



# Transforming Demand Planning with AI Agents

From Point Plans and Reactive Reporting  
to Proactive Decision Intelligence

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# Executive Summary

For decades, demand planners have been stuck in a cycle of manual forecasting, sprawling spreadsheets, and reactive reporting. In many organizations, as much as half of their time goes to data manipulation rather than shaping outcomes; forecasts age quickly, and planning meetings recount the past instead of steering the future.

This isn't just inefficiency – it's a missed opportunity. As a demand planner, you have to decide each month how to close revenue gaps, respond to competitors, allocate marketing spend, and prepare for supply constraints. Too many of those choices arrive late, with limited context and little visibility into trade-offs or outcomes.

Decision intelligence offers a different path. By automating routine work, detecting gaps instantly, evaluating options in real time, and making transparent recommendations, a decision intelligence agent shifts your planning from reporting to a proactive, decision-centric capability. With that foundation, you can deliver cross-functionally aligned inputs to demand reviews with greater speed, consistency, accuracy, and visibility.

This whitepaper shows how partnering with a decision intelligence agent creates a continuous learning loop that compounds into better forecasts and higher-quality decisions over time. As that partnership matures, you evolve from data processor to strategic decision architect – and your organization gains the agility to respond in hours rather than weeks.

# The Problem: When Planning Becomes a Time Trap

In many organizations, demand planning still consumes a disproportionate share of time on data handling – often approaching 50% – instead of on actual decisions.

Each cycle, planners pull data from numerous systems, reconcile inconsistencies, and produce forecasts that age quickly. Assumptions are often embedded in spreadsheets, which makes plans hard to audit and easy to question.

Meanwhile, critical decisions wait. Markets shift. Competitors move. Opportunities pass.

The Integrated Business Planning (IBP) process, evolved from Sales & Operations Planning (S&OP) in the 1980s, was designed as an executive decision-making forum. Yet too often, it becomes a reporting exercise – describing what happened rather than orchestrating *what should happen next*.

Consider the core questions every demand review should answer:

- **Performance:** Are we meeting commitments?
- **Validity:** Is the plan based on real activities and sound assumptions?
- **Sufficiency:** Does the plan deliver on business targets?
- **Risk and opportunity:** What scenarios should we prepare for?
- **Decisions and actions:** What must be decided, and by whom?
- **Improvement:** How do we continuously get better?

Planners want to answer these questions. They chose the role to drive business impact, not to wrangle data. But the current setup keeps them in tactical execution when they should be focused on strategic orchestration.

This is where decision intelligence provides a new approach.

# Why Decision-Centricity Matters Now

The business world has fundamentally shifted toward decision-intensive work. In 1960, just 6% of jobs required core decision-making skills; **by 2018, that number had reached 34%**<sup>1</sup>. This isn't just a trend – it's a transformation of how value gets created.

As **Blenko and colleagues** observed, "Ultimately, a company's value is just the sum of the decisions it makes and executes."<sup>2</sup> If this is true – and mounting evidence suggests it is – then the planning function must evolve from creating reports to orchestrating decisions.

Demand planning sits at the center of this shift. Every month, planners influence decisions worth millions of dollars:

- **Promotions:** Should we launch one to close a revenue gap?
- **Competitors:** How do we respond to unexpected moves?
- **Investments:** Where should incremental marketing spend go?
- **Contingencies:** What if supply gets constrained?

These decisions happen whether we manage them well or not. The question is whether they happen by design or by accident.

## The Decision-Centric Opportunity

When demand planning becomes truly decision-centric, several powerful things happen:

1. **Speed increases exponentially:** Decisions that once took days can happen in minutes.
2. **Quality improves dramatically:** AI can analyze far more options than humans, faster and without human bias.
3. **Consistency emerges naturally:** Digital decision logic ensures similar situations get similar treatment.
4. **Learning becomes systematic:** Every decision creates data that improves future decisions.
5. **Collaboration gets easier:** When decision criteria are agreed upfront, execution becomes smoother.

But realizing this shift takes more than intent. It demands a new model for how planners and technology work together.

<sup>1</sup>Agrawal, A., Gans, J. & Goldfarb, A. (2022). "From Prediction to Transformation," *Harvard Business Review*, 100(11-12), 100-109.

<sup>2</sup>Blenko, M.W., Mankins, M.C. & Rogers, P. (2010). "The Decision-Driven Organization," *Harvard Business Review*, 88(6), 54-62.

# The Five Steps to Decision Excellence

Achieving decision excellence means creating a planning process that is faster, more accurate, and continuously improving. It requires moving step by step – from automation of routine tasks, to augmentation of human judgment, to embedding structured decision logic, to managing and learning from every decision. Each stage builds on the last, culminating in a system where decisions are made consistently, transparently, and strategically.

## 1. Automation as the Starting Point

Before you can focus on high-value decision-making, you need to automate the routine work that consumes so much of your time today. Think of automation as clearing the stage so the real performance can begin.

