publishes 50 workflow patterns through Vociion, its open-source platform, so your team can read how an AI role is built before committing to one. Roles run in your own environment. If you stop the service, you keep the workforce: deployed roles stay yours on their last deployed version.

## What every AI role ships with

### Eleven standards, built into every role from day one:

- |                                                                                                                 |                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  Named human owner            |  Defined scope of work    |
|  Source citations            |  Approval gates          |
|  Exception routing           |  Role-based access       |
|  Write-back to your systems  |  Audit trail             |
|  Baseline and success metric |  Cost and usage tracking |
|  Monthly value review        |                                                                                                               |

## Oversight by design

### 01 Citations

Every claim and number ties back to a source your reviewers can check.

### 02 Review Gates

External actions are held for human approval; the system stages drafts and recommends next steps.

### 03 Audit Trail

Activity is actor-attributed and traceable: what AI suggested, what a human approved, and what moved.

### 04 Utilization & Cost

Usage is tracked by role, workflow, and surface, providing visibility into adoption, value, and operating cost.



# Start with the first AI role **worth funding.**

AI in distribution should begin with one high-volume exception queue where margin, fill rate, or cash still depends on people chasing each other for the answer. Pick the queue with the clearest economics, build the role around your real process, and expand from measured results.

## What a first build has to answer

01

**Where is value leaking?**  
Identify the holds, exceptions, and handoffs where margin, fill rate, or cash is repeatedly affected.

02

**Which work is most fundable?**  
Select the candidate with the strongest combination of business impact, repeatability, source readiness, decision ownership, and implementation path.

03

**What context and controls does it require?**  
Define the records, systems, permissions, rules, approvals, and exception paths required for reliable operation.

04

**How will value be measured?**  
Establish the baseline, success metric, and value model that will determine whether the build is worth funding.

## Estimate the opportunity with your own numbers

Use a small set of operating inputs to create a preliminary annual estimate. Metacto validates the assumptions against your actual baseline during the AI Workforce Review.

Annual opportunity = held orders × margin at risk × recoverable share + team capacity value

| ORDER HOLDS • YOUR INPUTS                              |      |
|--------------------------------------------------------|------|
| Held orders per year<br>(across branches)              | —    |
| Average margin at risk<br>(\$ per held order)          | \$ — |
| Recoverable share<br>(vs. your baseline)               | — %  |
| Team capacity value<br>(recovered hours × loaded cost) | —    |
| Illustrative gross annual opportunity<br>(\$)          | —    |

| WORKED EXAMPLE                                                   | ILLUSTRATIVE  |
|------------------------------------------------------------------|---------------|
| Held orders per year<br>mid-size distributor                     | 2,400         |
| Average margin at risk<br>\$ per held order                      | \$350         |
| Recoverable share<br>protected by faster release                 | 25%           |
| Team capacity value<br>900 hrs × \$55 loaded                     | \$49,500      |
| Illustrative gross annual opportunity<br>approximate opportunity | ≈ \$260K / yr |

Illustrative gross opportunity before implementation and operating costs. Validate that benefit categories do not overlap before adding them together. The same approach applies to supplier dates, allocation, and pricing.



# Is this work ready for an AI role?

Select one piece of recurring work and rate it from 1 to 5 against each condition. A total of 21 or above, with no factor below 3, signals work ready for an AI Workforce Review.

## THE FIVE CONDITIONS OF A FUNDABLE AI WORKFLOW

|                        |                                                                  |          |
|------------------------|------------------------------------------------------------------|----------|
| Business impact        | materially affects margin, fill rate, or cash                    | ___ / 5  |
| Workflow repeatability | the same core steps recur across orders in a repeatable sequence | ___ / 5  |
| Source readiness       | the records exist in systems you can integrate                   | ___ / 5  |
| Decision ownership     | one accountable role that signs off today                        | ___ / 5  |
| Implementation path    | a clean destination for the approved record                      | ___ / 5  |
| Your total             |                                                                  | ___ / 25 |

### 21 to 25 · Ready to map

With no factor below 3, bring it to an AI Workforce Review. The numbers are likely there.

### 15 to 20 · Needs discovery

Worth mapping. Expect some source or ownership work first.

### Below 15 · Prepare first

Line up the records and the approval owner, then score again.

## Is this the right fit?

**GOOD FIT**

You run recurring work like order holds, supplier follow-up, pricing, and disputes

Margin or fill rate is lost in manual exceptions and handoffs

Your orders, inventory, and price lists sit in systems you can integrate

A credit, buying, or sales owner can stay in the approval loop

You want a production system that runs on real orders

**NOT A FIT**

You want a generic chatbot or a one-off prototype

There is no source of truth for orders, inventory, and pricing

No one owns the workflow or the outcome it affects

You are not ready to measure impact against a baseline

# Put AI roles to work across your branches.

45 minutes. We look at where recurring work is costing your team the most time and map the first one or two AI roles around it. Nothing to prepare.

[Book an AI Workforce Review](#)