Guide to Overcoming Inventory Disruption to Maximize Service Levels and Profit

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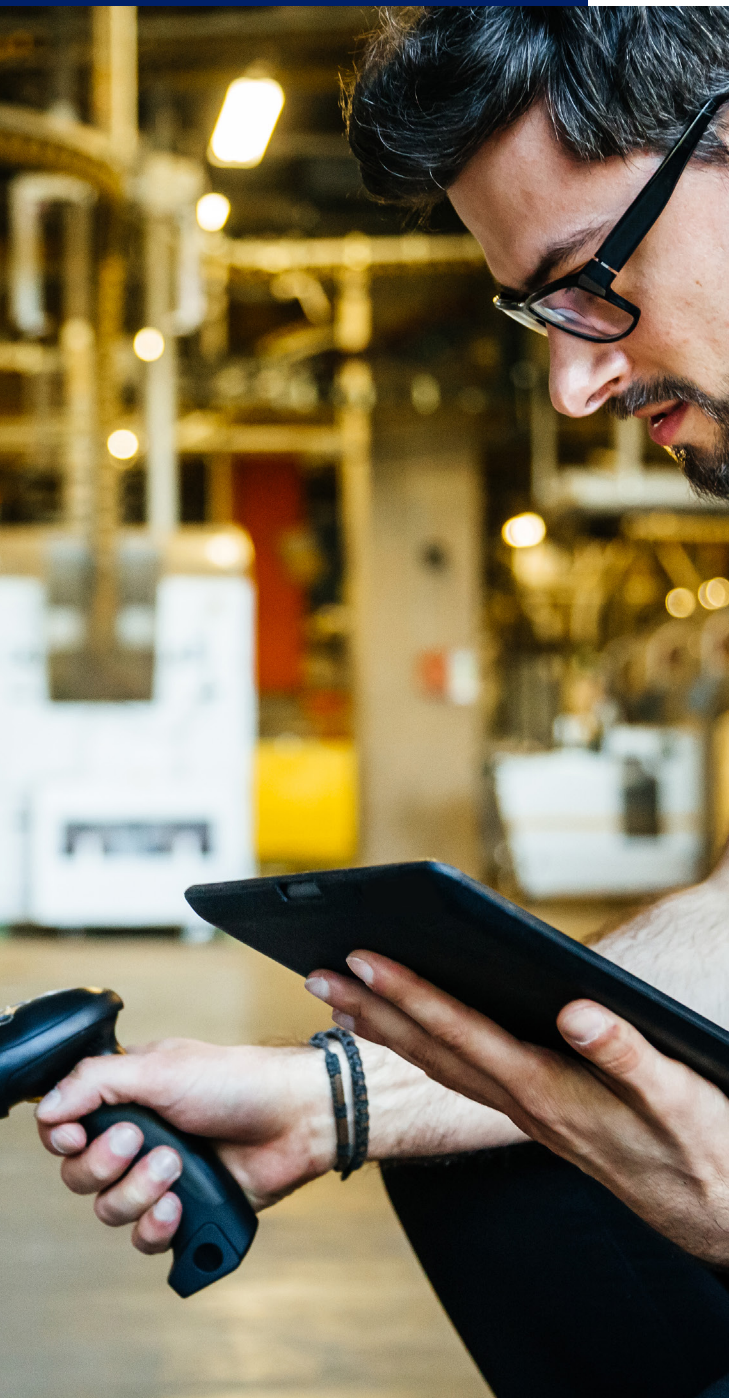
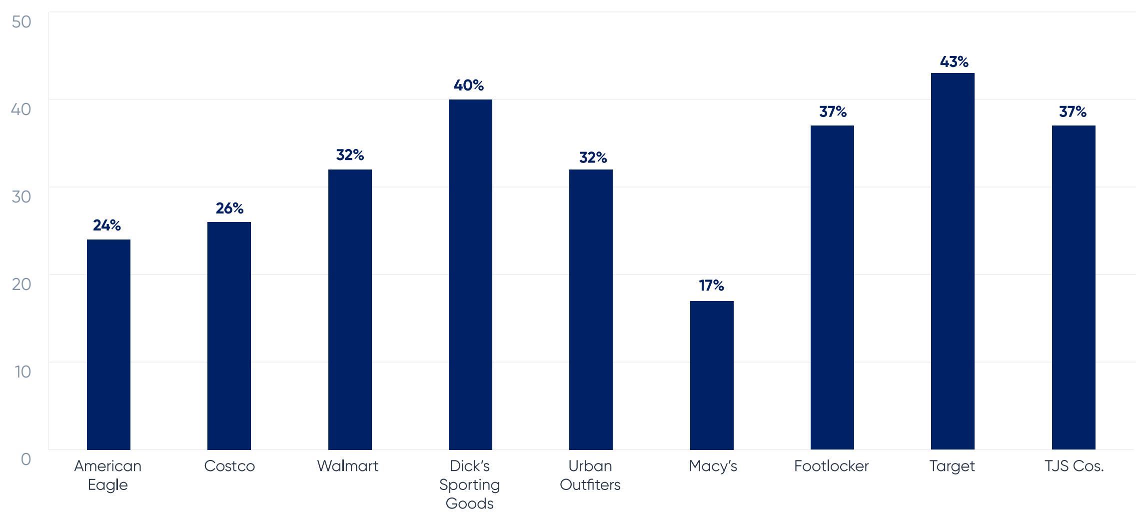