### The Forecasting Revolution

Modern forecasting automation has come remarkably far. Near-autonomous forecasting systems now handle:



#### Data ingestion and preprocessing

They pull from dozens of sources, clean inconsistencies, and fill gaps.



#### Algorithm selection and tuning

Auto machine learning chooses the best approach for each forecast grain.



#### Post-processing and validation

They ensure forecasts make business sense and flag anomalies.

The metric that measures this progress is **NTF% (No Touch Forecast %)**: the percentage of forecast combinations that require zero human intervention. Leading companies are achieving **80%+ NTF rates**, freeing planners to focus on the forecasts that truly need human insight.

Even perfect automation is only a baseline. A machine learning forecast, no matter how sophisticated, is still just a calculation of what might happen if nothing changes. Real business planning is about deciding what should happen and making it reality.

## Beyond the Baseline: Building Blocks of Reality

Every business operates in a world of constant change:

- **New product launches** that will reshape demand curves
- **Promotional campaigns** designed to accelerate sales
- **Marketing investments** that shift brand perception
- **Distribution changes** that open new markets
- **Competitive responses** that require counter-moves

These “demand shaping building blocks” represent the gap between forecasting and planning. A forecast says, “Based on history, here’s what we expect.” A plan says, “Based on our strategy, here’s what we’re going to make happen.”

The challenge is that these building blocks come from everywhere:

- **Trade promotion systems** with their own logic and timing
- **Marketing teams** with campaign calendars that shift weekly
- **Product teams** with launch timelines that depend on R&D breakthroughs
- **Sales teams** with customer-specific initiatives that require custom terms

Managing this complexity manually is like trying to conduct an orchestra where every musician is playing from a different sheet of music. Automation creates the foundation by ensuring everyone starts from the same baseline. Orchestrating the performance requires decision intelligence.



## 2. From Automation to Augmentation

Augmentation goes beyond automation by pairing machine speed with your judgment. Rather than replacing you, it equips you with context, analysis, and recommendations that improve decision quality. As **David Pidsley** of Gartner has observed, "decision automation is not the pinnacle of decision intelligence – decision augmentation is"<sup>3</sup> Supply chain professor **Nada Sanders**, co-author of *The Humachine*, echoes this point: human-AI collaboration produces superior results compared to automation alone.<sup>4</sup>

In practice, augmentation starts with one of your most familiar challenges: detecting and addressing gaps in the plan.

### The Gap Detection Moment

After you update demand plans with promotional activities and new product launches, you would traditionally spend hours comparing results against targets, scanning spreadsheets, and chasing alerts that may or may not represent real issues.

With decision augmentation, a decision intelligent agent instead:

- **Detects gaps:** It compares your plan against current commitments in seconds.
- **Gathers context:** It pulls in market data, competitive intelligence, promotional calendars, and inventory levels.
- **Evaluates options:** It assesses dozens of potential gap-closing actions simultaneously.
- **Recommends a path:** It identifies the best option and explains why.



<sup>3</sup>Pidsley, David (2025), "The Gartner Human-AI Delegation Framework," *The Decision Strategist*, LinkedIn.

<sup>4</sup>Sanders, N. & Wood, J. (2021), "Combining Humans and Machines in an Emerging Form of Enterprise: The Humachine," *Foresight*, Issue 61, 28–35.

