



SUN

[SYTELINE USER NETWORK]

ONE HIVE

INFINITE POSSIBILITIES

2026 SUN CONFERENCE

**Can AI Really Impact the Shop Floor?
Things You Need to Be Thinking About**

Presented by:

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Presenters



John Brown
Product Manager



Jesse Brohinsky
Vice President,
Product & Engineering



John Ring
Product Manager

Fiberon



Fiberon

- Lots of unplanned equipment failures
- Connected 40 machines to AI machine health system
- In 8 months they saved
 - 178 hours unplanned downtime
 - \$274,000

Chat and Chess



AI still seems like magic.

It's hard to understand how it works
It also gets things wrong sometimes

Let's find the truth, between the hype and the horror
stories.



How an LLM Learns

Large Language Models are like a human's long-term memory.

When you ask an LLM a question, it's not "looking up" a fact, it is **calculating the most probable response.**

- Knowledge is frozen in time
- The model may "hallucinate" responses.



When models hallucinate

Hallucinations aren't **bugs**, they're a **byproduct** of how AI processes information.

- Training a model transforms data into “parameters” which is **lossy compression**
- When a model doesn’t “know” it will confidently give you its “best guess.”
- "Reasoning" models can iterate on bad data and compound issues.

So how do we fix it?



Using Local Context

Ground the AI in reality.

Leverage the **context** you provide when you are asking AI a question.

If a general question is like testing a librarian's knowledge of every book in the library, local context is like an **open book test**.

Application & Impact

Moving the AI focus to local context reduces hallucinations by up to 68%
Factual accuracy in specialized fields were boosted from 52% to 89%
AI Document reading can be 90-99% accurate, based on how structured the data is.

Nourbakhsh, Armineh & Parekh, Siddharth & Shetty, Pranav & Jin, Zhao & Shah, Sameena & Rose, Carolyn. (2025). Where is this coming from? Making groundedness count in the evaluation of Document VQA models. 10.48550/arXiv.2503.19120.



The Pivot: Use AI for **Reasoning**, You provide the **Knowledge**.

Provide as much "Local Context" as you can.

- When a model has "local context" its task changes from **generation** to **transformation**.
- This **grounds** the AI in reality, and has it focus on what is important to you.

Ask the model to ask you questions!

- If a model doesn't have enough data to make a concrete answer, it can come back and ask for clarification.
- Clarification = Context.

Trust, but Verify.

- Use AI to be a research assistant that extracts information, then use **search & citations** to locate it.
- Don't make critical decisions from only AI.

How Doc-Trak uses Local Context

Doc-Trak 2026 now includes the ability to ask AI about your attachments!

Opt-In, private, sovereign, and secure.

Local Context: Doc-Trak provides your local context to the AI for you, without having to lift a finger.

Your documents stay in your secure environment.

File Share? Sharepoint? IDM? No problem.

BYOAI: You control the AI, the model, the costs, and the temperature.

Chain of Thought: Continue the conversation with AI, across records.

Citations: Understand exactly where the AI is getting its information.



PO - DP00000326 (LAKECO1_DEM_DALS) DP00000326

2



Search or Ask AI



- PO DP00000326 - Vendor Quote - RFQ_DP00000326
- PO DP00000326 - Purchase Order - PO_-2_V-2_2026

Preview



Progressive Industries - Dallas
517 S 2nd Ave
Dallas TX 75226
USA
Phone: 214-741-6701

Purchase Order: DP00000326
Page 1
Date: 3/1/2026
Buyer

Ship Via: Freight Lines
FOB: Columbus
Terms: Net 30 Days

2
V Steve Wilson
Western Steel Tube Shop
N 8300 W 185th St
D Tinley Park IL 60487
O USA
R Phone: 815-729-2407

S Progressive Industries - Dallas
517 S 2nd Ave
Dallas TX 75226
P USA
Phone: 214-741-6701

815-729-1812

R Steve Wilson
E Western Steel Tube Shop
M 8300 W 185th St
I Tinley Park IL 60487
T USA
Phone: 815-729-2407

Our Order Number Must Appear On Invoice, B/L Bundles, Cases, packing List and Correspondence

Fax Sent Prior Do Not Duplicate

Verbal Placed Prior Do Not Duplicate

Line/Ref	Qty Ordered	Qty Due	Item Description	Due Date	Unit Price/Extended Price
1	380.000	380.000	TA-31000 HB-335.27 EA Handle-Bars, Racing	1/5/2018	5.40 2,052.00
2	40.000	40.000	TA-20000 SF-332-00 EA Frame, Standard, Carbon-Steel	1/26/2018	8.95 358.00
Please accept our purchase order and furnish these items subject to the conditions described above. Please sign and return the acknowledgment copy.					Total: USD 2,410.00 US Dollar

Buyer/Purchasing Agent _____ Date _____ Manager _____ Date _____

**BICYCLE PARTS COMPANY
TERMS AND CONDITIONS**

1. ACCEPTANCE:
Acceptance of any Bicycle Parts Company purchase order (a "Purchase Order") referencing and incorporating the Bicycle Parts Company General Terms and Conditions is expressly limited to the terms and conditions set forth herein (the "Bicycle Parts Company Terms"). Bicycle Parts Company shall not be bound by any terms or conditions of Supplier's order acknowledgement or acceptance forms, invoices, counter offers or other documents which reference our terms or conditions in addition to or



Doc-Trak FLEX

CO - DC00000415 (LAKECO1_DEM_DALS) DC00000415

Compare the PO and the OVR

Summary:

- The vendor, ship to, item, quantity, unit price, due date, shipping method, and payment terms match between the PO and OVR.
- The main discrepancy is in the total amounts: the PO total is \$3,603.74 including tax, while the OVR total is \$327.61 including tax, which does not align with the quantity and unit price on the PO.
- The OVR sales amount per unit matches the PO unit price, but the total amount on the OVR appears to be for a single unit or a partial amount rather than the full order of 11 units.

Therefore, while most details match, the total amount on the OVR does not correspond to the PO total for 11 units, indicating a possible data entry or reporting inconsistency.

Sources:

Purchase Order SP89651 (\\sldemosql\Doc-Trak\Archived Docs\Customers\C_1\CO_DC00000415\CustPO_SP89651-CO_DC00000415-20260227-015014130_20250911.pdf)

Order Verification Report DC00000415 (\\UTIL1\Doc-Trak\Archived Docs\2025\Customers\C-1\OV\CO-DC00000415\OrdVer_CO-DC00000415_C-1_20250911-125430159.pdf)

AI can make mistakes. Validate response before using to make decisions

Close/Reset

ITEM ID	DESCRIPTION	DUE DATE	QTY	U/M	UNIT PRICE	EXTENDED
XRT-001XT	FA-10000 3 inch piece	09/18/2025	11.00	EA	306.18	3,367.98

Subtotal: \$3,367.98
Sales Tax: \$235.76
TOTAL DUE: \$3,603.74

1. Acceptance of this Purchase Order is limited to the Bicycle Parts Company General Terms and Conditions(ite: 52)
2. Delivery must be made by the specified due date(ite: 72)
3. All prices are firm and not subject to adjustment(ite: 57)

Attachment 1 / 4





Search or Ask AI



- PO DP00000326 - Vendor Quote - [RFQ_DP00000326](#)
- PO DP00000326 - Purchase Order - [PO_-2_V-2_2026](#)

Preview



Print Quote to PDF

WESTERN STEEL TUBE SHOP

SALES QUOTE

8300 W 185th St
 Tinley Park, IL 60487
 Phone: 815-729-2407
 Fax: 815-729-1812

Quote #: QT-2026-0884
 Date: February 20, 2026
 Expires: March 20, 2026
 Sales Rep: Steve Wilson

QUOTE TO:

Progressive Industries - Dallas
 517 S 2nd Ave
 Dallas, TX 75226
 Attn: Purchasing Department
 Phone: 214-741-6701

SHIP TO:

Progressive Industries - Dallas
 517 S 2nd Ave
 Dallas, TX 75226
 USA

Ship Via	F.O.B. Point	Terms	Lead Time
Freight Lines	Columbus	Net 30 Days	2-3 Weeks ARO

ITEM / PART #	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL PRICE
TA-31000 <small>Ref: HB-33527</small>	Handle-Bars, Racing <small>Premium alloy construction, aerodynamic profile.</small>	380.00	\$5.40	\$2,052.00
TA-20000 <small>Ref: SF-332-00</small>	Frame, Standard, Carbon-Steel <small>High-tensile carbon steel frame, primed finish.</small>	40.00	\$8.95	\$358.00

Subtotal: \$2,410.00
 Shipping & Handling: \$0.00
Total (USD): \$2,410.00

TERMS & CONDITIONS

- Pricing valid for 30 days from date of quote.
- F.O.B. Columbus shipping point. Western Steel Tube Shop is not responsible for damage during transit.
- Standard lead times apply. Custom finishes may require additional processing time.
- Payment terms are Net 30 Days from date of shipment, subject to credit approval.
- Return of goods requires prior authorization and may be subject to a restocking fee.