Introduction

Inventory costs are skyrocketing amid persistent supply chain disruptions including longer lead times for orders, delayed shipments, inflation, and material shortages— leaving retailers, manufacturers, and distributors out of step with consumer demand.

Exacerbating 26% increase in inventory costs are rising inflation and strained logistics costs. According to the annual Council of Supply Chain Management Professionals (CSCMP) State of Logistics Report[1], transportation costs rose by 22% in 2022. This upheaval in the supply chain has major implications for companies and their ability to achieve customer service levels and revenue targets.

Cause and Effect: A Peek Behind the Headlines



Increased Inventory Levels at the End of Q1, 2022. Compared to the Previous Year

We see clearly in news headlines the havoc of retail inventory overages, but inventory imbalance is pervasive across manufacturing and distribution industries as well.

For instance, a rebound in air travel is causing flight delays and cancellations across the globe because airlines are increasingly hard-pressed to find engines and other spare parts to keep their planes flying.[1] The push by customers to get back in the air has caught aircraft manufacturers off guard, leaving parts makers unable to increase production quickly enough to provide components both for new aircraft and for planes already in service. Unhealthy inventory is plaguing companies worldwide and causing:

- Poor customer experience
- Lost sales and diminished customer loyalty
- Working capital tied up in wrong inventory
- High expediting costs chasing evasive supply and maneuvering inventory to alternate locations
- Fewer inventory turns
- Markdowns and obsolescence which drag down profit margins
- Threatened top-line revenue

