Transforming sales & operations planning with *Agentic AI*

How consumer brands can improve service by 5%, reduce costs by up to 30%, and support strategic growth with AI-powered adaptive planning

Capgemini

In the consumer goods industry, plans start breaking down the moment they're approved. See how agentic AI helps brands adapt faster when reality takes over.

Introduction

For decades, Sales and Operations Planning (S&OP) has served as the foundation of the supply chain, helping consumer brands align priorities, balance trade-offs, and chart a path forward.

But what happens to that plan when reality sets in?

In an industry where promotions shift demand overnight, retail signals arrive late or incomplete, and interruptions ripple across Supply, Manufacturing, and Distribution, disruption is not an edge case—it is an inevitable, everyday reality. And it exposes the biggest shortcoming of traditional S&OP systems: They were designed for creating plans, not coordinating decisions.

In this landscape, the role of S&OP has expanded. The goal is no longer to create a perfect plan, but also to enable the organization to continuously adapt to evolving conditions and achieve optimal performance.

In this POV, we explore how AI-powered systems—and agentic AI in particular—are helping organizations make that shift, moving from planning for the future to continuously responding to it.

> For years, competitive advantage came from the ability to see around corners. Today, it comes from taking them faster than everyone else.

Mayank Sharma
VP, Global Supply Chain Capability Lead, Capgemini

A snapshot: Sales and operations planning challenges

Expanding the role of S&OP from traditional planning to continuous decision-making exposes challenges that existing planning systems were never designed to solve. In addition to addressing long-time issues like data fragmentation, system integration, and organizational alignment, adaptive planning requires brands to address a new set of cross-functional planning challenges:

1. **Invisible assumptions > undiagnosable deviations**
   Plans built on dozens of implicit assumptions that are rarely documented or revisited create deviations that the organization cannot trace back and solve.
2. **Alignment without continuity**
   S&OP creates cross-functional consensus at a point in time, but provides few mechanisms to maintain it.
3. **No learning loop**
   When decisions aren't documented and connected to outcomes, organizations struggle to understand what worked, what failed, and how to improve future decisions.
4. **Signal latency**
   Real-time deviations take too long to surface and reach the cross-functional teams responsible for making decisions.

Agentic AI in S&OP: Why response predictability matters more than forecast accuracy

Most S&OP challenges can be traced back to the same fundamental flaw: organizations invest heavily in improving forecast accuracy when outcomes depend on response predictability.

As brands face more numerous and more extreme disruptions, forecast shifts are inevitable. Competitive advantage, then, comes less from forecasting perfection and more from reliable, consistent response.

For example, imagine two brands run the same promotion and demand is 30% higher than expected. Both planning processes missed the forecast, but capturing the opportunity depends on what happens afterwards.

Do lagging signals reach teams days later and set off debates across Sales, Supply Chain, Manufacturing, and Finance about priorities and trade-offs? Or is the deviation detected in real-time, triggering a series of coordinated decisions to reallocate inventory, adjust production plans, and reroute shipments?

For consumer brands, advantage comes from that response gap. The challenge is addressing every change—from demand spikes to supply disruptions—at speed and at scale.

Agentic AI helps make that possible. By codifying decision logic, evaluating trade-offs, and orchestrating actions across functions, agents enable organizations to respond to disruptions with greater speed, consistency, and confidence. Instead of treating every deviation as a new problem to solve, brands can apply proven decision frameworks that keep teams aligned and focused on the same business outcomes—from the very start and at every point thereafter.

How agentic AI is solving S&OP pain points

Data unification

First, agentic AI addresses the core challenge of data fragmentation by bringing together both structured and unstructured data, eliminating blind spots and surfacing previously hidden signals that human planners simply cannot parse from disconnected systems and sources. By creating a more complete, contextual view, agentic AI reduces reliance on assumptions and enables data-driven decision-making.

