



Agentic AI in Manufacturing

Lessons learned from building agents for B2B workflows





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What we'll cover today

Where can agentic AI create real value in manufacturing today?

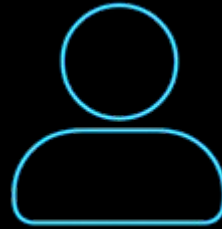
How can we do this safely in and around SAP?

What are practical first moves a B2B manufacturer can make in the next 90 days?

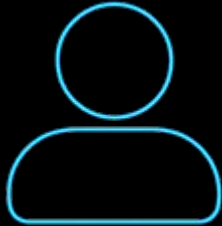
Who should lean in today?



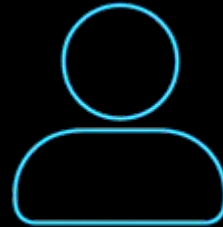
**VP of Sales or
eCommerce**



**Head of Customer
Service**



CIO or VP of IT



**Operations
Leader**

Of SAP-Centric manufacturers

The reality of many manufacturing teams today

Sales reps are spending **64% of their time** on non-selling tasks.

2024 Salesforce State of Selling Report

Customer service is forced to swivel between SAP, email, and spreadsheets to fix preventable order errors.

Operations leadership hears "use AI", but can't connect it to OTIF, fill rate, margin, or DSO.

Bottom Line: These frictions quietly erode fulfillment performance, margins, and customer trust.

**Ever read the headlines and
feel totally behind?**

Bosch invests \$2.7B in AI
as a growth driver



[Source: Bosch](#)

NVIDIA and AWS
Expand Full-Stack
Partnership



[Source: Nvidia](#)

OpenAI Unveils Plans for
Seemingly Limitless
Expansion of Computing
Power

[Source: WSJ](#)



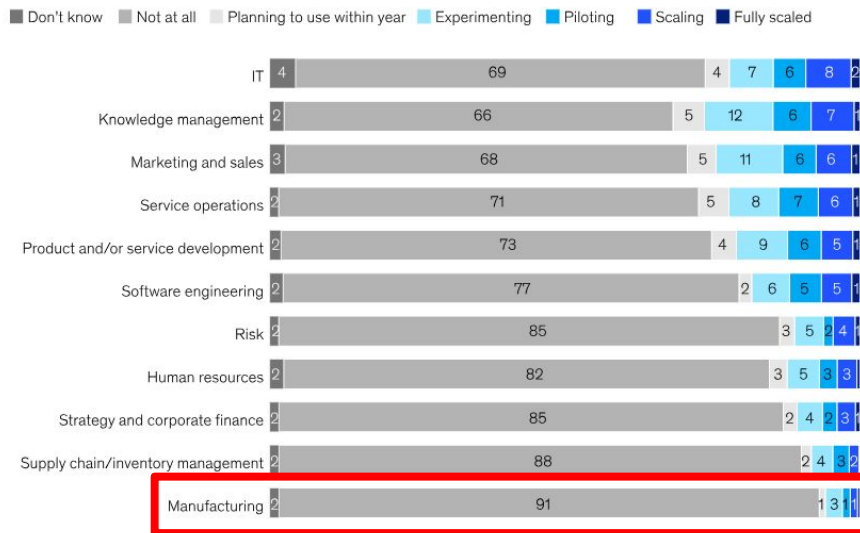
**Don't feel bad. You are not *that* far behind
your peers ... but let's close the gap.**



Most manufacturers are still in pilots; fewer than 10% have scaled AI agents in any function. This is a window to leapfrog, not a reason to panic

No more than 10 percent of respondents report scaling AI agents in any individual function.