Thank you for choosing Western Steel Tube Shop for your bicycle component needs.



DOC-TRAK

UNIFIED DOCUMENT INTELLIGENCE



*Connecting Multiple Repositories. Unlocking Every Document.
One AI-Powered Interface.*

Breaking Down Silos Across Infor IDM · SharePoint · File Server · Amazon S3 · Dropbox

Every Business Function Has Critical Documents

Finance & Procurement

Invoices · Customer POs · Purchase Orders · Credits · Matching Vouchers · Receivers · Packing Lists · Bills of Lading · Matching Spreadsheets · Journal Support

Engineering & Design

RFQs · Requisitions · Specs · Drawings · Revisions · Quotes · Estimates · Verifications · Customer Drawings · Customer Orders · Acknowledgements

Quality & Compliance

Certifications · SPC Data · NCRs · CARs · Engineering Specs · Weld Reports · Pressure Tests · Inspection Records · Audit Docs · Verifications

Manufacturing & Ops

Bills of Materials · Routers · Work Instructions · SOPs · Shop Packets · NCR Packets · Weld Certs · Process Specs · Field Reports

Sales & Customer

Customer Orders · Acknowledgements · Customer Invoices · Customer POs · Customer Drawings · Customer Specs · Verifications · Quotes

Archive & Shared

Archived Invoices · Scanned POs · Historical Orders · Backup Docs · Collaborative Specs · Shared Drawings · Audit Archives

WHERE YOUR DOCUMENTS LIVE

Multiple Repositories. Dozens of Document Types. One Business.

Infor IDM	SharePoint	File Server	Amazon S3	Dropbox
Invoices	RFQs	Certs & SPC	Archived Invoices	Shared Drawings
Customer POs	Requisitions	NCRs & CARs	Scanned POs	Revisions
Customer Orders	Specs & Drawings	Engineering Specs	Backup Docs	Customer Files
Bills of Lading	POs & Revisions	Bills of Materials	Media Assets	Collaborative Specs
Credits	Quotes	Routers	Audit Archives	Field Reports
Matching Vouchers	Estimates	Work Instructions	Historical Orders	
POs	Verifications	SOPs		
Packing Lists	Customer Orders	Shop Packets		
Receivers	Acknowledgements	NCR Packets		
Matching Spreadsheets	Customer Invoices	Weld Reports		
Journal Support Docs	Customer Drawings	Pressure Tests		

Doc-Trak: One Platform. Multiple Repositories. AI-Powered.





PO vs Quote Validation

USE CASE

Ensure PO matches quoted pricing and revision level

DOCUMENTS USED

Supplier Quote

Purchase Order

Engineering Revision

EXAMPLE PROMPT



User Prompt

"Compare this purchase order to the supplier quote and drawing revision. Identify discrepancies in price, quantity, revision level, and terms."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

RFQ Comparison & Quote Analysis

USE CASE

Normalize and compare supplier pricing, lead times, and compliance

DOCUMENTS USED

RFQ Package

Supplier Quotes

Specs

Drawings



EXAMPLE PROMPT



User Prompt

"Compare these supplier quotes against the RFQ requirements and identify pricing differences, lead time variances, and spec deviations."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

Spec & Drawing Requirement Extraction

USE CASE

Extract critical requirements into supplier checklist

DOCUMENTS USED

Engineering Drawings

Technical Specs

Certification Requirements



EXAMPLE PROMPT



User Prompt

"Extract all material, tolerance, finish, and certification requirements from this drawing and summarize them into a supplier-ready checklist."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

SOP & Work Instruction Simplification

USE CASE

Convert complex procedures into operator-friendly checklists

DOCUMENTS USED

SOPs

Work Instructions

Engineering Specs



EXAMPLE PROMPT



User Prompt

"Simplify this work instruction into a step-by-step checklist highlighting critical-to-quality steps."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

Job Operation Listing Report



3/3/2026 11:55:25 PM

Job: LJ00000350 - 0000	Job Date: 3/3/2026	Status: R	Released
Co-product Mix:		Released: 1.00	Initials: <input type="text"/>
Item: TA-10000	Tape, 1" Masking		Date: <input type="text"/>
Revision:			Qty: <input type="text"/>
Customer:		Destination: I	

Oper	WC	Description	Move Hours	Queue Hours	Setup Hours	Start	End
Ctrl			Lbr Hours/Pc	Mch Hours/Pc	Fixed Sched Hours		Offset Hours
10	PRN-10	Printing - Tape Area	0.00	0.00	0.00		
Yes			0.00000000	0.00000000			
	Type	Item Description	Qty / UM	Per	Destination		
	Material	PR-10000	1.00000	Unit	Purchase Order		
		Roll, Paper 12" x 100 YD	RL				
	Material	INK-10000	0.20000	Unit	Purchase Order		
		Ink, Special	GA				
20	GLU-10	Glue Area	0.00	0.00	0.00		
Yes			0.00000000	0.00000000			
	Type	Item Description	Qty / UM	Per	Destination		
	Material	GL-10000	0.30000	Unit	Purchase Order		
		Glue	GA				
30	CUT-10	Cutting Area	0.00	0.00	0.00		
Yes			0.00000000	0.00000000			

*****SAFETY ALERT: Operator MUST use safety shield when cutting any material.*****

AutoSave Off Doc-TrakWorkInstrImportTemplate (1) Search

File Home Insert Draw Page Layout Formulas Data Review View Automate Help

F14

	A	B	C	D	E	F	G	H
1	Type	Item	Oper_Num	WI_Step	Title	Description	Required	ViewInSeq
2	W	TA-10000	30	1	Cutting Instructions - TA-10000 Oper 30	*****SAFETY ALERT: Operator MUST use safety shield when cutting any material.*****	0	1
3	W	TA-25000	30	1	Cutting Instructions - TA-25000 Oper 30	**SAFETY ALERT: Operator MUST use safety shield when cutting any material.**	0	1
4	W	TA-45000	30	1	Cutting Instructions - TA-45000 Oper 30	***SAFETY ALERT: Operator MUST use safety shield when cutting any material.**	0	1

AutoSave Off cleaned_work_instructions_conditional Search

File Home Insert Draw Page Layout Formulas Data Review View Automate Help

E14

	A	B	C	D	E	F	G	H	I	
1	Type	Item	Oper_Nun	WI_Step	Title	Description	Required	ViewInSeq	WI_Att_Step	WI
2	W	TA-10000	30	1	Cutting Instructions - TA-10000 Oper 30	***SAFETY ALERT: Operator MUST use safety shield when cutting any material.***	1	1	NULL	NU
3	W	TA-25000	30	1	Cutting Instructions - TA-25000 Oper 30	SAFETY ALERT: Operator MUST use safety shield when cutting any material.	0	1	NULL	NU
4	W	TA-45000	30	1	Cutting Instructions - TA-45000 Oper 30	SAFETY ALERT: Operator MUST use safety shield when cutting any material.	0	1	NULL	NU
5										

clean up the description field, remove multiple asterisks if more than 3 in a row then change the required field to a '1' export to a csv file:

If you upload the CSV here, I can run this transformation precisely on your file and give you the finished CSV back.



Type	Item	Oper_Num	WI_Step	Title	Description	Required
ViewInSeq	WI_Att_Step	WI_Attach_Description	WI_Attach_Required	WI_Attach_Path		
WTA-10000	30	1	Cutting Instructions - TA-10000	Oper 30	*****SAFETY ALERT: Operator MUST use safety shield when cutting any material.*****	0
WTA-25000	30	1	Cutting Instructions - TA-25000	Oper 30	SAFETY ALERT: Operator MUST use safety shield when cutting any material.	0
WTA-45000	30	1	Cutting Instructions - TA-45000	Oper 30	SAFETY ALERT: Operator MUST use safety shield when cutting any material.	0

Done — I cleaned the **Description** field and updated **Required** exactly as requested:

- Any run of 4 or more asterisks was reduced to exactly `***`
- The **Required** column was changed to 1 for all rows
- Exported to a new CSV file

Cleaned Output Preview

Item	Description (cleaned)	Required
TA-10000	<i>SAFETY ALERT: Operator MUST use safety shield when cutting any material.</i>	1
TA-25000	SAFETY ALERT: Operator MUST use safety shield when cutting any material.	1
TA-45000	SAFETY ALERT: Operator MUST use safety shield when cutting any material.	1

CSV File Ready

You can download it here:

 [Download cleaned_work_instructions.csv](#)

If you want the asterisks removed completely (instead of trimmed to `***`), tell me and I can regenerate it.

