CASE STUDY: LEAD TO ORDER

Don’t automate the waste.

How AI agents reshape Lead to Order: challenge, approach and impact.

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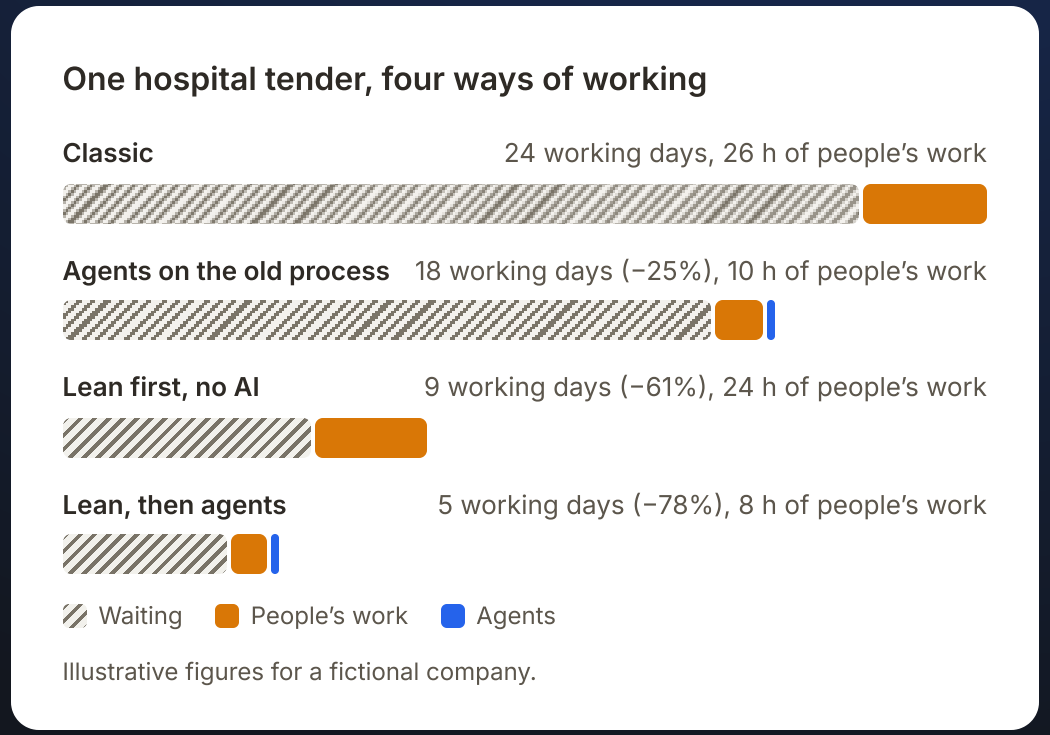


CHALLENGE

Lead to Order is mostly waiting

Every company that sells to other companies runs the same six steps from first contact to booked order. Ask how long that takes and the answer is weeks, sometimes months. Ask how much of it is actual work and the answer is hours or days.

The rest is waiting: in inboxes, for meetings, for sign-offs, for someone to re-type what someone else already typed. That gap is where AI agents promise the most, and where they can do the most damage.

Aurelis Pharma, one hospital tender

24 working days

of which 3 are work

Werf Noorderhaven, one hybrid ferry

160 working days

of which 39 are work

1 Capture	2 Qualify	3 Specify	4 Price & quote	5 Negotiate & approve	6 Order & handover
▲ Waiting and re-typing	▲ Waiting	▲ Unused talent and waiting	▲ Rework and waiting	▲ Waiting, motion and defects	▲ Re-typing and defects

CHALLENGE

Same six steps, two very different companies

The steps don’t change between industries. The documents, rules and risks do. To show it, we follow two fictional companies at opposite ends of the spectrum.

Aurelis Pharma

Generic injectables, sold to hospitals through public tenders and to wholesalers in the Benelux and Germany. We follow one hospital tender.

Volume	Many tenders, thousands of orders
Cycle	Weeks
Rules	Maximum prices, customer licences, serialisation
What hurts most	Supply penalties and compliance

Werf Noorderhaven

Tugs, workboats and hybrid ferries, some to a standard design and some fully custom. We follow one hybrid ferry.

