

A man in a high-visibility yellow vest and white jacket is looking at a tablet. The background is a blurred industrial port with many shipping containers. The overall lighting is dark with a blue tint.

# Navigating Supply Chain Turmoil with Cutting-Edge Planning

Brought to you by  
**SUPPLYCHAINBRAIN**  
One Forum | One Focus | Many Minds

Sponsored by  
**anaplan**

# Navigating Supply Chain Turmoil with Cutting-Edge Planning

Sponsored by Anaplan

Supply chains are experiencing change and coping with turmoil as rarely seen before. Some of these changes have been driven by COVID-19, and others by geopolitical events, notably the war in Ukraine and China's response to the pandemic, both of which have brought about supply shortages. As planners adjusted forecast volumes and response times to deal with supply deficiencies, inventory was driven into markets in a developing downturn. For some industries, supply shortages have now evolved into excess inventory. This phenomenon is often referred to as the supply chain 'bullwhip effect' or the Forrester effect, a long-understood but costly behavior that is the direct result of siloed supply chain planning activities.

Changing customer behaviors have led companies to rethink their supply chain approaches. A recent Gartner survey showed that 64% of organizations believe unexpected customer demand variations will increase over the next five years. The implications for planning processes of all these developments include the requirement for organizations to access and process increased volumes of data in making decisions. They also include the necessity of coordinating plans across multiple stakeholder functions, including supply chain, finance, workforce planning, and sales and marketing. As supply chain issues become more complex, connecting planning activities increase agility for faster decisions and far-greater resilience than traditional approaches.

## Spreadsheets and Their Limitations

Despite advances in supply chain thinking and technology, many companies still rely on old-school methods and systems — notably spreadsheets — to perform their planning functions. "Spreadsheets often get developed quickly in a corner of the organization by an individual who's the only one who knows where the data comes from

and how it works," says Tony Player, principal solutions consultant at Anaplan, a provider of supply chain planning solutions. "That kind of approach is not sustainable, nor is it scalable. Each functional area ends up with its own objectives, metrics, and periodicity of planning."

Working in isolation on spreadsheets, it's impossible for organizations to mount a coordinated response to changing conditions. "Without access to the same data," explains Deborah Pike, Anaplan's principal supply chain consultant for the Asia-Pacific region, "marketing may be working on yellow widgets, while sales are selling red ones and operations are making blue ones."

## S&OP is Not Enough

Historically, companies have attempted to coordinate supply chain responses through a discipline called sales and operations planning (S&OP). In today's tumultuous world, it's become clear that an enterprise-wide approach is required to respond to changing conditions — and that means connecting planning processes beyond traditional sales and operations activities such as balancing demand and supply.

Examples include increasing attention to align with financial and workforce planning, suppliers' plans, and a wider range of data that can help planners assess risk and even incorporate execution trends more rapidly. Advances in technology allow organizations to bring relevant data together and process it on a single platform, where stakeholders can plan collaboratively to deliver the agility and resilience organizations need to face challenges.

S&OP was first developed in the 1980s. Although the semiconductor revolution and increased processing power have put data at the fingertips of just about everyone, the process is often still tethered to obsolete technologies, including clunky processes for gathering and analyzing data. "It can take weeks to download the information needed for S&OP review meetings," says Pike. "In that time, things are changing, so you're making decisions that are naturally flawed."

The S&OP process, Pike adds, was an effort "to bring all voices to the table together at least one day a month." In today's volatile environment, the process and

technology constraints that hobble S&OP need to be addressed with greater planning frequency, based on higher volumes of complex data from multiple sources.

### A Connected Approach

Coming to a consensus on a plan for a company to execute also requires greater data connectivity, especially with finance. “For each plan, you want to see if it’s profitable,” says Tom McDonough, Anaplan’s senior director of supply chain solutions marketing. “Financial numbers need to be applied down at the capacity and material levels. All the data required to do that needs to come quickly to planners so that plans can be run and rerun, and options evaluated quickly.”

Integrated planning starts from the perspective that businesses require a cross-organizational response to changing conditions. “The whole organization needs to work coherently, with one set of data and one set of tools that allow everyone involved to gain insights from the data,” says Player. “That requires one platform on which they can work collaboratively and be made aware immediately of the consequences of their decisions and actions.”

### Meeting Complex Challenges

Supply chain planning fundamentally addresses the challenge of delivering the right item to the right place at the right time. To do this successfully, a multitude of data must be analyzed, and the volume of data required is only increasing in the current environment, characterized by many factors, including:

- *Distribution complexity:* Omnichannel distribution, which presents companies with the dilemma of allocating products between retail stores and direct-to-consumer deliveries, is one case in point. “You’re giving your

customers more options,” says McDonough, “and that generates more data.”