Start Time	Type	Reference	Description	Status	Elapsed	Resource
11:57 PM	Run	AAA0000001-0 10	3 inch piece	Running	1:26	



Info

Job Operation
AAA0000001-0 10

Item: FA-10000
3 inch piece

Resource Status

Work Instructions

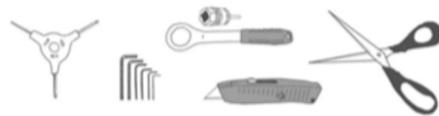
3 / 3 Viewed

Revision:0-3

Tools

Tools needed for assembly:

- Knife or Sharp Edge
- Allen Wrenches
- Torx Wrenches
- Scissors or Clippers
- Center Lock Tool



Step 1

insert post into the tool T#8553115. Align and adjust to the **previously marked height**. Tighten

Docs

Assemble according to the instructions in the attached Assembly Manual.



Work Instruction Attachment(s)

[Manual](#)

Material Issue

WIP Move



Open



Job Operation Listing Report



8/4/2025 11:12:03 AM

Job: AAA0000001 - 0000	Job Date: 2/24/2025	Status: R	Released
Co-product Mix:		Released: 25.00	Initials: <input type="text"/>
Item: FA-10000			Date: <input type="text"/>
3 inch piece			Qty: <input type="text"/>
Revision: REV-1		Destination: I	
Customer:			

Oper	WC	Description	Move Hours	Queue Hours	Setup Hours	Start	End
Ctrl			Lbr Hours/Pc	Mch Hours/Pc	Fixed Sched Hours		Offset Hours
10	AS-500	Assembly Area	0.00	0.00		0.00	
Yes			0.00000000	0.00000000			
Type	Item Description	Qty / UM	Per	Destination			
Material	SA-50910	1.00000	Unit	JOB			
	Frame, Assembly, Standard, Carbon-Steel		EA				
Material	SA-61500	2.00000	Unit	Inventory			
	Wheel, Assembly, 26"		EA				
Material	CP-10000	1.00000	Unit	Inventory			
	Seat, Padded		EA				
Material	CP-20000	1.00000	Unit	Inventory			
	Clamp, Seat		EA				
Material	CP-30000	1.00000	Unit	Inventory			
	Shaft, Steel, 14"		EA				
Material	CP-40000	2.00000	Unit	Inventory			
	Bolt, 1-1/2"		EA				
Material	TA-30000	1.00000	Unit	Inventory			
	Handle-Bars, Upright		EA				
Tool	LB-34000	1.00000	Lot	Inventory			
	Tool, Assembler-Wheel		PC				
20	INS-20	Inspection Center	0.00	0.00		0.00	
Yes			0.00000000	0.00000000			

DALS
kmoens@lakeco.com

Progressive Industries - Dallas

Page 2 of 3

Job Operation Listing Report



Help

Employee:

**

Start Time	Type	Reference	Description	Status	Elapsed	Resource

Ring, John

21:29

3/3/2026

Starting Run Transaction

Doc-Trak Work Instructions

There are required Work Instructions for this Operation.



Job: LJ00003220
FA-10 Bicycl...

Oper Num	Work Center	Received	Complete	Moved	Scrap	Operation Complete	Control Point
10	Final Asse...	20.00	9.00	9.00	0.00	No	No
20	Inspection ...	9.00	0.00	0.00	0.00	No	Yes
30	Outside Pa...	0.00	0.00	0.00	0.00	No	Yes
35	Cutting Area	0.00	0.00	0.00	0.00	No	Yes
40	Warehouse...	0.00	1.00	1.00	0.00	No	Yes

Doc-Notes

Job

Notes on expedited orders (3)

Job LJ0000322 0
add job notes here
Daniels, David I. 2/17/2025 7:31 AM

Job lj00000322 0
Materials issued for the whole order
68 2/25/2026 11:42 AM

Job lj00000322 0
another note here
68 2/25/2026 11:54 AM

Job Material or Substitution Issue (2)

Job lj00000322 0
Starting my run
Ring, John 2/25/2026 11:31 AM

Job lj00000322 0
First piece complete
Ring, John 2/27/2026 12:02 PM

Job: [dropdown] Job Material or Substitutor: [dropdown]

Doc-Note Entry

Job LJ00000322 0 [Clear] [Add]

Documents

Visual Dispatch

Send

Back

Undo&Exit

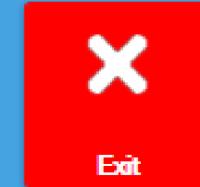


Ring, John

21:33

3/3/2026

Start Time	Type	Reference	Description	Status	Elapsed	Resource
09:29 PM	Run	LJ00000322-0 10	Bicycle, Model-	Running	0:04	



Info

Job Operation LJ00000322-0 10 Item: FA-10000 Bicycle, Model-30, 26" WC: FA-400 Final Assembly Area

Resource Status

Work Instructions 0 / 4 Viewed Revision:0-3 2/5/2025 9:08 AM

Material Issue

WIP Move

Doc-Notes Job Documents

Job

Notes on expedited orders (3)

Job LJ00000322 0
add job notes here
Daniels, David I. 2/17/2025 7:31:1

Job lj00000322 0
Materials issued for the whole order
68 2/25/2026 11:42:59 AM

Job lj00000322 0
another note here
68 2/25/2026 11:54:44 AM

Job Material or Substitution Issue (2)

Job lj00000322 0
Starting my run
Ring, John 2/25/2026 11:31:31 AM

Job lj00000322 0
First piece complete
Ring, John 2/27/2026 12:02:04 PM

Module Topic
Job Notes on expedited orders

Enter Note Here

Job LJ00000322 0

⏪ +

Ring, John

21:39
3/3/2026

Start Time	Type	Reference	Description	Status	Elapsed	Resource
09:29 PM	Run	LJ00000322-0 10	Bicycle, Model-	Running	0:10	



Info
Resource Status

Job LJ00000322-0
WC: FA-400
Final Assembly Area

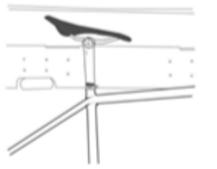
Error

All required attachments must be viewed prior to marking work instruction complete

2/5/2025 9:08 AM



Step 1
1. Insert the seat post into the seat tube. Align and adjust to the previously marked saddle height. Tighten the seat clamp to the frame's torque spec.



Step 2
2. Then secure the bike in the bike stand.



Step 3
Assemble the bike according to the instructions in the attached Bike Assembly Manual.

Work Instruction Attachment(s)

- Bike Assembly Manual

Doc-Notes Job Documents

Job

Notes on expedited orders (3)

- Job LJ00000322 0
add job notes here
Daniels, David I. 2/17/2025 7:31:16 AM
- Job LJ00000322 0
Materials issued for the whole order
68 2/25/2026 11:42:59 AM
- Job LJ00000322 0
another note here
68 2/25/2026 11:54:44 AM

Job Material or Substitution Issue (2)

- Job LJ00000322 0
Starting my run
Ring, John 2/25/2026 11:31:31 AM
- Job LJ00000322 0
First piece complete
Ring, John 2/27/2026 12:02:04 PM

Module: Job Topic: Notes on expedited orders

Enter Note Here

Job LJ00000322 0

Shop Packet Validation & Revision Control

USE CASE

Confirm document completeness and correct revisions

DOCUMENTS USED

Shop Packet

Bill of Materials

Route Sheet

Drawings

Work Instructions



EXAMPLE PROMPT



User Prompt

"Review this shop packet and confirm all required documents are present and at the correct revision level."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

Invoice Dispute Root Cause Analysis

USE CASE

Identify cause of dispute and draft response

DOCUMENTS USED

Dispute Email

Invoice

Purchase Order

Shipping Documents



EXAMPLE PROMPT



User Prompt

"Review this dispute email with the invoice and PO. Identify the root cause and draft a professional response explaining our position."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.



Cash Application Assistance

USE CASE

Match payments to open invoices and explain short-pays

DOCUMENTS USED

Remittance Advice

Bank Detail

AR Aging Report

EXAMPLE PROMPT



User Prompt

"Using this remittance advice and aging report, suggest which invoices are being paid and explain any short-pay deductions."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

Document Reconciliation & Mismatch Detection

USE CASE

Line-by-line comparison to detect discrepancies

DOCUMENTS USED

Estimate

Customer PO

Customer Order

Bill of Lading

Invoice



EXAMPLE PROMPT



User Prompt

"Compare this PO and invoice line-by-line. Identify discrepancies in unit price, quantity, freight, tax, and payment terms."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.

Contract & Flow-Down Compliance Verification

USE CASE

Ensure regulatory and customer requirements flow down

DOCUMENTS USED

Customer Contract

Supplier Agreement

PO Terms



EXAMPLE PROMPT



User Prompt

"Compare this customer contract to our supplier agreement and identify missing or conflicting flow-down requirements."