Volume	A handful of vessels a year
Cycle	Months
Rules	Class, flag state, standard shipbuilding contracts
What hurts most	Unpriced changes and late delivery

If the pattern holds at both ends, it holds for you.

APPROACH, 1 OF 3

The trap: automate the old process

Add an agent to every step and change nothing else. Agents read, check and draft in minutes, but the case still waits for the same meetings, queues and sign-offs.

Aurelis Pharma **24 → 18** working days **−25%**

Werf Noorderhaven **160 → 128** working days **−20%**

Same waste, faster.

Step	The agent added	What still makes Aurelis wait	What still makes Noorderhaven wait
1 **Capture**	Tender watch agent / Market watch agent	▲ Forwarded by email	▲ Still one inbox
2 **Qualify**	Tender analysis agent / Qualification agent	▲ Still waits for the meeting	▲ Still waits for planning
3 **Specify**	Specification agent / Specification agent	▲ Still in the regulatory queue	▲ Architects still part-time
4 **Price & quote**	Pricing agent / Estimating agent	▲ Still waits for Thursday	▲ Suppliers asked after the estimate
5 **Negotiate & approve**	Bid assembly agent / Contract agent	▲ Still three sign-offs in turn	▲ Changes priced per round
6 **Order & handover**	Order agent / Handover agent	▲ Still the order queue	▲ Still waits for the kick-off

APPROACH, 2 OF 3

Lean first: take out the waste

No AI yet. Take out the waiting, the re-typing and the approval layers that add nothing, with the same people doing the same work.

Aurelis Pharma **24 ⟶ 9** working days **−61%**

Werf Noorderhaven **160 ⟶ 110** working days **−31%**

Step	Lean waste	The fix at Aurelis	The fix at Noorderhaven
1 Capture	~~Waiting and re-typing~~	**Daily portal check**	**One inquiry register**
2 Qualify	~~Waiting~~	**Decided at stand-up**	**Weekly bid stand-up**
3 Specify	~~Unused talent and waiting~~	**Reserved review slot**	**An architect on the bid**
4 Price & quote	~~Rework and waiting~~	**Margin rules agreed once**	**Suppliers asked on day one**
5 Negotiate & approve	~~Waiting, motion and defects~~	**One joint approval**	**Priced before agreed**
6 Order & handover	~~Re-typing and defects~~	**Orders in flow**	**Project lead joins early**

APPROACH, 3 OF 3

Then agents, with decision points

Now agents take the reading, checking and drafting, on a process that no longer makes them wait. People keep the decisions that can’t be undone.

Aurelis Pharma **9 → 5** working days **−45%**

Werf Noorderhaven **110 → 71** working days **−35%**

Step	Aurelis Pharma: agent and decision	Werf Noorderhaven: agent and decision
1 **Capture**	■ Tender watch agent Runs on rules; people handle exceptions	■ Market watch agent Runs on rules; people handle exceptions
2 **Qualify**	■ Tender analysis agent ◆ Go / no-go, signed by the head of tenders	■ Qualification agent ◆ Bid / no-bid, signed by the commercial director
3 **Specify**	■ Specification agent ◆ Regulatory sign-off, signed by the head of regulatory	■ Specification agent ◆ Design sign-off, signed by the chief naval architect
4 **Price & quote**	■ Pricing agent ◆ Final price, signed by the commercial director	■ Estimating agent ◆ Final price, signed by the commercial director
5 **Negotiate & approve**	■ Bid assembly agent ◆ Approve and submit, signed by the managing director	■ Contract agent ◆ Risk and signature, signed by the board
6 **Order & handover**	■ Order agent Runs on rules; people handle exceptions	■ Handover agent Runs on rules; people handle exceptions

