Supply chain disruption: 10 tips for improving resilience

Modern businesses are in a time of increased risk and competition – as well as unprecedented opportunity and innovation. Mitigating supply chain disruption to improve and support supply chain resilience and agility is more important than ever.

The impact of supply chain disruptions today

Rapidly changing consumer demands as well as political and trade volatility had already been impacting the supply chain landscape for several years – and then the pandemic hit. Many companies got a sharp reminder about risk and vulnerability. And, as a Forbes magazine article puts it, "2020 shook business leaders awake to the importance of their supply chain, specifically their lack of visibility into systems and processes." Today, the best businesses are managing risk and disruption by transforming their operations from traditional, linear supply chain models to more resilient, on-demand networks of supply chain services and resources. Modern companies are achieving supply chain resilience and a competitive edge by leveraging

the best cloud-based supply chain technologies and top-down efforts to eliminate legacy silos and areas of opacity across their operations.

Inflation and supply chain disruptions

With inflation surging at its fastest rate in decades, supply chain management is at the eye of the storm. Pandemic-related bottlenecks in ports, warehouses, factories, and logistics networks have left many companies with low inventory levels at a time when consumer demand is skyrocketing. At the same time, fuel and labor costs are at an all-time high, forcing businesses across the supply chain to increase prices – further fueling inflation. In this volatile economic environment, supply chains need to be responsive, visible, streamlined, and efficient. The best businesses are turning to technologies to combat inflation. According to Gartner's latest research, the majority of global supply chain leaders are citing an investment in technology as one of the most meaningful competitive advantages they can have.

10 tips to managing supply chain disruptions and improve resilience

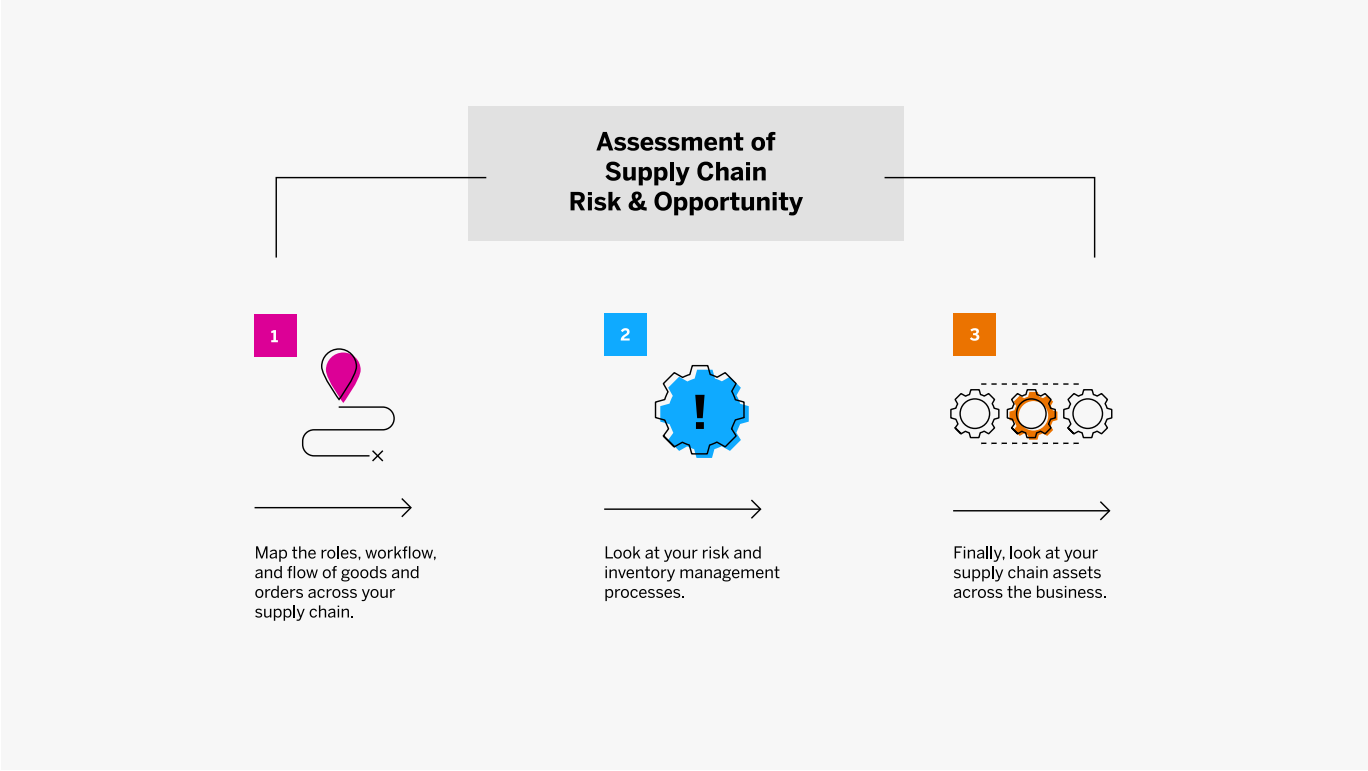
The elephant in the room of any major business transformation is the fact that up to 70% of corporate change efforts do not succeed. But the more important data point is not that they fail but *why* they fail. In reality, it is almost never to do with the technology or the plan itself. In fact, the major contributing factors to corporate change failure are poor leadership and a lack of awareness and buy-in from the bottom up. Conversely, if we look at all the businesses that have rolled out successful transformation initiatives, we can also see some commonalities. Transformation success stories start with clear communication across the business as well as a sound and robust change management strategy – and making sure the necessary people, skills, and technologies are in the right places at the right times.