Traceability

Agentic AI helps make assumptions explicit by continuously capturing the drivers behind forecasts, decisions, and trade-offs. When performance diverges from expectations, agents can trace deviations back to the specific assumptions that changed—be it demand, promotion performance, lead times, or supply constraints—helping teams diagnose root causes and respond more effectively.

Continuous alignment

Agentic AI can establish a clear logic mechanism that enables real-time, cross-functional conversion between metrics like units, revenue, and margin. As variables change, the system can dynamically adapt its calculations and recommendations while retaining the relationships and decision patterns learned over time. This helps ensure that proposed actions optimize for overall enterprise performance, rather than isolated functional targets.

Large-scale scenario planning

Most organizations still conduct manual scenario testing, forcing teams to rely on hypothetical "what-if" discussions for decisions. Agentic AI changes this by enabling large-scale scenario modeling across more variables, functions, and constraints than humans or traditional tools can reasonably evaluate. It can rapidly test trade-offs across cost, service levels, emissions, margin, inventory, capacity, and demand, then identify the options most likely to optimize enterprise-wide outcomes. This gives teams a more dynamic way to make decisions—not by debating a few scenarios, but by continuously modeling many possible paths and recommending the best course of action as conditions change.

Closed-loop accountability

Many S&OP decisions are made without a clear record of who made them, why, or what impact they had. Agentic AI establishes closed-loop accountability between planning, execution, and outcomes by tracking decisions end to end, capturing context, ownership, and results, as well as impact, patterns, and causal factors that humans simply cannot comprehend. Over time, these capabilities establish a complete and unbiased record that can help improve future decisions.

AI-powered S&OP: Five core components of agentic planning

Like S&OP itself, agentic planning isn't a singular capability but rather an interconnected system that brings together data, reasoning, execution, and adaptation. Each component plays a distinct role, but it is their combination that unites S&OP—connecting data, aligning decisions, and ensuring execution and measurement follows.

1 The starting point: A unified data foundation

Traditional S&OP systems rely heavily on structured data from core platforms, leaving critical context—often buried in emails, spreadsheets, and external signals—disconnected and unused.

Agentic AI closes this gap by ingesting and connecting both structured and unstructured data into a unified, real-time view of the business. This enables teams to move from partial, assumption-driven planning to more complete, context-aware decisions.

Agentic AI can also help improve data accessibility through intuitive, decision-ready interfaces. Instead of navigating disconnected spreadsheets, teams can interact with a clear, connected picture of the business, enabling them to quickly access the data they need to make decisions.

2 The Bridge: A reasoning layer

With a unified data foundation in place, the next step is a reasoning layer. While traditional analytics focus on outputs, S&OP requires understanding the factors behind them.

For example, a forecast may show a 15% increase in demand for a product. Traditional systems will surface the deviation but not link the factors behind it. Without adequate context, teams are left to interpret the signal themselves, often leading to delays or sub-optimal responses.

An AI-powered reasoning layer changes this by identifying and articulating the drivers behind the change, linking the forecast increase to specific factors such as a promotion in a key account, constrained supply in a competitor channel, or shifts in pricing.

It can also highlight associated risks, such as capacity constraints or margin erosion, and recommend actions in response. In this way, the system doesn't just provide a window into what has happened, but what teams should do as a result.

3 The key: The execution connection

The value of S&OP is ultimately determined by how the plan is executed across the business. And therein lies the problem: While planning processes are designed to align demand, supply, and financial objectives, execution still occurs through separate teams, systems, and workflows.

As conditions change, the connection between S&OP and Sales & Operations Execution (S&OE) can drift, making it difficult to translate decisions into coordinated action across the business.

For example, a manufacturing team may decide to increase production to meet an unexpected demand spike. But that decision must then be reflected in factory schedules, supplier orders, inventory targets, transportation plans, and workforce allocation. In practice, these activities often require multiple handoffs across functions and systems, introducing delays, inconsistencies, and execution risk.