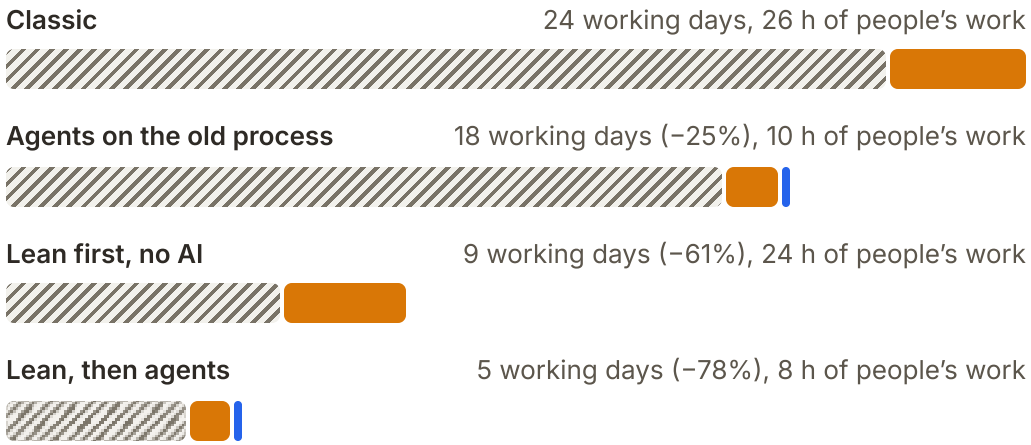
IMPACT

What the two companies get

Illustrative figures for two fictional companies. They show the pattern, not a prediction.

Aurelis Pharma

One hospital tender, from publication to first order



−78% lead time

5 working days instead of 24

−71% people's work

8 hours instead of 26: more than three times the tenders with the same team

4 weeks early

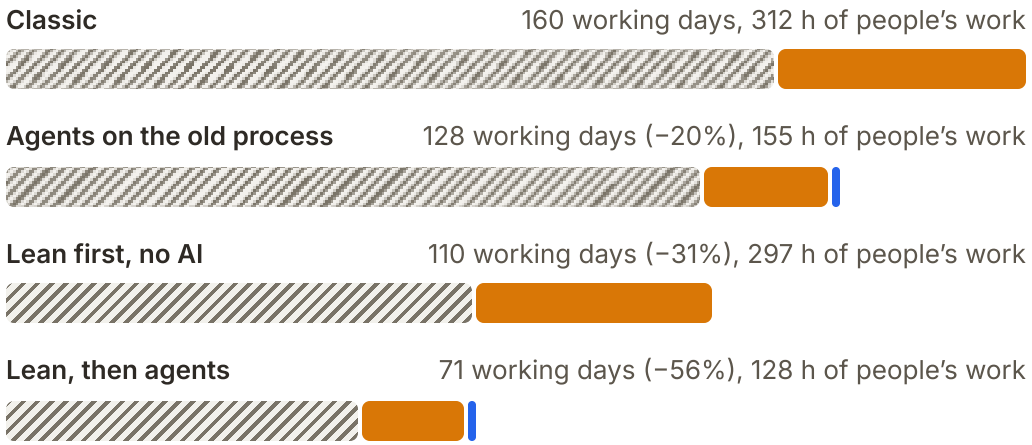
the bid goes out, instead of two days before the deadline

4 decisions

each signed by a named person, with the evidence kept

Werf Noorderhaven

One hybrid ferry, from inquiry to project start



−56% lead time

71 working days instead of 160

−59% people's work

128 hours instead of 312: 185 hours of engineering and estimating time freed per bid

Within a day

every change the owner asks for is priced, instead of five weeks

4 decisions

each signed by a named person, with the evidence kept

IMPACT: THE GUARDRAIL

Could it be faster? Yes, if nobody decides.

Let the agents decide alone and Aurelis is done in under 1 working day, Noorderhaven in 43 working days. Each time, five commitments nobody signed.

