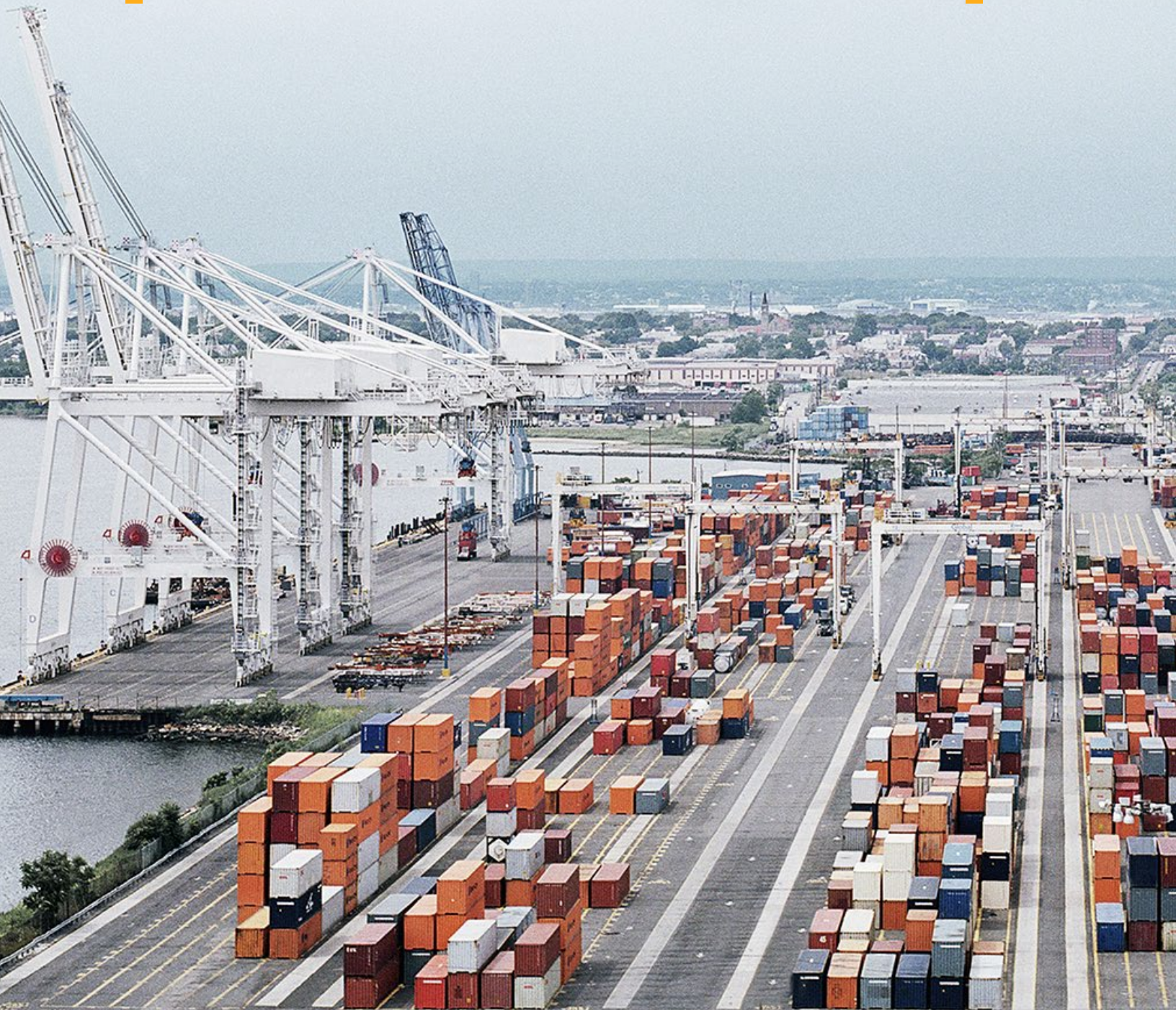


Gartner®

Adopt a New Supply Chain Strategy to Minimize Risk Impacts



Most organizations employ a three-pronged strategy to reduce the impact unfamiliar disruptions have on their organizations: visibility, resilience and agility. These three capabilities work together. Resilience ensures the supply chain has enough inputs and options to fuel a risk response. Agility ensures the flexibility necessary to use those inputs to respond quickly. Visibility ensures the supply chain senses risks early and knows what the best response options are so that it can act accordingly.



