Five Essential Practices to Protect Your Supply Chain from the Next Crisis

The content of this brief is adapted from the webinar "Won't Get Fooled Again: 5 Tips for a Resilient Supply Chain" presented by George Fowler of Spinnaker Management Group and David Barton of ToolsGroup.

Shelter in place, practice social distancing, wear a mask, wash your hands, take vitamin D, monitor your temperature, and of course get plenty of exercise. These are the approaches that experts have shared to help flatten the curve and to keep you and your families safe from the COVID-19 pandemic. But what do you do when it's not your personal health that you are trying to preserve, but the health and viability of your business?

Plenty of businesses have suffered losses throughout this global pandemic simply because they don't sell products that people need right now. However, there are far too many other companies out there whose inability to adapt and respond is due to their own poor decisions.

Many companies focus exclusively on short-term profits rather than investing some of that revenue into the processes and systems that can mitigate the impacts of an economic downturn. Unfortunately, in unexpected times like these, the price of those decisions becomes clear.

Savvy businesses compete by maximizing efficiency and profitability in the best of times to help them weather the storm in the worst.

The Importance of Preparation

Spinnaker and ToolsGroup spent the better part of last year surveying industry leaders to determine preparedness for the Digital Transformation era. As part of this effort we have discovered that many of the companies that made the largest advances in their digital transformation strategy were also better prepared for the global downturn. While this is not a guarantee of success, there are steps you can take now to increase your odds of survival both now and in the face of future challenges.

Here are five tips that will help your company increase its odds of survival.

Whether it's a global recession, the impact of regulation, taxes, tariffs, and recalls; or just simple supply chain disruptions from catastrophic weather events, it's time for corporations to stop operating as if they are invincible and to begin taking steps to prepare for these inevitabilities today.

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Have Effective Supply Chain Planning Tools

Planning tools are the personal protective equipment (PPE) and ventilators of the supply chain industry. Just as CPAP machines and breast pumps can be converted into life-saving breathing apparatuses, so too are today's companies relying on makeshift combinations of uncalibrated spreadsheets and back of the envelope calculations to sustain their businesses.

Once again, it has become incredibly apparent that leveraging makeshift approaches to building out systems for either purpose is not sustainable, and companies have been reluctant to make the capital investment necessary to retain these vital systems. Still others have fallen into the trap of purchasing systems that are inconsistent with their true needs.

These are the times when those decisions really matter. Some companies have invested years of expense to implement and maintain these vital systems, only to abandon them for less rigorous methods now when they are most needed. In most cases, this is done because the companies lack a detailed understanding of how to make the modest adjustments necessary to have their systems work in times like these.

A comprehensive and robust corporate planning solution must have the following capabilities to be ready for the next major disruption:

Critical Capabilities

- The ability to perform and maintain a relevant product segmentation in accordance with each product's life cycle
- A robust, responsive, and interactive forecasting capability (preferably with some degree of consensus planning, and the ability to correlate both short-term and long-term macro causal factors)
- Robust supply planning that can help evaluate the cost and risk of tradeoffs while providing visibility to inventory and providing sufficient time-phased analysis to manage it
- Machine learning capabilities supporting forecasting and planning efforts
- Interactive exception management capabilities that provide the ability to perform impact and trend analysis
- Support for S&OP strategy and decision making
- Robust network sourcing management capabilities that allow for rapid adjustments and the tracking and analysis of previous outcomes
- The ability to maintain and measure accurate master data and parameters over time

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Build a Resilient Supply Chain Network

Planning a resilient network is the social distancing of the supply chain space. Optimizing the appropriate distance between those resources most vital to your success is a critical and necessary skill. In recent years there has been a movement to develop extremely lean, specialized networks that are aimed at producing reliable delivery times at the lowest possible cost. Unfortunately, in times of catastrophe, supply disruptions can shut down operations entirely.

Consider the case of PPE manufacturers hampered by suppliers that operate in areas where there are COVID hot spots, or food manufacturers that can no longer get livestock to their production facilities before they exceed the capacity of machinery, or the ocean freight company that has to reduce the number of ships in the water because they can neither fill them to capacity, nor operate them with the same crew for safety.

For far too long companies have operated with few alternative sources of supply, leaving them one natural disaster away from entire closure. Companies not only need to reexamine their networks and transportation modalities, but also do so in a way that provides an alternate source of supply that will mitigate risk. While this may have a slightly higher impact on COGS and profitability, it is the insurance necessary to carry out business as usual when supply interruptions occur.