Step	With agents, who decides	If the agent decides alone at Aurelis Pharma	If the agent decides alone at Werf Noorderhaven
1 **Capture**	◆ Runs on rules People handle exceptions	Nothing breaks. Spotting a tender commits Aurelis to nothing.	Nothing breaks. Logging an inquiry commits the yard to nothing.
2 **Qualify**	◆ Go / no-go A person signs	The agent bids on every match, including a lot the plant can't supply for four years. Shortage penalties follow, and hospitals run short.	The agent says yes to every inquiry. The yard ends up quoting three ferries for the same building slot.
3 **Specify**	◆ Technical sign-off A person signs	The agent offers a pack size that isn't registered. The bid is rejected, or worse, it wins and can't be delivered.	The agent misses that the owner's ice class changes the hull. The estimate is built on the wrong ship.
4 **Price & quote**	◆ Final price A person signs	The agent optimises for the chance of winning and prices a lot below cost. Aurelis is locked into that price for four years.	The agent quotes the low end of the range to win. The margin is gone before any steel is cut.
5 **Negotiate & approve**	◆ Risk and signature A person signs	The bid goes out with nobody's signature on it. When the auditor asks who approved it, there is no answer.	To keep the deal moving, the agent accepts spec changes unpriced and agrees late-delivery penalties without a cap.
6 **Order & handover**	◆ Runs on rules People handle exceptions	To hit a delivery date, the agent ships a batch with three months of shelf life against a twelve-month requirement. Nobody approved the exception.	The agent commits a delivery date without a free slot in the yard. Penalties start running on day one.

THE RULE

Automate what you can undo. Sign what you can’t.

Three questions decide it for every step: can the decision be undone, does it commit the company, and does it need judgment? Wherever a person decides, the decision needs three things.

A named owner

Each decision point has one person who signs, by name. Not a department, and never the agent.

The evidence

What the agent read, what it proposed and why, kept with the decision instead of in someone’s inbox.

A record you can audit

Months later, anyone can see who decided what, and on what basis. That is what an auditor, a regulator or a board will ask for.

HOW WE BUILD IT

Agent-Atlas (working title)

The rule in this case is the rule Agent-Atlas is built on. Agent-Atlas is the agent-first software we are building at truck8.ai, and it treats every commitment the way this case says it should.

Agents draft

Agents read, check and draft: the tender brief, the priced change, the order. Fast, and never final on their own.

People sign

A named person signs every commitment. No agent can sign on anyone's behalf, however confident it is.

Evidence stays

Every decision keeps what it was based on: what the agent read, what it proposed, who signed. A record you can audit months later.

More about Agent-Atlas: truck8.ai/en/portfolio

A DAY IN THE LIFE

One tender at Aurelis Pharma

A purchasing group of seven hospitals publishes a four-year tender for injectables: seven lots, five of them molecules Aurelis makes. The bid window is five weeks.

Lean, then agents

Bid out on the Friday of week 1

Week 1, Monday 06:10	The tender watch agent matches the notice to five Aurelis molecules and opens the opportunity with the 150-page tender attached.
Monday 07:40	The tender analysis agent turns 150 pages into a checklist of 212 requirements, flags the penalty clause for shortages, and checks four years of volume against the production plan. Lots 1 to 4 fit. Lot 5 needs a second shift from year two.
Monday 09:00	**Go / no-go, signed by the head of tenders.** At the morning stand-up she reads the one-page brief: go on lots 1 to 4, no-go on lot 5. Six minutes, and the reasoning is on record.
Tuesday	The specification agent maps lots 1 to 4 to registered products. Lot 3 asks for a pack of 20 vials; Aurelis is registered for 10 in the Netherlands. It drafts a clarification question for the hospitals.
Wednesday	**Regulatory sign-off, by the head of regulatory affairs.** She confirms the pack-size gap and sends the question, well before the clarification deadline.
Thursday	The pricing agent proposes a price per lot within the legal maximum, with three years of public award notices for these molecules and the margin at each price point.
Week 1, Friday	**Final price and submission, signed by the commercial director and the managing director.** The commercial director raises lot 2 by 3%: Aurelis is the only bidder with stable supply there. The reason is recorded with the price. The bid goes out four weeks early.