Visibility: Access to transparent, accurate, timely and complete plans, events and data to support effective planning and execution of supply chain operations



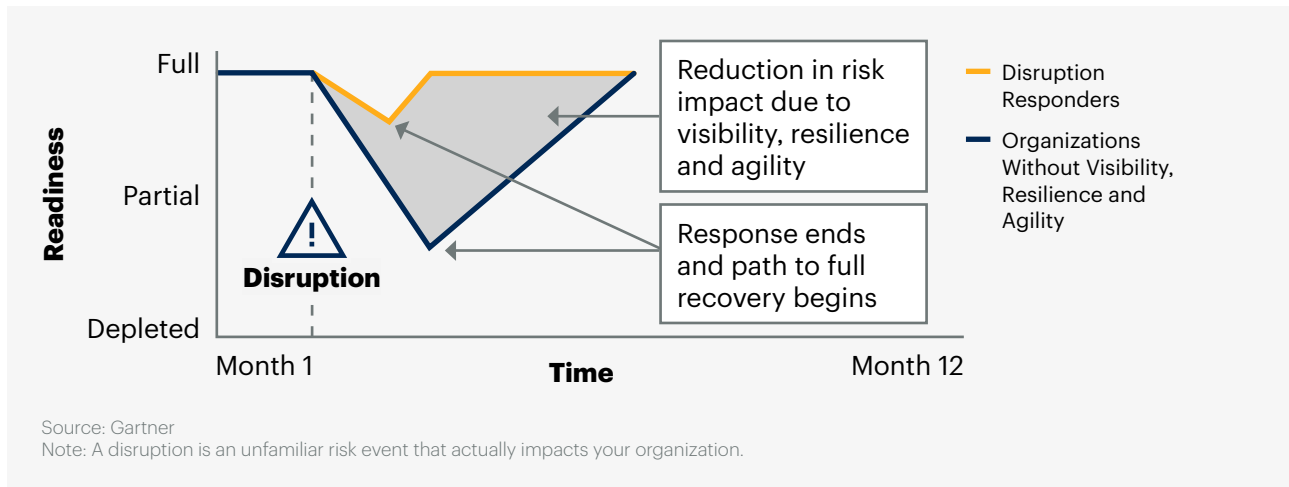
Resilience: The ability of an organization to resist, absorb and recover from a disruption in a way that minimizes the negative impact to its objectives



Agility: The ability to sense and respond quickly to an unfamiliar disruption to reduce the negative impact it has on the supply chain organization