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Monitor Business KPIs with Advanced Analytics

Monitoring the KPIs that govern the health of your business is just as important as monitoring your own health metrics so that you can make critical decisions in stressful or disruptive times. Digital twin and operational control towers are more than just buzzwords. These solutions collect the vital data that's required to run your business. One data point may not mean a lot, but the insights that can be derived from the trend of data within your operations can prove vital.

For instance, if the CEO were to come to you in the midst of the pandemic and ask strategically critical questions such as the ones below, would you have the data necessary to inform these decisions?

- What are our inventory projections given interruptions in demand, supply, and increased spoilage?
- What is the impact of normal seasonality on typical order and consumption patterns?
- Where are our products and what is the cumulative impact of delays?

Or are you—like most companies—in a position where you would need an army of SMEs and interns to pull together an array of information to come up with an answer based on data that's outdated by the time the model is completed? If it takes more than a few hours to collect and review your company's data to make a critical decision, your company is already in trouble. Having a forum to gather rapid insights and allow for agile changes in direction is critical.

If your primary vendor has a factory outage due to a localized COVID outbreak or a weather disaster, it is imperative that you be able to use digital transformation-related technologies to expedite the strategic realignment of your network. Often, companies will simply revert to the next closest provider when in actuality that provider could also be about to face the same interruption, or not as reliable as another vendor in meeting a specific need.

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Prioritize Knowledge Retention and Change Management

All too often companies invest in great systems and processes, but fail to make the investment in training their personnel to manage these systems. Even a state-of-the-art planning system will not yield the expected results if training was inadequate, or a crucial SME has departed. This often leads companies to revert to old systems and processes (and even Excel) when a crisis occurs rather than the APS systems that were implemented to handle these types of issues.

The days of relying on a single worker to perform heroics to keep the system together are over. COVID-19 has proven that no one is immune to disruption. Therefore, you must be able to rely on your entire staff to truly understand the total solution.

Companies that emphasize the training and development of their people—especially policy training—fare better in times of conflict. During a crisis, planners are typically faced with issues related to significantly changed or shifting demand in areas of constrained supply or capacity. During this pandemic, many companies have been inundated with various scenarios of shifting demand. Companies like electronics and sanitization products companies saw significant increases in demand, and even companies that make items like portable blackboards were inundated with back orders as people tried to occupy their kids while they sheltered at home. Other companies saw shifts in demand from one type of product to others, such as toilet paper companies that saw a shift from commercial products to home products. A similar phenomenon occurred in the food industry.

Without people with the experience and training to rapidly notice and address these shifts, companies may incur huge losses before they recognize the shift and react accordingly. Developing internal policies and checks to help planning staff recognize these issues before reacting is necessary to ensure that huge capital shifts in both supply and capacity are warranted. If there is a such thing as an antibiotic in a time of turmoil, it's training your staff for events of this nature before they occur.

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Implement Effective Scenario Planning

Whether it's done as part of a comprehensive S&OP process or within the confines of a digital twin and operational control tower, scenario planning is the physical exercise that helps to maintain the health of mature supply chains.

Like exercise for the human body, scenario planning exercises your company's capacity to face both expected and unexpected stresses that impact business as usual.

Companies today are using a vast array of planning tools to model catastrophic business scenarios to build organizational muscle memory in the event that a disaster should occur. Running models that feature both short- and long-term impacts to demand, supply and capacity are a healthy way for the business to prepare for a wide range of plausible outcomes. Most useful scenarios model supply and/or capacity constraints.

Other models to consider:

Network interruptions

Commodities cost changes

Gradual and rapid economic changes

Natural disasters

Companies can ill afford to be caught unprepared again. Instead, they must build, practice, and repeat these scenarios until real disaster strikes.

The best systems in use can overlay information such as COVID-19 hotspot data, weather data and even macro-economic data to help plan the appropriate real-time response.

Be Ready for Anything

In the 2019 study conducted by Spinnaker and ToolsGroup, companies that invested the most in their digital transformation strategies were best prepared to adapt to the crisis and maintain operations during this economic downturn.

ToolsGroup: Enabling Swift Response to Supply Chain Disruption

As an industry leader in the supply chain software industry, ToolsGroup has many of the tools necessary to power resilient supply chains.

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