Classic

Bid out two days before the deadline, in week 5

Week 1, Monday 06:10	The notice goes live on TenderNed. Nobody sees it.
Thursday	The weekly portal check. The tender desk finds the notice and forwards it to supply planning: “Can we do this?”
Week 2	Supply planning answers: probably, but they need volumes per lot. Someone starts reading the 150 pages. The go/no-go meeting is set for Thursday, the first slot everyone can make. The decision: go on all five lots. Nobody notices that lot 5 needs a second shift.
Week 3	Regulatory checks each lot by hand and finds the pack-size gap on lot 3 on Wednesday. The deadline for clarification questions passed on Monday.
Week 4	Prices are built from last year’s spreadsheet. Finance reviews the margin on Thursday.
Week 5	Compliance, legal and the managing director approve by email, one after the other. The bid goes out two days before the deadline, lot 5 included, lot 3 with the wrong pack size.

A DAY IN THE LIFE

One crane at Werf Noorderhaven

Month four of negotiating a hybrid ferry. On a Tuesday afternoon the owner's superintendent emails: "We'd like an extra 5-tonne deck crane aft. The delivery date can stay the same, right?"

Lean, then agents

Priced, signed and countersigned by Thursday

Tuesday 16:40	The contract agent logs the request as change 14 against the current contract version and puts it on the negotiation board.
Tuesday 17:30	The specification agent checks deck strength and stability against the reference vessel: the deck needs local reinforcement. The estimating agent prices it from the crane maker's framework prices and a similar change on a sister ship. It drafts two options. A: the full change, +€240k and +3 weeks, because the crane's lead time lands on the critical path. B: foundations now, crane at the first docking, +€45k and no delay.
Wednesday 09:00	**Price and terms of change 14, signed by the commercial director.** In the negotiation stand-up she trims option A to +€235k and signs both as offers. The evidence behind both prices stays attached.
Wednesday 10:15	The owner receives both options, priced and dated, in writing.
Thursday	**The owner chooses option B and countersigns.** The contract moves to the next version. When the owner's technical team sends a follow-up drafted against the old version, the agent flags it and re-prices it against the new one.

Classic

Priced in week 5, after a dispute

Tuesday 16:40	The email lands in the sales manager's inbox. He is at a trade fair in Hamburg.
Thursday	On a call from Hamburg, the sales manager says the crane "should be no problem". He means to keep the relationship warm. The owner hears a yes, at the same price and date.
Next Monday	Back at the yard, the sales manager forwards the email to engineering: "Can we do this?"
Weeks 2 and 3	Engineering checks deck strength. Purchasing asks the crane maker for a quote, which arrives after nine working days: €180k, 14 weeks.
Week 5	The estimate is ready: +€240k and +3 weeks. The owner disputes it: "You already agreed." The yard absorbs half, and the delivery date stays where it was.

A DAY IN THE LIFE

And if nobody had signed

◇ Aurelis Pharma

Monday 06:10, the agent finds the tender. By 07:00 it has bid on all five lots, at the prices with the highest chance of winning: 4% below cost on lot 2. The bid is in before anyone is at their desk.

Aurelis wins lots 2 and 5. That means four years at a loss on one, and a second shift it doesn't have on the other. When hospitals run short, the penalties start. When the board asks who decided to bid, the answer is: nobody did.

◇ Werf Noorderhaven

The contract agent has one instruction: keep the deal moving. At 16:45 it replies, "Yes, we can add the crane." No price, no new date.

The crane's 14-week lead time now sits on the critical path, and delivery slips three weeks. The late-delivery penalty has no cap, because the agent accepted that clause in round two to close a point. That comes to three weeks of penalties plus €240k of unpriced work: close to half a million euros from an email that no person at the yard ever read.

WHAT TO DO

Lean first, then agents

01

See the waste

Map your current Lead to Order value stream and put lead time next to work time. In most companies, that gap is the whole story.

02

Remove it

Cut approval layers that add nothing, agree on one source of truth for the customer's request, and stop re-typing between systems.

03

Add agents, with decision points

Let agents do the reading, drafting and checking. Use the three questions to decide, step by step, where a person signs.

The question for directors is no longer whether agents will enter Lead to Order, but whether they will speed up the flow or the waste.

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Explore the interactive case: truck8.ai/en/cases/lead-to-order
Talk to us: hello@truck8.ai

Aurelis Pharma and Werf Noorderhaven are fictional companies. All figures are illustrative.