Figure 1: Advantage of Visibility, Resilience and Agility

Illustrative

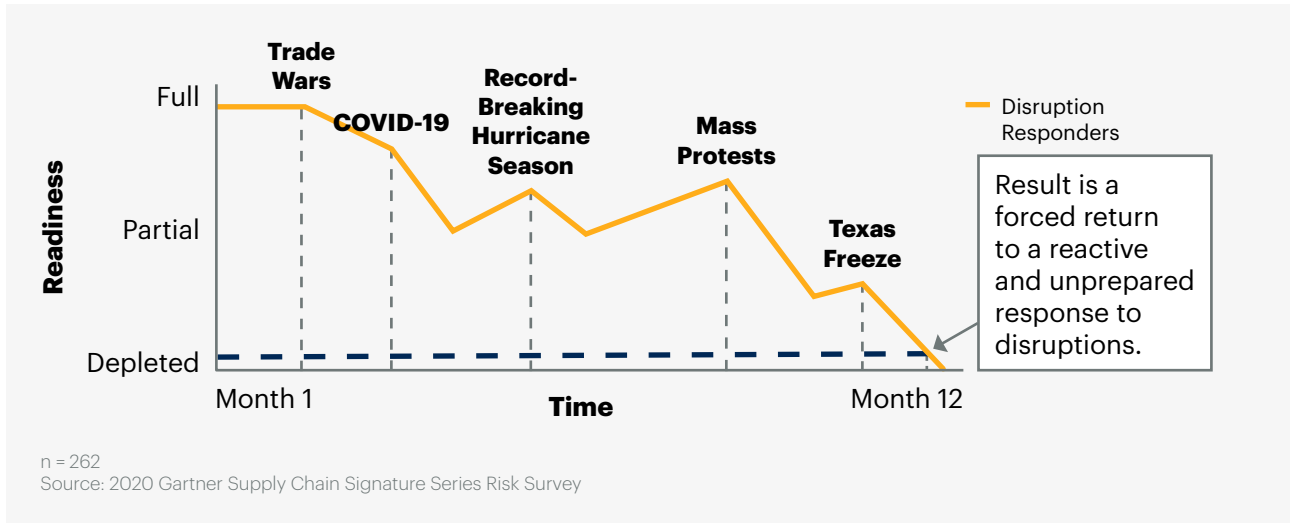


The strategy reduces the impact of unfamiliar risk events when the supply chain cannot reasonably develop response playbooks. Supply chain leaders know they cannot predict which events will occur. They also know that even the best-laid plans will rarely, if ever, remain relevant to a chaotic situation after an unfamiliar disruption occurs. For that reason, supply chain leaders focus on improving their ability to respond after the disruption in a way that reduces its impact. Supply chains with visibility, resilience and agility will get to recovery faster while using fewer “readiness” resources (see Figure 1). We refer to supply chains that manage unfamiliar risks in this way as “disruption responders.”

This strategy makes a lot of sense. Because these events are so rare, it is highly unlikely that two high-impact disruptions would occur at the same time. In that situation, supply chains would have plenty of time to recover long before another disruption hits — and these strategies do shorten recovery time.

In this current environment, however, the high rate of disruption overwhelms the strategy (see Figure 2). The supply chain never returns to a sufficient level of readiness before another disruption occurs. This means that, as multiple disruptions impact the supply chain organization, they continue to draw down their readiness to a point where it may become depleted, which creates a risk of supply chain failure. The result is a forced return to a reactive and unprepared response to disruptions, despite the investments supply chains have made in visibility, resilience and agility.

Figure 2: Impact of Current Rate of Disruption on Disruption Responder Strategy
 Illustrative



Given this change in the risk environment, the changes to the supply chain itself over time, and the struggle supply chains are having to keep up with this high rate of disruption, we did some research. Gartner set out to identify how leading organizations reduce the impact this high rate of unfamiliar disruptions has on the supply chain. The 2020 Gartner Supply Chain Signature Series Risk Survey examined how well visibility, resilience, agility, portfolio complexity and network design reduce the impact of risk events on the supply chain.