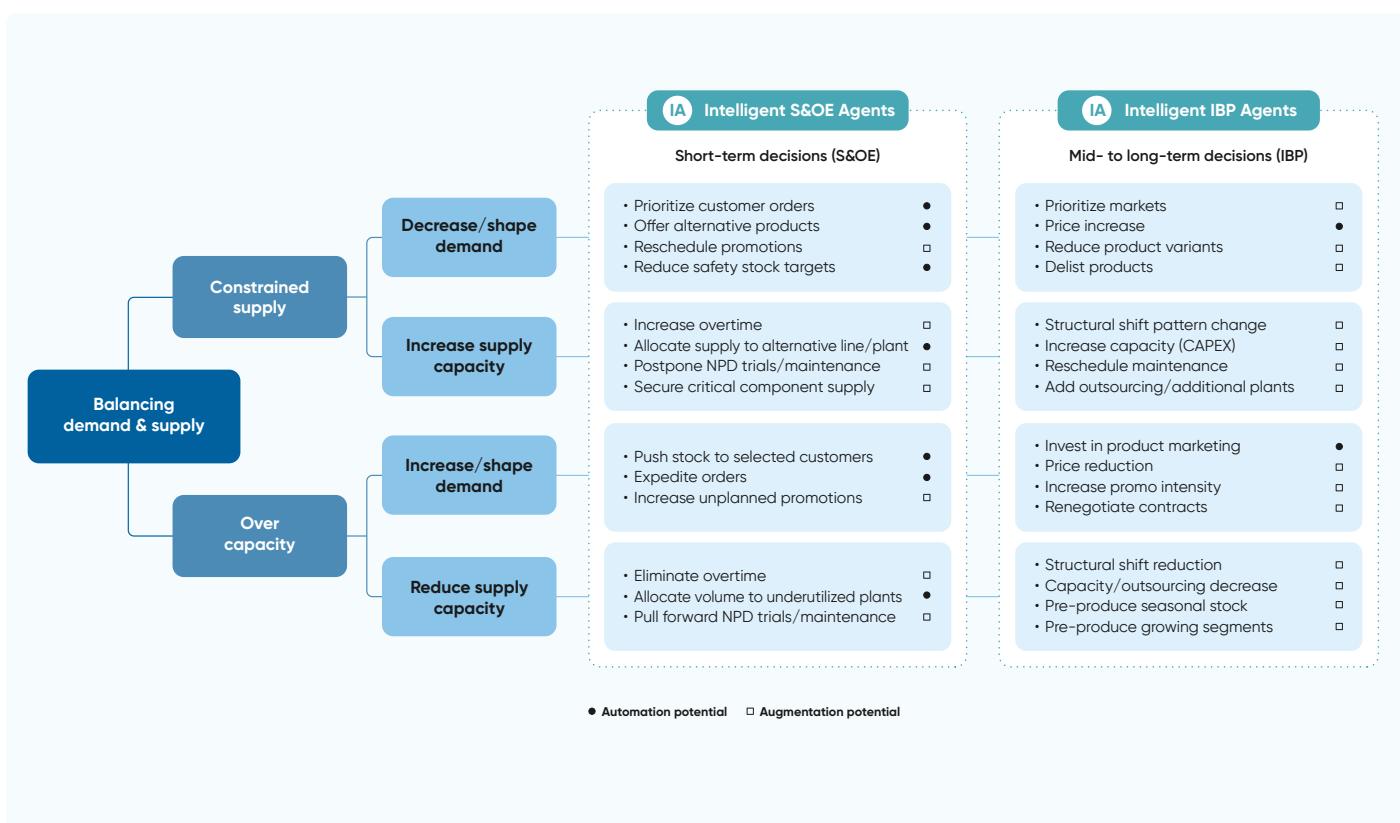
## The Power of Digitized Decisions

Gap-closing decisions – pricing, promotion timing, marketing spend, product launch adjustments – occur repeatedly across planning cycles. Once digitized, these decisions become building blocks for a smarter system. At this point, a decision intelligent agent can:

- **Recognize patterns:** It learns which solutions work best in different contexts.
- **Model impacts:** It evaluates each option across volume, margin, and cost.
- **Manage boundaries:** It keeps decisions within pre-set parameters unless escalation is needed.
- **Automate workflows:** It processes approvals in parallel rather than sequentially.

The result is that decisions which once required days of cross-functional negotiation can now be made in minutes – with better analysis and more consistent outcomes.

While IBP decisions occur less frequently than short-term Sales & Operations Execution (S&OE) decisions, they tend to follow predictable patterns. A decade-old schematic from a global beverage company illustrates this clearly: when faced with a projected demand-supply imbalance, planners consistently drew from the same limited set of corrective actions.



This predictability creates a significant opportunity. Many demand gap-closing decisions recur repeatedly across cycles, making them ideal candidates for digitization and orchestration through decision intelligence agents. The most common examples include:

#### Pricing and Promotion Adjustments

- Temporary price reductions to stimulate demand
- Optimization and rephasing of existing promotional calendars
- Increases in promotional intensity and frequency

#### Marketing and Launch Strategy

- Adjustments to social media or product marketing investments
- Strategic rephasing of new product introductions

Instead of manually recreating these decision frameworks each cycle, you can embed this institutional knowledge into intelligent systems that rapidly evaluate options, recommend optimal paths, and track execution – turning repetitive planning tasks into a strategic advantage.

### **Building Trust Through Transparency**

Of course, none of this works if planners don't trust the recommendations. That's why the best augmentation systems make their reasoning completely transparent. In this case, a decision intelligence agent would show you:

- Which data sources informed the recommendation
- How different options were scored and ranked
- What assumptions were made and why
- How similar decisions performed historically
- What the confidence intervals look like

Transparency not only builds trust – it helps you strengthen your own decision-making by learning from each recommendation.

### 3. Decision-Centric Scenario Planning

Scenario planning is widely recognized as important, yet it is often skipped because of time pressure and disconnected tools. The challenge isn't that you fail to see its value – it's that traditional methods are too slow and too detached from actual decision-making. This creates a frustrating paradox: the moments when scenario planning would be most useful are exactly when you are least able to do it effectively.

#### When Scenarios Matter Most

Consider the kinds of scenarios that keep you awake at night:

- **Unique external events:** A pandemic disrupts supply chains, extreme weather halts transportation, or a competitor makes an unexpected move.
- **Unique internal events:** You enter a new market with limited data, face a product recall, or deal with changes in key supplier relationships.
- **Recurring external events:** Holiday demand spikes, early competitor promotions, or shifting consumer behaviors signaled by economic indicators.
- **Recurring internal events:** A product launch exceeds projections, excess inventory builds in one channel while another faces stockouts, or marketing pushes spend while operations are at capacity.

