

Is your supply chain ready for what's next?

To improve system-wide resilience before the next disruption, supply chain leaders need to foster vigilance to handle whatever surprises will come next.

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Recent generations of lean supply chains have benefited from falling trade barriers, lower logistics costs and rapid advances in digital technologies. But blithe assumptions about the stability and predictability of the ecosystems of global supply chains were upended by a series of unpleasant surprises, external shocks and above all the global pandemic of 2020.

Supply chain leaders have absorbed some painful and costly lessons from the rising turbulence. Their highly optimized and increasingly lengthy chains proved more brittle than expected—with most lacking resilience in the face of COVID-19. Their reliance on a few, specialized suppliers with scale advantages, limited their degrees of freedom when they were hit by large unexpected shocks. In pursuit of low-cost production systems, supply was heavily concentrated in China, increasing the exposure to risk. These problems have been further exacerbated by the political and social push-back on globalization—even before the pandemic.

These and other sources of uncertainty

have combined in unpredictable ways to increase turbulence. Leaders naturally wonder what else may be coming over the horizon? Inherently, the nature of uncertainty defies precise predictions about the likelihood, timing and impact of future shocks. Answers to the questions of when, where and how will always be shrouded in doubt. Still, it is quite possible to explore various zones of uncertainty that may affect future supply chains, as shown in Figure 1. The arrows linking the zones point to some of the combinations and interactions that could magnify the systemic uncertainty.

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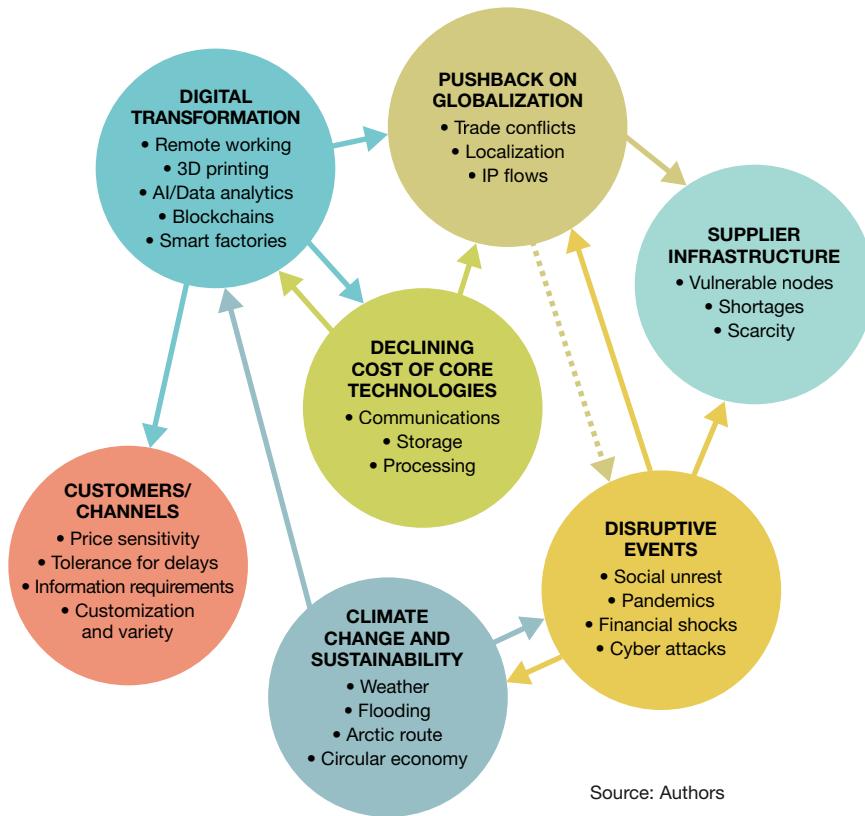
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FIGURE 1

Zones of supply chain uncertainty



stronger, especially after having been surprised. They avoid the pitfalls of wishful thinking, willful blindness, paralysis or myopia when black or grey swans surround them. Vigilant firms and their strategic leaders deliberately orchestrate more robust and resilient supply chains by following three navigation principles drawn from best practice.