// Shifting Customer Demand and the Impact of Inflation

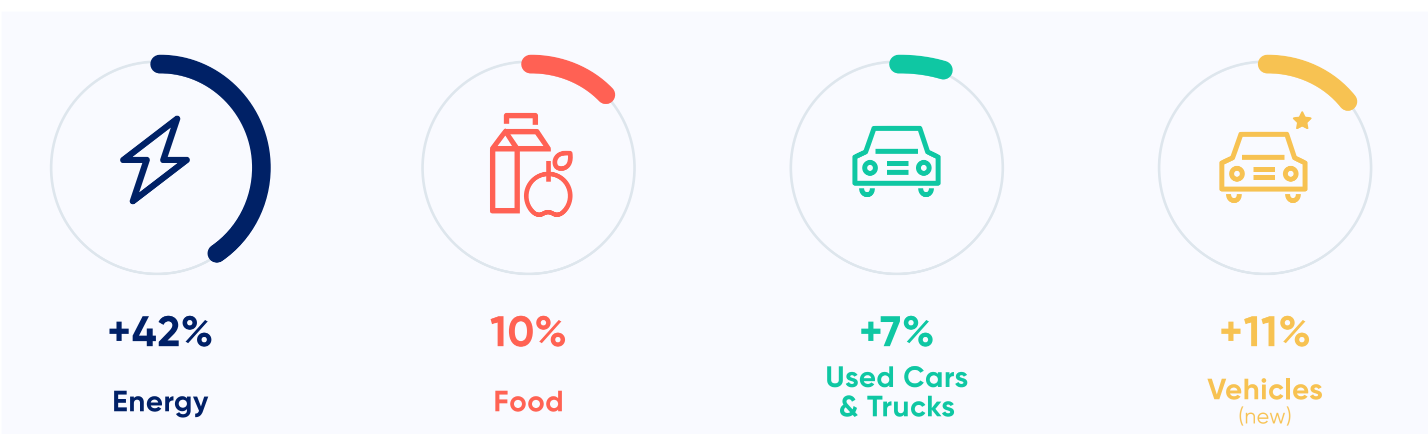
Customer demand is constantly shifting, a fact underscored by the pandemic. Companies went on a buying spree, stocking up on products to meet demand. Now, keeping too much stock has backfired due to inflation and high gas prices. These two unforeseen factors forced consumers to pivot in terms of where they were spending their money. With rising costs, more than eight in 10 US consumers are planning to make changes to mitigate their product spending according to the NPD Group, a data, industry insights and prescriptive analytics firm.

"There's probably 20% of [inventory] if you could just wish away and make it disappear, you would," said John Furner, CEO and President, Walmart U.S.[2]

So, what's driving inflation? Sevin Yeltekin, Dean of the Business School at University of Rochester offers this assessment:

> First, we are witnessing a massive release of pent-up demand as retailers open their doors and airlines resume normal flight routes once again. It might seem counterintuitive that Americans are emerging from a pandemic with enough money in their pockets to demand more goods and services than producers can supply in the short-term, but there are a few unique factors at play. An extended period of lockdown… forced many people to increase their savings.
>
> Second, the CARES Act and American Rescue Plan gave most households more than $3000 in direct cash assistance. These fiscal supports, extended in the context of a low-interest-rate environment, have resulted in a distinct frothiness in consumer demand.[3]

Inflation is not equal in all categories, however. For the 12 months ending June 2022, prices increased substantially according to the Consumer Price Index: energy (+42%), food (+10%), used cars and trucks (+7%), and new vehicles (+11%).



// Navigating Lead Times

Businesses are using longer lead times to get ahead of supply chain disruptions, which directly correlates to the rise in inventory costs and excess inventory. Why? Because by the time the products arrive, consumer demand and buying patterns have shifted, leaving businesses with too much of the wrong inventory and too little of the right inventory. This is problematic because it ties up working capital, necessitates expensive moving around of inventory, and threatens service levels, resulting in lost customers and lost revenue.

Inventory Disruption Insights from Industry Experts

Executives say they don't anticipate much relief from the onslaught of supply chain disruptions for the foreseeable future. Too little or too much inventory affects service levels, customer satisfaction, and your bottom-line, and combined with unpredictable global and economic forces, it's easy to see why experts might be cautious.

" We don't expect to see a change in the availability or cost of supply."

— David Bullwinkle, chief financial officer, Kodak.[4]

" [Companies] have a lot of stuff sitting in places that are different than where they want it to be."

— Steve Bobb, chief marketing officer at BNSF Railway Co.[5]

" It's inventory, but it's clearly not the right inventory."

— Bob Biesterfeld, president and chief executive of freight broker C. H. Robinson Worldwide, on loading Halloween costumes at its warehouses at the ports of Los Angeles and Long Beach in December.[5]

> "It's unprecedented. I have never seen the pressure in terms of excess inventory as I am seeing right now."
>
> — Chuck Johnston, former Walmart executive, chief strategy officer at goTRG.[6]

> "They're all guessing and if anyone tells you they aren't, they're lying, because they don't know...The demand levels are entirely unpredictable."
>
> — John McQuiston, Managing Director and Global Head of Originations, Receivables and Trade Finance, Wells Fargo.[7]

The Latest Supply Chain and Inventory Risks Companies Must Mitigate

Companies must consider the tangible risks to their financial goals, as well as long-term risks surrounding product availability and maintaining customer service levels at or above industry average. These risks have long-term implications for revenue, market share and customer loyalty.

