

GAME ON: A Planner's Playbook for Rapid Response to Supply Chain Disruptions

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Planning Isn't Going as Planned?

The real world doesn't follow the rules. Unpredictable behavior in response to macro events creates demand volatility in every link of our global supply chain. As the bullwhip effect demonstrates, it only takes relatively small fluctuations in supply or demand to create massive bottlenecks. Huge, unexpected demand changes can bring unprepared companies to their knees.

The better you prepare now, the better you will be able to manage in the future. Your best defense against radical uncertainty is a resilient supply chain that's ready for anything.

"Supply chain planning leaders should engage in scenario planning based on likely outcomes of the demand or supply. Good planning involves building scenarios based on real outcomes possible in your business and identifying trigger points to set an action plan."

Gartner¹

To Be Ready for Anything, You Need to Do Three Things:

1 Predict More Behaviors

...by understanding the uniqueness of demand for each item you sell, across location, time frame and other key factors ranging from promotions to weather

2 Protect Against Surprises

...by using automation to anticipate real-world uncertainty and plan for service levels your customers can count on, no matter what happens

3 Perform More Efficiently

...by optimizing your product inventory, distribution, and replenishment from the point of supply to point of consumption, maximizing your revenue and profit

ToolsGroup is how organizations achieve their target service levels while optimizing inventory—no matter how complex their supply chain is or how much demand changes. This way, they can be ready for anything. Next, let's look at three of the biggest risks to businesses during supply chain disruptions, and how you can recover rapidly and be ready for whatever crazy events are around the corner.



+ Three Kinds of Supply Chain Risk

Businesses around the world are learning to adapt as best they can to COVID-19 and other major supply chain disruptions. Unpredictable consumer behavior in response to macro events creates demand volatility in every link of global supply chains.



Demand Risk

- Unprecedented demand shifts
- New demand patterns
- New demand triggers

Inventory/Service Risk

- Escalating competition in providing customer service
- Increased difficulty determining the best trade-off between inventory and service
- Excess inventory or scarcity

Supply Risk

- Inability of global suppliers to deliver on time
- Widespread supplier closures
- Excess supply with diminished demand

+ Assess Areas of Risk and Plan Your Response

Demand Risks

It's not just disruptive events like pandemics that lead to chaos; it's the way people react to them. Who would have predicted a virus could cause escalated demand for toilet paper or ground beef? Depending on the nature of the disruption and the business, demand could soar or fall off almost completely. Here are crucial questions to ask to assess your risk and begin to apply corrective actions.

Time to Value

Short: 0-2 months. Not lead-time dependent or short lead-time.

Medium: 2-4 months. Lead-time dependent and/or requires several months of demand data to achieve full potential.

Long: 4-8+ months. Lead-time dependent and requires stock remix.

Level of Complexity

Low: Low level of complexity and that can be implemented by any team member.

Medium: Mid-level complexity and requires specialized consultants.

High: High degree of complexity plus process adjustments; may require development.

Are You at Risk?	Pathway to Recovery	Time to Value	Complexity
Are we capturing unprecedented demand shifts that a statistical forecast may overlook?	Manual overrides to statistical forecast and propagation to inventory plan.	Short/Medium	Low
Are we reaching out to all forecast stakeholders to collect last-minute market intel?	Collaborate in real time with all stakeholders to assess market.	Short/Medium	Low
Do we have a plan in place to ensure the demand signal is accurately reflecting the latest changes?	Model the growth/slump using more reactive short-term forecasting and demand sensing to look into current month behaviors/trends. Use commercial overrides to model the return to normal levels or limit the effect in time.	Short/Medium	Low
Are we modeling new demand patterns due to quarantine or spikes in demand due to stockpiling?	Model growth and return to normal in aggregate using external variables.	Short/Medium	Medium
Have we identified appropriate demand triggers to track to determine when to decrease/increase demand volumes?	Assess correlation with external causals if adequate data is available. The analysis can be done at any aggregation level.	Short/Medium	Medium

Inventory/Service Risks

Whether you're unable to meet escalating demand with your existing inventory, or concerned about spoilage, it's important to assess changing demand and re-evaluate service levels and stocking decisions.