Agentic AI helps bridge this gap by creating a comprehensive plan that can be handed off to S&OE. Because the system continuously monitors changes, the AI engine can provide ongoing guidance to execution leads, helping them make faster cross functional decisions and identify trade-off risks and opportunities with every change of decision. By connecting S&OP outputs directly to execution, it ensures that plans are not just aligned, but delivered.

4 The gearshift: The adaption layer

Traditional S&OP assumes the plan remains valid until the next planning cycle. In reality, conditions change continuously, causing the plan to diverge from reality almost as soon as it is approved.

Agentic AI helps organizations continuously adapt by maintaining decision memory—the assumptions, trade-offs, and commitments that underpin the plan. As conditions change, agents can monitor for divergence between those assumptions and real-world outcomes, identifying where the plan no longer aligns and assessing the impact across functions.

Rather than waiting for the next review cycle—or relying on reactive escalations—agents can orchestrate re-alignment and re-negotiation across Sales, Supply Chain, Manufacturing, and Finance. By bringing the right stakeholders together with shared context, quantified trade-offs, and recommended actions, organizations can respond to change in a coordinated and consistent way—something traditional planning systems were never designed to do.

5 The loop: The memory system

A key limitation in S&OP is the lack of decision memory. Decisions are made in one cycle, but the context, rationale, and outcomes are rarely captured, forcing teams to revisit the same issues repeatedly.

A memory layer addresses this by recording decisions and applying those learnings to future scenarios. By retaining context over time, agentic AI enables faster scenario planning, more consistent decisions, and better cross-functional alignment.

3 best practices to drive change through trust in AI-powered S&OP

A recent study from the Capgemini Research Institute reveals that 66% of organizations expect agentic AI systems will make most supply chain decisions in the next 3-5 years.

Yet industry data published in Supply Chain Magazine reveals a potential issue: only about 20% of supply chain leaders reported meaningful value gained from AI, including just 7% who said so of agentic or Gen AI.

These two data points underscore the gap between expectations and execution. For many consumer brands, the issue likely isn't a technical shortcoming but a cultural one.

While AI promises forecast accuracy improvement, its opaque "black box" outputs often lack the transparency and explainability needed for teams to believe and act on them. Over time, this creates a cycle where trust erodes, reliance on AI declines, and the system delivers less value, reinforcing the perception that it isn't working.

The answer, therefore, isn't rolling back AI, but building the right capabilities to improve trust in the system. Here we offer three best practices to ensure agentic models deliver value to teams and the business.

1. Design for explainability

Unlike traditional "black box" models, agents can clearly show how decisions are made, including what data was used, which variables prompted the action, what assumptions were included or excluded, and the steps taken to reach an outcome.

This transparency changes how decisions are made among human teams. Instead of being driven by intuition or influence, decisions can be challenged, understood, and validated against a structured, data-backed rationale. Agents can also draw on historical context, surfacing past scenarios, outcomes, and patterns, to strengthen recommendations and defend them.

In environments where humans struggle to process and articulate complex, multi-variable decisions, and bias has a tendency to creep into decisions, this level of clarity and objectivity shifts S&OP from opinion-led debates to evidence-based, explainable decision-making.

2. Ensure traceability

When AI is embedded into S&OP, especially at the outset, users typically don't blindly trust outputs, especially if they conflict with personal experience. Building explainability into the system should help minimize this issue, but in reality, human planners will still challenge and override system recommendations.

Without traceability, these interactions are lost: there is no clear record of why a recommendation was made, how it was adjusted by a human, or whether the intervention affected the outcome. This potentially limits trust in the system and prevents both the model and the organization from learning.

For example, in our work with a leading CPG company, we helped develop and deploy a process to track manual changes made to the plan and assess whether they added or diminished value. Value-adding inputs were used to improve model performance, while value-diminishing inputs became a change management tool that helped teams understand where overrides reduced accuracy and how to build greater trust in the system.