Phase of AI agent use at respondents' organizations, by business function,¹ % of respondents (n = 1,933)

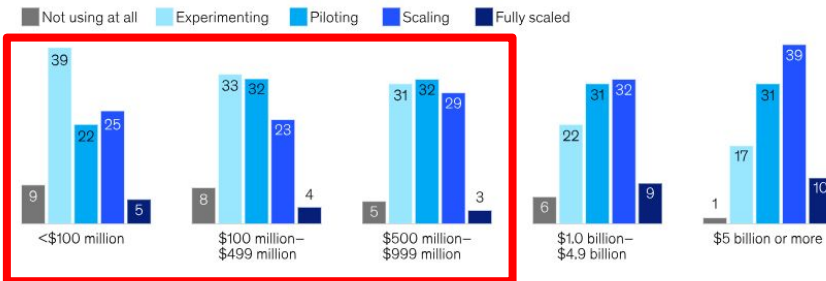


Note: Figures may not sum to 100%, because of rounding.
¹Question was asked only of respondents who reported regular use of AI in the respective functions and was rebased to reflect the total sample.
Source: McKinsey Global Survey on the state of AI, 1,993 participants at all levels of the organization, June 25–July 29, 2025

McKinsey & Company

Larger companies lead the way in scaling AI beyond pilots.

Phase of organization's use of AI, by company revenues,¹ % of respondents



Note: Figures may not sum to 100%, because of rounding.
¹Respondents who said "don't know" are not shown, but represent <2% of the total.
Source: McKinsey Global Survey on the state of AI, 1,993 participants at all levels of the organization, June 25–July 29, 2025

McKinsey & Company

So why start now?

✦ AI Features within Purchased Solutions ✦

Type of Solution Purchased	Purchased Included AI Features	AI Features Expected (Significant or Moderate Functionality)	AI Features Required (Mandated or Strongly Encouraged)	AI Features Not Expected	AI Features Not Wanted
Hardware	84%	75%	60%	14%	9%
Heavy Equipment/ Machinery	67%	55%	46%	23%	6%
Services	92%	87%	63%	3%	2%
Software	93%	88%	67%	4%	2%
Fraction of Total Sample	89%	83%	62%	7%	4%

Being behind is not the risk. Standing still is.

Here is what meeting those expectations can look like



Factory Floor Operations

Predictive maintenance: AI detects equipment failures before they happen

Automated quality inspection: Computer vision spots defects in real-time



Supply Chain & Inventory

Demand forecasting: AI aligns production with real demand, cuts excess inventory

Supply chain risk & logistics: Anticipate disruptions, optimize routes and safety stock



Product & Engineering

Design acceleration: AI speeds up simulation and design-of-experiments

Physical AI & robotics: Smart equipment that learns and adapts to variation



Commercial & Strategy

Pricing & margin analytics: Detect where margin is leaking, recommend dynamic pricing

GenAI decision support: Natural language copilots for operations and planning

So what's standing in the way... really?



Strategy



Headcount



Budget



Bandwidth

These barriers are real. They just aren't reasons to wait anymore.



Let's align on some definitions. What is an AI Agent?



Listens

Pulls in signals, data, and context from people and systems.



Thinks

Processes data, weighs options, and chooses the next best step.



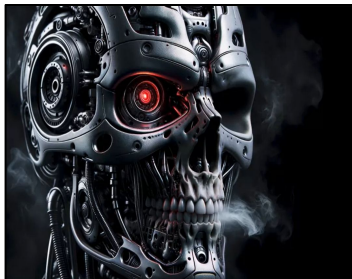
Executes

Acts by leveraging internal or external tools and systems.

Generative AI vs Agentic AI?

How can I help, Caroline?

+ Ask anything



- Create single outputs like text or images
- Human input needed for detailed instructions
- Achieves complex, multi step objectives
- Low human input, defines strategies and uses external tools

Our stack for building tools manufacturers can run



ChatGPT



perplexity



Lovable



CURSOR



n8n

The two groups agents create value for:



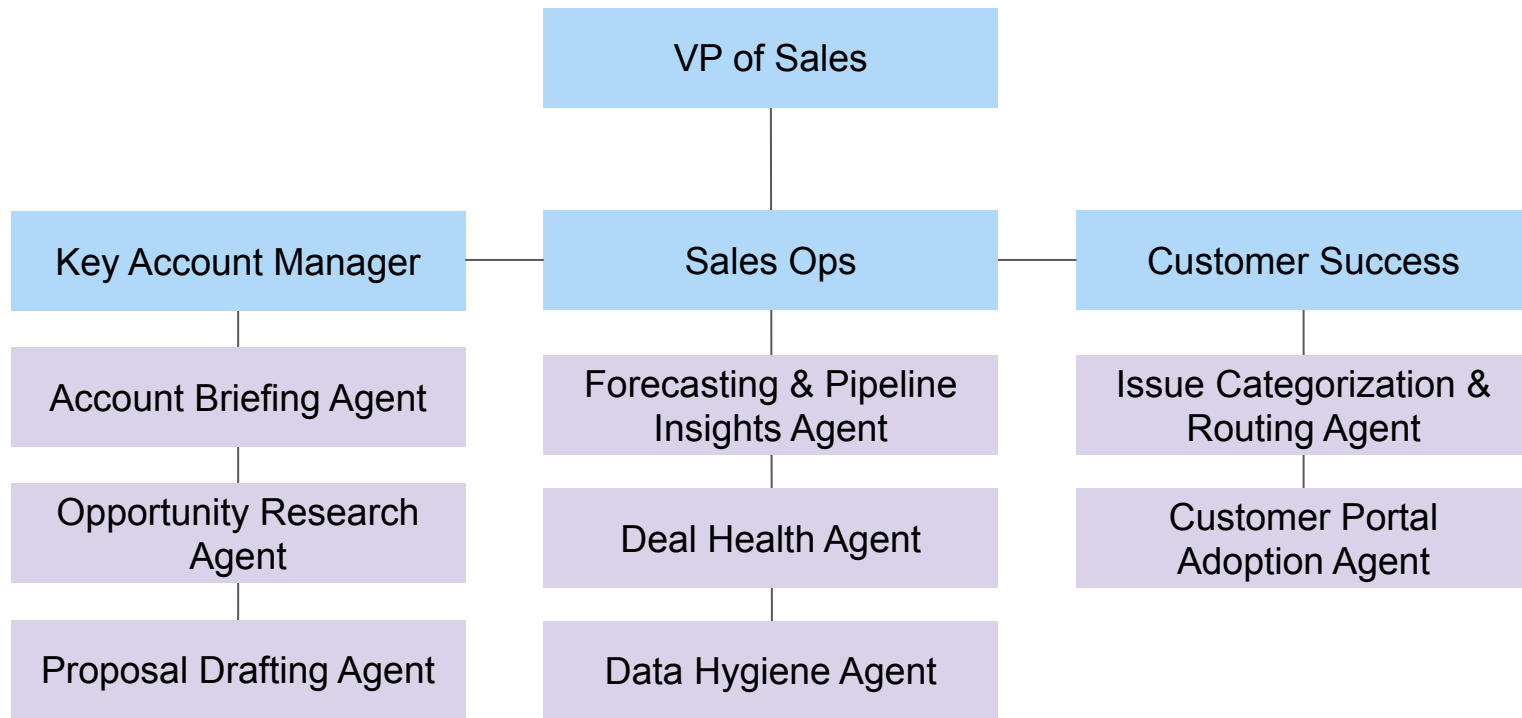
Your Company
(Internal)



Your Customers
(External)