In each case, the question isn't just *what might happen but what should you do about it?* Traditional scenario planning rarely answers that in time.

#### Integrating Scenarios into the Decision Flow

Intelligent scenario planning flips the model. Instead of being a separate exercise, scenarios are integrated into the decision flow. When a gap is detected, the decision intelligence agent can generate and evaluate alternatives instantly:

- **Option A:** Reduce prices by 10% in affected regions.
- **Option B:** Increase promotional intensity by 25%.
- **Option C:** Reallocate marketing spend from brand to performance channels.

Each option is modeled in real time, showing not just potential impact but also downstream implications:

- How does each option affect margins?
- What are the supply chain feasibility constraints?
- How might competitors respond?
- What's the risk-adjusted probability of success?

**The result:** scenarios that are not academic exercises, but practical decision support tools.

## Automated Scenario Generation

AI strengthens this further. While you can always create custom scenarios, the system can also generate relevant ones automatically based on:

- **Current constraints:** "Given today's inventory and capacity, these options are feasible."
- **Strategic priorities:** "Based on your objectives, these trade-offs align best."
- **Market conditions:** "Considering competitive dynamics, these moves minimize retaliation risk."
- **Historical patterns:** "When we faced similar gaps, these solutions worked best."

Instead of spending time creating scenarios, you spend your energy evaluating them, adding business context the system might miss, and making the final strategic choices. In this way, automation doesn't replace your judgment – it amplifies it, ensuring your expertise is applied where it adds the most value.

## 4. Decision Management

In many organizations today, demand planning decisions are largely invisible. They happen in spreadsheets, get debated in meetings, and may be captured in an email thread, but then they disappear from view. This invisibility leads to several problems:

- **Accountability gaps:** It's unclear who decided what and why.
- **Learning losses:** You don't know what worked, what didn't, or how to improve.
- **Coordination failures:** Decisions may conflict with one another.
- **Strategic drift:** Tactical moves may not align with long-term goals.

When planning becomes decision-centric, managing the decisions themselves becomes just as important as making them well.



## The Decision Log

Imagine if every demand planning decision were automatically captured in a structured, searchable, and actionable format. You'd not only see the final choice, but also the context that informed it:

- **Gap detected:** Revenue shortfall of \$2.3M in Premium segment
- **Options evaluated:** Six alternatives ranging from pricing to promotion to marketing spend
- **Decision made:** Accelerate October promotion to September + increase social spend
- **Decision maker:** Sarah Chen (Demand Planner) with approval from Mike Rodriguez (Marketing)
- **Expected impact:** Close 85% of gap with 78% confidence
- **Success criteria:** Track weekly sell-through and social engagement metrics
- **Status:** Approved and executing
- **Actual results:** [To be updated post-execution]

Now multiply this by every gap, every cycle, and every planner. Suddenly, you have a living database of decision intelligence that gets smarter over time.

## Decision Operations in Practice

Once decisions are digitized, you can manage them systematically:



**Priority dashboards** show which decisions need attention:

- Sorted by urgency, impact, or success probability
- Filtered by function, product line, or region
- Escalation alerts for high-value decisions approaching deadlines



**Progress tracking** shows execution status:

- Which approvals are pending and with whom
- How actual results compare to predicted impacts
- Where bottlenecks are slowing decision velocity



**Pattern analysis** reveals systemic insights:

- Which types of decisions consistently succeed or fail
- How decision quality varies by planner, product, or season
- Where decision processes can be streamlined or automated

## Real-Time Course Correction

Perhaps most powerfully, digitized decisions enable real-time course correction. When company objectives shift – and they always do – the agent can instantly identify which decisions need adjustment:

- A new competitive threat emerges → Which decisions assume competitor inaction?
- Supply constraints tighten → Which decisions depend on unconstrained capacity?
- Economic indicators shift → Which decisions rely on stable consumer spending?

Instead of hoping these changes get communicated through meetings and emails, you can see immediately which actions need to be reconsidered and adjusted before it's too late.

## 5. Learning from Every Decision

Most demand planners rarely know whether their judgmental adjustments actually improve forecast accuracy. You make hundreds of decisions each cycle, but systematic feedback is scarce. Without it, you can't improve decision-making, organizations can't raise planning effectiveness, and businesses can't adapt optimally to changing markets.

Decision intelligence closes this gap by making learning continuous and actionable.

### Personal Learning: Your FVA Mirror

Forecast Value Add (FVA) analysis has long been available, but it's often delivered as a static monthly report that arrives weeks after the fact. By then, the context is lost and the lessons are abstract. A decision intelligence agent changes that. Instead of post-hoc analysis, you receive real-time feedback while making adjustments:

"You're about to increase the forecast for Product X by **15%**. Historical analysis shows your adjustments for this product typically reduce accuracy by **8%**. Are you sure you want to proceed?"

This prompt doesn't override your judgment – sometimes human insight is superior to algorithmic predictions. But it raises awareness. Over time, this awareness shifts behavior: you focus interventions where they add value and avoid those driven by bias or habit.