Navigation principle No. 1. Vigilant supply chain leaders pay attention to what else might be coming over the horizon. While they are fire-fighting in the present by looking after their own people, taking care of their suppliers and customers and watching their cash, they are also looking ahead. While coping with CoronaChaos is all about the here and now of restoring

Despite these profound uncertainties, some firms will absorb future shock waves better, and navigate greater turbulence more adroitly, than their vulnerable rivals. Resilient supply chains can capitalize on organization-wide vigilance advantages and resilience. They have honed their capabilities for anticipating looming threats and emerging opportunities sooner than their rivals. Vigilance is the collective ability to detect, share, interpret and then act on early signals of change from inside and outside the organization.

This article will address two central questions underlying these vigilance advantages; First, what principles do vigilant firms follow to navigate their zones of uncertainty? And second, what are the distinguishing features that vigilant organization can orchestrate in order to become more resilient?

Improving organizational vigilance

Vigilant supply chain executives excel at seeing around corners, with a readiness to act decisively when the time is right. Also, they use this collective ability to get

disrupted supply chains and cutting fixed costs, some attention must be given to the next horizon, to be ready to pivot when the time is right.

The digital transformation of industries will not pause during the crisis, and will likely accelerate other digital transformations that were already underway. Fighting the pandemic gave a major boost to digital monitoring and mitigation, for example, with companies operating virtually as much as possible. With lower costs of capital and higher margins, vigilant firms can invest in new opportunities that surface, while their vulnerable rivals are forced to cut back. Following are some general questions that supply chain leaders and other C-suite executives should ask to push organizational foresight toward the next horizon.

- What are the biggest uncertainties across the zones of uncertainty? What scenarios should management develop to capture these uncertainties and reveal interactions between zones?
- What strategic moves can the firm make to diversify their supply chain, while reducing exposure to

disruptive events and logistic problems? How robust are these moves across the scenarios?

- Are there opportunistic moves we can make now; and which ones should be approached flexibly as options? Should we shift the allocation of our innovation resources? Can we redesign our products to meet the requirements of a circular system?
- What new leadership talent, experience and organizational capabilities will be needed? What new partners should we add to strengthen the ecosystem?

Navigation principle No. 2. Vigilant organizations systematically nurture dynamic capabilities that foster agility and preparedness. While at the bleeding edge of CoronaChaos, some successfully transitioned from the comfortable and known risk environments of the past (where decision outcomes could be specified and probabilities calculated) toward managing deeper uncertainties. Stable environments can usually be navigated with ordinary capabilities focused on the proficient execution of current processes, such as executing routine transactions and delivering reliable performance. To navigate deeper uncertainty, in contrast, requires a more vigilant toolkit with three dynamic capabilities: sensing change sooner than rivals, seizing opportunities more effectively and transforming the organization as needed to stay ahead.

An encouraging illustration of the benefits of being adaptive and properly aligned organizationally to adapt to external turbulence is the Stone Brewing company, the 9th largest of 8,300 craft brewing companies in the United States. At the start of the pandemic, Stone Brewing, like many other beer producers, was forced to buy back and dump millions of dollars of beer from shuttered restaurants and bars.

In what now seems like a prescient move, Stone's data analytics teams had begun to strengthen relationships with sales teams, working with each region to combine historic forecasts with direct insights from the field about demand changes. These new relationships paid off as the United States began to reopen its economy. Data analytics teams worked with regional sales managers to model demand county-by-county based on their opening dates, and new assumptions about what percentage of businesses would resume operation. Additionally, they used demand shaping principles to promote their top five beers.

Stone Brewing is now capturing new demand and climbing in its ranking as a supplier of choice as other brewers falter in matching supply levels with demand curves produced by waves of re-opening. Their experience confirms findings in July 2020 from the Resilience 360 survey of 350 firms, that while nearly three-quarters of respondents encountered some or significant detrimental effects on the supply side, there were still some winners who saw sooner and acted faster.