Easiest place to start? Enable your team to build their own agents

Sample AI-Enabled Sales Department of a Manufacturer



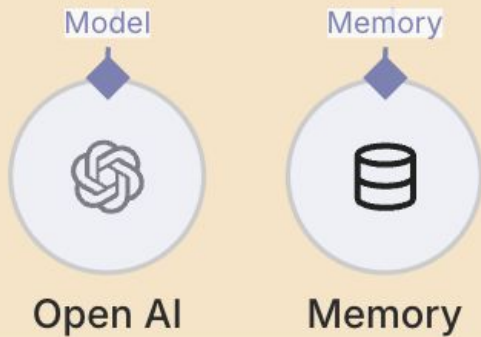
Trigger

Agent

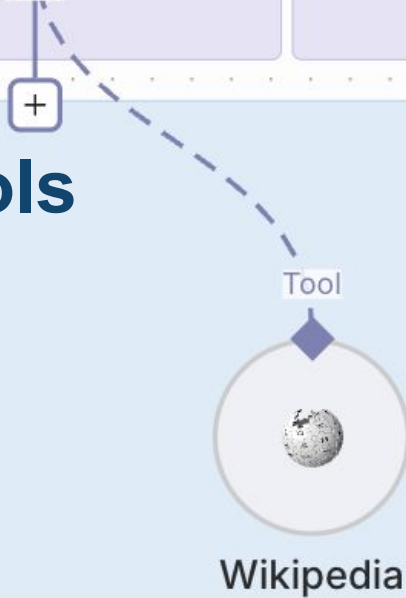
Response



Brain



Tools





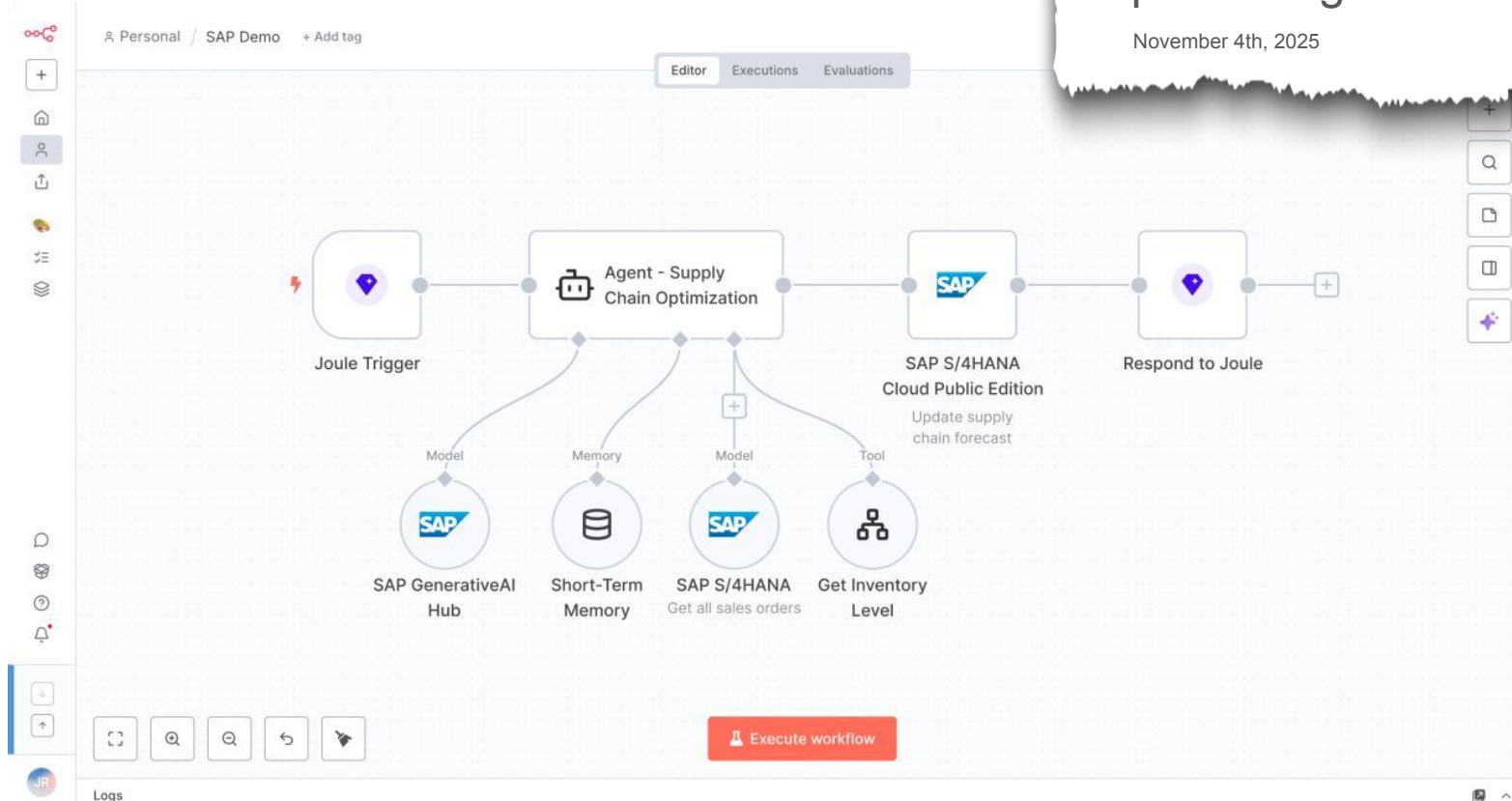
Enough theory. Let's show what we've built.

Look Familiar? This is the future.

“We’re happy to announce that n8n is partnering with SAP...”