## Decision Learning: The Wisdom of Choices

More powerfully, the agent learns from every gap-closing decision across cycles. Consider this sequence:

- **Decision 1:** In Q1, facing a 10% revenue gap, you accelerated promotions. Result: closed 80% of the gap but reduced margin by 3%.
- **Decision 2:** In Q2, with a similar gap, you increased marketing spend instead. Result: closed 90% of the gap with only 1% margin impact.
- **Decision 3:** In Q3, the agent recommends marketing spend over promotion acceleration, citing Q2's superior outcome.

Each choice generates data. Each data point strengthens future recommendations. The organization becomes smarter with every cycle.

## Probabilistic Decision Support

As the decision database grows, the agent identifies patterns you might not notice:

- **Promotional accelerations:** More effective in some seasons but counterproductive in others.
- **Marketing spend increases:** More successful when paired with specific product lines.
- **Price reductions:** Effective in certain regions but harmful to brand perception in others.

These patterns become probabilistic guidance:

"Based on **47** similar decisions over the past **3** years, this option has a **73%** probability of achieving target impact with **95%** confidence interval of **65-81%**."

Instead of promising certainty, the agent helps you make better decisions with clearer insight into likely outcomes.



# The Rise of Autonomous Agents

The evolution we've described so far – from automation to augmentation to orchestration – points toward an even greater transformation: agents that can reason, collaborate, and make complex decisions autonomously within defined boundaries.

We're already seeing early examples of this future in action.

## Natural Language Intelligence

Imagine starting your week with a simple question: "What changed since last month that I should know about?" In seconds, a decision intelligence agent can analyze:

- Changes in forecast accuracy across product lines
- New gaps that emerged and which were closed
- Shifts in market conditions or competitor activity
- Updates to strategic priorities or budget allocations
- Performance trends that may reveal systemic issues

The response isn't a dense presentation – it's a conversational briefing that highlights what matters most:

"Three significant changes since last month: First, accuracy improved **8%** in Premium segments due to better promotional data integration. Second, we've closed **12 of 15** detected gaps, but the **3** remaining represent **67%** of total impact – recommend prioritizing. Third, competitor Alpha launched aggressive pricing in the Eastern region – our current plan doesn't account for this threat."

With natural language interaction, you reduce the friction between asking a question and getting an answer. You can explore data intuitively, diving deeper where needed.

## Multi-Agent Orchestration

But the real future lies in coordinated agent teamwork. Consider this scenario: A demand planner's agent detects a significant gap and needs to evaluate whether gap-closing options are operationally feasible. Instead of requiring human coordination across multiple functions, the agent orchestrates an automated consultation among other agents.

- 1. Demand Agent** detects a gap and identifies potential solutions.
- 2. Supply Agent** checks production capacity and inventory constraints.
- 3. Distribution Agent** validates logistics and transportation feasibility.
- 4. Finance Agent** models revenue, margin, and cash flow implications.
- 5. Sales Agent** assesses customer acceptance and competitive response.
- 6. Strategy Agent** confirms alignment with broader business objectives.

All of this happens in minutes, not days. Each agent operates within boundaries, escalating to humans only when conflicts can't be resolved automatically or when decisions exceed authority levels.

## Negotiation and Escalation

Agents can even negotiate with each other:

- 1. Sales Agent:** "To close this gap, I recommend accelerating the October promotion to September."
- 2. Supply Agent:** "Production capacity is constrained in September. I can support 70% of the required volume."
- 3. Sales Agent:** "What if we phase the promotion over 6 weeks instead of 4?"
- 4. Supply Agent:** "That works. Recommend adding 2 temporary production shifts to minimize disruption."
- 5. Finance Agent:** "Temporary shifts increase costs 8%. Still profitable given gap closure value."
- 6. Consensus achieved. Escalating to Sales Director Agent for final approval.**

This negotiation happens automatically, transparently, and again, within minutes. Executives receive the proposed solution with full context: how it was developed, which trade-offs were considered, and the rationale behind the recommendation.

## Learning at Scale

As these agent networks operate, they create new learning opportunities. Every negotiation, decision, and outcome becomes training data that improves future performance. Over time, this builds institutional memory that transcends individual knowledge, ensuring your organization learns continuously, remembers past outcomes, and gets better at navigating complexity.

# Decision Intelligence for Demand Planning: How it's Done with Aera

Building on those early examples, these capabilities are already in production with companies using Aera, the decision intelligence agent. The agent redefines how you approach demand planning. Instead of static dashboards and disconnected workflows, the agent blends live data, AI models, and automation into a living decision cycle. It closes the gap between insight and execution by spotting emerging risks, sizing their impact, recommending the best response, and carrying approved actions into the systems that matter. The result is continuous, proactive orchestration rather than episodic, reactive planning.

