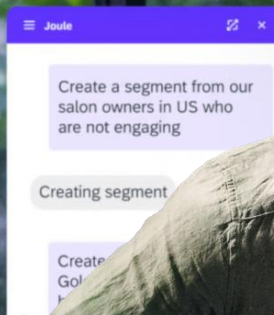




The beginning of better.

Welcome to

Autonomous Supply Chain Management



Summary

XYZ Supplier • Distribution center

Actions taken:

1. We have run a new planning scenario and recommended using an alternative supplier, ACME Corp

Next steps:

1. Please confirm you wish to proceed with the order

Help me mitigate this distribution center disruption



Supply chain is the largest intersection of critical business processes, risk and opportunity....

Supply chain is one of the major drivers of cost and profitability metrics

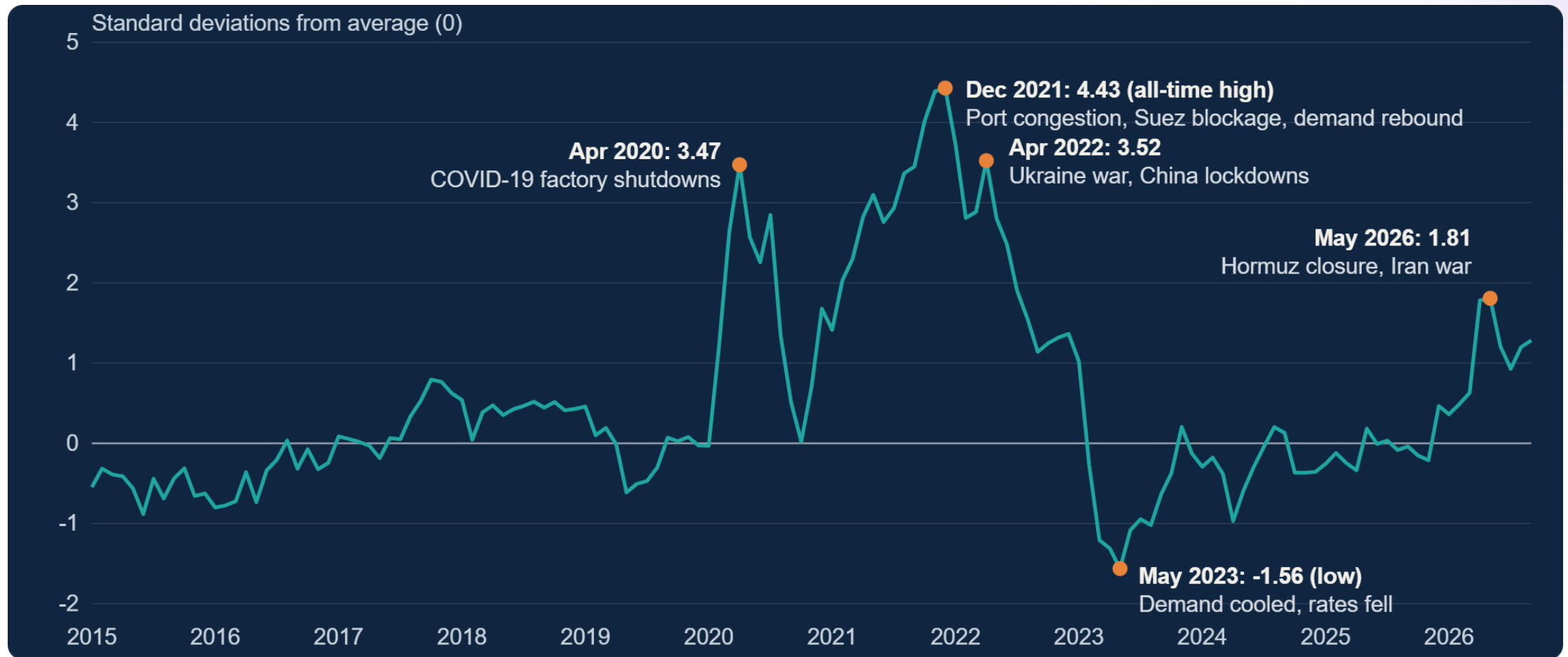
Supply chain is where customer service is first apparent

Supply chain is where organisations can make the biggest sustainability impact.

Strong and agile supply chains underpin resilience and business continuity

A “fit” supply chain can be a key competitive differentiator in today’s volatile market environment

Global Supply Chain Risk Index



Data: NY Fed GSCPI. Drivers per Transport Geography, NY Fed Liberty Street and Reuters; the NY Fed does not attribute causes.

2026's biggest supply chain pressure points

Strait of Hormuz closure

Container shipping has been shut out of the strait for over half a year, and carriers now run land bridges via Saudi and UAE ports.

Red Sea and Cape detours

Routing via the Red Sea can cut about 14 days from a China to Genoa trip, so each network change brings uncertainty.

Energy and trade policy

Oil has topped \$100 a barrel after Red Sea tanker attacks, while tariffs and the USMCA review add trade uncertainty.

BLOOMBERG INTELLIGENCE

Iran war disruption hits shippers such as Maersk, ONE and HMM

Notes suspended operations at Jebel Ali, the world's ninth busiest container port, and higher ocean and air freight rates.

[Read the article](#)

BLOOMBERG NEWS via GCAPTAIN · 3 MAR 2026

Container shipping swings from expected glut to possible supply crunch

Recalls pandemic-era port gridlock and soaring rates, and warns of pressure on freight rates and fuel costs.

[Read the article](#)

Impacts across freight, trade and energy

\$7,738

Average spot rate per 40ft container, Far East to US West Coast, on 10 Sep 2026.

\$4,131

Cost of a container on the Shanghai to Persian Gulf route by 15 May, up from \$980 (Clarksons, via FT).

\$125bn+

Value of goods either stranded or forced to re-route by the close of the Strait of Hormuz

-95%

Fall in LNG exports, with urea down 83%, per ITC as reported by TradeArabia.

FINANCIAL TIMES

Shipping firms turn to trucking as Hormuz disruption lifts freight rates

MSC, Maersk, CMA CGM and Hapag-Lloyd have set up land routes linking Red Sea and Gulf ports.

[Read the article](#)

KHALEEJ TIMES

Hormuz disruption forces costly rerouting for regional supply chains

Experts warn that sustained disruption could feed into inflation and growth if oil and petrochemical prices stay high.

[Read the article](#)

Sources: Hellenic Shipping News, Financial Times, Khaleej Times, TradeArabia. Article cards are summaries.

Manufacturing: input shortages and curtailed output

Petrochemical output cuts

Mitsubishi Chemical has reduced ethylene output to avoid a halt, and other Japanese makers could suspend operations if the closure continues.

Feedstock squeeze

Fitch expects force majeure declarations and curtailments, especially in Asia, as naphtha, LPG, sulphur and methanol supplies tighten.

Helium and chips

Qatari output has halted, removing about a third of global helium supply. South Korea sources 65% of its helium imports from Qatar, so chip production is exposed.

SIDLEY · APR 2026

Hormuz disruption spreads from energy markets into supply chains and credit

Warns that European chemical makers face early pressure and that shortages will ripple through polymers, plastics and specialty chemicals.

[Read the article](#)

ENERGY INTELLIGENCE · MAY 2026

Aramco and Dow joint venture Sadara temporarily halts output

Shows how the de facto Hormuz closure reaches the Gulf's downstream chemicals sector.

[Read the article](#)

Also: Business Insurance (citing The Japan Times); Fitch Ratings (via TradeArabia). Cards are summaries.

Logistics lead times stretch and grow less predictable

10-14

Extra days of transit for ships rerouted around the Cape of Good Hope.

2.5m

TEU of container capacity absorbed by the longer Cape routing (Xeneta).

90%+

Drop in strait traffic at times after late February 2026.

84

Hormuz transits in the week of 27 Jul to 2 Aug, versus 95-138 a day before the crisis.

CARGOLINKED · SHIPPER PLAYBOOK

There is no sea workaround for Hormuz, so plan for longer, less certain transits

Some importers now hold Gulf stock in bonded warehouses outside the strait and replenish by truck in smaller, more frequent lots.

[Read the article](#)

EASYSHIP · 16 MAR 2026

What small businesses should expect as Hormuz traffic stalls

Advises that goods linked to the Gulf, South Asia or East Africa face longer lead times, slower drayage and customs delays.

[Read the article](#)

Also: SendFromChina; Lloyd's List Intelligence (via Cargolinked); Xeneta (via Asstra). Cards are summaries.

Planning strategies: buffers, flexibility, scenarios

Rebuild buffers

Advice ranges from 3-4 extra weeks of best sellers to 60-90 days of critical items, at a higher carrying cost.

Diversify

Dual sourcing and nearshoring for exposed inputs, plus air or intermodal options for urgent goods.

Re-baseline and test

Reset promise dates using landbridge transit times and test cases such as 7 extra days on 20% of inbound lanes.

CELLO SQUARE · 15 APR 2026

Logistics issues shippers should watch as Hormuz risks expand

Flags freight rate swings, route changes and transshipment delays, and urges revised inventory plans and delivery response strategies.

[Read the article](#)

CLEVERENCE

How warehouse teams cope with Iran-related lead time swings

Explains that raising safety stock across many SKUs strains racks, labor and cash, so buffers should target critical items.

[Read the article](#)

Also: SendFromChina; Easyship; Cargolinked. Cards are summaries; open the links for full text.

Supply Chain leaders face unprecedented pressure.

...but AI is opening a unique window of opportunity

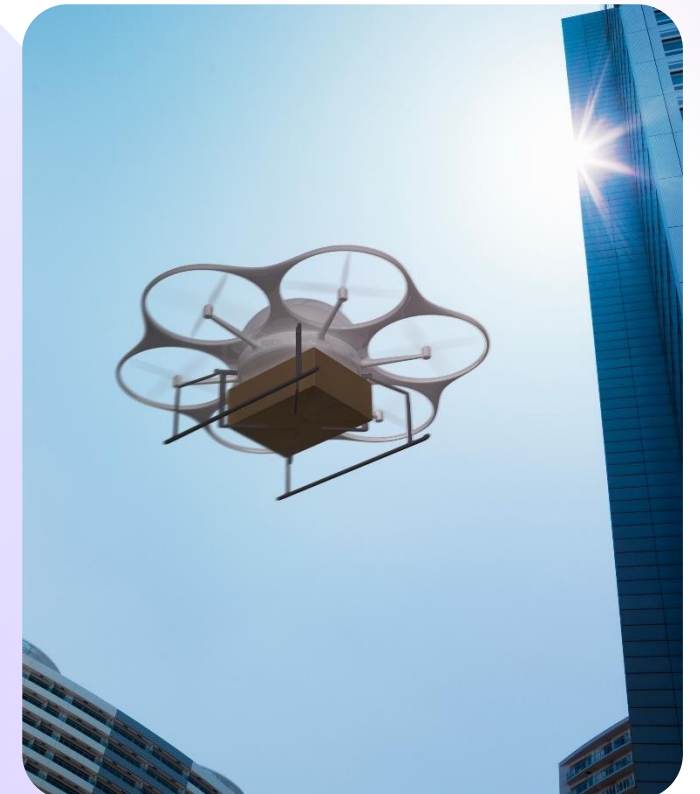
CSCO / COO Strategic Priorities



Agentic AI is opening
the window of opportunity to
fundamentally rethink supply chains



Autonomous Supply Chains



Best in class companies evolve towards Supply Chain Orchestration



AI is everywhere. Results aren't.

The bottleneck isn't AI capabilities. It's how supply chains are currently designed to work.

Challenges which are keeping AI stuck in proof of concepts and pilots

Lack of process & organizational readiness

Supply chain leaders have not yet redesigned roles, skill, and process in an agentic AI-driven environment.

AI is only as good as the data it uses

Supply chain data is often spread across multiple platforms and not available in real-time.

Need to improve workflow governance

AI remains adjacent to core operational decision-making instead of being embedded inside end-to-end processes.

AI agents are gaining traction, but most companies are still stuck between pilots and scale, with major gaps in data readiness, people skills, and process governance.