// Predicting Consumer Demand

As we've seen, predicting consumer demand in an unpredictable world is a struggle faced by most businesses and shows no signs of abating. At any time, any type of disruption could shift demand. Lately, it's inflation, high gas prices and inventory challenges among others.

// Forecasting Reliability

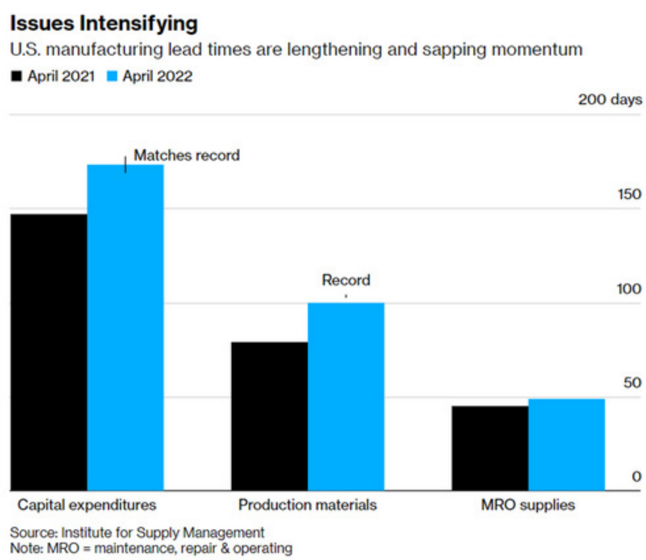
Getting the forecast right is still challenging for many supply chains, and even worse if you're using spreadsheets for planning, as 67% of small to medium-sized businesses do.[8] According to Gartner, 90% of supply chains will still be demand-driven by 2026, making them fragile and unable to account for uncertainty. So, chances are high that your forecast is wrong.[9]