Aera delivers on this new approach through a series of interconnected stages:

## 1. Data Foundation: Harmonizing Inputs Across the Value Chain

The process begins with a current, end-to-end picture of demand. Aera connects internal and external sources to build a single, real-time view that lets you assess risk and opportunity with confidence. The core data inputs include:



- **Planning and forecast data:** Historical sales, baseline forecasts, demand plans, promotional calendars
- **Market signals:** Point-of-sale data, customer orders, competitive intelligence, economic indicators
- **Operational inputs:** Production capacity, inventory levels, supply constraints, distribution capabilities
- **Performance data:** Forecast accuracy, promotional effectiveness, decision outcomes, margin impacts

By integrating these sources, Aera creates a unified decision context, eliminating the delays and blind spots common in traditional systems.

## 2. Risk Detection: Using Business Logic and Thresholds

With the foundation in place, Aera continuously watches for leading indicators of disruption or opportunity. It applies dynamic rules and thresholds so the right signals surface early. These signals include:



- **Demand-supply mismatches** across products, channels, and time horizons
- **Market opportunity patterns** from competitive actions and consumer behavior shifts
- **Promotional performance degradation** requiring strategy adjustments
- **Revenue gap emergence** relative to committed targets and strategic goals

Early visibility enables faster intervention – before small issues compound into missed targets.

## 3. Scenario Evaluation: Using AI/ML Models to Score Mitigation Options

When a trigger fires, Aera generates and scores feasible responses. AI- and ML-driven simulations balance operational constraints with business priorities to reveal the most promising levers. Simulated options include:



- **Promotional strategy optimization** based on elasticity and competitive positioning
- **Pricing adjustment scenarios** with margin and volume trade-off analysis
- **Marketing investment reallocation** across channels and customer segments
- **Product launch timing modifications** to capture maximum market opportunity

This step ensures recommended paths are both realistic and grounded in historical performance.

## 4. Recommendation Generation: Selecting the Best Course of Action

From the scored alternatives, Aera assembles a short list of actions ready for review. Each recommendation is explained, quantified, and packaged for quick decision-making. Key outputs include:



- **Feasibility and impact scoring** with confidence intervals and success probabilities
- **Execution-ready proposals** with clear resource requirements and timelines
- **Trade-off analysis** across revenue growth, margin optimization, and strategic alignment

With this step, you get clarity – not just what to do, but why it's the right move and what to expect.

## 5. Action Orchestration: Seamless Execution and Closed-Loop Monitoring

Once you approve, Aera pushes changes to connected systems and monitors results in real time. Execution becomes part of the same flow as analysis, shrinking time to impact. Actions typically include:



- **Promotional system updates** and campaign activations across channels
- **Pricing modifications** and competitive response implementations
- **Budget reallocations** and marketing spend optimizations
- **Outcome verification** and performance measurement against predictions

With execution built in, the loop between insight and action finally closes.

## 6. Learning and Optimization: Getting Smarter with Every Cycle

Each cycle ends by capturing what happened – including system results and your adjustments – and folding those learnings back into models, rules, and playbooks. Over time, guidance fits your business more precisely. This continuous improvement is driven by:



- **Action effectiveness tracking:** what worked, what didn't – and why
- **User feedback loops:** planner adjustments feed into model retraining
- **Pattern recognition:** repeated issues across SKUs, suppliers, or regions are flagged
- **Scenario modeling enhancements:** options improve in speed, cost, and accuracy

Each iteration strengthens the next, making Aera more accurate, more efficient, and more aligned to your strategy.

**The result:** Demand planners, sales leaders, and marketing managers can **prevent revenue gaps** before they materialize into missed targets, **act decisively** on market opportunities without lengthy cross-functional negotiations, and **align decisions** with both operational capabilities and strategic objectives.

## Area's Agentic AI Capabilities: Why Agents Are Essential

With Aera, you compose specialized agents that go far beyond linear workflows. They understand context, navigate constraints, and adapt as conditions change – bringing decision intelligence to life with autonomy, speed, and scale.

Here's what sets these agents apart:

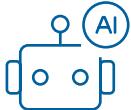
- **Complex reasoning under uncertainty:** Demand planning involves incomplete information, competing objectives, and dynamic markets. Agentic AI weighs trade-offs across variables and adapts as new information emerges.
- **Cross-functional expertise integration:** Modern demand strategies span supply operations, finance, marketing, and competitive dynamics. Specialized agents contribute domain expertise while coordinating seamlessly.
- **Dynamic market responsiveness:** Conditions shift faster than human coordination can. Agents continuously monitor signals and adjust strategies in real time without coordination overhead.
- **Natural-language business communication:** Agents explain opportunities, quantify impact, and justify recommendations in the language planners use every day.

Taken together, these capabilities make agents essential for running decision intelligence at scale – so your organization can reason, coordinate, and act at market speed.



# The Demand Planning Agent Ecosystem in Action

Aera's agent ecosystem mirrors how your teams work: a coordinating agent orchestrates domain specialists in tight loops. Here's how the core roles come together in a typical demand-shaping flow.