With the right set of capabilities, an organization can be agile when turbulence is high. Agility here means being able to move quickly and shift resources and adjust the supply chain sooner than rivals. Agile strategies require small teams to tackle an emerging opportunity or address a recent threat. A scrum of three people to nine people can be quickly assembled with all of the skills needed to carry out the initiative. Scrums essentially function as self-managing teams, following a transparent process, using design thinking methods to develop and test prototype solutions and learn quickly. These features are the antithesis of cumbersome, top-down processes with repetitive meetings, rigid command structures and other impediments to action.

Navigation principle No. 3. Vigilant organizations have a different perspective on speed than typical firms and focus on being ready to act when the time is right. In the maelstrom of a disruption like CoronaChaos, speed of supply chain adaptation will remain an especially useful and distinguishing creed. Delays usually narrow the range of strategic actions because someone else may get to them earlier. Seeing sooner also gives a vigilant firm more time to create strategic options to be exercised later as warranted. Vigilant firms have a head start on conducting due diligence about weaker rivals they may wish to acquire. One way is to prepare ahead of time with key suppliers and customers, rather than being forced to tackle key decisions in the midst of a chaotic crisis.

In one case, a bulk chemical company teamed up with its main ocean carrier to develop joint "what if" scenarios about potentially disruptive uncertainties during the pandemic. These scenarios focused on uncontrollable variables like changes in fleet capacity, availability of crew, delays in port operations and other legal restrictions. By better understanding each other's hopes, fears, constraints and vulnerabilities, both firms enriched their understanding of the strategic issues involved. They

essentially rehearsed how to respond quickly, alone or jointly, if new shocks were to arise. This approach requires shared interests, a disciplined process and some trust, but in return enables faster action when needed. Scenarios have also been used for planning investments in the freight transportation infrastructure. Once laid out, the scenarios were then linked to strategic decisions the transportation planner would have to make in different scenarios.

Getting ready for the long game

Just because the clock of business is whirring faster doesn't mean that leaders must operate in haste. Acting faster than rivals is about being ready for action when needed, starting with early detection and learning through probing questions by the C-suite, followed up with exploratory forays. Only after sufficient clarity about key issues has been achieved can leaders orchestrate a more resilient supply chain system. The aim of broadly scrutinizing your supply chain for vulnerabilities now is to have strategic degrees of freedom later. When quick or bold actions are called for due to external shocks, you don't want to be boxed in by earlier moves of more agile rivals. Strategic leaders always want to act on their own terms rather than be forced to react to moves by others, and fostering organizational vigilance plays a critical role in assuring that happens.

Robust supply chains, blessed with many eyes and ears along the entire system, will be better prepared to absorb shocks and disruptions, and work hard to emerge stronger when the next shock hits. Firms like Agilent, Intuit, Sysco and Amazon have systematically developed the requisite leadership orientations, economic resources, managerial talent and system capabilities needed to seize emerging opportunities ahead of their rivals.

For example, Rockwell Automation (RA), a \$6.7 billion global producer of industrial automation and IT systems, embarked on a journey 20 months ago to improve its supply chain's agility through a centralized approach to planning and analytics. Previously, data analysis talent and capabilities were embedded into each of the key functional area: sourcing, logistics, planning and others.

RA moved its data analytics capability to a centralized team that brought together supply chain data into a

common data repository. The firm also invested in advanced planning and scheduling (APS) software to automate decision making and improve agility. It used this new system first to automate the calculations for levels of inventory safety stocks, which reduced inventory cost by more than 10% and decreased the number of decisions that planners had to review manually by more than 50%.

Additional benefits of more centralized analytics came when CoronaChaos challenged RA's global supply chains. Through its new planning system, RA had immediate visibility into overall demand, supply and inventory levels as the company's suppliers and logistics partners were disrupted by the crisis. This heightened visibility enabled extremely rapid decisions and the ability to alert anxious customers to adjusted delivery times. RA has responded effectively to the pandemic without incurring significant supply chain costs, and with few exceptions, has provided the same level of service its customers had experienced prior to the pandemic.

This kind of organizational vigilance stems from a collectively orchestrated capability driven by curiosity, candor and openness to diverse inputs. It is the antithesis of myopia, siloed thinking and being held captive by outdated conventional wisdom. Vigilant firms differ from their vulnerable rivals in many ways, including the open-minded posture of the leadership team and their collective investments in foresight capabilities that give them a significant head start. Their Boards engage the executive team in dialogues about the future through the strategic questions they ask, their diverse perspectives and broad business experience and the wider networks they can tap into.