Supply chain optimization: The preparation stage

Change management guru John Kotter reminds us: “Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles.” The best business initiatives start out with strong leadership – and by taking a realistic approach to planning and goal-setting.

Tip 1: Assess your current supply chain risks and opportunities.

Take an unflinching audit of your current processes, workflows, and assets – as well as where your business is today. As the software pioneer Watts Humphrey once said, “If you don’t know where you are, a map won’t help you.”



Map the roles, workflows, and flow of orders and goods across your supply chain from end to end, starting with raw materials producers and suppliers through to manufacturers, shippers, distributors, sales and marketing, and finally the customers themselves.

Look at your risk and inventory management processes. Do you have a plan in place to respond quickly to disruptive events? What are your risk management protocols and

contingencies? How do you gather and use data to inform inventory planning and set optimized buffer amounts?

Finally, look at your supply chain assets across the business: fleets, manufacturing machines, automated equipment. How do you tell if those assets are operating most efficiently and safely?

This process often requires patience and diplomacy as it will typically unearth a lot of silos, blind spots, inefficiencies, and potential risks. Team leaders should be supported and encouraged during this time. If they fear they will be chastised for weaknesses found in this audit, then they will be less motivated to throw back the curtain. And in addition to highlighting risk, this process also helps alert you to potential opportunities, low hanging fruit, and the best areas for rapid and meaningful improvement – to build early momentum and morale.

Tip 2: Set your supply chain transformation goals.

Now that you know where you are, it's time to decide where you're going. Of course, it's important to set ambitious long-term goals but it's also crucial to give your teams some quick wins with achievable, early KPIs to build optimism and show how the process can work. Long-term business goals can include improved profit/loss statistics, greater customer loyalty, or measurably improved brand equity. Quicker wins can be things like monthly improvements in fulfilment times, reductions in downtime, or a visible rise in customer reviews.

Tip 3: Build your supply chain optimization team.

At this stage, it's important to identify needs and gaps in the skills and leadership you'll need for your supply chain transformation. As part of a robust change management strategy, you'll want to bring your HR team members on board early. They can help you pinpoint existing employees who can most efficiently be upskilled or reskilled. They will also be best positioned to assist you with building profiles and job descriptions for any new talent you may need to support new operations or technologies. You should also make your software provider is part of your team in the planning stages. They can assess your unique needs, opportunities, and challenges to help you build your supply chain transformation road map.

Supply chain optimization: The procedural stage

The Amazon Effect refers to the ever-increasing consumer demand for same-day and next-day delivery speeds. A 2021 survey from Digital Commerce 360 reports a 12% rise – from 2020 to 2021 – in requests for next-day delivery from both online and omnichannel retailers. In fact, the trend in delivery speed demands is such that many consumers are beginning to judge fulfilment times in hours rather than days. Furthermore, digital supply chain technologies, shorter product life cycles, and more customizable goods and services are only adding to the competitive demand for speed and agility.

Supply chain optimization procedures will need to be about more than simply cost reduction. The truly resilient supply chain procedures of the future will need to be agile, elastic, and predictive – from design and manufacturing to enhanced customer experiences. Competition has never been fiercer so legacy systems and processes that can take months to adapt to new business or production models cannot support today's demands.

Tip 4: Reduce dependency and supplier risk.

Roughly 80% of supply chain disruptions originate with lower-tier suppliers, particularly when geographical distance adds to a lack of visibility. Supply chain managers are fully aware of these risks and have long *wanted* to mitigate them, but the old-school systems and operational processes they have in place have made it unrealistic to do so. Of course, businesses need to be able to count on their suppliers to deliver consistent pricing and reliable volumes, but that's only part of the risk management picture. Supply chain managers need to have complete confidence as to the provenance of the goods in their supply chain – from raw materials sourcing and handling to the ethics and workplace practices of their suppliers.