Doc-Trak AI Response

Analyzes documents across all connected repositories and returns a structured, cited response.



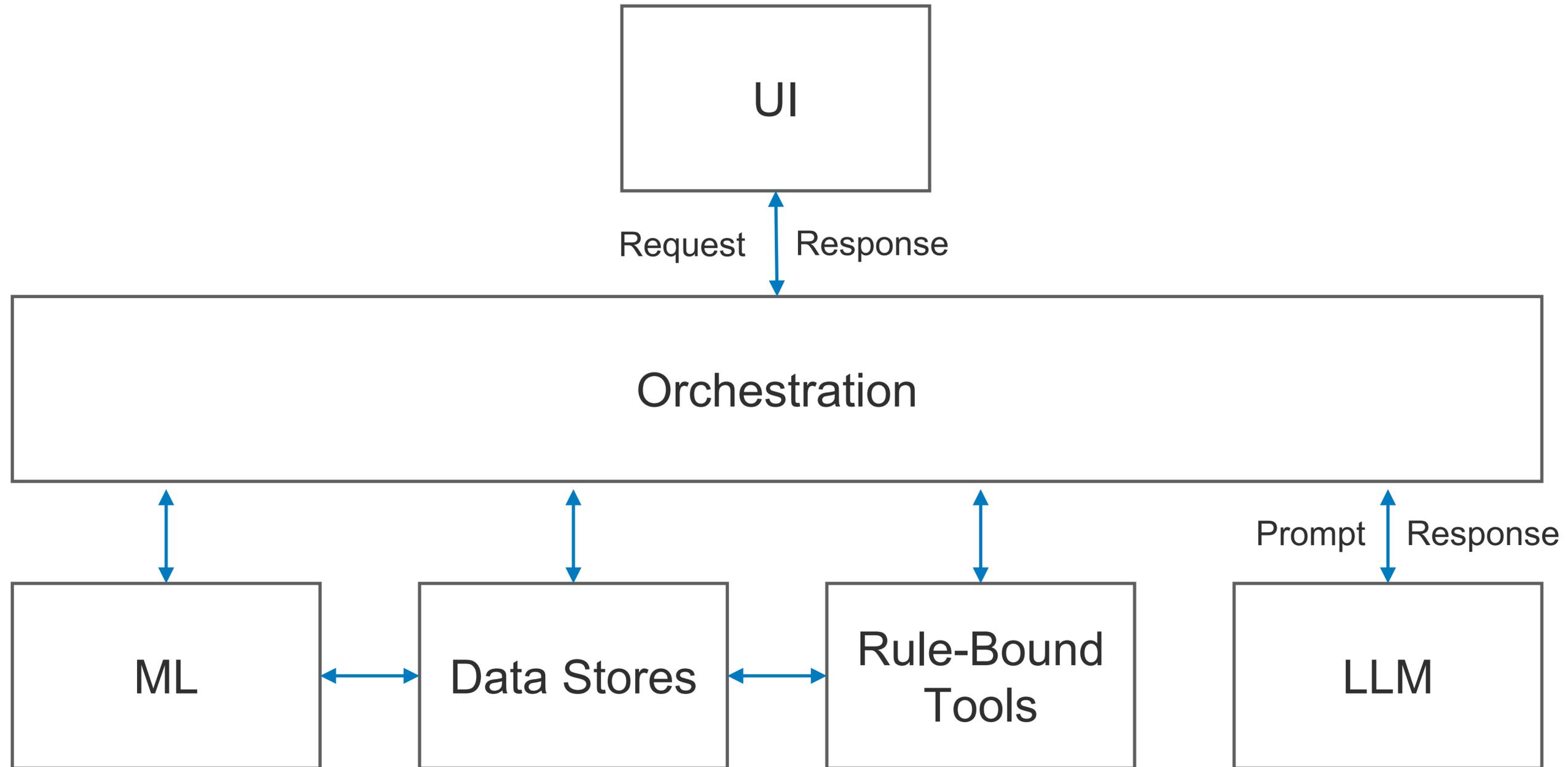
Doc-Trak: One Platform. Every Repository. AI-Powered.



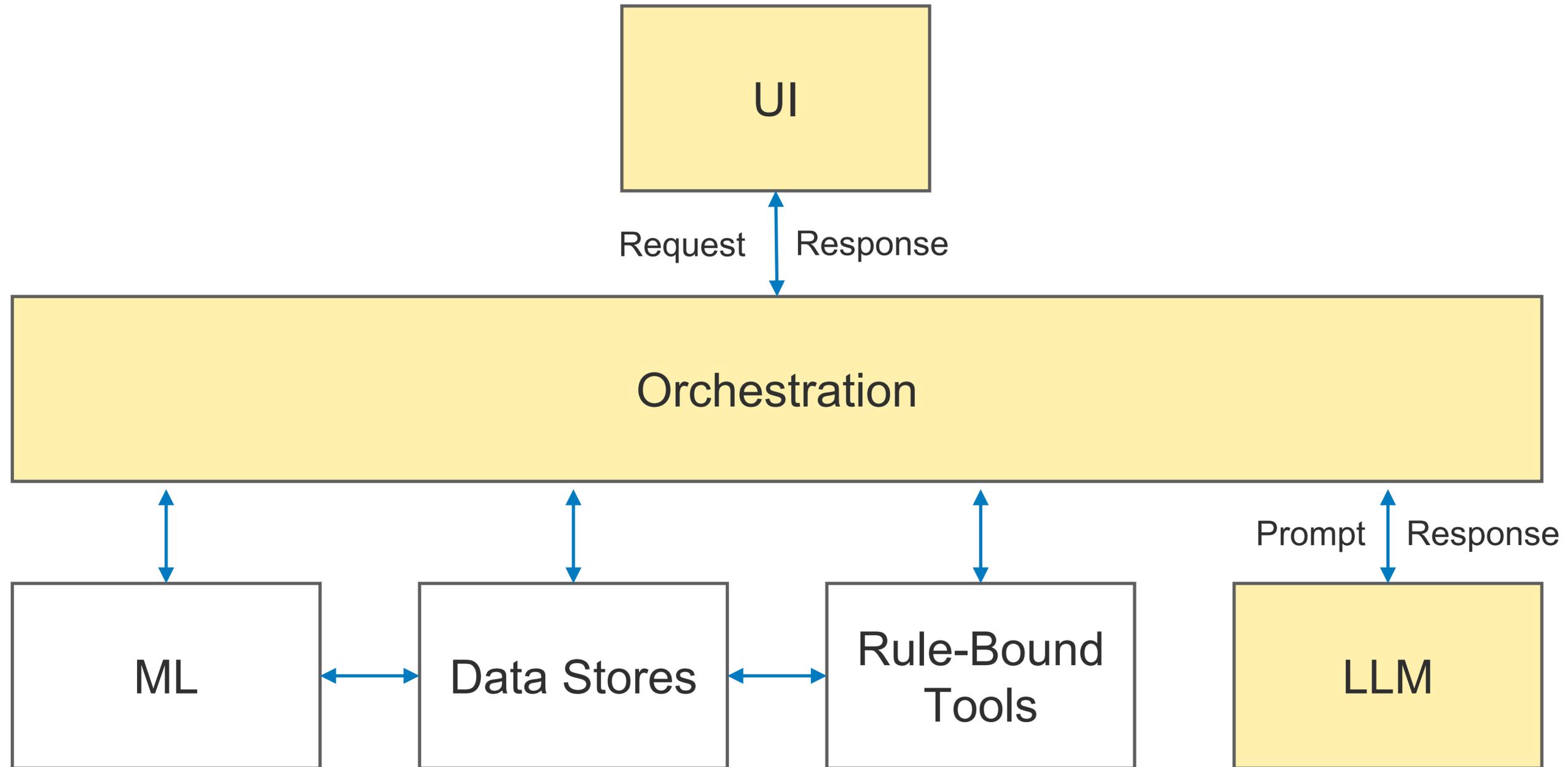
Use an AI System that Calls the Right Tools