Are You at Risk?	Pathway to Recovery	Time to Value	Complexity
Are we able to assess and adjust safety stock levels during this disruption to avoid unnecessary builds or hoarding? How has our ability to deliver customer service been impacted?	Easily run what-if scenarios to assess the impact of changes in supply parameters (e.g. extended lead times, changes in supplier constraints and ordering frequencies) on stock targets. Import values can be temporarily overwritten to adjust safety stock.	Short/Medium	Low
Are there alternative locations and/or already qualified suppliers we could use in the short to medium term (i.e. next 3-4 months) to diversify our supply base?	Diversify the portfolio by planning to replenish from a multitude of suppliers over a specific time period.	Short	High
Have we revised our service level strategy and stock mix to account for shifts in demand and increased variability?	Move from a fixed stocking strategy (e.g. fixed service level strategy) to an optimal one by using optimization algorithms.	Short/Medium	Low
Have we put controls in place to protect our budget (i.e. prevent our own panic buying)?	Incorporate budget constraints while optimizing inventory.	Medium/Long	Medium

Supply Risks

During uncertain times it's critical to enable collaboration and visibility into the plan with suppliers to assess impacts to lead times and determine whether to consider alternate suppliers or substitute more readily available products.

Are You at Risk?	Pathway to Recovery	Time to Value	Complexity
What level of visibility do we have to our tier-1, tier-2 and tier-3 suppliers?	Collaborate with suppliers to receive information on product availability/constraints.	Short/Medium	High
Are we actively communicating our projected needs and receiving information on supplier availability?	Revise pipeline inventory and current plan and avoid generation of useless proposals (those which cannot be executed).		
Are there alternative locations and/or already qualified suppliers we could use in the short to medium term (i.e. next 3-4 months) to diversify our supply base?	Diversify the portfolio by planning to replenish from a multitude of suppliers over a specific time period.	Medium/Long	Low
Is our current inventory optimally placed? Is there a convenient way to rebalance inventory across our network to account for the latest shifts in demand and supply?	Detect and correct possible stock imbalances by re-distributing excess stock in the network to one or more candidate locations.	Short	Low
Are we distributing the scarce stock remaining in a way that protects service levels?	Utilize automatically optimized 'fair share allocation' to 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.	Short	Low
Are we ready to manage increased supplier quality defects due to sped-up production?	Be sure to build in extra time to check for defects.	Short	Low
Are we able to determine how long we can exist with our current inventory and raw materials? Are we able to incorporate the effect of force majeure notification in our stock projection?	Advanced replenishment engine in combination with the current plan provides visibility on future stock projection. This can be combined with a supplier calendar for full visibility.	Short	Low





Real-World Stories of COVID-19 Supply Chain Responses

Ulabox // Meeting Escalating Demand for Home Food Delivery
For some companies, COVID-19 brought surges in demand. Ulabox,
the first purely online supermarket in Spain, reacted efficiently
to the demand spike they experienced because of COVID-19.
In order to face this exceptional demand, the company used
ToolsGroup's commercial override capability on a daily basis and
reinforced the target service level in all its A-class products. Thanks
to the ToolsGroup planning solution, the company managed this
exceptional situation while achieving high service levels even in
extremely unfavorable conditions.

Franke // Collaborating to Better Understand Demand

Franke, a kitchen equipment manufacturer based in Switzerland, has adopted ToolsGroup in over 50 global regions and has been using different capabilities of ToolsGroup supply chain planning software to minimize supply chain disruption. Examples include commercial overrides, exceptional demand filtering, adding dummy demand and factoring in the partial closure of sales calendars. These functions have enabled Franke to generate a more accurate forecast amid extreme demand changes.