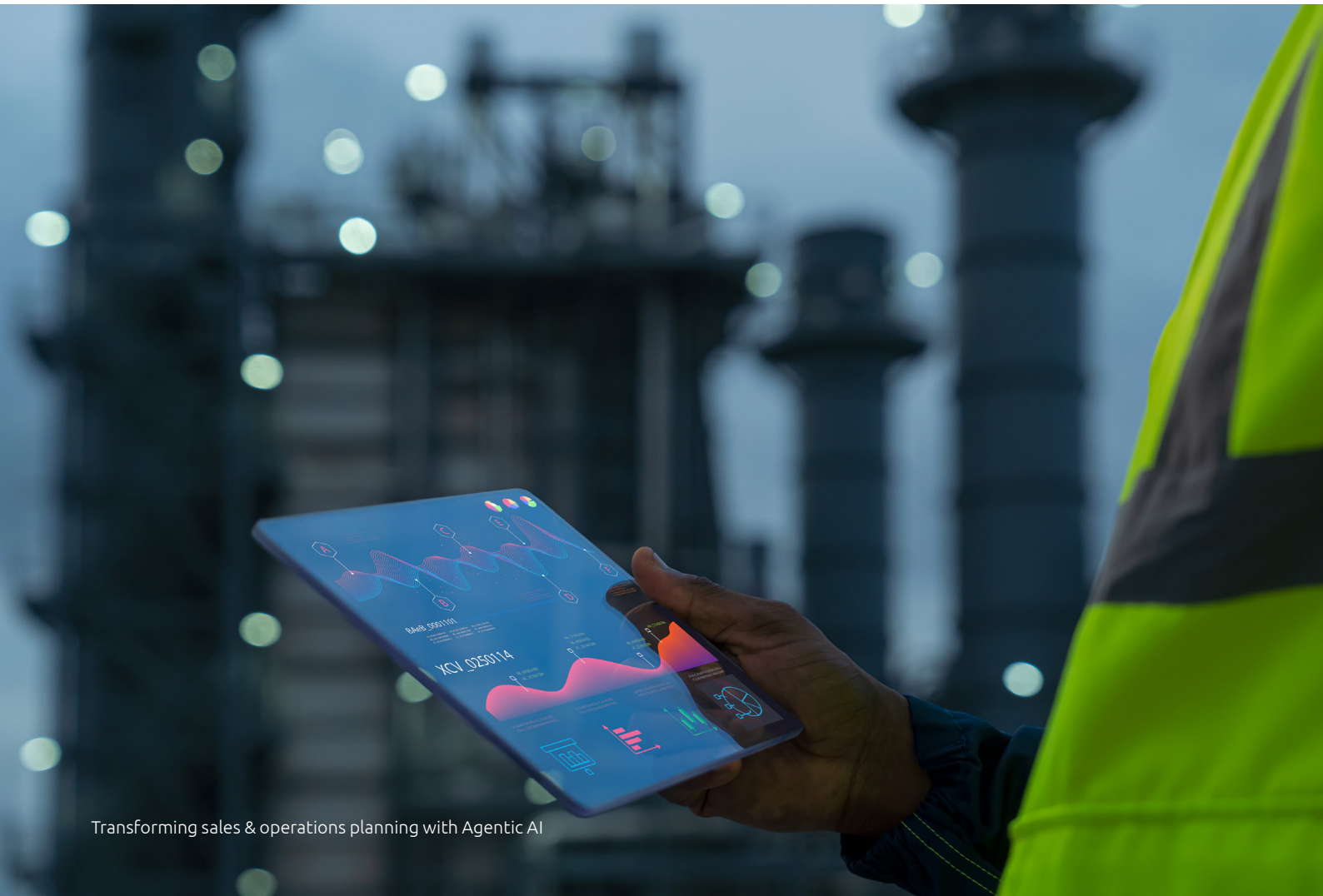
Building traceability into agentic systems in this way captures the impact of decisions end to end—linking recommendations, human inputs, and outcomes back to the underlying data and reasoning. This creates a continuous feedback loop that improves model performance, increases accountability, and enables more consistent, evidence-based decision-making over time.