Use an AI System that Calls the Right Tools

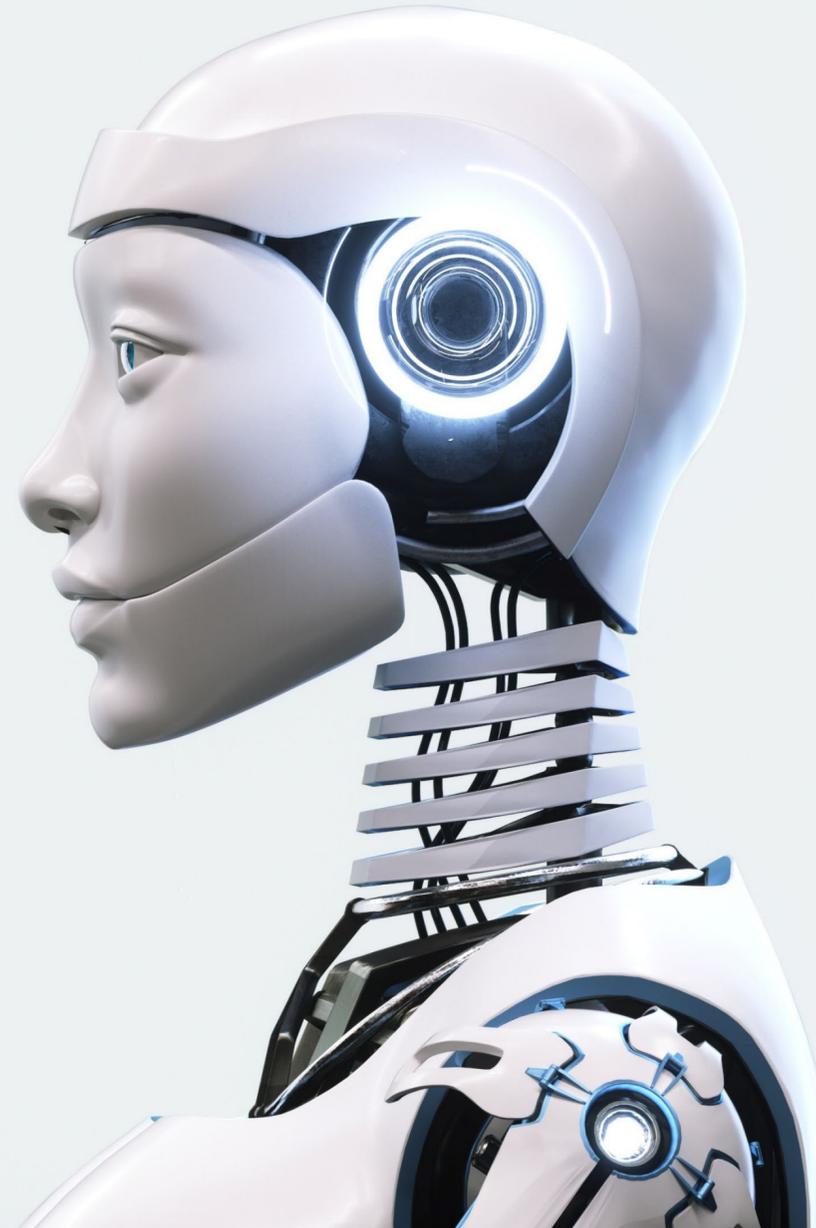


Use an AI System that Calls the Right Tools



Easy to Think an LLM is the Right Tool

Fluency



LLMs - Patterns in Language

Strengths

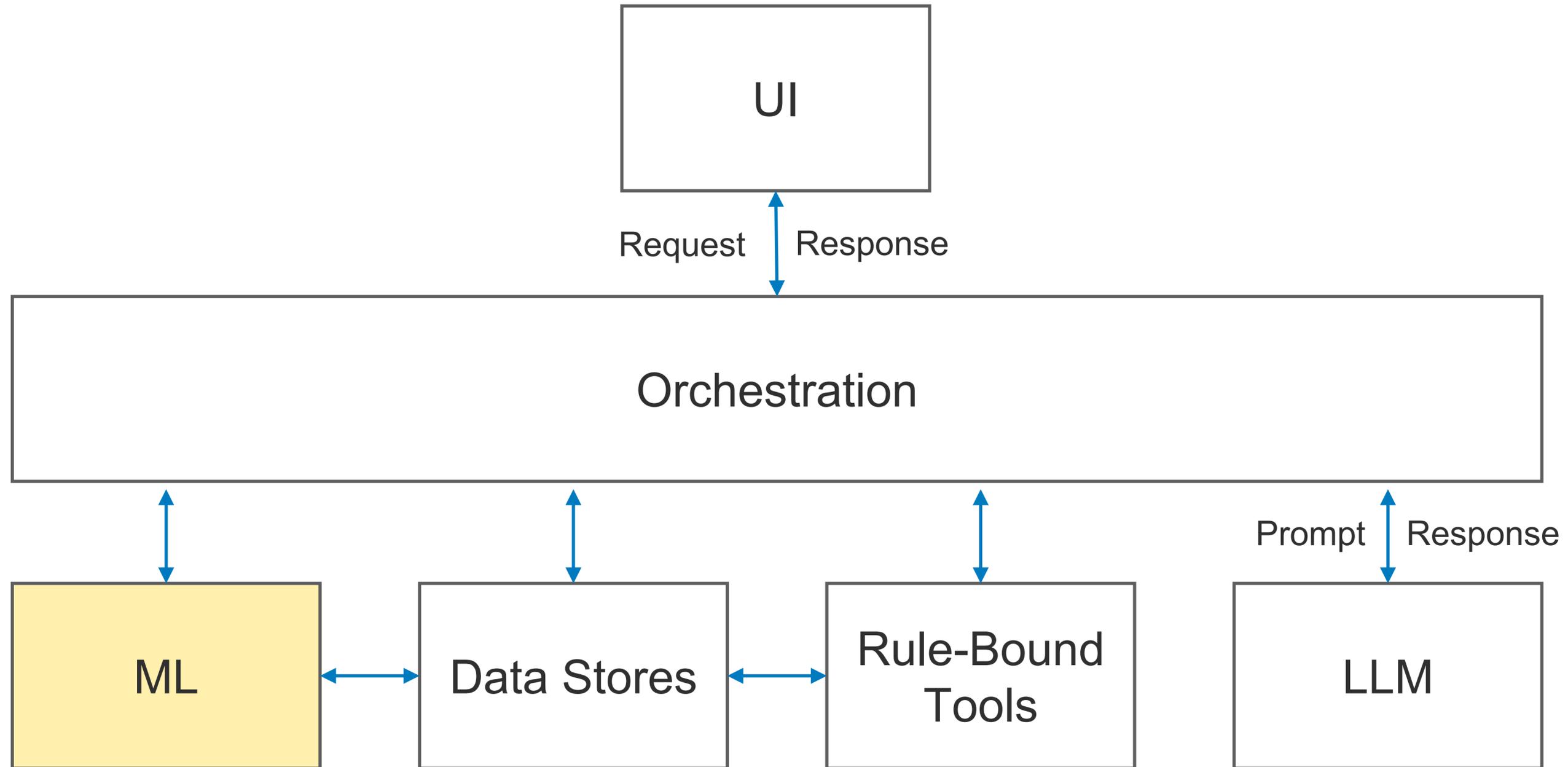
- **Summarize** existing text
- **Extract** information from texts
- **Compare** documents
- **Rewrite** text for tone, lengths, clarity
- **Translate** English to Russian
- **Translate** problem descriptions into code patterns
- **Explain** computed results in plain language

Weaknesses

- **Play** chess
- **Compute** statistical regressions
- **Perform** tax calculations
- **Plan** a shop floor schedule
- **Allocate** constrained inventory across competing demands



Use an AI System that Calls the Right Tools



ML Models - Patterns in Measured Data

1. Take historical measured data
2. Learn predictive **relationships** between variables
3. **Store** those relationships into a **trained model**
4. **When** given new data, **apply relationships** to estimate likely outcomes based on probability