60%

"Gartner® predicts that by 2030, 60% of enterprises using SCM software will have adopted agentic AI features."¹

15%

of supply chain organizations have AI and execution-ready data foundations.²

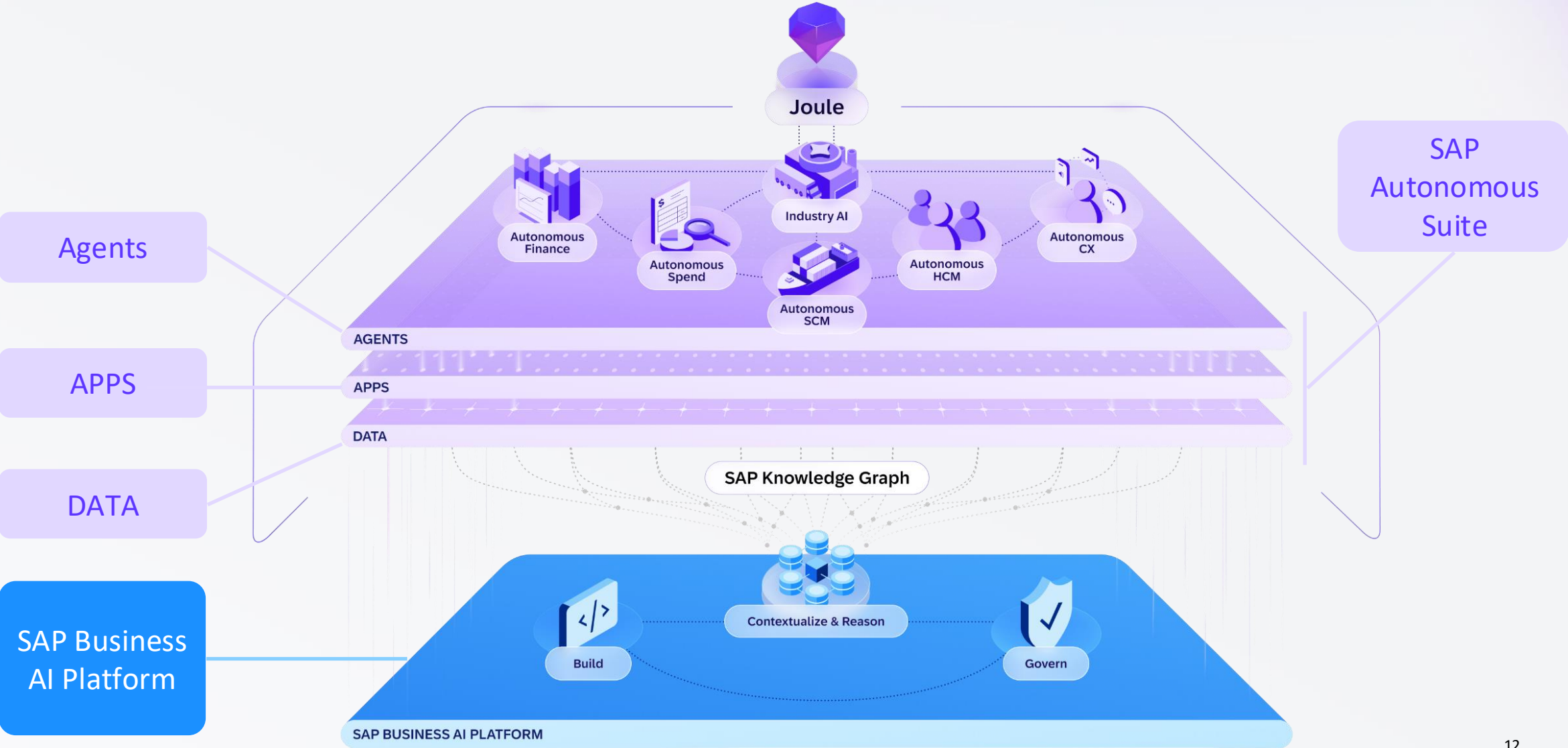


¹Gartner Press Release, [Gartner Forecasts Supply Chain Management Software with Agentic AI Will Grow to \\$53 Billion in Spend by 2030](#), 7 April 2026. GARTNER is a trademark of Gartner, Inc. and/or its affiliates.

²Zero100 Report: The AI-ready Data Imperative, 2026

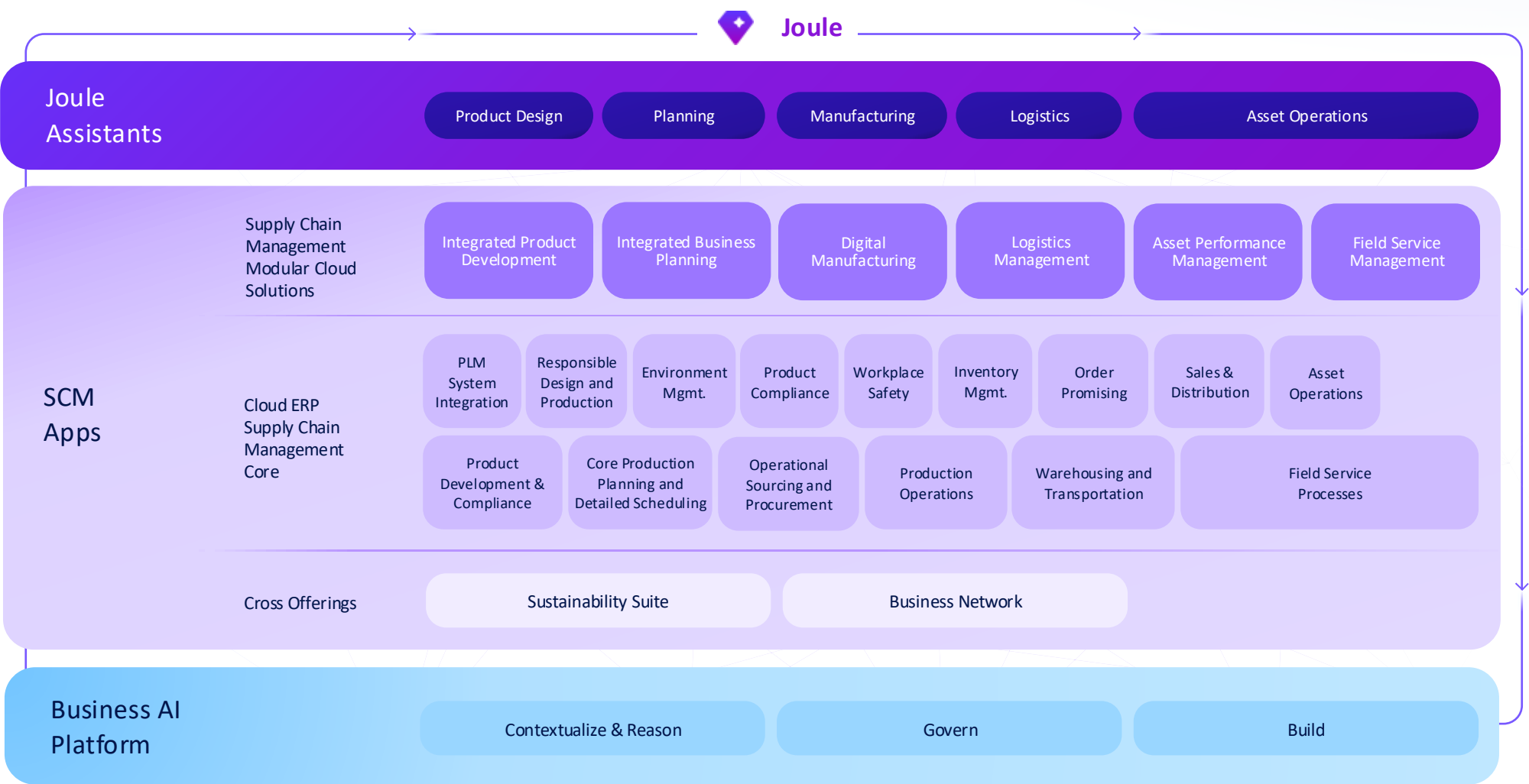
SAP Autonomous Enterprise

provides required capabilities for our customers



SAP Autonomous Supply Chain Portfolio Overview

Delivering a comprehensive Best of Breed in a Suite Portfolio to elevate your business into an autonomous Domain

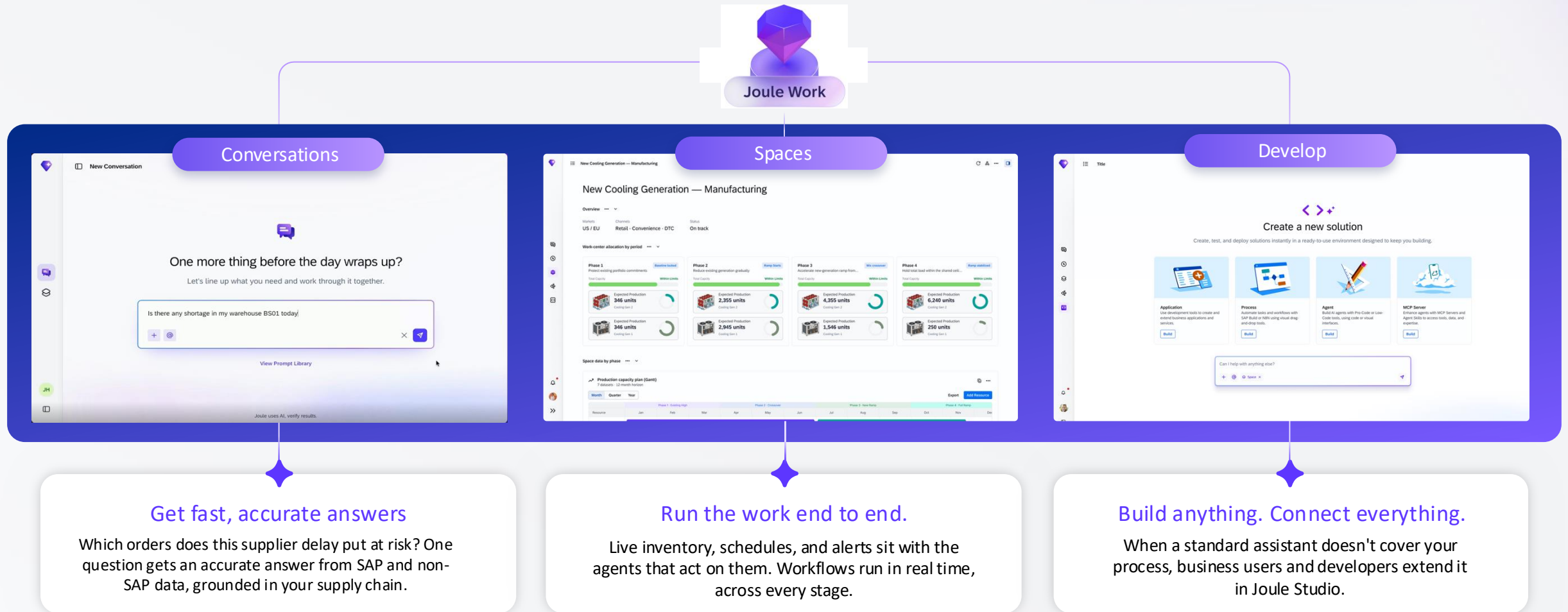


Unlock
a new era
for your
business

powered by the
Autonomous Supply
Chain Domain
embedded within SAP
applications and
trained on rich,
contextual data.

One front door for everyone who keeps the supply chain moving

Engineers, planners, buyers, and technicians say what they need. Joule Work brings the right assistant, the right data, and the next steps.





Autonomously Orchestrated Supply Chain

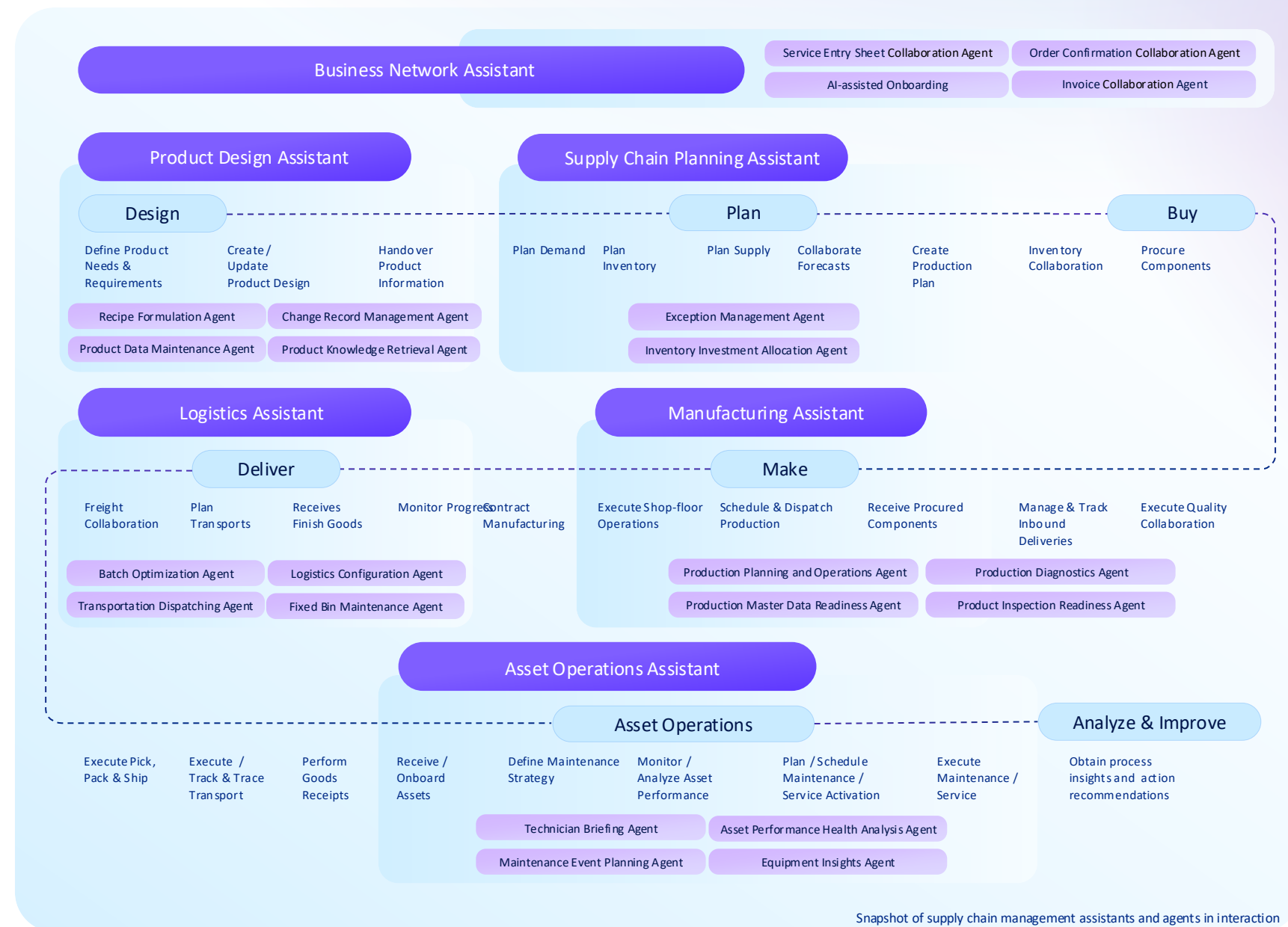
Dynamically adjusting supply chain that anticipates disruptions, responds instantly to change and transforms your operations into a high-performance engine



Vision: Unlock end-to-end visibility, built-in resilience, and seamless orchestration so you anticipate disruptions, run smoother operations, and exceed expectations



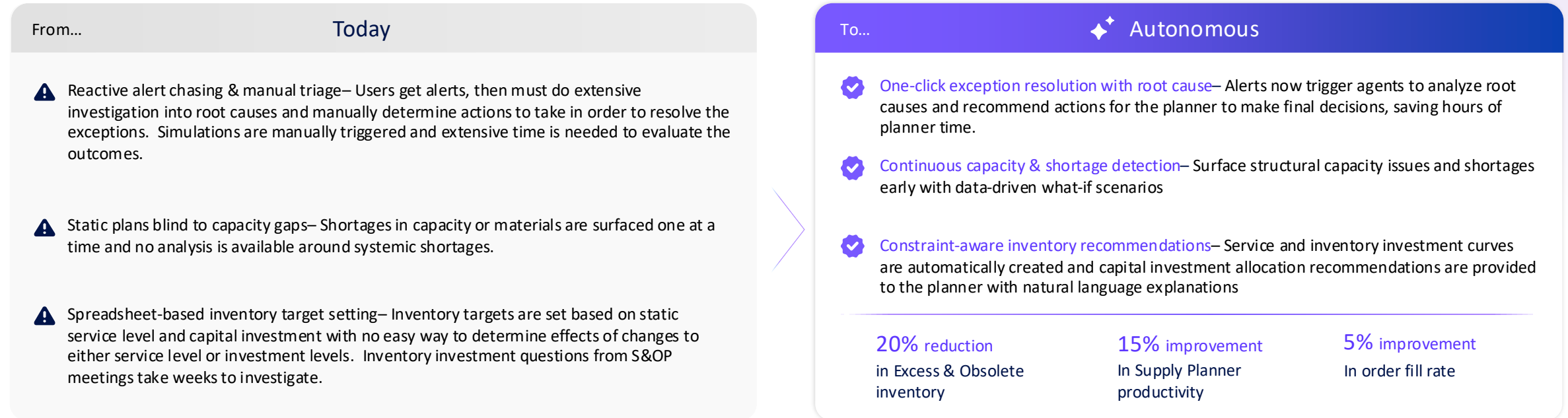
Mission: Deliver AI-powered supply chains assistants and agents that think ahead, orchestrate every step, and enable proactive decision-making, instant problem-solving and truly run autonomously





Supply Chain Planning Assistant

Turn supply-chain alerts into decisions — sense, simulate, and resolve plan exceptions in one workspace.