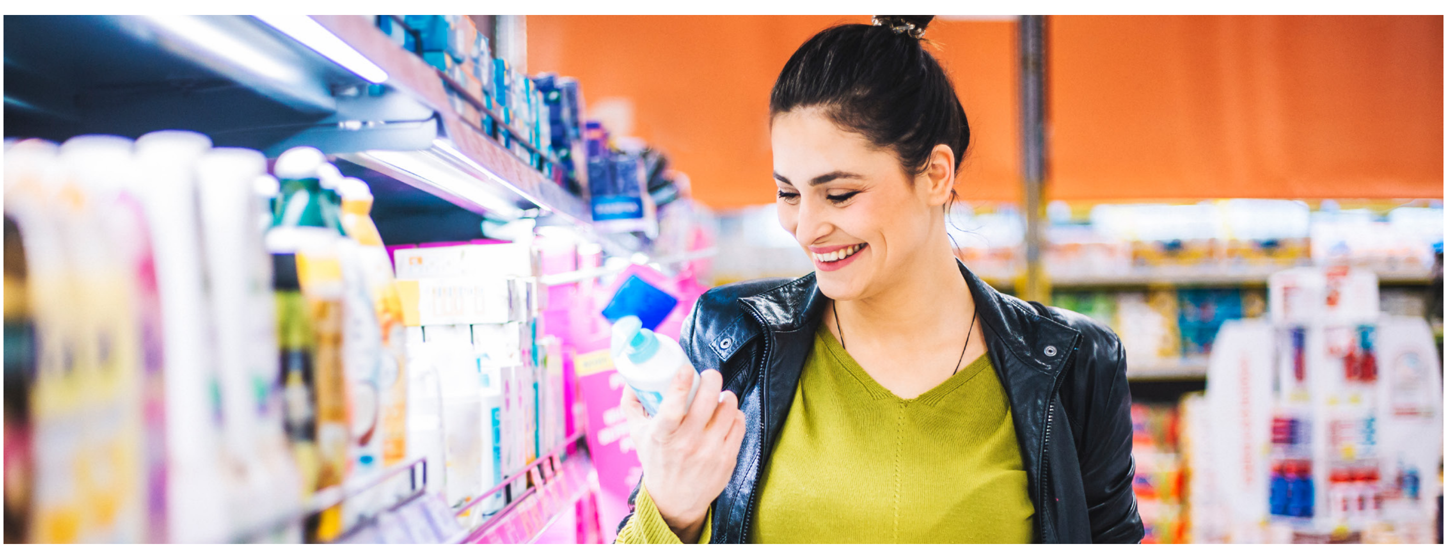
// Unreliable Historical Data

Only one third of firms trust their data enough to use it effectively and derive value from it.[10] A sobering statistic considering the pressure on supply chains to become data-driven. There are tremendous benefits to collecting data including improvement to products and services, attracting new customers, innovation and predicting future demand to name a few. However, companies are still struggling to harness data into meaningful and executable insights. Without a single source of truth, supply chains are stumbling around in the dark, with unreliable data that becomes a hindrance instead of a tool of increased profitability, agility, and resilience.

// Long and Uncertain Lead Times

The reality is that lead times continue to lengthen for manufacturers. Ports in China and elsewhere remain clogged up, demand continues to be high and transportation companies struggle to find drivers. About 11% of shipments from Asia arrived on time in North America in May 2022, down from 18% in May 2021 and 59% for the same month in 2020.[11]





// Stockouts that Risk Customer Loyalty

There are multiple reasons that contribute to a business facing stockouts. Disruptions in the supply chain as we've already covered are the most common cause (materials shortages, shipping delays, increased transportation costs etc.) but businesses should be diligent about making sure reasons such as forecasting errors, inaccurate records, a shortage of working capital or replenishment disruptions, i.e., a manufacturer slows down or stops production of a certain item, don't put them at risk for stockouts.

// Managing Operational Costs

Soaring logistics, transportation inventory, labor and raw materials costs are contributing to increased operating costs across the board. Kodak, for example, was able to keep up with orders despite increased costs for materials and labor in 2021, but when supply chain issues hit the electronics industry hard, companies were asking suppliers for more products. Compounding the problem were price increases for certain materials that Kodak needed, such as aluminum, which is used for printing plates, its biggest revenue generator.

A metric ton of aluminum cost about $1,000 more in late February of 2022 than it did in May 2021, resulting in a roughly $100 million hit to Kodak's balance sheet.[11]

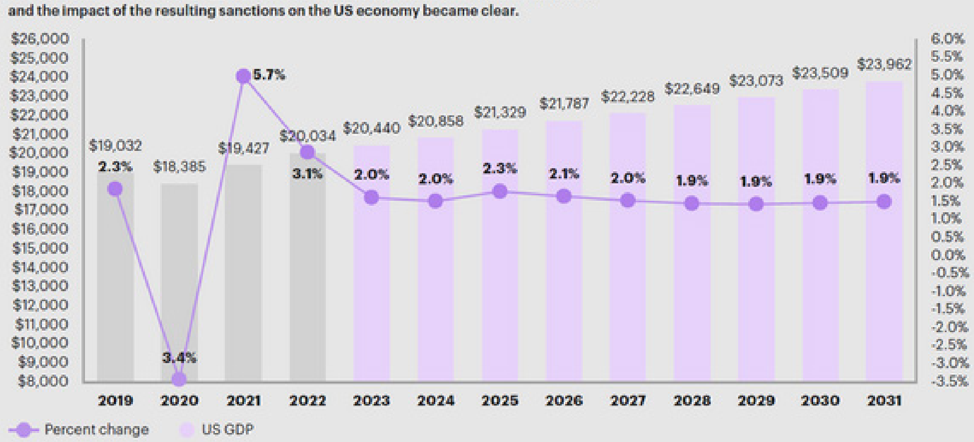
// Global Economic Uncertainties

International financial institutions have expressed increased concern over a slowdown in global economic growth amid the fallout of the conflict in Ukraine and broadening price pressures. Economic ministers at this year's Spring Meetings of the World Bank and the IMF underscored that global economic recovery is at risk amid geopolitical tensions, rising food and energy prices due to the war, and the persistence of the pandemic.[12]

Figure 2
After an optimistic 2021, volatility and uncertainty have hit the US economy in 2022

US economic growth (chained 2012 prices, $ billion)

The economic forecast for 2022 was revised down as the situation in Ukraine unfolded and the impact of the resulting sanctions on the US economy became clear.