These adjusted forecast values are shared via the ToolsGroup collaboration hub, where regional markets have two days to finetune the adjusted forecasts for their regions before the commercial overrides are imported back to the planning system.

McDonald's Mesoamérica // Inventory Visibility Enables Quick Decisions

The impact of COVID-19 on restaurants was significant. For McDonald's Mesoamérica the primary challenges were reduction in volume and forecast uncertainty. With ToolsGroup the company can see all inventory by warehouse, location and item, in near real time. They can also consolidate by region for categories: beef products or dairy products or bakery in the south or in the north, in a country or in a warehouse.

The team focused on short-term forecasting. Instead of relying on four years of information, they used two days of information to model the realities of COVID-19. These tools have made the company very efficient in making these kinds of decisions.

"ToolsGroup as software and an asset, it 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 some decisions."

-**Rafael Labbé,** Supply Chain Director at Suministros y Alimentos, a distributor to McDonald's Mesoamérica





Quick Tips for Planning During and After a Major Disruption

When the only certainty is uncertainty, supply chain planners are more strategically important than ever. While conditions and actions will vary widely based on the nature of the disruption, industry, geography and government regulations, planners can take immediate action during a crisis to support rapid recovery. Here's a simple breakdown of steps to take:

First, start with the forecast. You'll need to apply corrective actions for the forecast for next year. We're in new territory here—there's no correlative data—so look closely at what's happening in sales week to week and react quickly to apply corrective actions.

Then, focus on service. After the forecast has been adjusted, you'll need to adjust the service levels accordingly. These service decisions are influenced by competitors as well. Evaluate them.

Increase supplier collaboration. During a crisis your suppliers may be struggling. Reach out to understand their action plan. Provide visibility to your supply plan and collaborate to adjust the plan where needed, and take corrective action. For example, extended customs delays may mean some suppliers will require extra lead time to deliver. You may also consider alternative suppliers.





Remember, the impact of a major supply chain disruption often echoes on long after initial recovery. Expect a phased return to normal; or in the case of a pandemic, a whole new 'normal' where consumer demand, displaced and refocused during isolation, will settle differently after the crisis subsides.

- During the phased recovery, you'll likely need to continue to revise the forecast weekly as you gather new demand data.
- Be sure to involve all stakeholders and collect their input for the most accurate statistical forecast.
- Utilize what-if scenarios to easily assess the impact of changes in supply parameters.
- Look for new ways to do things—be creative! For some companies, this is a time to accelerate changes and adjustments to your business and supply chain models to ensure you're meeting post-disruption demand requirements.
- Consult with your technology provider and other companies to understand what's working for others.

"This is a time where demand planners have a tremendous opportunity to demonstrate the value of the human component in planning."

- Gartner²



Act Now to Be Ready for the Next Disruption

During a major crisis, planning for the usual is impossible. To weather the storm and be among the survivors, planners must take the lead and be agile, responsive and resourceful. At ToolsGroup, we're all about being ready for anything—even the unpredictable. Working together, we can achieve target service levels while optimizing inventory, even with complex supply chains and changing demand.

Predict

- Capture unprecedented demand shifts
- Rapidly respond to shifting demand with short-term forecasting
- Monitor influence of external and daily causals on demand

Protect

- Assess and adjust safety stock levels
- Collaborate and assess supplier impact with what-if scenarios
- Optimize inventory and service levels under budget constraints

Perform

- Reposition and substitute stock to combat both scarcity and spoilage
- Instantly detect and correct stock imbalances
- Distribute inventory to protect service levels

Visit our **COVID-19 Action Center** to access videos, articles and other supply chain planning resources.

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Resources

- (1) New Dawn for Demand Planning—Marko Pukkila, Gartner. SCM World—Mar 2020 https://www.scmworld.com/new-dawn-demand-planning/
- (2) Gartner: Winning in the Turns: A Supply Chain Planning Action Guide—Focus on Strategy and Action Plans Published 17 October 2019