Food Safety Magazine tells us that the average cost of a food recall for a national brand is about US$10 million. And that's just for the logistics and manpower of the recall itself, to say nothing of the lasting brand damage. Cloud-based supply chain and integrated business processing tools are capable of connecting a network of suppliers in real time. This means that not only are connected supply chains more transparent, but they also allow businesses to build a more diverse network of suppliers – so if one fails, they have others to fall back on quickly.

Tip 5: Optimize your inventory management.

A fundamental challenge for every supply chain manager is balancing shortage and surplus. In the past, this has been a largely backward-looking task where analysts try to assess past market and customer activities to predict an optimal inventory balance. And in times of disruption and volatility, this retrospective approach is particularly risky, as Gartner's research

vice president Alex Linden points out in a 2021 WSJ article: "The problem in highly volatile times is that sales data of last week is not a good predictor of sales in the following week... This is literally the definition of volatility."

Today, businesses have access to real-time and predictive data analytics to help build more accurate forecasts and supply chain visibility. Many businesses have demand forecasting specialists on their teams whose instincts and experience are invaluable. Demand forecasting and inventory optimization technologies that employ artificial intelligence (AI), machine learning, and advanced analytics are able to augment the talents and skills of those specialized professionals. Add a strong planning and communication strategy and businesses have the potential to be further ahead on inventory management than at any time in supply chain history.

Tip 6: "Design everywhere, produce everywhere."

Reliance upon one or two (often offshore) sources for design and production contributes to supply chain vulnerability. A key step in the transformation to a more resilient supply chain is to leverage smart technologies like AI, machine learning, and advanced analytics to help you coordinate a domestic and global network of design and production partners – rather than depending upon the traditional linear model of relying upon one or two fixed partners. On-demand elasticity in design and production functions not only reduces risk and vulnerability in supply chains, it also allows businesses to cast a wider net across a growing network of talented designers and producers. And those benefits are passed along to satisfied customers in the form of more competitive and customizable products and fresh, inventive designs.

Tip 7: Nearshoring manages supply chain disruptions.

Many long-established supply chains rely upon supply and manufacturing partners in countries like India and China – and have strong and long-standing relationships with them. But political, economic, and environmental factors are making those relationships harder to sustain.

Historically, the economic disparity between countries like the U.S. and China has meant that it simply wasn't feasible to compete using domestic sourcing and manufacturing. The challenge has been to find ways to narrow the cost margins just enough to make nearshoring realistic. With the use of smart supply chain technologies, businesses can more efficiently and precisely estimate their manufacturing needs, use Internet of Things (IoT) solutions to optimize machines and assets, and significantly reduce waste. Other innovations like on-demand 3D printing can help reduce costs with "virtual inventories." And access to flexible

product design and manufacturing networks can further increase the feasibility of nearshoring many significant lower-tier supply chain functions.

Tip 8: Make elastic logistics work for you.

Transportation management and logistics have been the backbone of every supply chain for thousands of years – as well as one of its greatest expenses and vulnerabilities. Alexander the Great is reported to have said, "My logisticians are a humorless lot. They know they are the first ones I will slay if my campaign fails." Traditional logistics operations are costly and limited as they are typically comprised of a company-owned fleet and/or fixed contracts with one or more third-party logistics providers. Elastic logistics refers to an on-demand logistics network that can stretch and shrink as required. You can look at it like a ride-share company where there are lots of shipping and last-mile logistics resources available in real time, when you need them – but not sitting there idle and costing you money when you don't.

Tip 9: Supply chain planning is fundamental.

Every supply chain is comprised of crucial yet all-too-often siloed functions such as sales and operations planning (S&OP), forecasting and demand, response and supply, demand-driven replenishment, and inventory planning. Cloud connectivity, smart technologies, and solid supply chain planning strategies can integrate these functions to help analyze and leverage data and insights from across the business. The goal-setting and self-auditing processes in the "early preparation stage" above can help build a culture of better communication and responsiveness across your entire supply chain. And software solutions that integrate these business planning functions are at the heart of today's supply chain agility and resilience. Technologies like AI, machine learning, advanced analytics, and IoT all come together to deliver supply chain planning capabilities that are powerful and fast.

Tip 10: Supply chain optimization starts with a single step.

Although it can seem like a daunting task to optimize often decades-old supply chain operations, it doesn't have to happen all at once. Every step you take toward a more strategic and visible supply chain makes you that much more resilient. A good start can simply be to map all the people and functions in your supply chain from end-to-end. Get those team leaders talking to each other. Learn firsthand where the most fixable problems are and where the lowest-hanging fruit is for quick and easy wins to jump-start your supply chain transformation.