3.Build for value with a progressive roll out model

A common failure in AI adoption is scaling too quickly without proving value. Rather than delivering impact, this often amplifies existing issues, eroding trust and increasing reliance on manual overrides.

A progressive rollout model addresses this by focusing on value before scale. Organizations start with targeted use cases, validate outcomes with data, and expand only where impact is proven. This approach ensures that each step builds confidence and strengthens the underlying system.

The result is a more disciplined path to scale. Rather than deploying AI broadly and hoping for impact, organizations build what works, prove value with data, and scale with confidence.



Our S&OP AI solution

Unlocking the benefits of agentic AI in S&OP with Capgemini

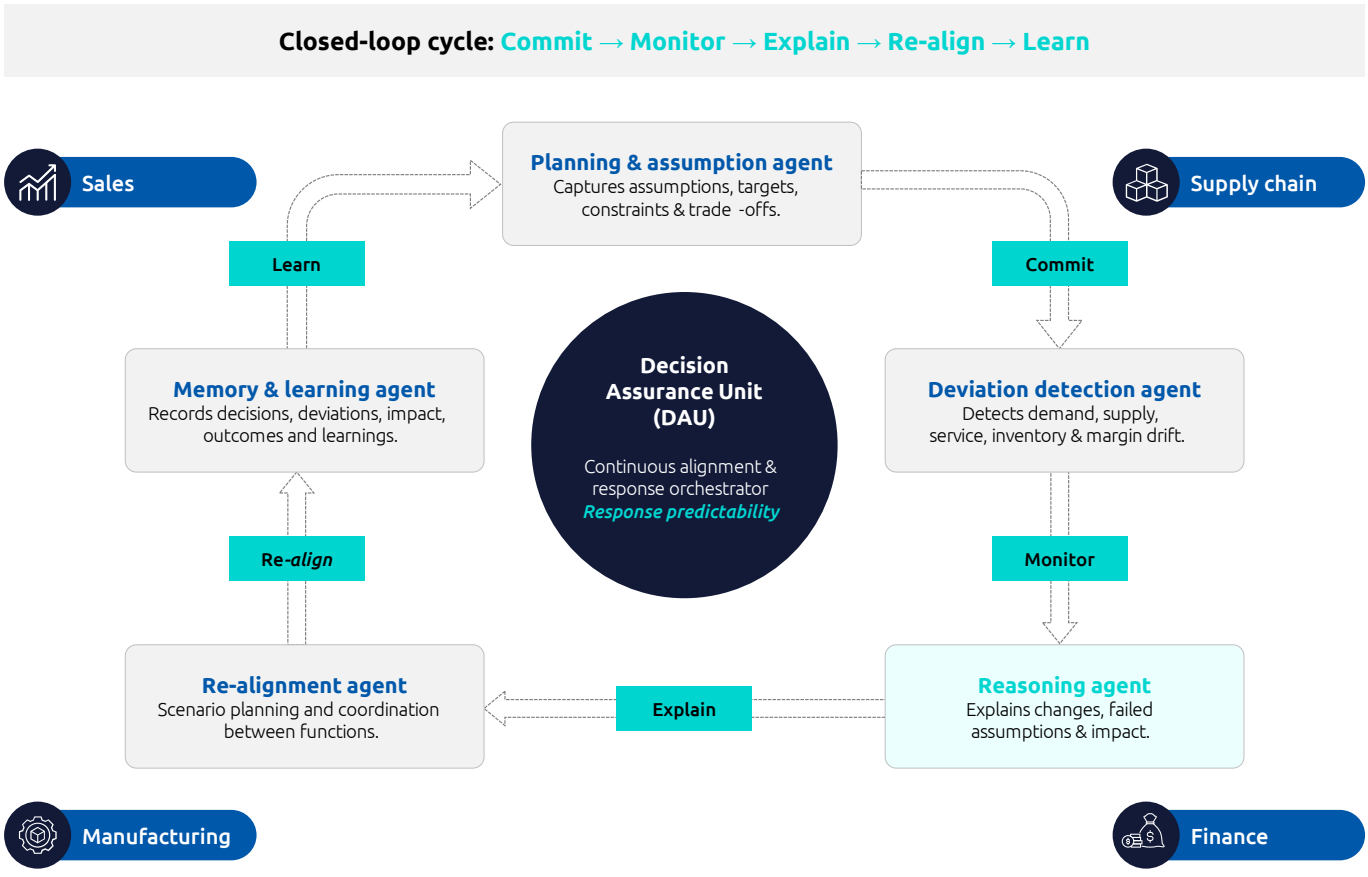
S&OP Intelligence Co-Pilot is a new offering from Capgemini that helps consumer brands transform S&OP from a periodic planning process into a dynamic decision-making capability, enabling faster, more coordinated responses as conditions evolve.