Exception Management Agent

From manual alert investigation to AI-guided exception resolution.

Inventory Investment Allocation Agent

AI-driven inventory and capital allocation analysis.

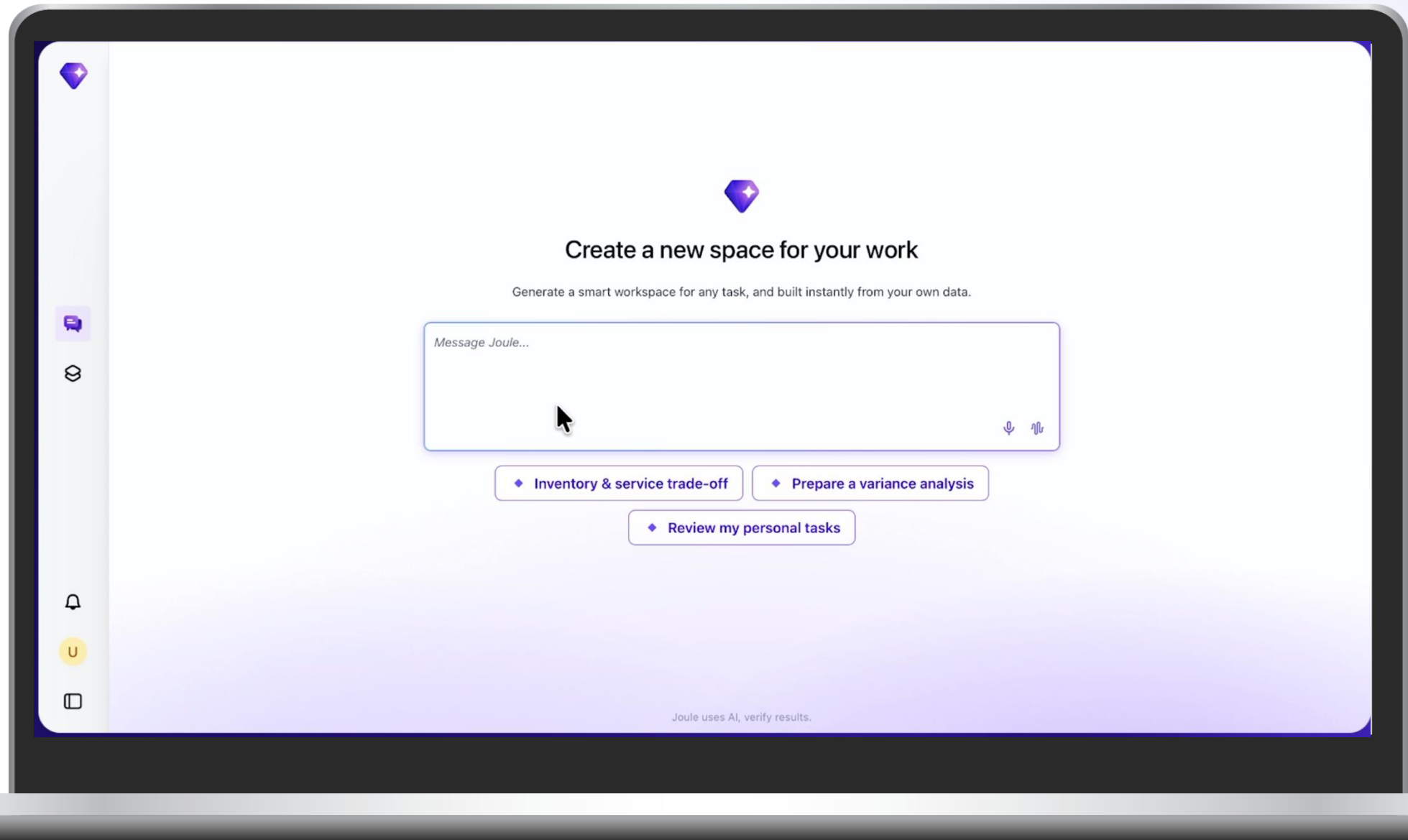
Footprint Optimization Agent

Enhances operational decision-making by highlighting footprint hotspots, simulating reduction levers, and comparing scenarios against the baseline.

Supply Plan Explainability Agent

Instant clarity on what changed in your supply plan, and why

Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.





Create a new space for your work

Generate a smart workspace for any task, and built instantly from your own data.

In our last SI&OP meeting, the Finance team requested a 10% reduction in inventory by next quarter. Customer relationship managers want to understand the impact on on-time service. Help me prepare an analysis.