## Core Orchestration: The Demand Creation Agent

- **Role:** Master coordinator
- **Input Processing:** Takes product, market, and gap information to generate actionable suggestions
- **Agent Coordination:** Orchestrates dialogue across four specialized agents in iterative cycles
- **Decision Integration:** Synthesizes agent inputs into coherent, executable action plans



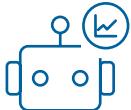
## Supply Agent

- **Mission:** Specialized in evaluating operational feasibility
- **Key Questions:** "Do we have the capacity? Do we have the inventory? Can we increase volumes based on the projected lift?"
- **Capacity Assessment:** Determines if proposed demand strategies are operationally possible
- **Constraint Validation:** Checks production and inventory limitations in real time



## Finance Agent

- **Mission:** Calculates margins and validates financial impact of proposed actions
- **Key Questions:** "If I do this discount, are they okay with it? What's the margin impact?"
- **Calculation Tools:** Uses Aera's financial calculation methods (not generated, but actual financial tools)
- **Margin Analysis:** Evaluates discount impacts and profitability implications



## Marketing Agent

- **Mission:** Recommends optimal promotional approaches and campaign types
- **Key Questions:** "Is it a discount or loyalty program? What's going to work for this product and channel?"
- **Campaign Optimization:** Suggests promotional strategies by week, by retailer
- **Elasticity Analysis:** Provides details on price impact and promotional effectiveness

Together, these agents surface feasible, financially sound, and operationally realistic options – and move them toward execution with the context you need to decide quickly.

## Case Study

# Halving Forecast Error and Decision Cycle Time at a Global Spirits Company

## The Challenge

A global leader in spirits set out to modernize its demand forecasting process but faced material operational constraints with the status quo. Manual tools and fragmented workflows constrained throughput and control:

- **Manual spreadsheets:** A spreadsheet-based planning process produced inconsistent, often inaccurate results.
- **Fragmented governance:** User inputs, approvals, and version control were hard to manage, blocking real-time collaboration.
- **Limited scalability:** The approach could not keep pace with current market complexity or future global expansion into EMEA, APAC, and LATAM.
- **High carrying costs and slow decisions:** Inventory levels remained elevated and decision cycles moved too slowly, especially in the complex U.S. alcohol market.

In short, the company needed a scalable, collaborative solution that could support key markets like the U.S. and Canada while laying the groundwork for global growth.

## The Aera Solution

To address these challenges, the company implemented the Aera decision intelligence agent, which leveraged its Dynamic Demand Forecasting Skill to deliver a context-aware, planner-in-the-loop, execution-ready solution. The solution provided:

- **Automated data ingestion:** It automatically ingested and augmented data from multiple sources.
- **Advanced forecasting:** It ran state-of-the-art forecasting using AI and ML.
- **Recommendation execution:** It generated automatic recommendations and could execute approved actions.
- **Planner workspace:** It presented results in a custom interface where planners reviewed and adjusted forecasts based on business insights – with full explainability.

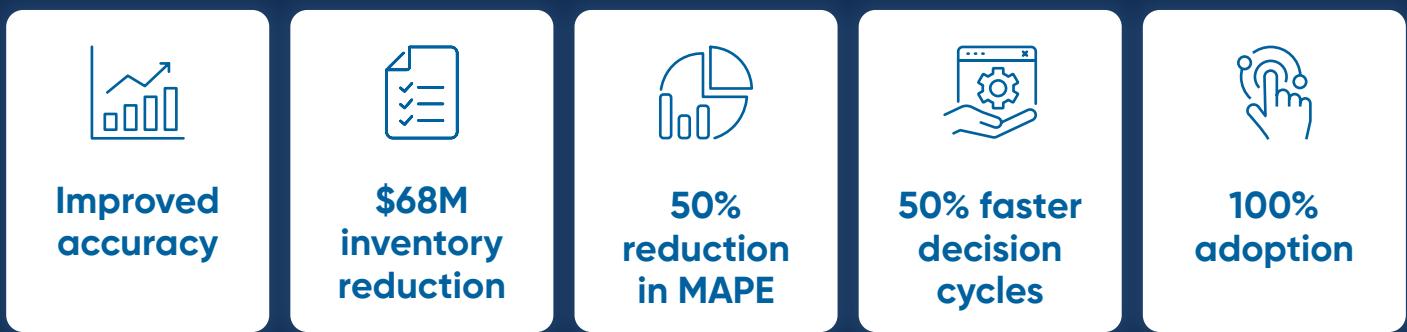
Together, these capabilities replaced ad-hoc manual effort with a consistent, auditably intelligent process.

## The Results

Within months, the company saw measurable gains in accuracy, efficiency, and adoption:

- **Improved accuracy:** Data-driven demand forecasting improved accuracy through automated, data-driven processes and provided planners with an interactive interface for real-time forecast adjustments and control.
- **\$68M inventory reduction:** Optimized stock levels reduced excess inventory costs.
- **50% reduction in MAPE:** Forecast error fell by half, significantly improving forecast reliability.
- **50% faster decision cycles:** Time from understanding to action was cut in half.
- **100% adoption:** A simplified user interface and transparent, digitized process drove full planner uptake.

These results created the momentum – and the trust – to scale the approach across regions.