ML Models - Patterns in Measured Data

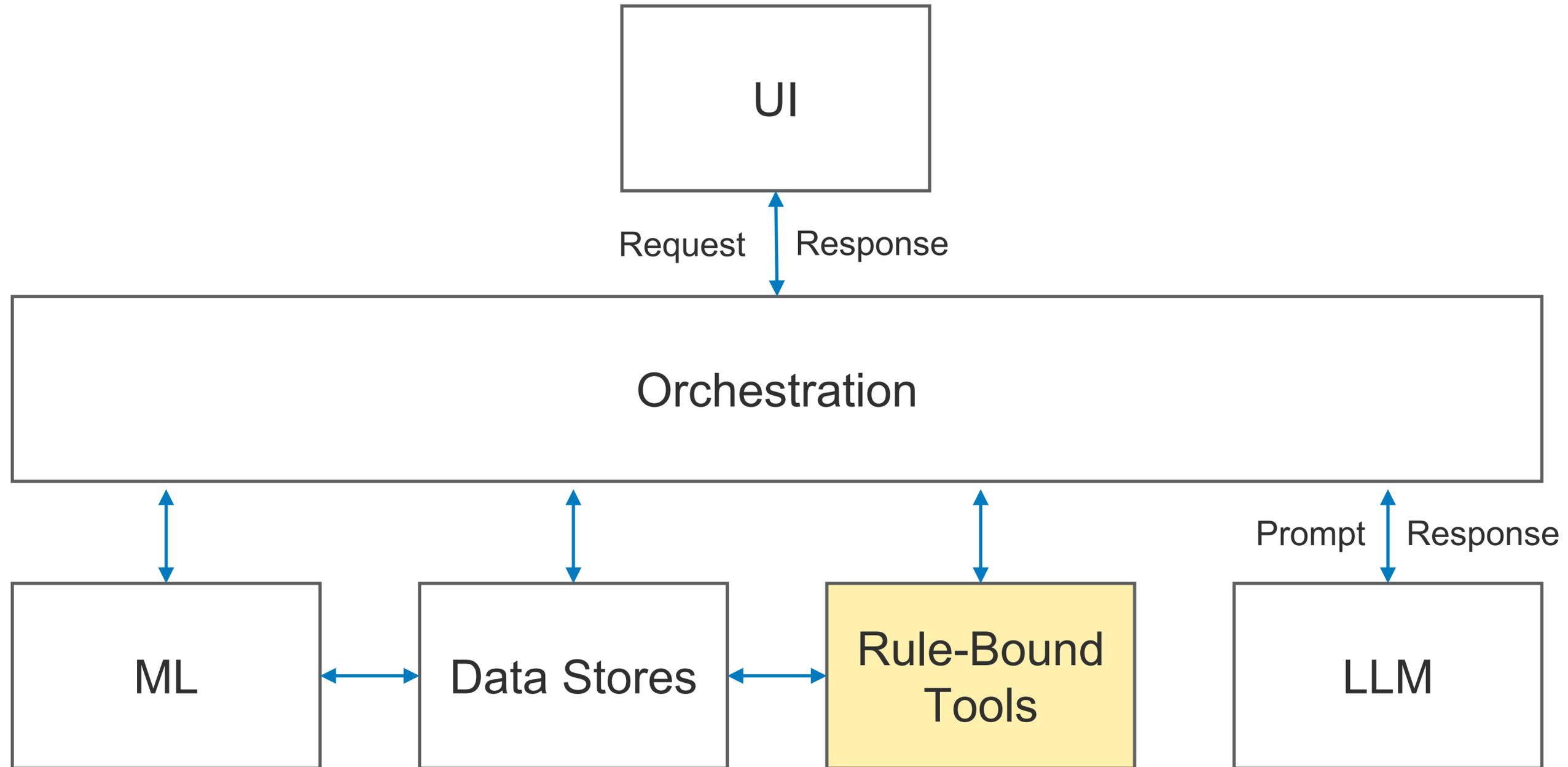
Strengths

- **Predict** what's likely to happen (demand, late orders, scrap)
- **Spot** warning signs (breakdowns, quality drift)
- **Flag** high risk (fraud, defects)
- **Identify** factors that show up when problems happen (common drivers)

Weaknesses

- **Guarantee** outcomes for individual jobs or items
- **Explain** causality
- **Perform** exact computations (tax, accounting, compliance)
- **Adapt** instantly to new conditions (new supplier, process, product)

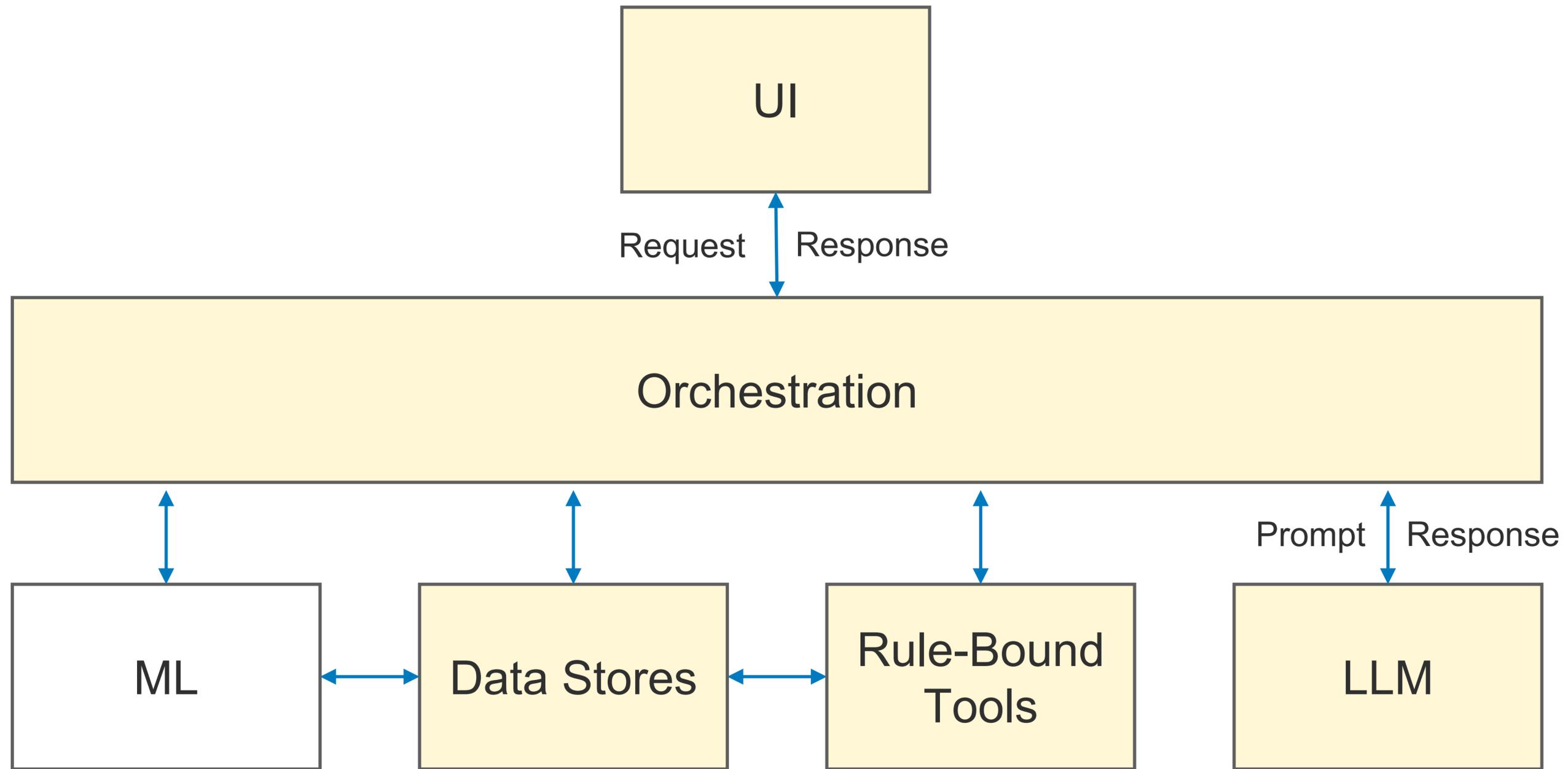
Use an AI System that Calls the Right Tools



Rule-Bound Tools – Explicit Logic

- Calculators
- Simulators
- Game engines
- Calendar apps
- Accounting logic (Turbo Tax)
- APS and MRP
- Small programs written on the fly by the LLM and executed elsewhere

Fact-Trak: Job Late Start Analysis



Fact-Trak: Job Late Start Analysis

- **UI** captures user **request** and displays system **response**
- **Orchestration** calls **tools**, structures **context**, gathers **results**, enforces **guardrails** using our **business logic**
- **Rule-bound tools** **analyze data** & identify likely culprits using our **business logic**
- **LLM** generates **clear explanations** of findings

Wrap Up

- Fiberon vs Chat and Chess
- How do we use AI safely and reliably?
- Provide LLMs the knowledge
 - Give it as much local context as you can
 - Ask it to ask you questions
 - Trust, but verify
- Use an AI system that calls the right tools

Can AI Really Impact the Shop Floor?

Things You Need to Be Thinking About



SUN

[SYTELINE USER NETWORK]

ONE HIVE

INFINITE POSSIBILITIES

QUESTIONS?