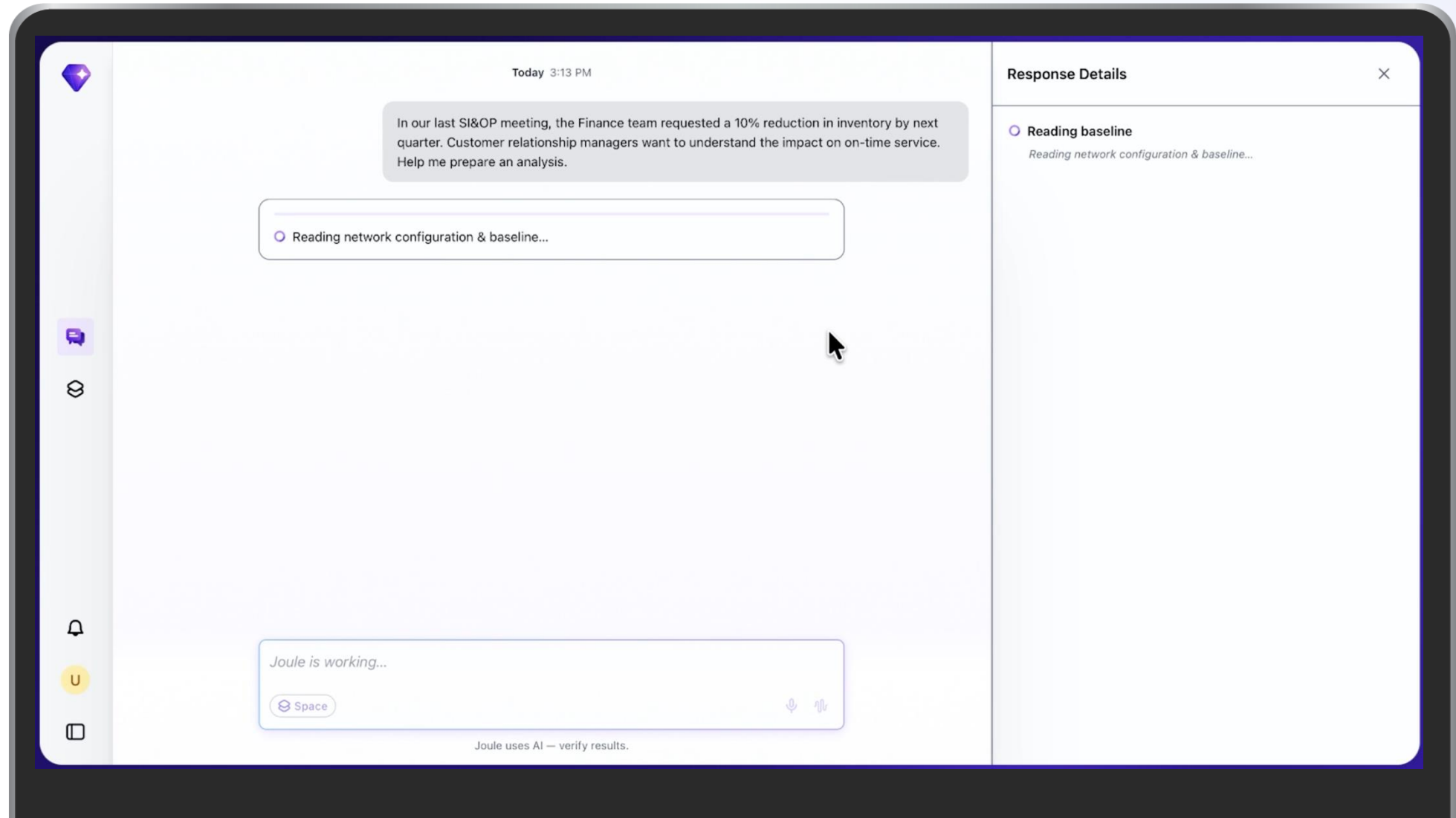


◆ Inventory & service trade-off

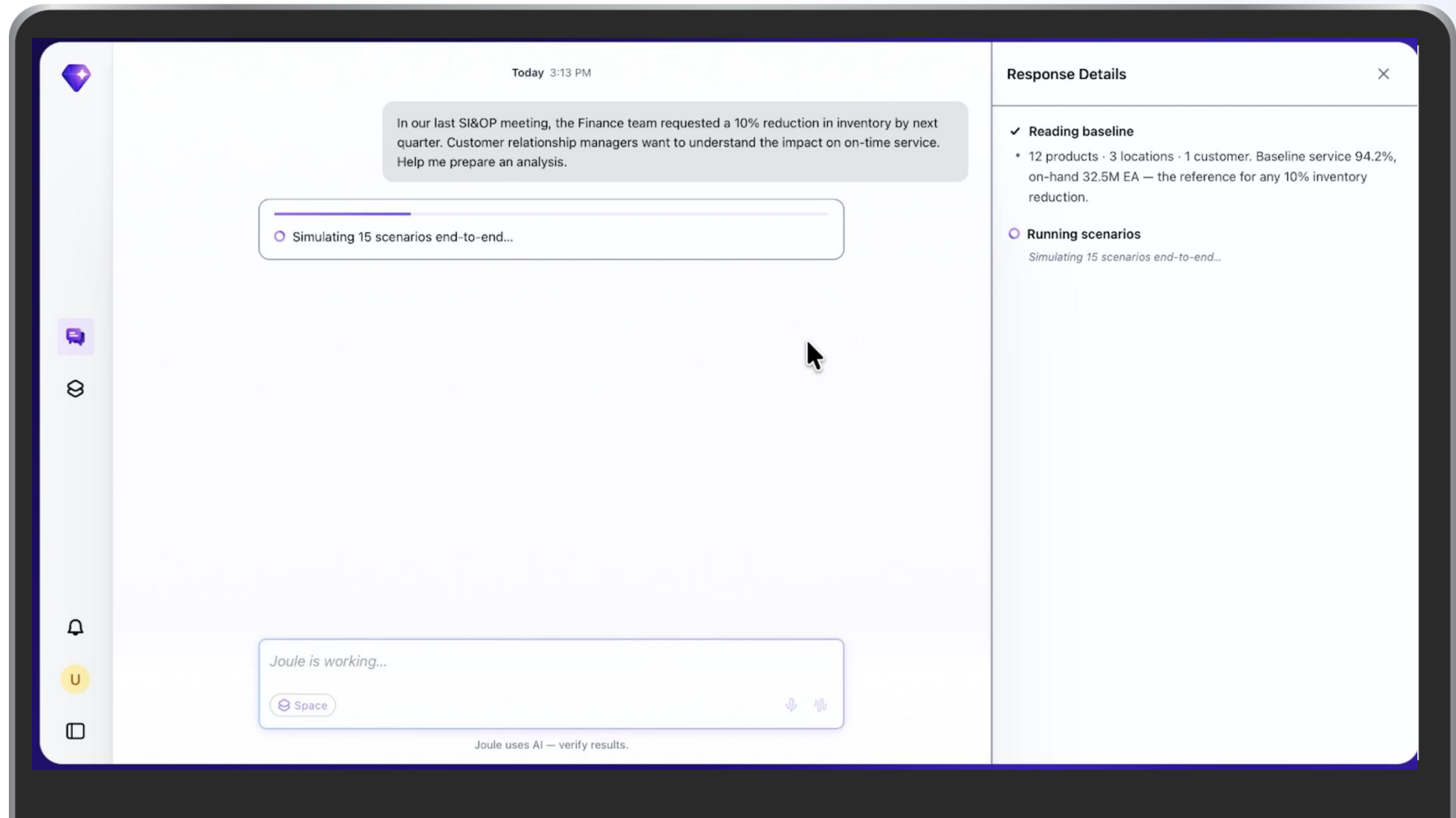
◆ Prepare a variance analysis

◆ Review my personal tasks

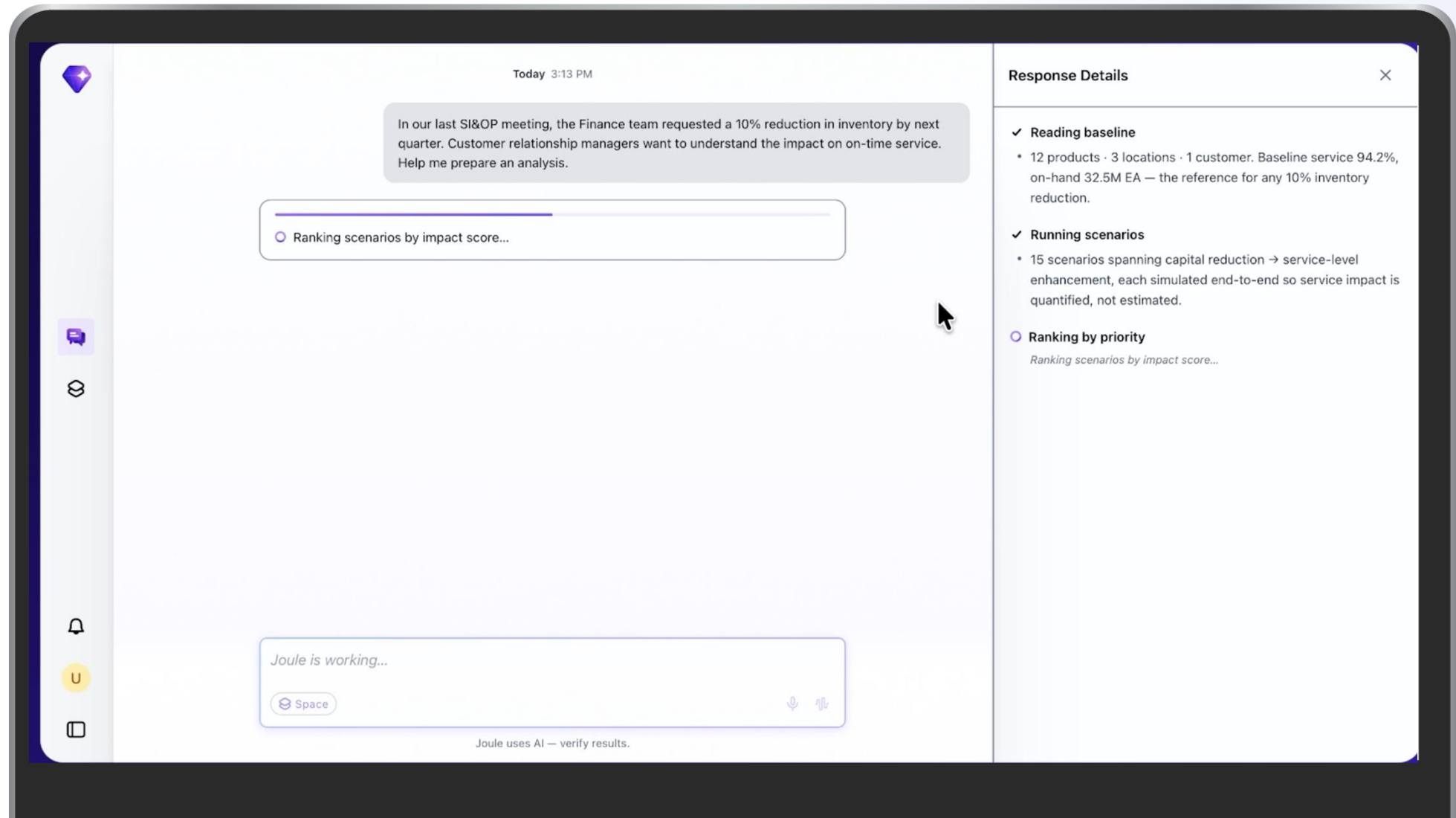
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



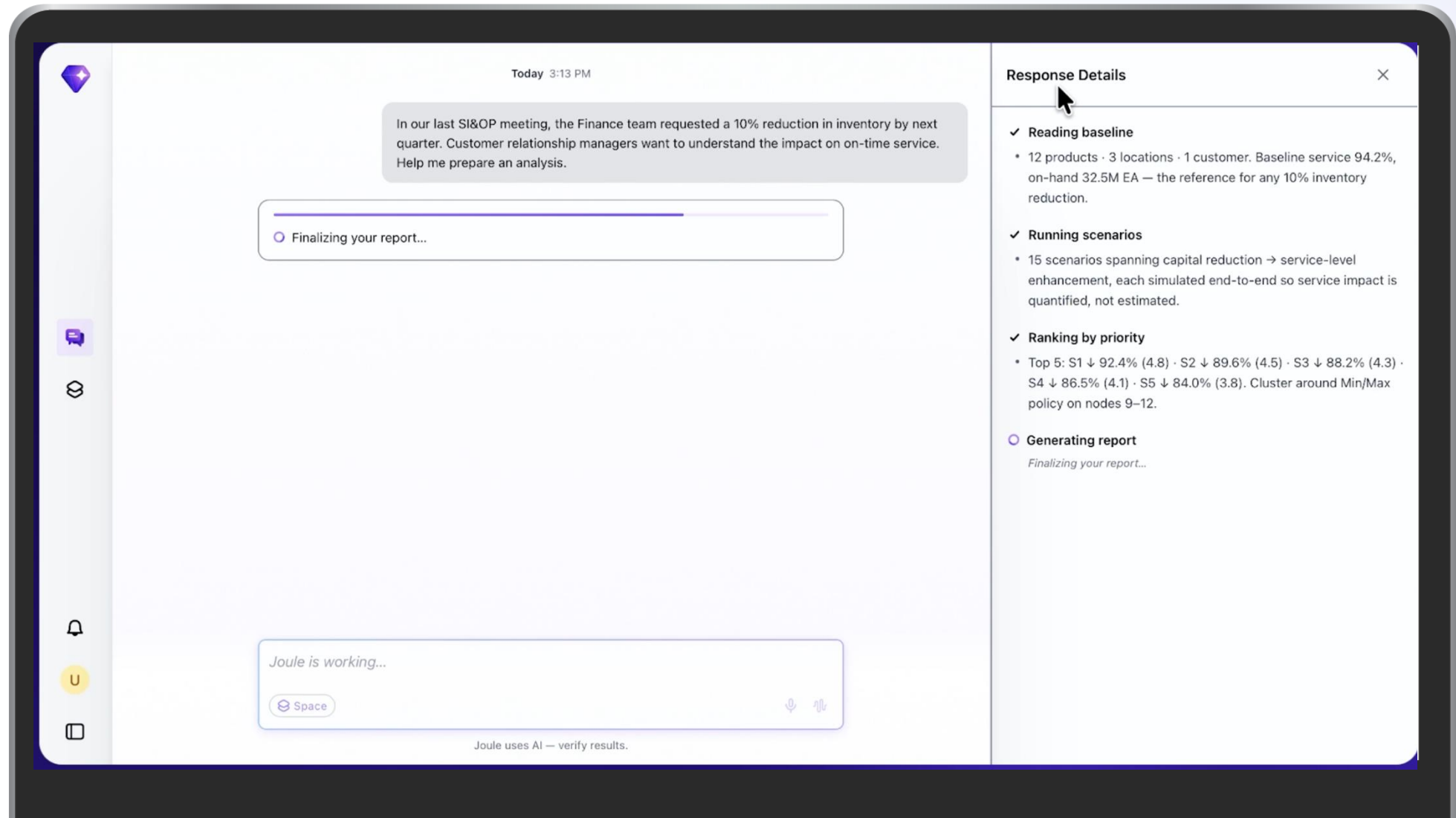
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



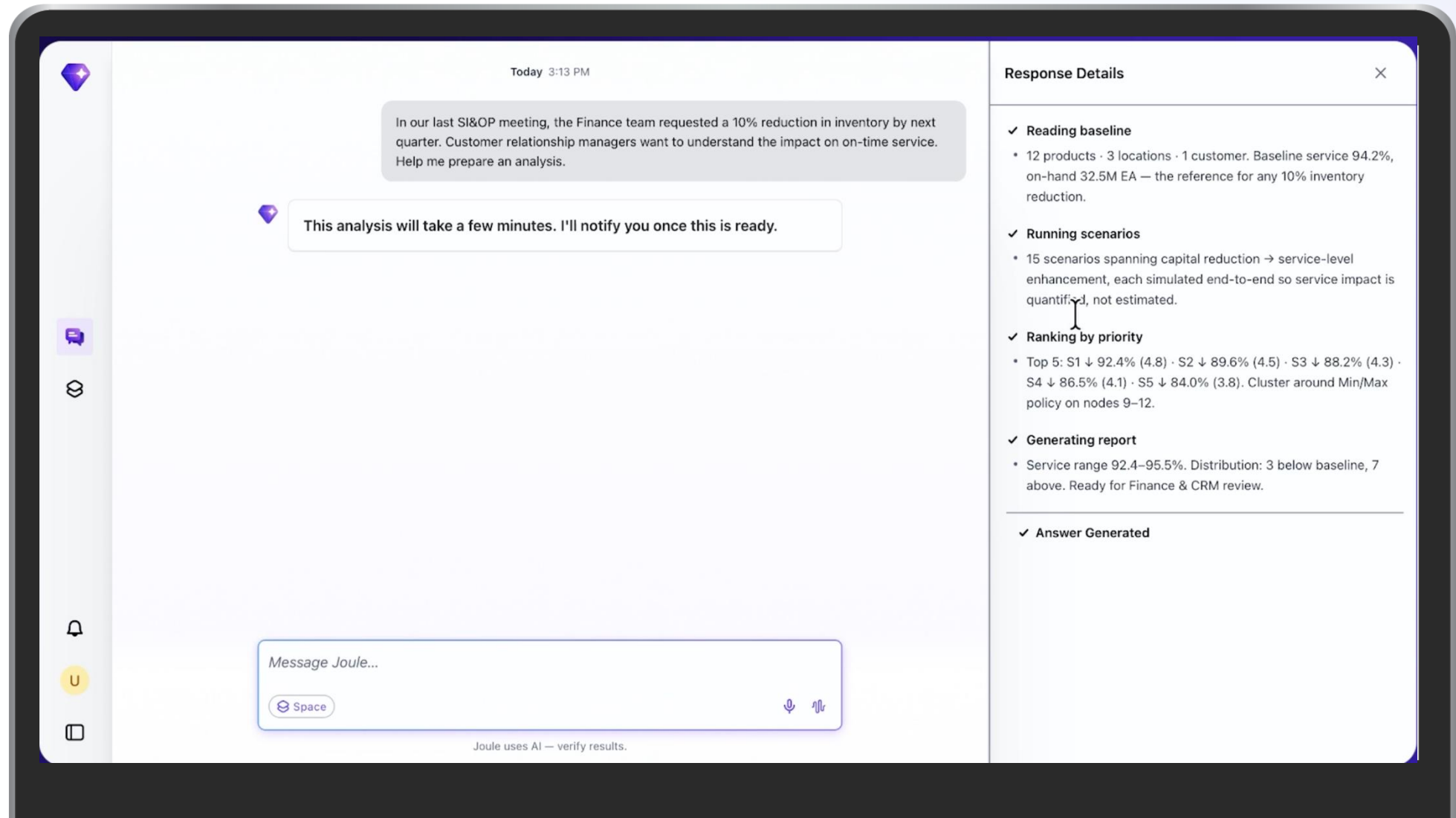
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



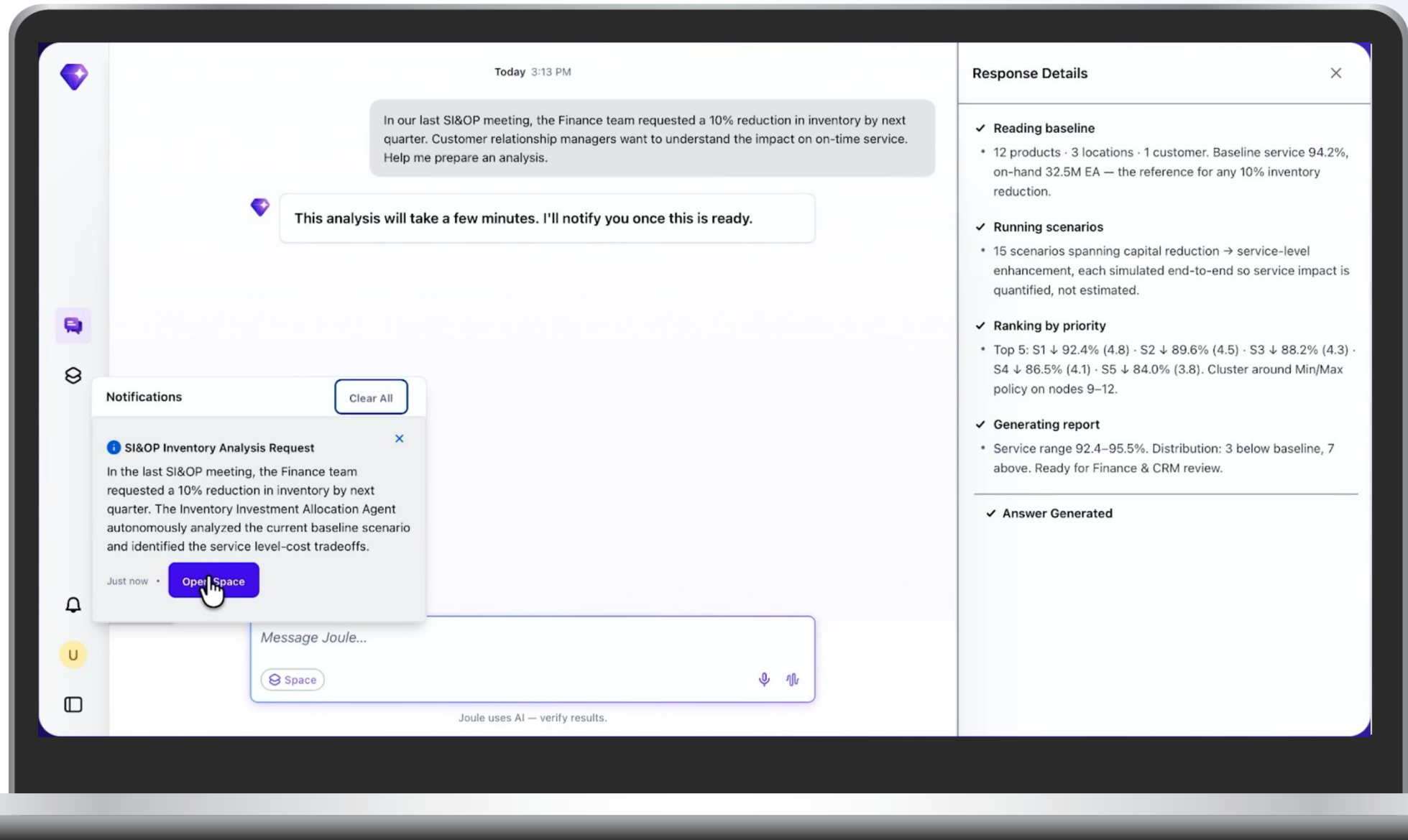
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