## The Long-Term Transformation

With the foundations in place, the working model for planners evolved from manual configuration to agent-assisted decisioning:

- **From tinkering with forecast parameters to auto analytics:** Planners moved from manual algorithm tuning to reviewing AI-generated insights with full explainability.
- **From data crunching to reviewing recommendations:** The **Understand → Recommend → Act → Learn** cycle replaced hours of manual analysis with minutes of decision review.
- **From cross-functional hassle to agent-augmented options:** Multi-agent coordination eliminated days of meetings and negotiations for gap-closing decisions.
- **From unclear decision status to transparent management:** Natural-language querying provides real-time visibility into decision status, expected impact, and actual performance.

Taken together, these shifts turned a reactive, spreadsheet-driven process into a scalable, decision-centric rhythm the organization could trust and extend globally.

# The New Role of the Demand Planner

When routine work is automated and an agent augments complex decisions, your role doesn't shrink – it expands. You shift from producing forecasts to architecting how decisions get made, measured, and improved. The focus moves from manual effort to high-leverage design, governance, and cross-functional orchestration.

## Shifting from the Tactical to Strategic

Consider how the planner role evolves across key dimensions:



### Data architecture – not data manipulation

Instead of spending hours gathering and cleansing data, you design the information architecture that feeds decision intelligence. You determine:

- Which external data sources could improve forecast accuracy
- How to structure internal data for maximum decision support
- What new data relationships might reveal hidden insights
- How to balance data richness with processing speed



### Automation engineering – not automation consumption

Rather than simply using automated reports, you become an automation architect. You identify:

- Which processes are ready for full automation
- Where human oversight remains critical
- How to design exception handling for edge cases
- What new automation opportunities emerge from changing business needs



### Decision architecture – not decision execution

Instead of making every decision from scratch, you design decision frameworks that guide an agent. You define:

- What constitutes a "gap" that needs addressing
- How different solutions should be evaluated and ranked
- When decisions need human approval versus automatic execution
- How decision logic should adapt to changing strategic priorities



### Agent collaboration – not isolated analysis

Rather than working alone with spreadsheets, you collaborate with AI agents that augment your capabilities. You learn:

- How to prompt agents for optimal analysis
- When to trust agent recommendations versus applying human oversight
- How to teach agents about business context that isn't captured in data
- How to orchestrate multiple agents working on complex problems



### Cross-functional orchestration – not cross-functional negotiation

Instead of negotiating every decision in real time, you facilitate upfront agreements about decision criteria and trade-offs. You focus on:

- Building consensus around decision frameworks before gaps emerge
- Maintaining alignment as strategic priorities evolve
- Escalating only the decisions that truly require executive input
- Creating transparency that builds trust across functions

## The Engagement Opportunity

As you move into this role, the work becomes inherently more interesting. Instead of wrestling with data quality issues and hunting for gaps in spreadsheets, you:

- **Design systems that learn:** You shape feedback loops so every cycle improves the next.
- **Analyze market dynamics:** You use scenarios to anticipate change – not just react to it.
- **Craft decision playbooks:** You codify best practices so great choices scale across teams and regions.
- **Raise organizational fluency:** You help partners read the same signals, understand the same trade-offs, and move faster together.

The outcome is a planning function that's measurably better – faster cycles, higher forecast quality, and decisions that are transparent and improvable. Your title may stay the same, but the scope of your impact grows, positioning you as a strategic decision architect for the business.

# Putting Decision Intelligence to Work

For too long, talented planners have been trapped in tactical execution when they should be driving strategic impact. The technologies in this paper – automation, augmentation, and agent intelligence – don't just make planning faster or more accurate. They change what it means to be a demand planner.

In this new operating model:

- **Data becomes an asset, not a burden:** A decision intelligence agent handles routine manipulation while you design information architectures that create advantage.
- **Decisions become visible and improvable:** Every choice is captured, analyzed, and learned from, building organizational intelligence that compounds over time.
- **Planning becomes collaborative and coordinated:** Agents manage routine coordination so you and your partners focus on strategic alignment and exception management.
- **Learning becomes systematic and continuous:** Humans and agents get smarter with every cycle, turning improvement into a habit rather than an event.
- **Work becomes engaging and impactful:** You spend time on challenges that directly drive performance – not on chasing data or reconciling spreadsheets.



This shift doesn't happen overnight, and it won't happen without thoughtful change management. You'll need to invest in new technology, redesign planning processes, upskill planning teams, and rethink what "good planning" looks like.

For teams willing to make the leap, the rewards are substantial:

- **Faster decision-making** that responds to market changes in hours, not weeks
- **Higher quality decisions** informed by comprehensive analysis and historical learning
- **More consistent execution** guided by proven decision frameworks
- **Better strategic alignment** across functions and planning horizons
- **Improved business outcomes** from more effective demand shaping and gap closure

Put simply, decision intelligence turns planning into an always-on capability – one that learns, aligns, and acts at the speed of your market. If you start now, the payoff is cumulative: each cycle gets clearer, faster, and more effective than the last.



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