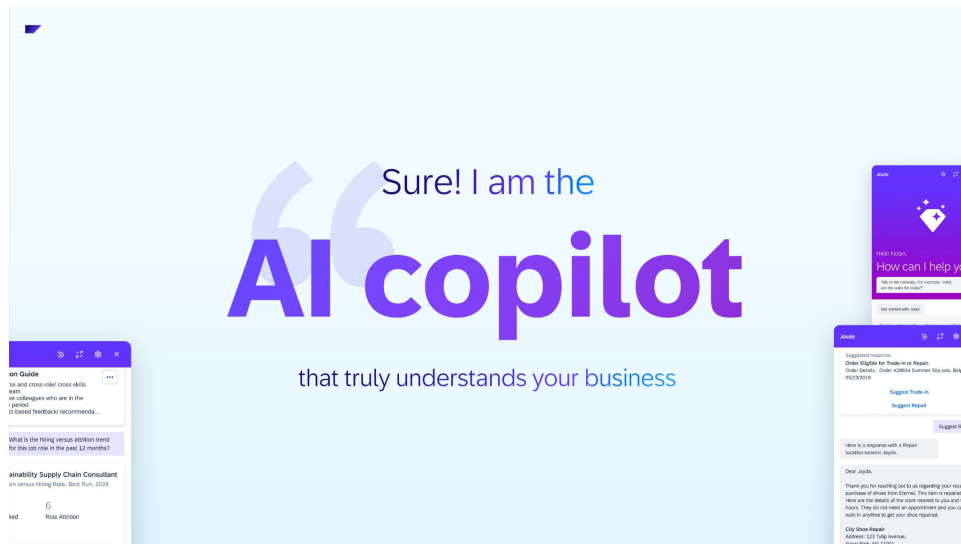
November 4th, 2025

[Source: n8n](#)



Where does SAP Joule fit in?

Think of SAP Joule as a **copilot** for interacting with SAP data in natural language



- Conversational access to SAP transactions and reports
- Embedded directly inside SAP workflows
- Inherits SAP's enterprise security and governance model

Other considerations

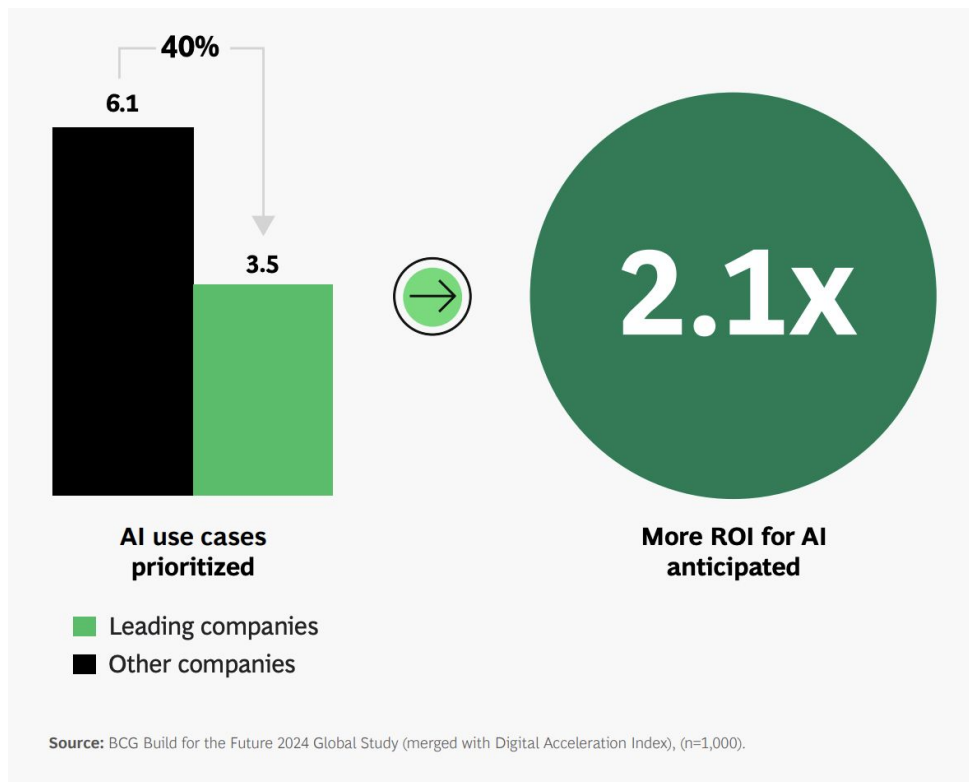
- Designed for SAP cloud-first environments
- Scope and cost vary based on licensing and usage - speak with your SAP AE for more information



**Switching gears... let's talk about agents that
create value for your customers**

You have a million suggested use cases. How do you prioritize?