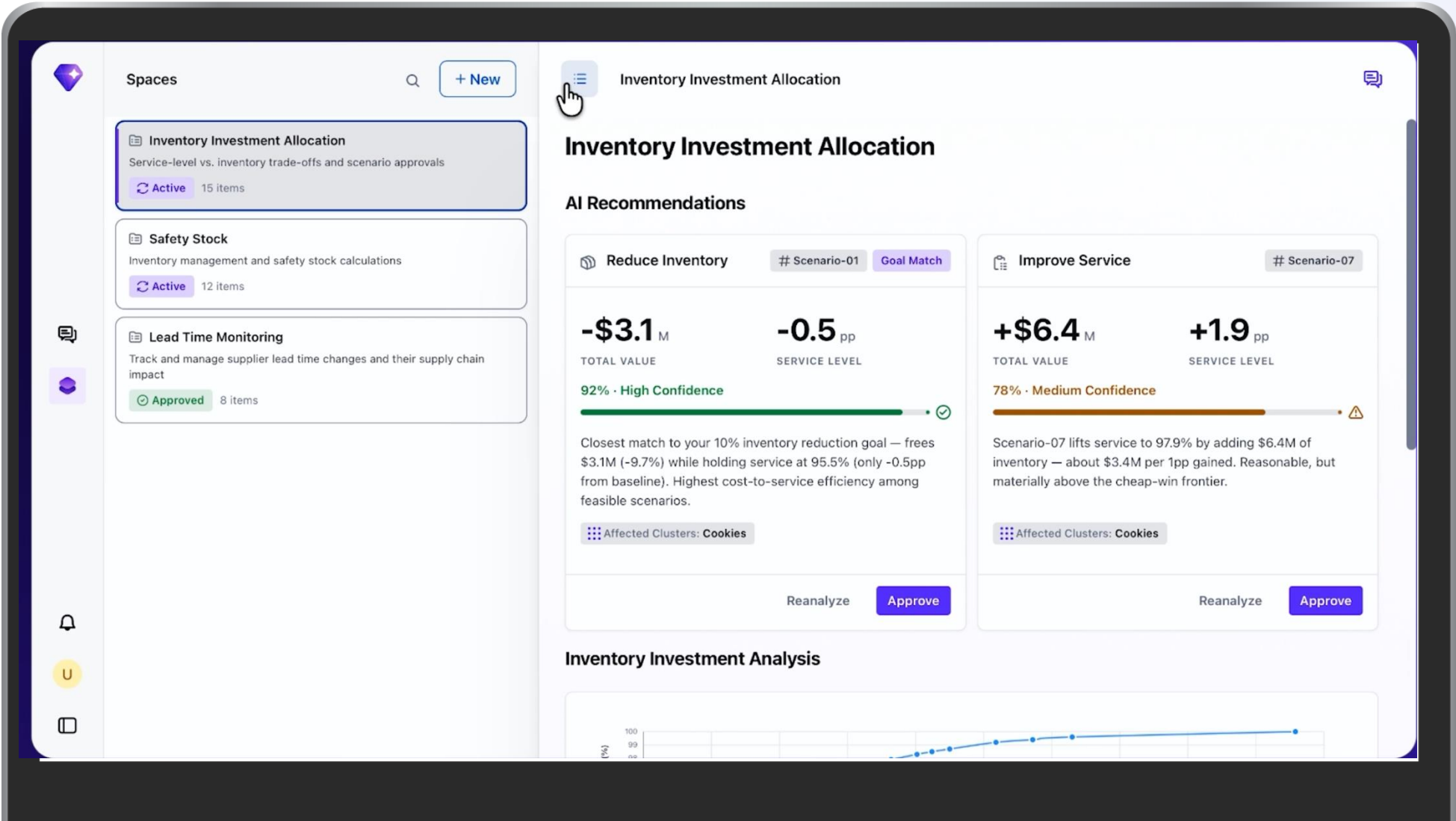
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



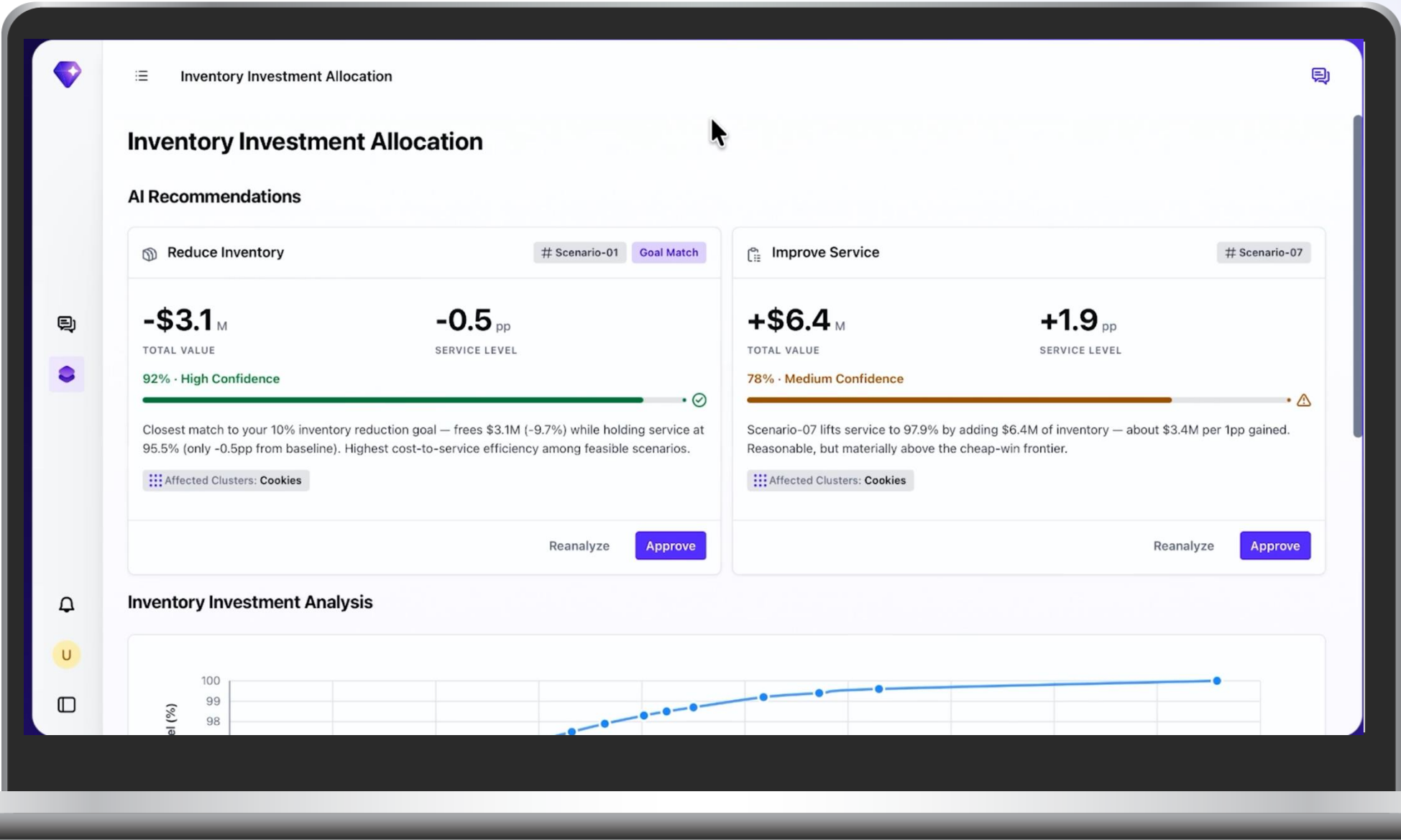
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



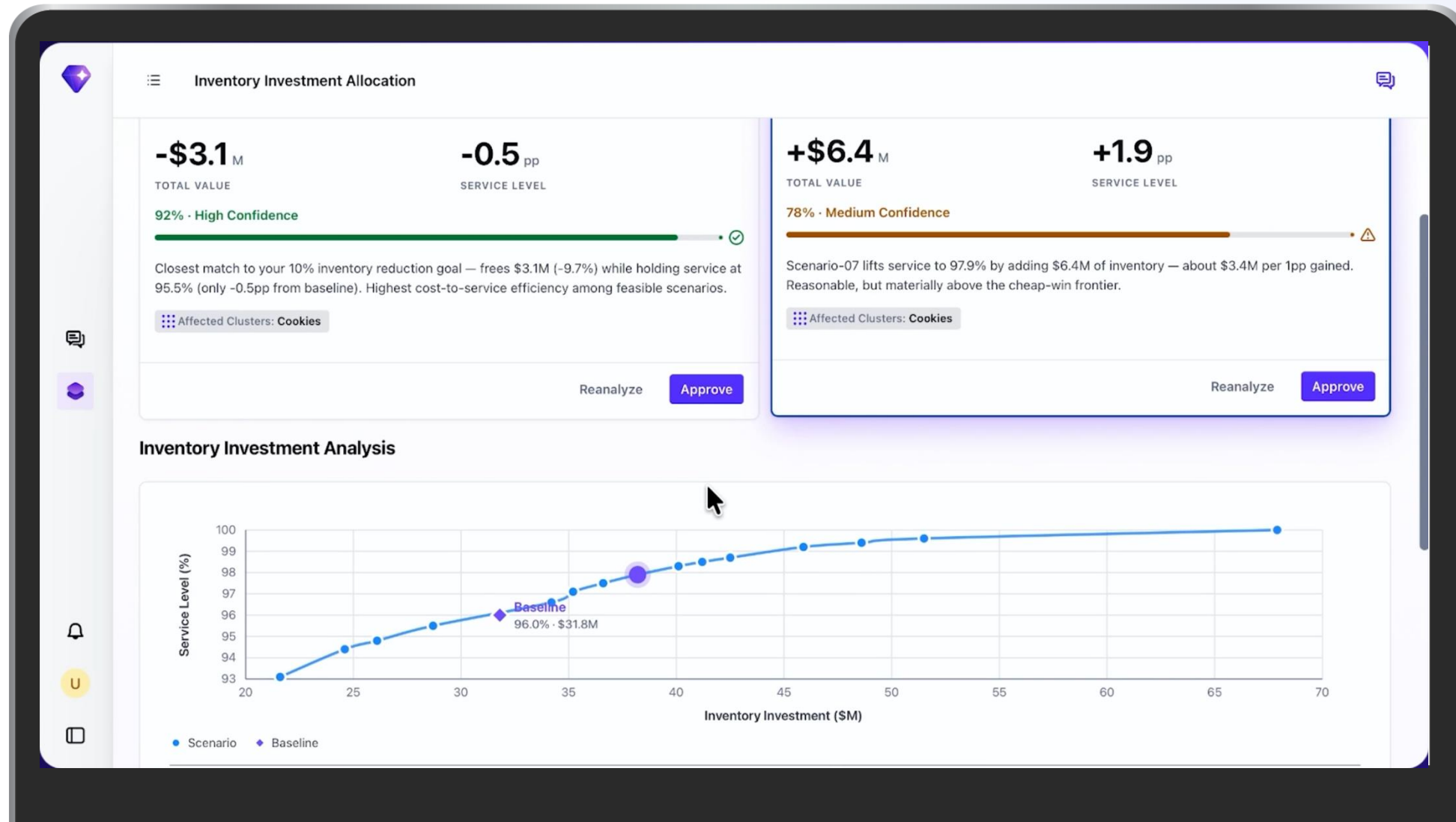
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