Sources: Oxford Economics; Kearney analysis

// The Increased Demand for Sustainability

More and more companies are making supply chain sustainability a priority because it makes sense on many fronts but two of the biggest drivers are regulations and revenue. More governments, regulators and stakeholders are requiring supply chain sustainability transparency. But it also comes down to customers and profit. Consumers are becoming more concerned about where their products come from and how they're produced. Furthermore, they're willing to pay extra for products that can provide supply chain transparency.

The younger generations who rate sustainability high on their agenda will spend their money with companies that align with their values as their purchasing power and influence grow. Gen Z, dubbed the "Sustainable Generation" are willing to spend 10% more on sustainable brands.

// Supplier Reliability

Inventory risks also include unreliable suppliers—suppliers who quote a specific lead time then deliver too early or too late, impacting inventory levels: too little or too much stock. And there are instances where the stock quality or quantity may not be what was contractually agreed to. These failures can result in production delays, inventory stockouts and customer dissatisfaction.

// Changing Regulations and Compliance Laws

Compliance laws and regulations are nothing new for supply chains but keeping up with changing regulations requires diligence and resources to make sure your business doesn't break the rules and end up incurring fines or damage to brand reputation.

The Uyghur Forced Labor Prevention Act— a U.S. federal law that would change policy on China's Xinjiang Uyghur Autonomous Region with the goal of ensuring that American entities are not funding forced labor among ethnic minorities in the region— is expected to exacerbate already strained supply chains. Ten percent of companies globally that do any kind of manufacturing touch the Xinjiang region in some way. That region provides 20% of the world's supply of cotton, and 25% of its tomato paste. The world's largest wind turbine manufacturer is in the region as well.

The law could create a compliance nightmare for companies because it puts the onus on them to show any goods they import from the region don't come from a company, either directly or indirectly, that uses forced labor.[13]

10 Strategies to Minimize Inventory Disruption and Maximize Profit

// Put Your On-hand Inventory to Best Use

Whether in times of supply shortage or overstocks, it's crucial to get the right products to the right stores/channels where customers want to buy–and maximize revenue and profit. This is where an advanced supply chain planning system can really shine, by assigning the optimal inventory mix and placement in the network and allocating inventory where it will sell for the highest margin.

Automatically optimized "fair share allocation" helps you determine the best way to allocate scarce resources until supply can be replenished. Allocate based on the relative volume of customer business, or past performance in different markets.

// Optimize Future Stock Mix

To avoid unhealthy inventory in the future, stock mix optimization is crucial. Inventory mix optimization segments items by 'service class', then assigns each individual SKU a unique service level and inventory policy. Items that customers don't need urgently and that sell infrequently essentially "subsidize" higher in-stock levels for popular, critical items, so you can deliver a good customer experience while maximizing margin.

// Model Uncertainty in Your Forecast

Of course, healthy inventory starts with a reliable forecast. While no one can predict the future with absolute certainty, an AI-powered probabilistic demand forecast actually knows it could be wrong and shows you by how much. It takes uncertainty into account and provides all the potential outcomes as probabilities that may occur. This way, your odds of getting it right are much higher.

// Recalibrate Your Product Portfolio

Today's demand shifts and inventory variability present a unique opportunity to rethink product portfolio and rationalize it to ensure you're focused on the more critical subsets going forward.

- Identify the products that are surging in demand versus dwindling and adjust assortment
- Determine the strategic value of each product in your portfolio
- Assess potential opportunities to collaborate with business partners to bring new products to market

// Proactively Shape Demand to Available Inventory Options

With demand shaping you can shift customer attention to products you have available to sell. Work with commercial teams to ensure they use incentives (discounts, terms, lead time) to shape demand toward products or configurations with overages and that can be delivered within customer expected lead times.