- 1) Identify the KPIs that move the needle for your business
- 2) Talk to your customers
- 3) Streamline use cases



Our 1-2-3 framework for Customer-Facing AI

#1 Core System

Slick, Robust eCommerce System

- ✓ Direct, real-time SAP ERP Integration
- ✓ Enterprise security
- ✓ High-speed performance
- ✓ Ready-to-use features
- ✓ Flexible storefronts
- ✓ Easy navigation

#2 KPIs that drive success



#3 AI Agents that supercharge results

-  Predict buying trends for smarter inventory
-  Automatic routine support
-  Surface sales opportunities
-  Proactively resolve issues
- ... and more

So what might this look like for a chemical manufacturer?



Demand Signal Agent:

Learns your usage patterns and anticipates future demand



Throughput Acceleration Agent

Optimizes routing, scheduling, and material allocation to move each order from receipt to shipment with minimal delay.



Compliance Guardian

Checks every order for proper SDS, labeling, hazard class, and transport documentation before shipment.



58% of buyers now engage earlier to understand how vendors are implementing AI

Guardrails that Unlock AI Commerce in SAP

- AI Agent are coming to your digital front door
 - Your SAP system is still the system of truth
 - Goal: more revenue + better customer experience,
not more red tape
-

*How do we make the
safe path the fast path?*



Where AI Actually Changes Your Attack Surface



At the Edge

Customer-facing touchpoints

- Customer portals
- eCommerce platforms
- Email
- PDFs
- RFPs



In Motion

Data transfer & integration layers

- SAP BTP
- SAP Integration Suite / CPI
- Cloud Connector
- APIs



In Memory

Persistent data & processing history

- System logs
- Prompt history
- Vector stores
- Chat transcripts



AI doesn't just touch data. It *moves* data in new ways

S-A-P-E-R Guardrails for AI Commerce (1/2)

S - Scope & Segregation

- Start narrow: specific tables/fields, specific use cases
- Expose SAP via BTP + Cloud Connector, not open DB holes
- Keep early AI use cases **read-mostly** and non-production first



A - Access & Identity

- No shared SAP_ALL bots
- Separate service principals/technical users for AI Agents
- Turn on Read Access Logging (RAL) for sensitive fields (pricing, bank data, PII, etc.)

Together, S and A make sure AI can only see what it truly needs, and that you have receipts for every sensitive read.

S-A-P-E-R Guardrails for AI Commerce (2/2)

P - Policy in Prompts & Pipeline

- Allowlist actions for agents:
 -  “propose an order” / “draft a quote”
 -  “change vendor bank details” / “change credit limits”
- Use [OWASP LLM Top 10](#) as your checklist for prompt injection, excessive agency and insecure output handling.

E - Egress & External Models

- Decide where models run (e.g. [BTP](#), [hyperscaler](#), [cloud vendor](#))
- Confirm **data residency & training** behavior per provider
- Keep SAP as system of record; AI sees just enough via APIs

R - Runtime Monitoring & Response

- Log *which* agent, *which* SAP object, for *which* customer
- Alerts for unusual patterns (discounts, credit, bank data)
- A clear kill-switch for AI-driven commerce flows

S-A-P-E-R gives you a playbook. You don't have to say 'no AI'. You can say 'yes, within these guardrails'!

