

Decision Velocity Over Process Speed: The End of Calendar-Driven Supply Chain Planning

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Initiatives: Delivery of Functional Responsibilities

True supply chain agility comes from decision velocity, not faster planning cycles. Making the right decisions at the right time with the best available information requires heads of supply chain planning to prioritize: mapping decisions, setting clear triggers and defining action thresholds.

Insights at a Glance

Currently, 56% of supply chain planning leaders rely on cyclical planning processes to support decisions after disruptions occur, forcing teams to wait for scheduled meetings rather than acting when market conditions shift. ^{1,2} Calendar-driven planning creates an illusion of control while destroying enterprise value.

Organizations have become so obsessed with process discipline that 42% of supply chain professionals say it is difficult to deviate from standard processes even when they feel that it will improve business outcomes. ³ Leading organizations focus on decision velocity. **True agility requires rapid analysis paired with deliberate patience, delaying resource commitment until the last viable moment when information quality is highest while optionality remains open.** Process discipline without decision velocity is mere operational noise.

Heads of supply chain planning need to prioritize:

- Mapping decisions and owners
- Accelerating decision analysis
- Enabling decisions at the right time

Issue

Traditional supply chain planning (SCP) is organized around planning cycles rather than decision needs. As a result, decisions are often deferred until the next scheduled planning cycle, reducing responsiveness when conditions change. Aligning organizations around schedules and process execution rather than explicit decision velocity produces an illusion of productivity while systematically delaying decisions and action.

Impact

- Cyclical planning focuses attention on completing planning activities rather than accelerating decisions, hindering enterprise outcomes like growth, profit or working capital. According to the 2024 Gartner Planning for the CSCO and Supply Chain Under Volatility Survey, 36% of planning teams report spending 30% or more of their time firefighting, and 49% frequently make significant revisions to their plans despite running standard S&OP/IBP cycles. ⁴ We keep trying to optimize processes, but we are not impacting decisions.
- Calendar-driven planning processes are not fit for all planning decisions. By strictly forcing decisions to cycles, organizations can be either making decisions too early, which increases the risk of an incorrect decision, or acting too late, which can eliminate alternatives and increase the cost of responding.
- The impact of disruption gets amplified the longer it takes an organization to realize an event has occurred, calculate the impact and map potential response options. The disruption impact translates into service and/or profit gaps.

More Detail

Process speed of SCP is irrelevant if decision speed remains unchanged. The objective is not to make decisions faster, but to make them at the most advantageous moment, when enough information is available to act confidently without unnecessarily limiting future options. Organizations achieve this by accelerating decision analysis while delaying commitment until the latest responsible moment.

Map SCP Decisions That Most Impact Critical Business Outcomes

Traditional planning workflows map activities. Decision maps chart the critical choices that determine business outcomes.

Before organizations can improve decision velocity, they must first understand which decisions matter, when they should be made and what information is required to make them.

Some examples of decisions made within planning workflows include:

- Should we adjust the forecast based on recent market intelligence?
- How much product should we produce or order for the planning period?
- Which production facilities should fulfill the supply?
- How do we allocate limited capacity if demand exceeds supply?
- Should we increase safety stock based on changing conditions?
- Should we expedite delivery?

Mapping all planning decisions from the start is neither practical nor necessary. Organizations should start with their most critical business outcomes and work backward to pinpoint the small number of decisions that have the greatest influence on performance.

Table 1: Examples of Most Impactful SCP Decisions by Outcome

Outcome	Most impactful decisions
Revenue Growth	■ Adjusting the demand signal based on consumption changes ■ Reallocating inventory ■ Expediting replenishment when there is a risk of out-of-stock ■ Mitigating service risk with proactive inventory buffers ■ Protecting service for strategic customers
Profitability	■ Increasing overtime spend ■ Expediting transportation ■ Keeping assets running even when demand slows down ■ Resizing inventory buffers to protect against risk
Resilience	■ Adjusting safety stocks based on increased demand variability ■ Allocating demand to supply sources balancing cost and resilience

Source: Gartner

Once decisions are captured, a full decision map to enable decision velocity requires clear definitions of:

- **Decision roles:** A single owner for each decision — one person, not a committee. Other decision roles include who needs to provide input, who runs decision analysis, who needs to agree to the decision and who has to perform the decision once taken.

- **Decision timelines:** Specify the latest viable moment to decide — set a clear deadline linked to when options expire, not just the next meeting.
- **Decision inputs and analysis:** List the key information needed to make the decision, and ensure it's available when needed.
- **Decision default:** Define the default action — avoid defaulting to inaction or letting decisions drift.