// Rethink Retail Assortment Planning

The right retail planning solution can provide guided strategic open-to-buy target setting to ensure the right localized assortment width and depth, increase sales, and build brand loyalty because customers can count on the right items being available. Localizing assortments also means reducing unnecessary products in stores where customers may not want them.

// Improve Allocation and Replenishment

Intelligent inventory allocation, on-order visibility, and continuous in-season planning help retailers maximize sales and margins despite constrained stock and supplier challenges such as late and canceled orders.

// Adopt Automated Order Fulfillment and Real-Time Inventory Visibility

Capture events across systems to create a real-time record of inventory for centralized availability and eligibility management and to display accurate and real-time inventory to any channel or application–at web-speed–for a consistent customer experience.

// Harness External Data to Anticipate Shifts in Consumer Demand

With constant change in demand factors, it's crucial to incorporate outside-in market data including weather and social trend data. A self-learning, AI-powered system can use this data to drive store and channel clustering algorithms and localized assortments as well as demand sensing for daily fine-tuning of the forecast.

// Prioritize Communication With Suppliers for Inventory Benefits

Gaining full visibility into your inventory also requires constant communication with suppliers to stay updated on issues related to capacity. Visibility into lower tiered suppliers is critical in preparing for the unexpected.

Say another massive disruptive event were to take place, failure to communicate could result in missed deadlines, untimely deliveries, increased transportation costs, shortages, and irate customers who will go elsewhere.

Not all suppliers are created equal, however, so segment your suppliers based on how critical they are to your business:

- Suppliers with high impact on revenue
- Single-source suppliers
- Suppliers in most affected regions
- Suppliers shipping to manufacturing locations in highly affected regions
- Suppliers of essential raw materials or components

Supply Chain Planning Technology in Action

The best advice and insights often come from peers who are wrestling with the same challenges you are. Here's a brief snapshot of how your peers are tackling demand uncertainty and inventory imbalances.

" For demand planning, we introduced statistical forecasting to calculate baseline demand and provided the team with tools for planning the demand uplift during campaigns and promotional activities. We deeply analyzed the replenishment process to improve both automatic replenishment procedures for our shops and collaboration with suppliers. Advanced inventory planning techniques were introduced to optimize the inventory both at the central warehouse and in our shops."

— Alessandro Nobile, Group Purchasing and Supply Chain Director, Amplifon

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" Prior to ToolsGroup, we had a very rudimentary forecasting planning system. We would have to guess at every forecast. Now we can take some of those high-level directional settings and quickly run scenarios to see how buying and inventory levels would be affected. So we're in a much better place than we were several years ago."

— Mark Chandler, Senior Vice President of Global Supply Chain for American Tire Distributor

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" ToolsGroup planning software works really well in consumer goods environments, since ToolsGroup algorithms can manage demand volatility while taking into consideration the individual behaviors of each SKU. It is a very flexible tool that covers all areas of our supply chain."

— Bárbara Fraga, Supply Chain Director at Cerealis

" My only regret now is not upgrading sooner! I'm immensely proud to be passing on a highly efficient, productive spare parts operation that provides exceptional service and is ready for the future."

— Shalom Asayag, Service and Aftermarket Director, Lubinski

" ToolsGroup as software and an asset, has been a great tool. It gives you great visibility of the whole inventory. It's predicting the forecast as has never been done before, and it has fantastic visual tools that the team is using to make decisions."

— Rafael Labbé, supply chain director at Suministros y Alimentos, a distributor to McDonald's Mesoamérica toolsgroup

Capitalize on Your Inventory Opportunities Today

Learn how you can improve inventory imbalances with expert guidance from the planning solution trusted by brands across the globe, including Absolut, Chewy, Cole Haan, Thule, American Tire Distributors, and more.

Take the first step in your journey to improved service levels and increased working capital: **Get in touch now.**

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