- *Volatility:* The omnichannel distribution factor also contributes to supply chain uncertainty. Manufacturers and distributors

**“The whole organization needs to work coherently, with one set of data and one set of tools that allow everyone involved to gain insights from the data. That requires one platform on which they can work collaboratively and be made aware immediately of the consequences of their decisions and actions.”**

need the capacity to switch from one channel to another in reaction to demand signals. “Organizations need to comprehend this volatility, consider alternative ways of going to market, and execute on alternative plans in a dynamic way,” says Player. It’s a process that needs to take place “in a matter of days rather than weeks and months.”

- *Data complexity:* Organizations that deploy advanced planning platforms, which provide tools allowing them to view, analyze and collaborate on data in real time, are prepared to face supply chain volatility. Advanced platforms have built-in artificial intelligence, machine learning and statistical forecasting capabilities to enable the analysis of disparate data and increase the productivity of planners. Research from Gartner has shown that automating supply chain planning tasks can reduce their workload by 50% to 90%.

### Versatility in Planning

Advanced planning platforms “are able to slice data in different ways and provide access to the data across a wide group of stakeholders to consider alternatives, make and document decisions, and then follow that through in their execution,” says Player. “Organizations that have integrated planning capabilities can respond with a more organizational, coordinated, efficient and value-driven approach.”

*Scenario modeling:* These advanced platforms are developed around scenario modeling, notes Pike. “The platform uses a single source of truth, no matter where the data is coming from. It can draw from all the enterprise systems within an organization, including multiple ERP systems, planning systems and Excel spreadsheets that may be scattered about.”

The platforms can also draw upon external information to drive decision-making, such as weather conditions, shipping scheduling and reliability, and data from governmental organizations and university researchers. Analyzing weather patterns as part of planning processes, for example, can help predict future demand for certain products and the chances for logistics delays.

*Signal sensing:* In a business-to-business scenario, manufacturers most often seek signals through a customer relationship management (CRM) system to translate those signals into opportunities. A signal might indicate, for example, that a customer plans to begin producing a new product in 18 months. That will prompt the vendor to begin conversations with the customer to learn the product's features, when the product is to come to market, and how the vendor can contribute to its manufacture.

"As the opportunity matures, the data becomes enriched to the point where they can make a sale," explains Player. "At that point, they know exactly what the customer wants and when they want it."

#### **Coordination is Key**

Internally, the same data informs conversations among sales, finance, operations, and supply chain organizations. "They understand that they'll need to allocate capacity at some point," says Player, "and to acquire particular components and human skill sets to deliver the product when it needs to be made. The manufacturer will also need to assign a probability of this thing happening to reserve capacity for this customer while balancing the needs of other customers whose opportunities may mature simultaneously."

The data is likely to be much more granular in the business-to-consumer realm. Companies may consider hundreds of thousands of transactions to understand consumer behavior and to determine how to allocate products among channels. "In this case, you're looking for data on customer behavior, but also signals from marketing organizations about promotional activity," says Player. "They'll want to know how promotions went last time

around and about the behavior of competitors in the market."

Large consumer packaged goods (CPG) manufacturers often monitor tens of millions of lines of real-time data to properly manage supply chains. A maker of mayonnaise, for

**“Having a single platform to sense changes enables organizations to work with current data rather than having to wait for sales information to come in at the end of the month. It all comes down to using data to drive decision-making on an hourly, daily, and weekly basis, rather than monthly.”**

example, might find a prediction that bird flu will infect chicken flocks earlier than expected to be of interest, as that could drive up the price of eggs. Higher egg prices will drive up costs for the manufacturer, which may spur a price increase, but planners need to know how that will impact sales.

The same conditions might also provide an opportunity to change the product's formulation. To make that effort a success, the company would require collaboration among its product development, food science, procurement, and finance departments. "Analyzing the universe of available data can uncover the opportunities to look for economic advantage, even under adverse conditions," says Player.

#### **True Planning Agility**

The agility required to make changes dynamically as the data dictates is the primary value provided by advanced planning platforms. "Having a single platform to sense changes enables organizations to work with current data rather than having to wait for sales information to come in at the end of the month," notes Pike. "It all comes down to using data to drive decision-making on an hourly, daily, and weekly basis, rather than monthly."

The result is essentially a continuous planning process, which enables planners to have their fingers on the pulse of the marketplace for better, faster decisions. Companies in that position provide better service to their customers, which will drive more sales. Understanding future demand enables companies to carry less inventory, leading to better cash flow and increasing the availability of working capital. And the higher levels of productivity and efficiency brought about by precise and accurate planning yield the ultimate benefit: higher profit margins.

*Resource Link:* [www.anaplan.com](http://www.anaplan.com)