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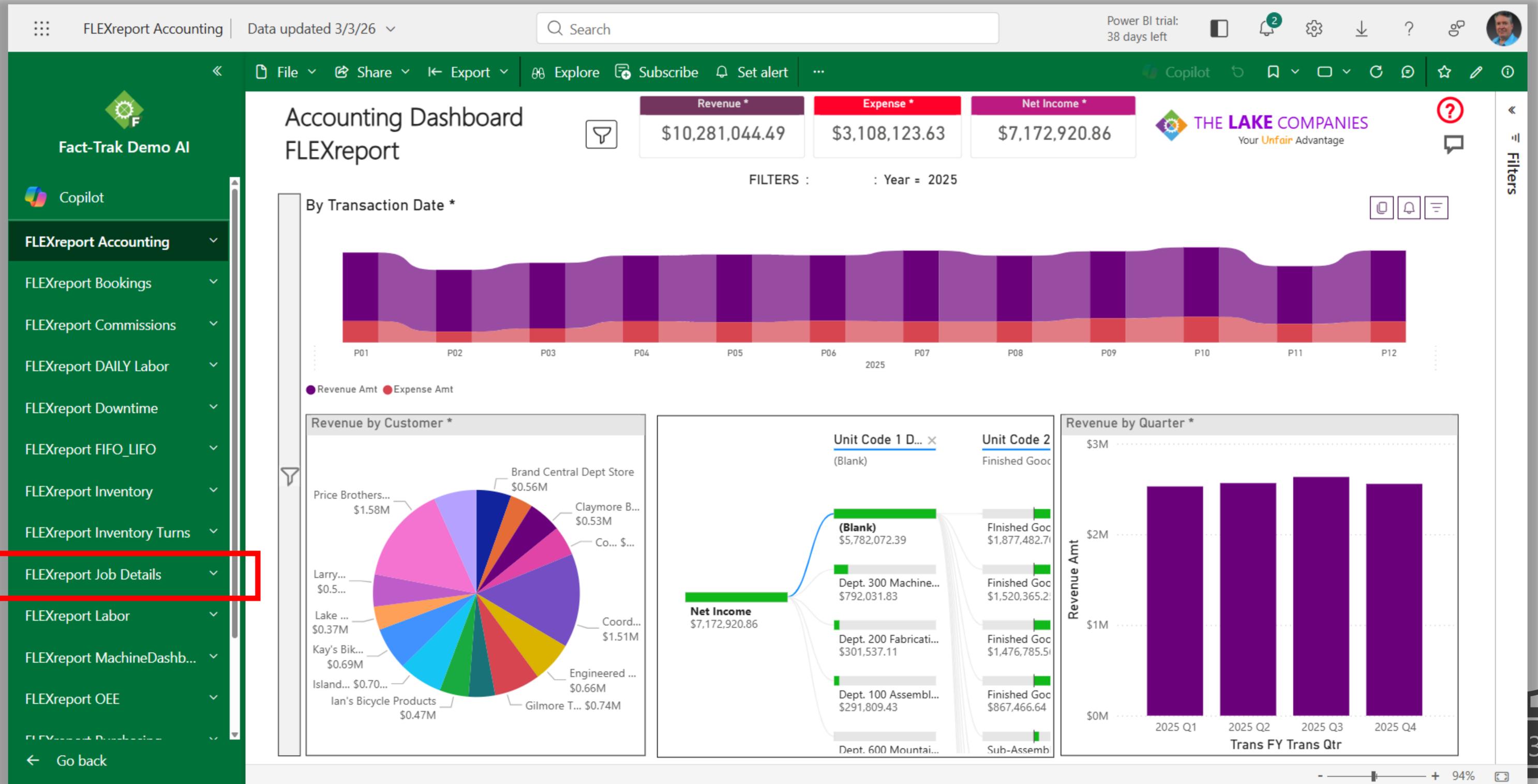
Scan to access
additional resources.

<https://qrco.de/lakeco-sun26>



Fact-Trak: Call the Right Tools

Call the Right Tools



Call the Right Tools

FLEXreport Job Details | Data updated 3/3/26 | Search | Power BI trial: 38 days left

File | Share | Export | Explore | Subscribe | Set alert | Copilot

Fact-Trak Demo AI

Copilot

FLEXreport Inventory

FLEXreport Inventory Turns

FLEXreport Job Details

Dashboard

Job

Late Jobs

Material Variances

Quick Tips

Field Descriptions

SUM Job Thruput

FLEXreport Labor

FLEXreport MachineDashb...

Go back

Job Delivery Performance FLEXreport

THE LAKE COMPANIES
Your Unfair Advantage

AI

FILTERS : Job Status = Complete : Year = 2025

Job Item Number	Avg Job Start Days Late	Avg Job End Days Late	Thruput Days	Plan Job Days	Thruput Percentage
SA-55000	-1.0	-19.2	25.1	4.8	19.21 %
WA-37000	-2.5	-1.8	22.2	4.8	21.50 %
SA-50910	1.3	-12.2	19.5	4.0	20.61 %
FA-40000	-7.0	-5.9	14.2	2.8	19.42 %
FA-10000	4.1	-1.8	11.5	2.0	17.84 %
SP-11000	-2.2	-4.3	8.6	1.5	16.91 %
SP-13000	0.3	-2.1	8.6	1.5	17.24 %
SP-12000	-2.3	-3.5	7.6	1.3	16.44 %
FA-30000	-5.1	-3.6	7.5	1.1	15.00 %
FA-20000	-2.5	-2.6	6.8	1.2	17.02 %
SA-61500	-2.6	-9.6	6.6	1.0	14.75 %
BMX-13000	-7.4	-6.1	6.0	1.1	18.76 %
BMX-12000	-6.2	-5.5	3.6	0.4	10.85 %
MB-11000	-6.5	-5.1	2.9	0.2	6.47 %
MB-10000	-5.6	-4.8	2.7	0.2	7.80 %
MB-12000	-5.5	-4.6	2.7	0.2	7.47 %
MF-50900	-3.5	-2.7	2.6	0.2	6.99 %
MW-61500	-3.9	-3.0	1.3	0.1	5.28 %
Total	-3.3	-4.7	7.0	1.0	13.73 %

Average Job Thruput

Last_Trx_Period	Avg Job Thruput	Thruput Percentage
2025 P01	6.0	20%
2025 P02	7.2	20%
2025 P03	5.2	20%
2025 P04	5.6	20%
2025 P05	6.8	20%
2025 P06	6.0	20%
2025 P07	4.9	20%
2025 P08	4.7	20%
2025 P09	6.7	20%
2025 P10	10.6	20%
2025 P11	8.1	20%
2025 P12	13.4	20%

Percent of Jobs ending On-Time

Last_Trx_Period	On-Time (No)	Late (Yes)
2025 P01	8...	2...
2025 P02	7...	3...
2025 P03	8...	2...
2025 P04	9...	1...
2025 P05	7...	3...
2025 P06	6...	4...
2025 P07	7...	3...
2025 P08	7...	3...
2025 P09	8...	2...
2025 P10	8...	2...
2025 P11	9...	1...
2025 P12	8...	2...

94%

Call the Right Tools

The screenshot displays a Power BI dashboard interface. At the top, the page title is "FLEXreport Job Details" with a sub-header "Data updated 3/3/26". A search bar is located in the top right. The dashboard is divided into a left sidebar and a main content area. The sidebar, titled "Fact-Trak Demo AI", contains a list of navigation items: Copilot, FLEXreport Inventory Turns, FLEXreport Job Details, Dashboard, Job, Late Jobs (highlighted), Material Variances, Quick Tips, Field Descriptions, SUM Job Thruput, FLEXreport Labor, FLEXreport MachineDashb..., FLEXreport OEE, and FLEXreport Purchasing. The main content area is titled "Job Delivery Performance FLEXreport" and features the "Fact-Track AI Assistant" interface. This interface includes a header with the company logo "THE LAKE COMPANIES" and the tagline "Your Unfair Advantage". Below the header is a large speech bubble icon and the title "Fact-Track AI Assistant" with the subtitle "Surface likely drivers behind performance problems – fast." A search bar with the placeholder text "Ask me your question..." and a purple submit button is highlighted with a red box. Below the search bar is a card titled "Late Start Analysis for Jobs" with the subtitle "Surface likely drivers of late starts for jobs." Underneath this card are two filter options: "Late starts last 7 days" and "Late starts last 4 weeks", with the latter also highlighted by a red box. The bottom right corner of the dashboard shows a zoom level of 94%.

Call the Right Tools

The screenshot displays a Power BI dashboard interface. At the top, the header includes 'FLEXreport Job Details', 'Data updated 3/3/26', a search bar, and a 'Power BI trial: 38 days left' notification. A green navigation bar contains options like 'File', 'Share', 'Export', 'Explore', 'Subscribe', and 'Set alert'. On the left, a dark green sidebar lists various reports, with 'Late Jobs' currently selected. The main content area is titled 'Job Delivery Performance FLEXreport' and features a purple header for 'Late starts last 4 weeks'. A central AI chat window shows a 'Thinking...' status. To the right, there is a 'Start new analysis' button and a 'Filters' panel. The bottom of the screen shows a 'Type your message here' input field and a system tray with a 94% battery indicator.