At the core of our solution is a suite of ready-to-deploy agents that manage the end-to-end planning, execution and adaptation process, bridging the gap between Sales, Supply Chain, and Finance teams to improve data visibility, optimize decision-making, and orchestrate actions.

As a closed loop system, the agents learn and evolve over time, helping teams continuously improve processes and eliminate the costly and time-consuming pattern of negotiations that often slow down execution and lead to sub-optimal results.

This is what agentic S&OP looks like.

5 agent personas helping organizations shift from planning to continuous organizational alignment



Revenue protection | Margin protection | Service improvement | Faster response | Cross-functional alignment

Planning & assumption agent

Captures cross-functional plans and operational strategy, as well as the underlying assumptions (demand, supply, promotions, margins) that drive them. This ensures the organization has a clear, shared understanding of what was agreed and why.

Deviation & detection agent

Continuously monitors execution against plan, identifying where demand, supply, or financial outcomes are diverging. It acts as an early warning system, surfacing alignment cracks before they become major issues.

Reasoning agent

Diagnoses deviations by linking outcomes back to broken assumptions, signals, or constraints. Instead of just showing variance, it explains what changed, why it changed, and what it means for the business.

Re-alignment agent

Orchestrates cross-functional response by recommending trade-offs and actions across Sales, Supply Chain, and Finance. It enables structured, faster re-alignment when plans break, reducing disruption and decision delays.

Memory & learning agent

Maintains a record of decisions, assumptions, deviations, and outcomes over time. This creates continuity across cycles, allowing organizations to learn, refine decisions, and avoid repeating the same S&OP debates.

Anticipated outcomes: S&OP intelligence co-pilot from Capgemini

5%
Service improvement

Up to
30%
Cost reduction

2-4%
Working capital and margin improvement

4-15%
Shelf availability improvement

20-40%
Forecast accuracy improvement

Enhanced
time to market

Achieving the next level of S&OP excellence with agentic AI

For consumer brands, outcomes are determined by what happens after a plan is put in place: how quickly the organization detects change, aligns around a response, and acts before the opportunity passes.

Agentic AI helps make that response repeatable. By embedding intelligence into the decision-making process, it enables organizations to adapt with greater speed, consistency, and confidence—helping organizations turn evolving conditions into competitive advantage.

> *Does your organization want to build competitive advantage through adaptive planning? AI-powered S&OP is part of the answer. Contact our authors today to learn more about how our* ***S&OP Intelligence Co-Pilot*** *can help your team leverage advancing agentic AI capabilities to shift from periodic planning to dynamic decisioning.*

> The future of S&OP is not about creating a plan that defies disruption, but an organization that adapts to it.

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About Capgemini

Capgemini is an AI-powered global business and technology transformation partner, delivering tangible business value. We imagine the future of organizations and make it real with AI, technology and people. With our strong heritage of nearly 60 years, we are a responsible and diverse group of over 420,000 team members in more than 50 countries. We deliver end-to-end services and solutions with our deep industry expertise and strong partner ecosystem, leveraging our capabilities across strategy, technology, design, engineering and business operations. The Group reported 2025 global revenues of €22.5 billion.

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