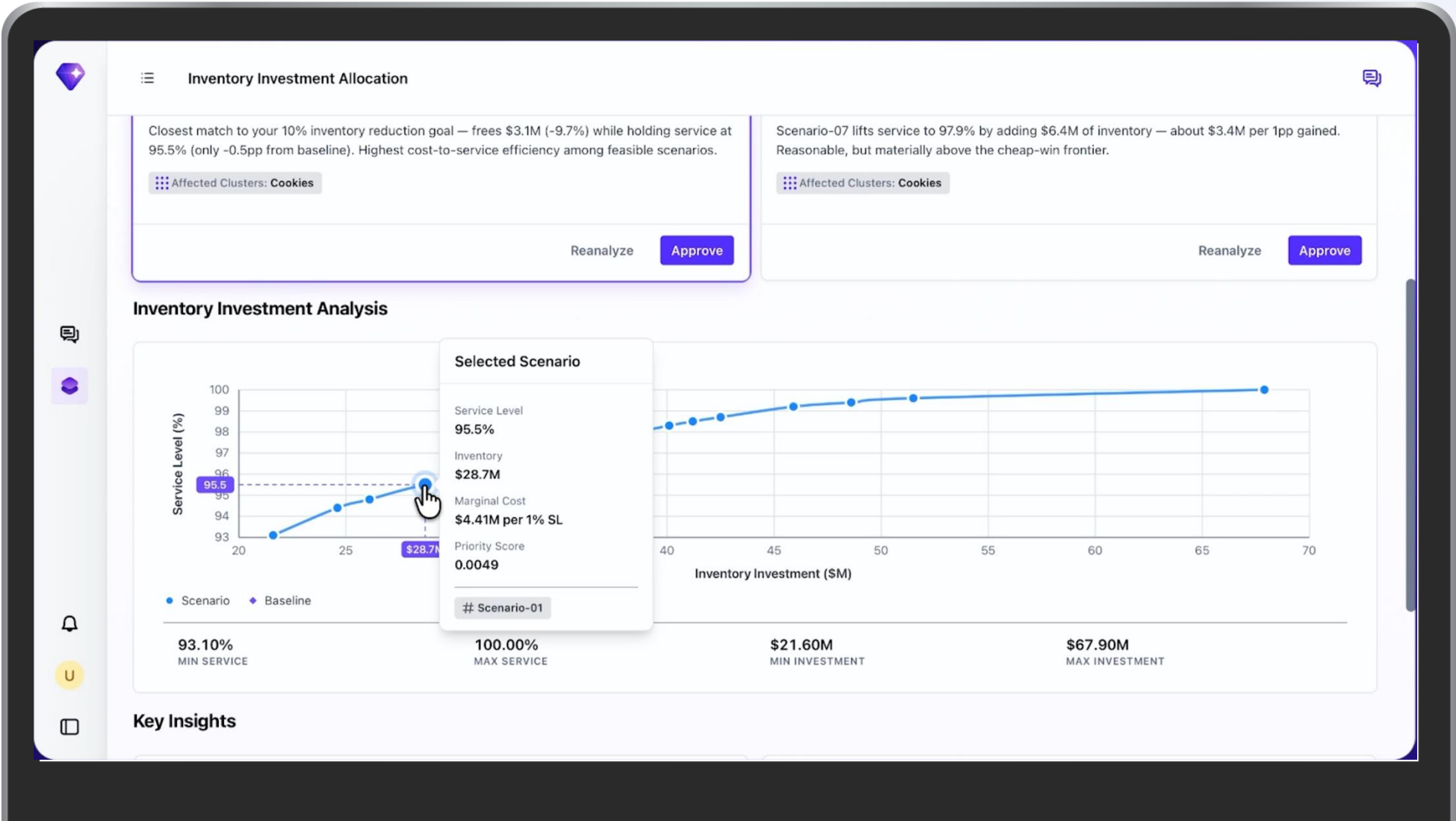
Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



Inventory Investment Allocation Agent | AI-driven inventory and capital allocation analysis.



Autonomous SCM helps you deliver on your core objectives.

Combining AI, contextual business data and end-to-end applications.

Autonomous SCM can help you...

Manage uncertainty

Anticipate disruption and respond faster with predictive, real-time insights.

Orchestrate across domains

Unify planning and execution to operate the supply chain as one connected network.

Deliver customer value anytime

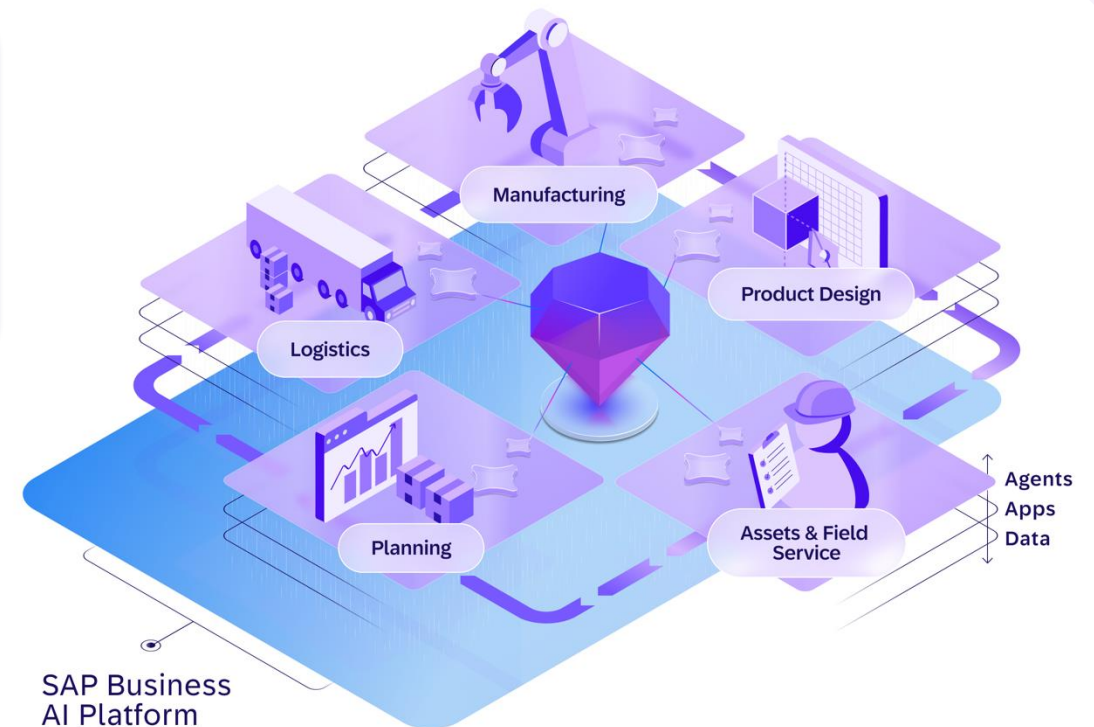
Scale globally while enabling new models and exceptional customer experiences.

Drive efficiency & compliance

Embed compliance, risk management, and sustainability into core processes with real-time visibility, traceability, and reporting.

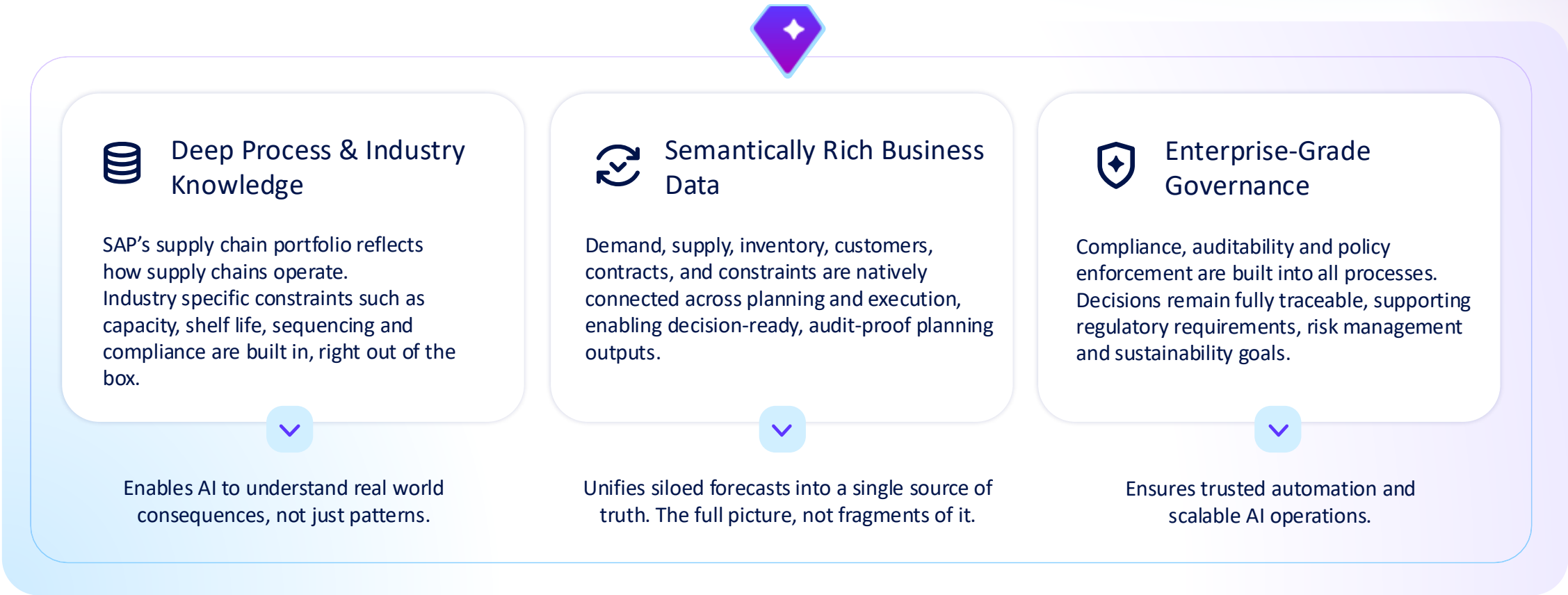
Transform to maximize value

Break down silos, automate operations, and turn data into actionable insights to continuously optimize performance and value.



SAP's Supply Chain advantage sits at the operational core.

Standalone AI can't transform supply chain management. SAP's AI can



SAP runs AI inside the supply chain, powering agents that think ahead, act in real time, and drive autonomous operations. From siloed optimization to end-to-end orchestration.



New Agents with powerful capabilities



Autonomous Supply Chain

36 new powerful Agents across all 6 SCM Assistants

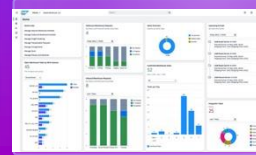


Product Design

Product Data Maintenance

Recipe Formulation

Change Record Management



Supply Chain Planning

Co/By Products

TLB Upsizing, QI Lots, MM SAR's

Post Planning Decision Intelligence

CBP Propagation



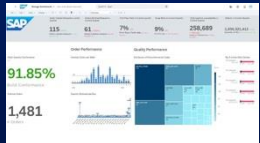
Manufacturing



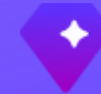
Workforce Scheduling

Operator Defined Experience

Microsoft & SAP Manufacturing



Innovation in Action



Logistics

Data product across EWM / TM / LGM

Transportation Planning Board in LGM

Freight Costing LTL/FTL in LGM

Joule-powered agentic warehouse execution

Joule in TM freight order

Business Network

Unified private sector access for Non-Promote suppliers

Support for multi-tier collaboration for scheduling agreements

Support consignment items in scheduling agreements in S/4 Hana Public Cloud

Shipment attribute-based loading point filtering for appointment booking

Asset Operations

Agent for alert context analysis and follow-up actions

Workload and capacity insights through Joule Agent

Simulation mode for anomaly detection model validation

Gantt-Based Workload and Capacity Scheduling



Figure 1: Magic Quadrant for Supply Chain Management Suites



SAP Take on Why This Recognition Matters

- **50+ Years of Industrial Experience:** SAP has helped organizations navigate supply chain volatility for over 50 years by connecting planning, execution, and business processes across the enterprise and business networks.
- **Autonomous Supply Chain Vision:** AI assistants orchestrate and purpose-built agents execute within governed guardrails, compressing disruption response from days to minutes and enabling proactive, self-optimizing decision-making at enterprise scale.
- **Integrated Platform Breadth:** Three deeply integrated layers: Operational Systems (SAP Ariba, SAP IBP, SAP Digital Manufacturing, SAP TM, SAP EWM, SAP Business Network), Trusted Business Data (SAP Business Data Cloud), and Intelligence & Orchestration (SAP Business AI, Joule) connect sourcing, manufacturing, logistics, and finance in real time.
- **Joule AI Assistants Embedded Across the Supply Chain:** New Joule Assistants and agents span planning, manufacturing, logistics, asset management, and supplier collaboration — auto-generating pre-validated scenarios, accelerating response, and keeping humans firmly in control.

Gartner, [Magic Quadrant for Supply Chain Management Suites](#), Jan Snoeckx, Balaji Abbabatulla, Christian Titze, August 11, 2026.

Thank you!

Matthew Atherton & Anders Björklund

October 2026



Bring out your best.

Appendix.

One place for work where people express intent and agents handle execution

With Joule work, people express what they want to accomplish, and Joule surfaces the right insights, automates routine work, and coordinates AI agents across systems to achieve it – all in one dynamic workspace.

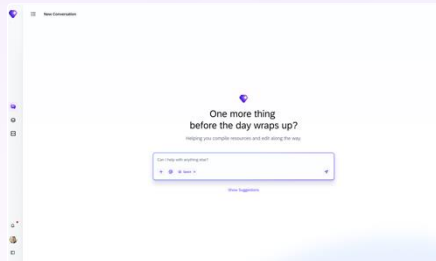
AI does the busy work, so people do their best work.

A new human advantage



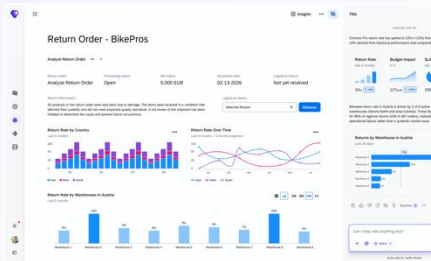
Joule, beyond chat

Less navigation. Faster action. Better decisions.



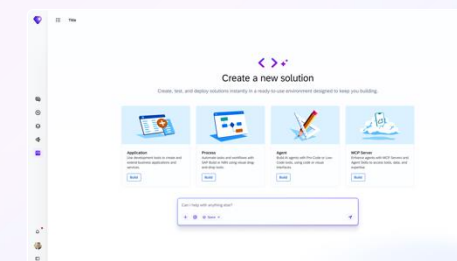
Conversations

Find out which shipments are delayed with immediate insights to action.



Spaces

Display live inventory levels, production schedules, and delivery alerts in one personalized view.



Develop

Create a custom tracking app for supplier performance.

People direct. Assistants coordinate. Agents execute.