Call the Right Tools

The screenshot displays a Power BI dashboard for 'Job Delivery Performance FLEXreport'. The interface includes a top navigation bar with 'FLEXreport Job Details' and 'Data updated 3/3/26'. A green sidebar on the left contains navigation options like 'Fact-Trak Demo AI', 'Copilot', and 'Late Jobs'. The main content area features a title 'Job Delivery Performance FLEXreport' and a subtitle 'Late starts last 4 weeks'. A purple button labeled 'Start new analysis' is visible. A table lists job numbers, actual start dates, planned start dates, and late days. A red box highlights a notification: 'Default late threshold applied: 1 day. Would you like to change the lateness threshold? If yes, please specify the new threshold in days.' Another red box highlights the table headers: 'Job Number', 'Actual Start Date', 'Planned Job Start Date', and 'Job Start Late Days'.

Job Delivery Performance
FLEXreport

Late starts last 4 weeks

Start new analysis

Late starts last 4 weeks

Default late threshold applied: 1 day.
Would you like to change the lateness threshold? If yes, please specify the new threshold in days.

Job Number	Actual Start Date	Planned Job Start Date	Job Start Late Days
DJ00002025	2026-02-03	2026-01-30	4
DJ00002026	2026-02-04	2026-01-30	5
DJ00002033	2026-02-05	2026-01-26	10
DJ00002034	2026-02-05	2026-01-26	10
DJ00002035	2026-02-05	2026-02-03	2
DJ00002036	2026-02-05	2026-02-02	3
DJ00002037	2026-02-05	2026-01-30	6
DJ00002038	2026-02-05	2026-01-29	7

Type your message here

94%

Call the Right Tools

Power BI trial: 38 days left

FLEXreport Job Details | Data updated 3/3/26

Job Delivery Performance FLEXreport

DJ00002080	2026-02-23	2026-02-13	10
DJ00002081	2026-02-24	2026-02-17	7
DJ00002082	2026-02-24	2026-02-19	5
DJ00002083	2026-02-24	2026-02-16	8
DJ00002084	2026-02-24	2026-02-12	12
DJ00002087	2026-02-25	2026-02-17	8
DJ00002088	2026-02-25	2026-02-23	2
DJ00002091	2026-03-02	2026-02-16	14
DJ00002094	2026-02-25	2026-02-18	7

You may also want to ask:

- Show me jobs that started late by more than 7 days
- List late start jobs grouped by planned start week
- Provide the average delay in job start days over the last month

Type your message here...

THE LAKE COMPANIES
Your Unfair Advantage

Call the Right Tools

FLEXreport Job Details | Data updated 3/3/26

Power BI trial: 38 days left

File | Share | Export | Explore | Subscribe | Set alert

Copilot

Job Delivery Performance FLEXreport

THE LAKE COMPANIES
Your Unfair Advantage

DJ00002080	2026-02-23	2026-02-13	10
DJ00002081	2026-02-24	2026-02-17	7
DJ00002082	2026-02-24	2026-02-19	5
DJ00002083	2026-02-24	2026-02-16	8
DJ00002084	2026-02-24	2026-02-12	12
DJ00002087	2026-02-25	2026-02-17	8
DJ00002088	2026-02-25	2026-02-23	2
DJ00002091	2026-03-02	2026-02-16	14
DJ00002094	2026-02-25	2026-02-18	7

You may also want to ask:

- Show me jobs that started late by more than 7 days
- List late start jobs grouped by planned start week
- Provide the average delay in job start days over the last month

Were material shortages a problem with any of the jobs in the list above?

Call the Right Tools

The screenshot displays a Power BI workspace titled "FLEXreport Job Details" with data updated on 3/3/26. The main content area is titled "Job Delivery Performance FLEXreport" and features a chat interface with Copilot. The chat history shows a question: "Were material shortages a problem with any of the jobs in the list above?" and a response: "Thinking...". A text input field at the bottom of the chat says "Type your message here...".

The left navigation pane includes the following items:

- Fact-Trak Demo AI
- Copilot
- FLEXreport Inventory Turns
- FLEXreport Job Details
- Dashboard
- Job
- Late Jobs**
- Material Variances
- Quick Tips
- Field Descriptions
- SUM Job Thruput
- FLEXreport Labor
- FLEXreport MachineDashb...
- FLEXreport OEE
- FLEXreport Purchasing
- Go back

The top header contains a search bar, a "Power BI trial: 38 days left" notification, and user profile information. The right sidebar is labeled "Filters".

Call the Right Tools

FLEXreport Job Details | Data updated 3/3/26 | Search | Power BI trial: 38 days left

File | Share | Export | Explore | Subscribe | Set alert | Copilot

Job Delivery Performance FLEXreport

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Your Unfair Advantage

Were material shortages a problem with any of the jobs in the list above?

Yes, material shortages were a problem with several of the late start jobs in the list.

Here are some examples where shortages occurred (Quantity Short > 0):

Job Number	Material Item Number	Material Item Description	Material Source	Quantity Needed for Job	Quantity Available at Job Start Date	Quantity Short
DJ00002025-0	MW-61500	Wheel, Assembly, Mountain	Manufactured	440.00	-64.00	504.00
DJ00002026-0	SP-13000	Sprocket, Chromium, 58-Tooth	Manufactured	100.00	-227.88	327.88
DJ00002026-0	PT-50000	Paint, Black	Manufactured	200.00	-22781.60	22981.60
DJ00002036-0	SP-13000	Sprocket, Chromium, 58-Tooth	Manufactured	100.00	-22.88	122.88
DJ00002036-0	PT-50000	Paint, Black	Manufactured	200.00	-23981.60	24181.60

Type your message here...

Call the Right Tools

The screenshot displays a Power BI dashboard titled "Job Delivery Performance FLEXreport". The dashboard includes a navigation pane on the left with options like "Fact-Trak Demo AI", "Copilot", "FLEXreport Inventory Turns", "FLEXreport Job Details", "Dashboard", "Job", "Late Jobs", "Material Variances", "Quick Tips", "Field Descriptions", "SUM Job Thruput", "FLEXreport Labor", "FLEXreport MachineDashb...", "FLEXreport OEE", "FLEXreport Purchasing", and "Go back". The main content area shows a table of material shortages with the following data:

Job Number	Material Item Number	Material Item Description	Material Source	Quantity Needed for Job	Quantity Available at Job Start Date	Quantity Short
DJ00002025-0	MW-61500	Wheel, Assembly, Mountain	Manufactured	440.00	-64.00	504.00
DJ00002026-0	SP-13000	Sprocket, Chromium, 58-Tooth	Manufactured	100.00	-227.88	327.88
DJ00002026-0	PT-50000	Paint, Black	Manufactured	200.00	-22781.60	22981.60
DJ00002036-0	SP-13000	Sprocket, Chromium, 58-Tooth	Manufactured	100.00	-22.88	122.88
DJ00002036-0	PT-50000	Paint, Black	Manufactured	200.00	-23981.60	24181.60

Below the table, a Copilot chat interface is visible, showing a question: "Were material shortages a problem with any of the jobs in the list above?". The response is: "Yes, material shortages were a problem with several of the late start jobs in the list. Here are some examples where shortages occurred (Quantity Short > 0):". A red box highlights a new question being typed: "What is the root cause of the late starts?".

Call the Right Tools

The screenshot displays the Power BI Copilot interface within a report titled "Job Delivery Performance FLEXreport". The interface includes a top navigation bar with "FLEXreport Job Details" and "Data updated 3/3/26". A search bar is present in the top right. The left sidebar contains a navigation menu with items like "Fact-Trak Demo AI", "Copilot", "FLEXreport Inventory Turns", "FLEXreport Job Details", "Dashboard", "Job", "Late Jobs", "Material Variances", "Quick Tips", "Field Descriptions", "SUM Job Thruput", "FLEXreport Labor", "FLEXreport MachineDashb...", "FLEXreport OEE", "FLEXreport Purchasing", and "Go back". The main chat area shows a user query: "What is the root cause of the late starts?". The Copilot response is: "I'm designed to help with the analysis of jobs starting late. And have been given guardrails not to venture into analysis I'm not yet set up for." The second sentence of the response is highlighted with a red box. Below the response, there are suggested questions: "What data do you need to analyze late start jobs?", "Can you identify patterns or trends in late start occurrences?", and "Are there specific times or locations where late starts are more frequent?". The bottom of the chat area has a text input field with the placeholder "Type your message here..." and a send button. The top right corner of the interface shows "Power BI trial: 38 days left" and a user profile picture. The bottom right corner shows a zoom level of 94%.

FLEXreport Job Details | Data updated 3/3/26

Power BI trial: 38 days left

Job Delivery Performance FLEXreport

THE LAKE COMPANIES
Your Unfair Advantage

What is the root cause of the late starts?

I'm designed to help with the analysis of jobs starting late. And have been given guardrails not to venture into analysis I'm not yet set up for.

You may also want to ask:

What data do you need to analyze late start jobs? Can you identify patterns or trends in late start occurrences?

Are there specific times or locations where late starts are more frequent?

Type your message here...

94%