Lanes, Not Roadblocks: Governing AI in SAP Commerce



Green Lane

Experiment Freely

- Read-only SAP data
- For small, internal, or pilot customer audience
- Use cases: Search, Q&A, recommendations, “explain my ____”



Yellow Lane

Controlled Impact

- AI can draft quotes or orders; humans approve
- AI can propose discounts within bounded rules
- Logged and reviewed quarterly



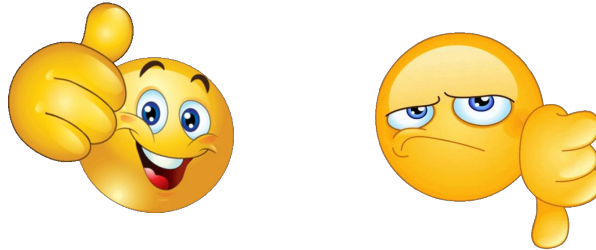
Red Lane

High-Impact Changes

- Vendor bank details, credit limits, safety-critical orders
- AI may assist analysis; No autonomous changes
- Full change control & dual-control approvals

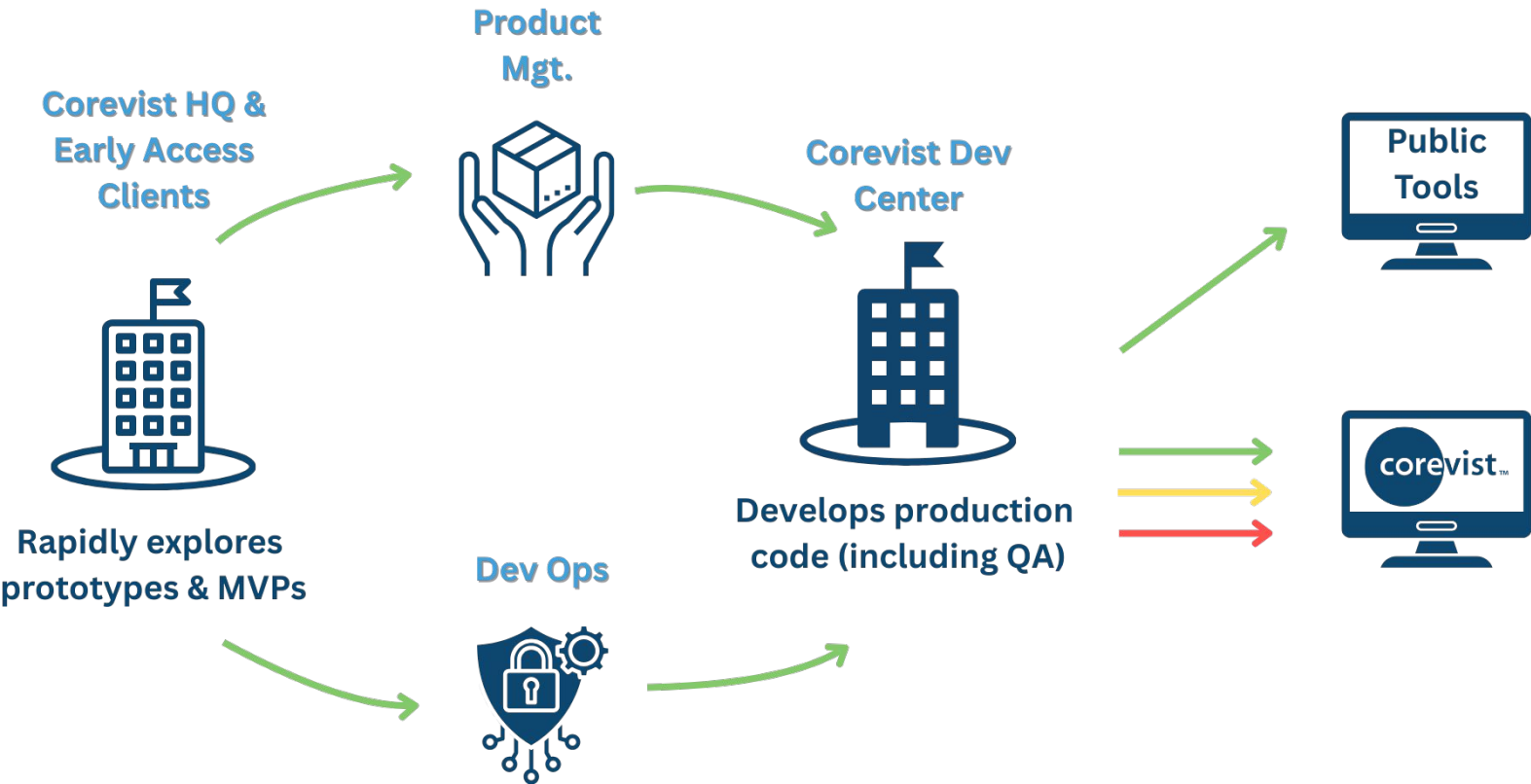
60-second Health Check for AI in SAP Commerce

1. Can we trace which AI or Integration touch which SAP document for a customer last month?
2. Do AI agents and bots use their own SAP roles, separate from humans?
3. Are AI-driven actions on our portals limited to an allowlisted set?
4. Do we know where portal chat logs and prompts live, and how long we keep them?
5. If an AI feature started doing something strange with pricing or discounts, who gets the first alert?