Accelerate Decision Analysis Through Decision Triggers and Impact Thresholds

Historically, planning processes were the only way to sense if the world around us had meaningfully changed, and through that assessment, the need to adjust plans to new realities was identified. Technology now allows us to continuously monitor the environment using real-time data feeds and trigger decisions once the environment requires it. However, only 19% of supply chain planning and inventory leaders say their organizations collect multiple real-time data feeds that enable event-driven decision making.^{2,5} Most supply chains are missing value opportunities by only using cyclical processes to identify changing realities.

For each of the critical decisions identified, map which of the following data types could enable your organization to reduce the latency at which the decision is triggered:

- **Demand:** Consumption data, inventory at point of consumption, competition inventory, pricing
- **Manufacturing:** Throughput, yield, quality defect rate, temperature, raw material availability
- **Logistics:** Inbound, outbound, warehouse capacity utilization, shipping notifications
- **Supplier:** Inventory, capacity, production schedule, quality, shipments
- **Environment:** Weather, events

The required trigger data will differ by type of decision. For example, to make a decision to:

- **Adjust the forecast you can leverage:** Consumption demand signal, point-of-sale inventory, value chain price change, competition out-of-stock or availability for other related products
- **Reorder stock at a warehouse location you can leverage:** Demand signal changes, inventory, lead time changes, production adherence changes, weather data

Avoid falling into the trap of trying to capture all data. Focus on most relevant data for most critical decisions.

Continuous monitoring does not equal continuous replanning.

In many cases, plan stability benefits surpass the benefits of adjusting the plans based on small changes to our demand or supply. Only 37% of supply chain professionals say their organization has thresholds that define when they need to replan. ¹ Heads of supply chain planning must protect their organizations to avoid real-time data feeds turning into noise by clearly defining what level of change actually triggers a decision using impact thresholds. Effective thresholds are:

- **Measurable:** There has to be data that enables the continuous monitoring
- **Impact-based:** The threshold must be based on the business impact (e.g., “inventory costs now exceed margin” or “supplier capacity is at risk”), not just operational metrics (e.g., lead time is higher than X)
- **Specific:** It must be a specific number that requires action; is not a trend change, it is a preset limit

Case in Point: Sanofi Plai Inventory Agent

Sanofi is a life sciences company headquartered in Paris, France. Its inventory agent continuously monitors AI-driven demand signals and stockout probabilities within a “thoughtful risk-taking” (TRT) governance framework. Safety stock parameter updates are automatically triggered and executed into the advanced planning system (APS) whenever predictions cross specific, prealigned risk thresholds. The agent operates under clearly defined business rules, with automated safeguards to protect critical parameters such as life-saving drugs (LSD) and service-critical SKUs, ensuring humans remain in control of sensitive decisions.

Source: 2026 Power of the Profession.

Do not permit continuous replanning without business thresholds: Enforce strict impact-based thresholds (e.g., “margin erosion exceeds 3%” or “inventory holding costs exceed expedite penalties”) before activating a replanning trigger, protecting operational stability from background noise. (See [Transform Chaos Into Clarity: Make Impact the Core of Agile Decisions](#).)

Enable Decisions at the Right Time

Not all planning decisions require the same timing. Some planning decisions can be made within predefined guardrails during normal operations, while others require intervention when business conditions change materially and the impact of the decision is significant. Organizations should therefore distinguish between routine decisions and exception decisions.

Decentralize Routine Decisions

Routine decisions occur frequently and have limited impact on business outcomes. These decisions should be delegated to the lowest appropriate level in the organization through clearly defined decision rights, business rules and guardrails. Some examples include: the impact of demand-shaping initiatives in the forecast, the creation of replenishment orders and the materials requirements order placement.

The objective of decentralizing is to enable quick, consistent routine decisions without unnecessary review or coordination.

Define Impact Thresholds for an Exception Decision

Exception decisions have a significant impact on business outcomes and require coordination. A decision threshold (identified in the previous section) triggers a decision driven by a relevant change in business conditions. An exception threshold determines whether to act and what action to take, which requires coordination and stakeholder involvement at different places within the organization. An exception decision significantly impacts a strategic outcome.

Rather than waiting for the next planning cycle, decision timing should be determined by when available options begin to expire. Some decisions are most effective when delayed until additional information becomes available. Others lose value when action is postponed. The urgency of the decision drives the decision process, not the fixed calendar.