Autonomous Suite

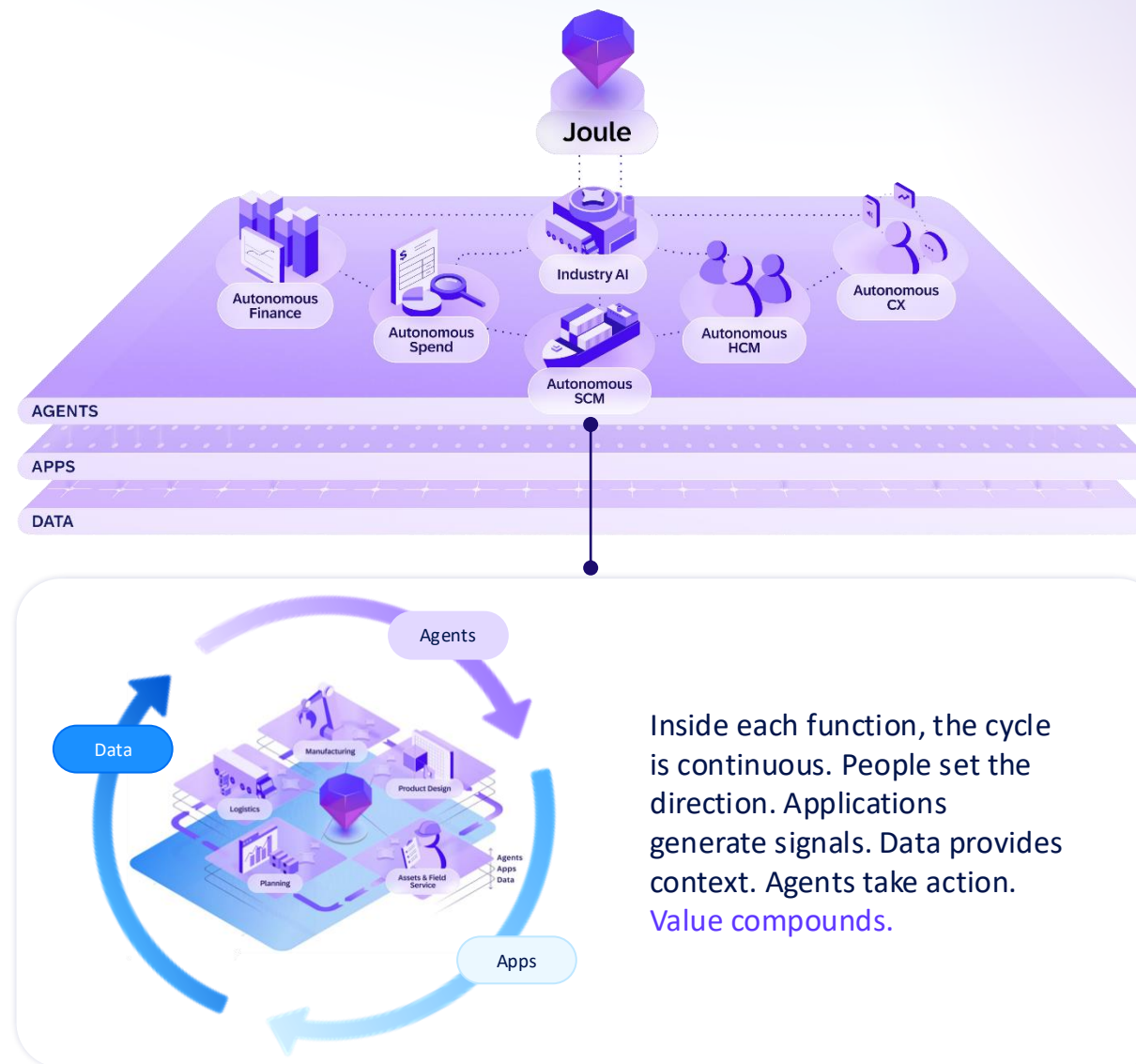
Autonomous SCM is where applications, data, and AI agents come together to run supply chains end to end.

It sits within an Autonomous Suite, alongside Finance, Spend, HCM, and CX, so supply chain decisions are never disconnected from the business signals that drive them.

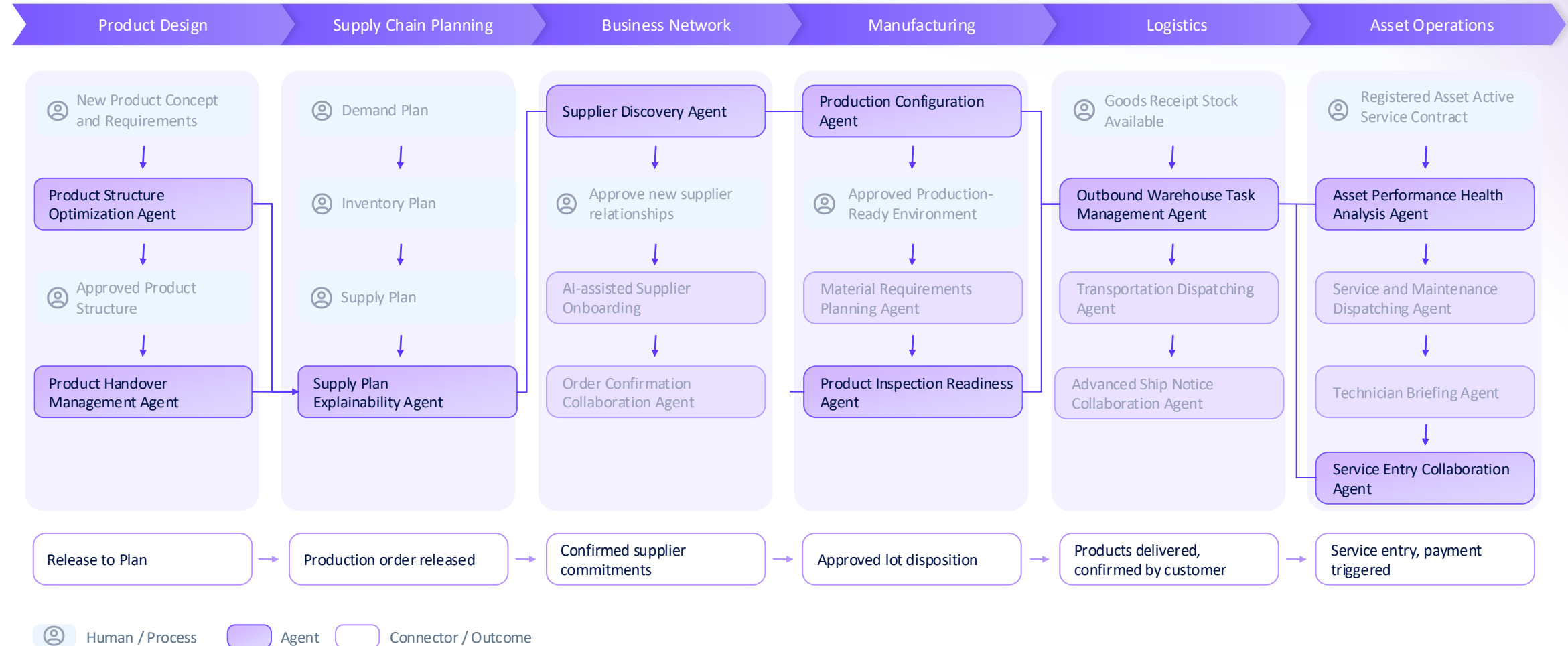
The business moves as a single system.

A supplier disruption automatically surfaces in Finance and Procurement, triggering the necessary workflows before anyone picks up the phone. No integration tax. No stitched-together stack.

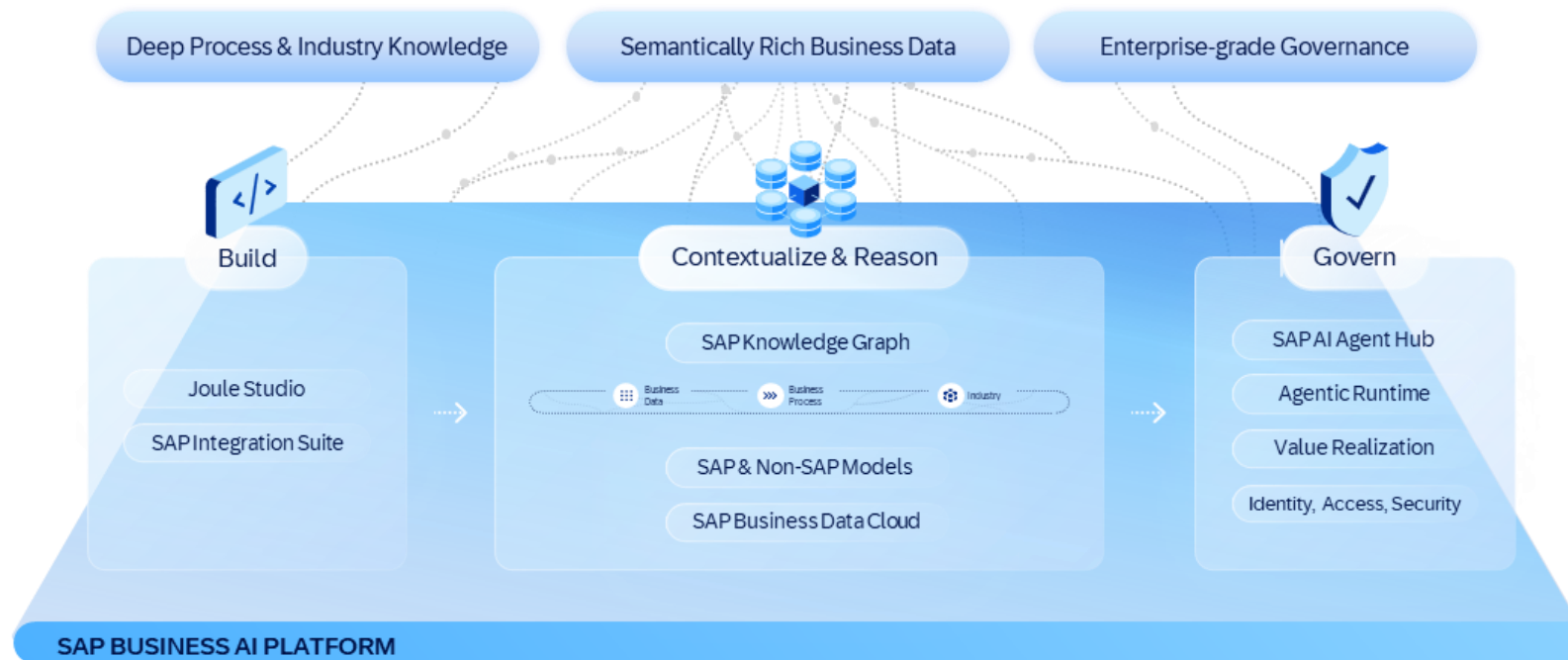
The result: a supply chain that is designed to **anticipate**, **absorb**, and **adapt** in real time.



Design to Operate: New Product Introduction as Example



SAP Business AI Platform: The platform for building, running, and governing AI your business can actually depend on



Build

Build AI agents & apps
with best-in-class tools & models

300+ Agents built by Partners
in SAP Joule Studio

Contextualize & reason

50 years of encoded business process
expertise

7.3M Data fields in
Knowledge Graph

Govern

Command center for enterprise-wide
AI agent governance

>55k AI agents managed
in SAP AI Agent Hub
across customers

Standalone AI can't transform supply chain management. SAP's AI can.

SAP delivers what standalone AI can't: context, connectivity, and compliant control.

AI with business context leads to precision.

- Forecasts reflect actual supply chain conditions, not statistical guesses
- Stock allocations account for the full logistics network, not just local inventory
- Asset health decisions draw on real maintenance history and operational patterns

✔ SAP: Deep Process and Industry Knowledge

50+ years of supply chain process knowledge built in. Every AI recommendation starts with what your supply chain actually looks like.

AI with connected data leads to real automation.

- Risk detection works across every supply chain domain simultaneously
- Reliability of the digital thread for supply chain
- Automation flows from the shop floor to the top floor

✔ SAP: Semantically Rich Business Data

One unified data model across supply chain. No silos. No blind spots. That's what lets agentic AI actually deliver.

AI with governance leads to outcomes you can trust.

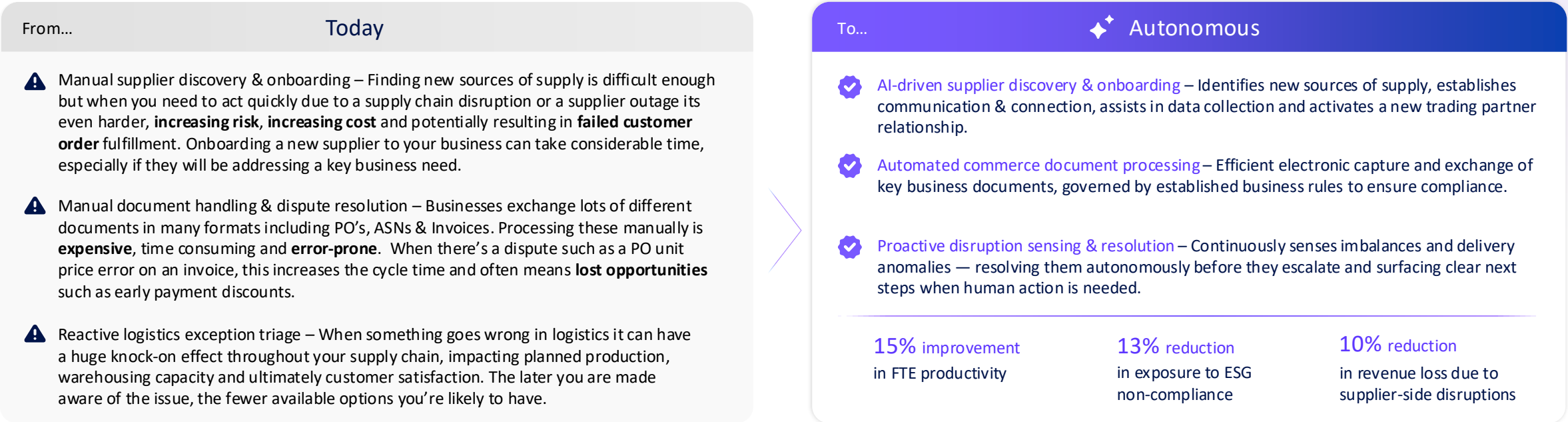
- Manufacturing and logistics decisions meet policy and quality standards automatically
- Supplier engagements follow ethical and diversity requirements by design
- Regulatory compliance for critical industries is built in, not bolted on

✔ SAP: Enterprise-Grade Governance

Governance is in the architecture, not on top of it. Every AI action is auditable. Compliance with ISO, EU AI Data Act, and industry regulations is enforced continuously.