Our research shows that the resilience of vigilant organizations in turbulent times comes primarily from four main strategic drivers that work together. We studied 118 international companies (detailed in our book, "See Sooner—Act Faster: How Vigilant Leaders Thrive in an Era of Digital Turbulence"), to determine the contribution of each driver to their vigilance advantage.

1. Leadership commitment to vigilance manifests itself when the organization is open to weak signals from diverse sources, such as customers, suppliers, logistics service providers, regulators and even media critics. This can only happen if everyone is encouraged and rewarded to explore issues outside their functional purview, and

by thinking outside the box. The more the leadership team focuses externally and nurtures curiosity throughout the entire organization, the more prescient and adaptive the company will be. Walking the talk is the *sin qua non* for leaders in bringing about genuine culture change. Without it, organizational vigilance simply will not flourish due to risk aversion, lack of role models, work overload and employee insecurity about raising issues they only partly understand. Skating on thin ice is a dangerous mid-career move and so leaders must give unqualified permission first.

2. *Investments in foresight* are made systematically, perhaps through centralized foresight units for scanning and developing possible scenarios to understand more deeply the key uncertainties. The supply chain function should develop strategic dashboards that flash early warnings when external events threaten timely deliveries. Rather than waiting to find out how key uncertainties play-out, vigilant organizations proactively develop a flexible portfolio of real options so they are better to act faster when needed. Strategic dashboards are not about operational visibility, but help to spot early warnings of external changes that could materially affect the normal operation of the supply chain. As such, they complement as well as safeguard the operational dashboards.

3. *Strategy making processes* are flexible and adaptive by adopting both an “outside-in” and a “future-back” approach. Thinking from the outside-in means scanning the world around you before turning toward internal problems. Outside-in thinking allows supply leaders to have deeper insights into changing circumstances and a better understanding of suppliers or partners. By feeling their pain, hopes and constraints, your company will make wiser strategic choices going forward. Future-back thinking in this regard is about envisioning what kind of supply chain system will be needed to win when COVID-19 uncertainties subside and then getting prepared. Strategic leaders will use such future images to create receptivity to change, plant organizational seeds now and along the way to relieve perhaps some of the near-term pain of their people, customers and suppliers amid crisis.

4. *Coordination and accountability* mechanisms in well-run supply chains are properly moored in place, such that information is shared readily with those who

need it. By flagging and redressing uncoordinated activities and haphazard initiatives, the management team overseeing the supply chain can reduce decision-making ambiguities. The aim is to align the sourcing/purchase or production side of the business all the way through to distribution end of the spectrum, including customer service. Such tight coordination, reinforced by proper performance standards and incentives, are crucial in creating the right conditions for system-wide vigilance. As soon as the warning signals about the pandemic appeared, truly vigilant organizations—such as Johnson and Johnson’s health care supply chain (which Gartner ranked on top for a second year now), created “plan ahead” teams to think about the future and evaluate promising initiatives from across the firm.

While leadership teams are addressing the immediate imperatives of fire-fighting and keeping the ship stable, they must also allocate some organizational attention toward thriving in an uncertain future. But in these extraordinary times, when black swans and a tiny vicious virus pull everyone down in tandem, vigilance is also about reinvention, orchestrating greater resilience and reaping competitive advantage while many companies are befuddled.

This is not “resilience” in the usual sense of simply bouncing back and returning to normal. Instead, vigilant supply chain organizations ask: What should we be ready to do when we return to the next normal? Supply chain leaders and the C-suite can stimulate this kind of thinking by asking such questions as: What can we learn from the ongoing tumult and chaos? What must we do now to gain a competitive edge in the future? What are the organizational impediments to upgrading our vigilance capabilities? What strategic actions and change initiatives should we launch to put us in a stronger position for the future? Vigilant supply chain leaders will create sufficient mental space to get everyone prepared for whatever is next over the horizon. ☺☺

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