Putting the pieces together

The agent development process from idea to production

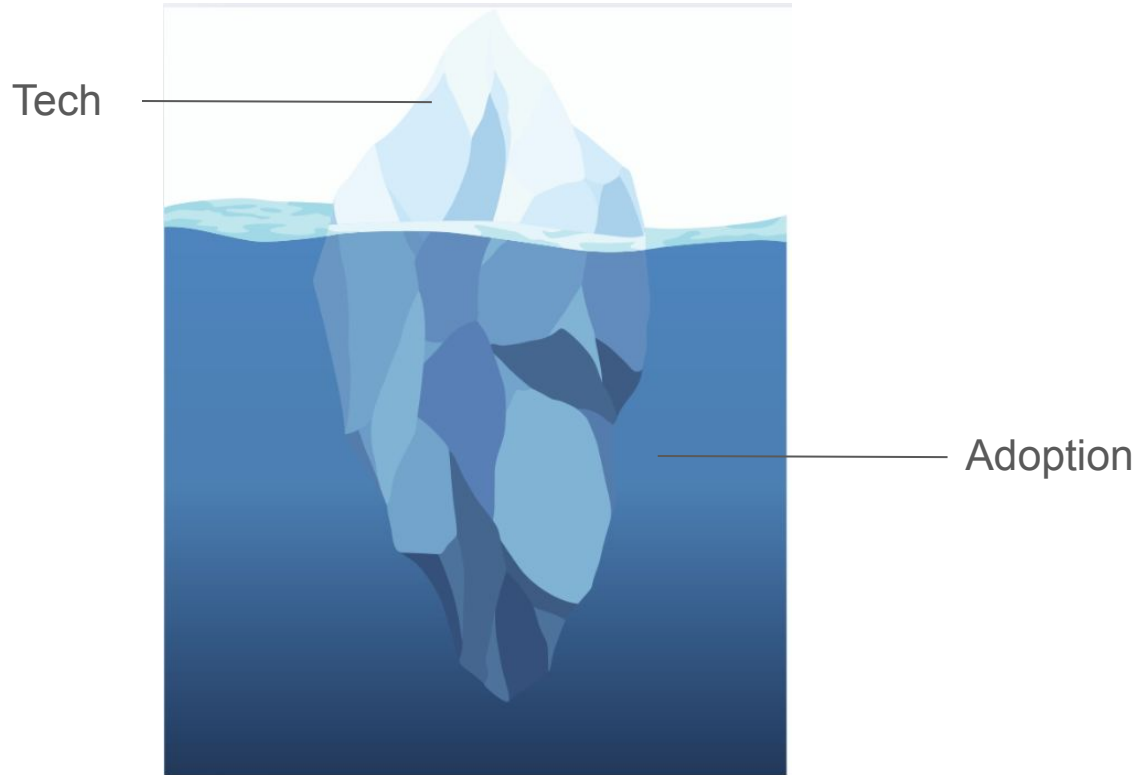




Now for our second demo. Meet **Polaris**.



Success goes beyond just the tech... need to create a culture that encourages experimentation



Thank you

How to get in touch, for your custom agent or other inquiries

Email: tim.brewer@corevist.com

Fill out our form with the QR code →



www.corevist.com

| Research Triangle Park, NC



Resources

[The state of AI in 2025: Agents, innovation, and transformation](#)

McKinsey & Company · Nov, 2025

[2025 Smart Manufacturing and Operations Survey: Navigating challenges to implementation](#)

Deloitte · May, 2025

[2025 Buyer Experience Report](#)

6sense · Nov, 2025

[AI Automation with n8n Youtube Series](#)

[SAP Joule Documentation](#)