Business Network Assistant

Collaborate seamlessly with trading partners across procurement and supply chain processes



Business Network Assistant – Document collaboration across agents

Advanced Ship Notice Collaboration Agent

Assist with the processing of confirmed orders to ensure buyers know when goods are due to arrive

Invoice Collaboration Agent

Quickly converts purchase orders to invoices, ensuring details are consistent across documents

Order Confirmation Collaboration Agent

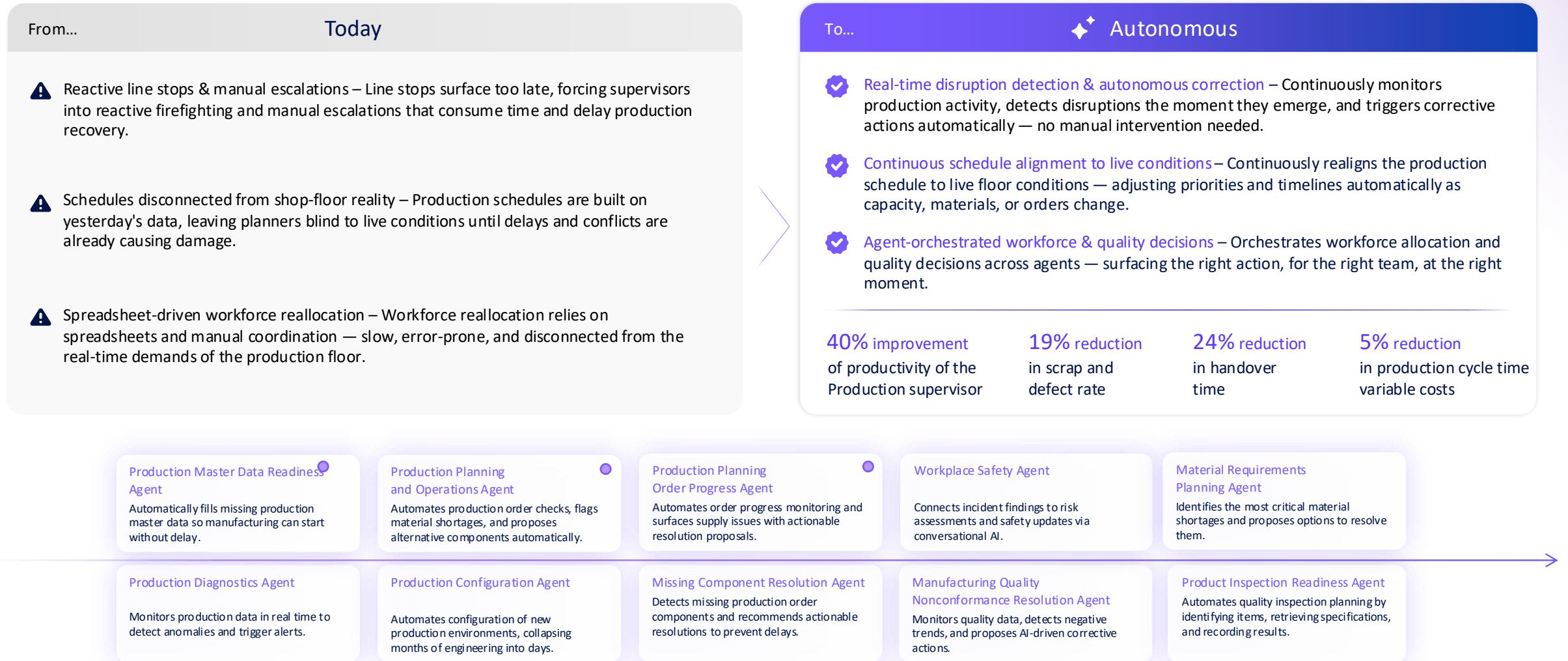
Assists with processing high volumes of inbound orders for suppliers so their buyers get instant visibility

Service Entry Sheet Collaboration Agent

Assist with processing completion of work orders in a service environment

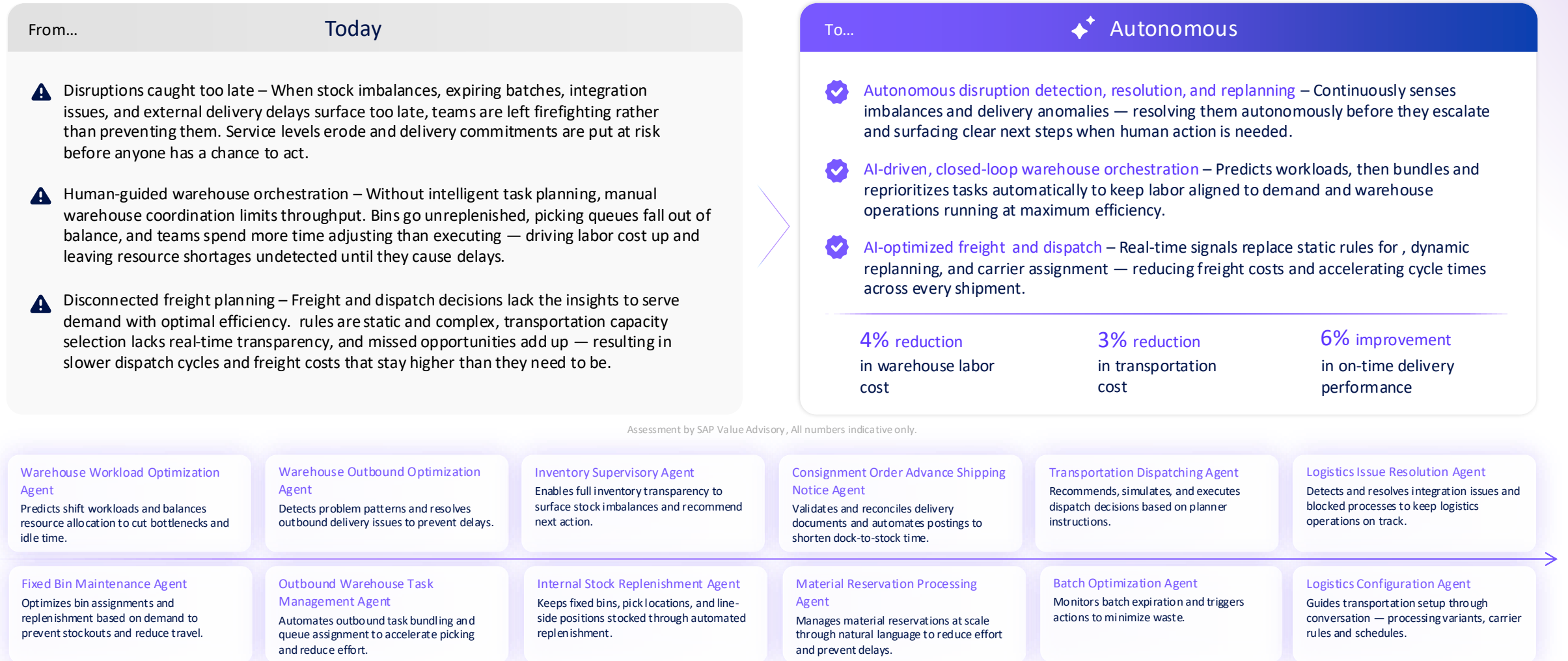
Manufacturing Assistant

Rethink manufacturing with agentic-driven execution that adapts to plant-floor reality.



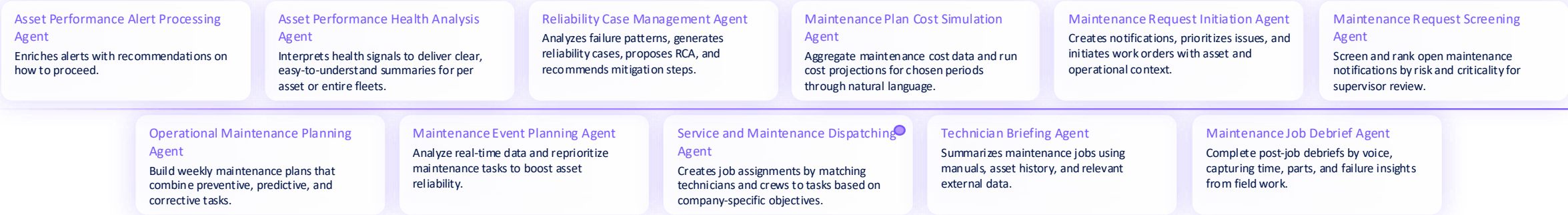
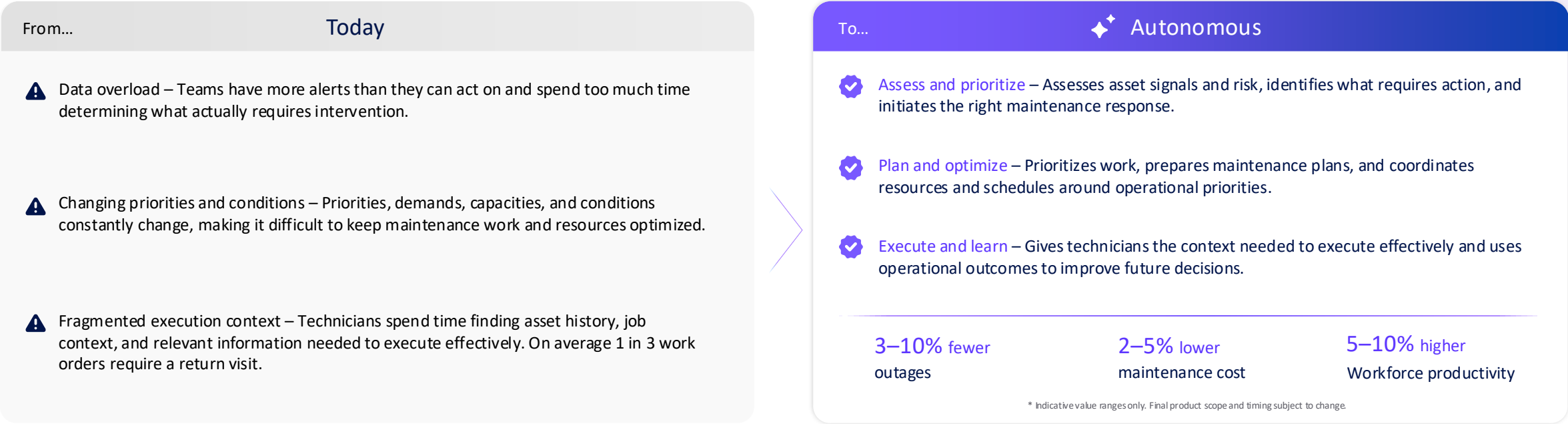
Logistics Assistant

Turn logistics intelligence into autonomous optimization and execution across warehousing, fulfillment, and distribution — so teams steer the business while operations run at full speed.



Asset Operations Assistant

Use AI agents to turn asset signals into coordinated maintenance action and improve uptime.





Autonomous Supply Chain Management with sustainability built in

From compliant product design to safer, lower-impact execution to safeguard your margins and license to operate

Business Problem

COOs and supply chain leaders must balance cost, service, resilience and compliance in an environment where sustainability requirements increasingly impact operations, sourcing and market access. Verification, traceability and compliance requirements introduce complexity across multi-tier supply chains, increasing the risk of disruption, delays and financial exposure.

Yet today, these trade-offs remain fragmented, manual and difficult to manage at scale.

Autonomous Capabilities

- ❑ Connect supply chain and sustainability data for trusted steering
- ❑ Automate compliance and traceability across products and suppliers
- ❑ Trace material origin and supplier risk across multi-tier supply chains
- ❑ Surface supply, compliance and cost risks earlier
- ❑ Link sustainability and compliance to operational and financial outcomes

Industry Relevance

- ❑ Chemicals: Hazardous materials compliance, GHS classification, safe handling and regulatory reporting
- ❑ Consumer Products: Sustainable packaging design and compliance, circular materials, responsible sourcing and supply chain transparency
- ❑ Energy and Utilities: Environmental compliance, emissions management and asset-level monitoring
- ❑ Industrial Manufacturing: Product compliance, carbon footprint tracking and circular production processes
- ❑ Mills and Mining: Environmental impact, worker safety and traceability across complex, high-risk supply chains



Trusted Autonomous Supply Chain. Built for the enterprise.

Security, compliance, and governance embedded across AI, data, and operations.

Secure AI & Autonomous Workflows

- Controlled AI agent execution across workflows
- Built-in safeguards to prevent unintended actions
- Full auditability of AI-driven decisions and workflows
- Secure-by-design AI workflows from development through execution

Built-In Governance & Compliance

- Compliance embedded into core processes, not added later
- Continuous enforcement of global regulatory requirements
- Audit-ready by default with standardized controls
- Aligned with global enterprise and regulatory standards

End-to-End Data Protection

- Secure handling of supplier, logistics, and operational data
- Unified data model enhances control and visibility
- Supports privacy, sovereignty, and cross-border requirements
- Designed for complex, cross-network supply chain data flows



Forward-Looking Security Information

Applied within SAP's security engineering and operations to continuously strengthen product strategy

AI-driven security for AI system design and workflows
AI-native vulnerability detection for enterprise code

Security is not a layer – it is built into every AI-driven process across SAP Supply Chain Management.
Enabling customers to scale with confidence, transparency, and control.

Significant value impact of AI capabilities across supply chain management

Addressing the value leakage with AI across supply chain core domains



*Assessment by SAP Value Advisory, All numbers indicative only.