By linking decisions to business conditions rather than planning calendars, organizations can orchestrate the decisions when needed through composable workflows and improve decision velocity while preserving optionality. (See [From Fragile to Agile: How AI Agents Strengthen Composable Processes in Decision-Centric Planning.](#))

Evidence

¹ **2025 Gartner Antifragility or Decision-Centric Planning, What Is the Future of Planning? Poll.** The question “Which of the following capabilities has your organization already invested in to support uncertainty and disruption management?” was asked of attendees in the breakout session “Antifragility or Decision-Centric Planning, What Is the Future of Planning?” at the 2025 Gartner Supply Chain Symposium/Xpo (NA) on 5 to 7 May 2025. In all, 72 attendees responded. Disclaimer: The results of this survey do not represent global findings or the market as a whole but reflect the sentiment of the respondents surveyed.

² **2025 Gartner Supply Chain Planning Reimagined Through Antifragility and Decision-Centricity Session Poll.** The question “Which capabilities do you have to support event-driven decision making?” was asked of attendees in the “Supply Chain Planning Reimagined Through Antifragility and Decision-Centricity” breakout session at the 2025 Gartner Supply Chain Planning Summit (London) on 2 December 2025. In all, 43 attendees responded. Disclaimer: The results of this survey do not represent global findings or the market as a whole but reflect the sentiment of the respondents surveyed.

³ **2026 Gartner Growing Market Share Through Frictionless Supply Chain Survey.** This survey aimed to investigate the role of designing supply chain workflows backward from key enterprisewide business outcomes. The survey was conducted online from 16 June 2026 through 23 July 2026. In total, there were 303 respondents from North America (n = 110), Europe (n = 74), Asia/Pacific (n = 61), and Latin America (n = 57). Respondents were from organizations with \$250 million or more in 2025 enterprisewide annual revenue. Industries surveyed included healthcare, manufacturing (consumer products, industrial – discrete, industrial process, high tech, and pharmaceuticals/life sciences), retail, wholesale trade, transportation and logistics, energy and utilities, and natural resources. To qualify, respondents’ decisions and activities must regularly impact at least three other supply chain functions. Disclaimer: The results of this study do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

⁴ **2024 Planning for the CSCO and Supply Chain Under Volatility Survey.** The objective of this survey was to assess approaches to improve the alignment and resilience of supply chain plans across strategic, tactical and operational horizons, ensuring effective disruption management and the achievement of strategic goals. The survey focused on two key issues: (1) sales and operations planning (S&OP) and financial misalignment and (2) disruption management. The research was conducted online from April through May 2024 among 264 respondents from North America (n = 159), Latin America (n = 9), Western Europe (n = 61) and Asia/Pacific (n = 35). Respondents were from organizations with \$500 million or more in 2023 enterprisewide annual revenue. Industries surveyed included manufacturing (consumer products, industrial, high tech and life sciences; n = 140), transportation and logistics (n = 16), retail (n = 52), healthcare providers (n = 31), energy and utilities (n = 18), wholesale trade (n = 6) and natural resources (n = 1). To qualify for the survey, respondents had job roles tied to the supply chain planning and inventory management (n = 86), supply chain center of excellence (CoE) (n = 36), end-to-end supply chain (n = 114) and supply chain performance management and metrics (n = 28). They are involved with both supply planning and demand planning and have been either solely/jointly responsible or a key contributor to the decision-making process in the S&OP/IBP. Disclaimer: The results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

⁵ **2025 Gartner Supply Chain Planning Reimagined Through Antifragility and Decision-Centricity Session Poll.** The question “Which capabilities do you have to support event-driven decision making?” was asked of attendees in the “Supply Chain Planning Reimagined Through Antifragility and Decision-Centricity” breakout session at the 2025 Gartner Supply Chain Planning Summit (NA) on 12 December 2025. In all, 101 attendees responded. Disclaimer: The results of this survey do not represent global findings or the market as a whole but reflect the sentiment of the respondents surveyed.

Disclaimer: The organization (or organizations) profiled in this research is (or are) provided for illustrative purposes only, and does (or do) not constitute an exhaustive list of examples in this field nor an endorsement by Gartner of the organization or its offerings.

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

[Executive Essentials: Adopt Decision-Centric Planning to Evolve Beyond S&OP](#)

Tool: Document Thresholds for Supply Chain Planning Decision Governance

Define the Future of Supply Chain Planning With Emerging Capabilities

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