Disruption Shapers: A New Strategy

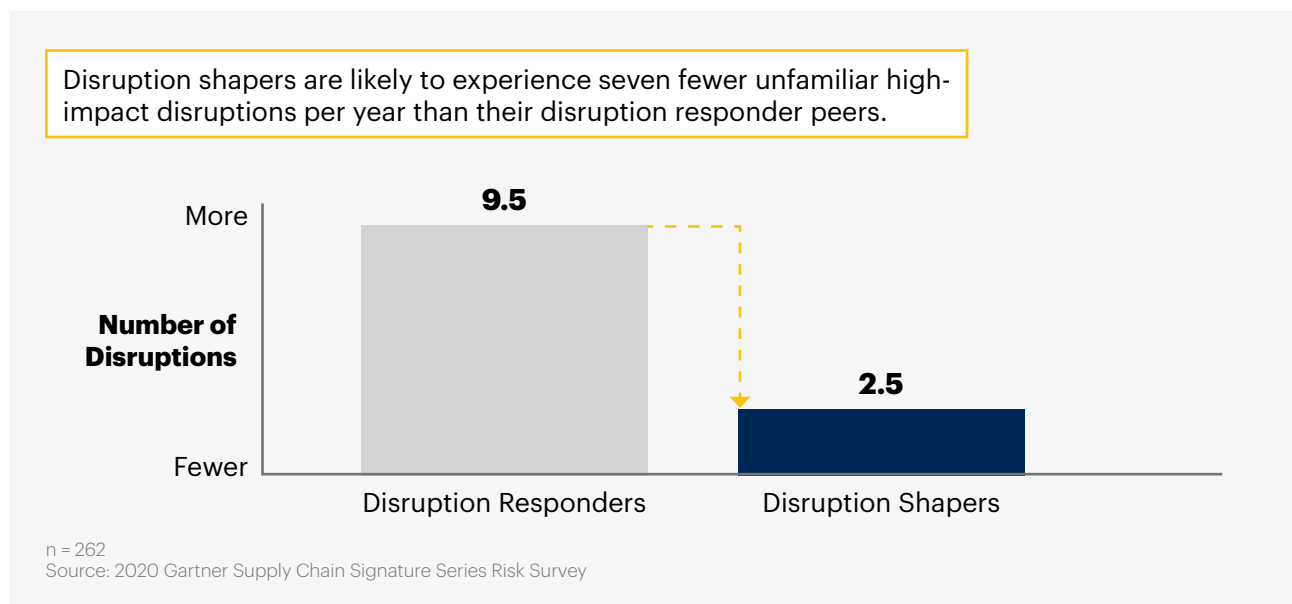
As we analyzed the survey data, we compared leading organizations with others to find out how they are different. Our analysis showed two important findings:

1. Organizations can reduce the rate of disruption to their supply chains — something most supply chain leaders dismiss as even a possibility.
2. Organizations can strategically shape which risk events will disrupt them, effectively reducing the number of disruptions they experience.

Supply chains can reduce the rate of disruption to their supply chains. In fact, these disruption shapers are likely to experience less than one-third of the disruptions their peers experience.

We call these organizations “disruption shapers.” Gartner’s survey shows that disruption shapers are likely to experience less than one-third of the disruptions their response-focused peers experience. That is a difference of seven fewer unfamiliar disruptions per year on average (see Figure 3).

Figure 3: Comparison Between Supply Chain Organizations



Disruption Shapers Are Designed Differently

To find out more, we examined how disruption shaper organizations are different from their peers. Surprisingly, disruption shapers and disruption responders are not different in terms of their revenue, volume of products or volume of SKUs. But survey data does show two main differences in movement and physical footprint (see Figure 4).

For movement, disruption shapers are significantly different from their peers in the way their supply chains operate. In particular, they have fewer processes, sales channels, touchpoints for orders, and countries and sites through which inventory passes. They also have fewer third-party logistics providers, shipping modes and shipping lanes, and they have greater distances between suppliers, factories, warehouses and distribution centers. In terms of physical footprint, disruption shapers are also significantly different from their peers. They have fewer Tier 2+ suppliers and fewer internal and external manufacturing sites.

Put in different terms, disruption shaper organizations have smaller surface areas, and this is the reason they are likely to experience fewer disruptions than their peers.

Figure 4: Impact of Different Variables on the Number of Disruptions Experienced

		Disruption Responders	Disruption Shapers	
No Statistically Significant Differences	Revenue	No Significant Differences		
	Number of Product Lines			
	Number of SKUs			
Statistically Significant Differences	Number of Processes Across the Product Life Cycle	Greater	Fewer	Movement
	Number of Sales Channels			
	Number of Countries and Sites Through Which WIP and Finished Inventory Pass			
	Number of Touchpoints Through Which an Order Passes Before a Customer Receives It			
	Number of 3PLs, Shipping Modes and Shipping Lanes to Transport Products	Fewer	Greater	Footprint
	Distance Between Suppliers, Factories, Warehouses and DCs			
	Number of Tier 2+ Supplier Sources for Materials	Greater	Fewer	
	Number of Internal and External Manufacturing Sites			

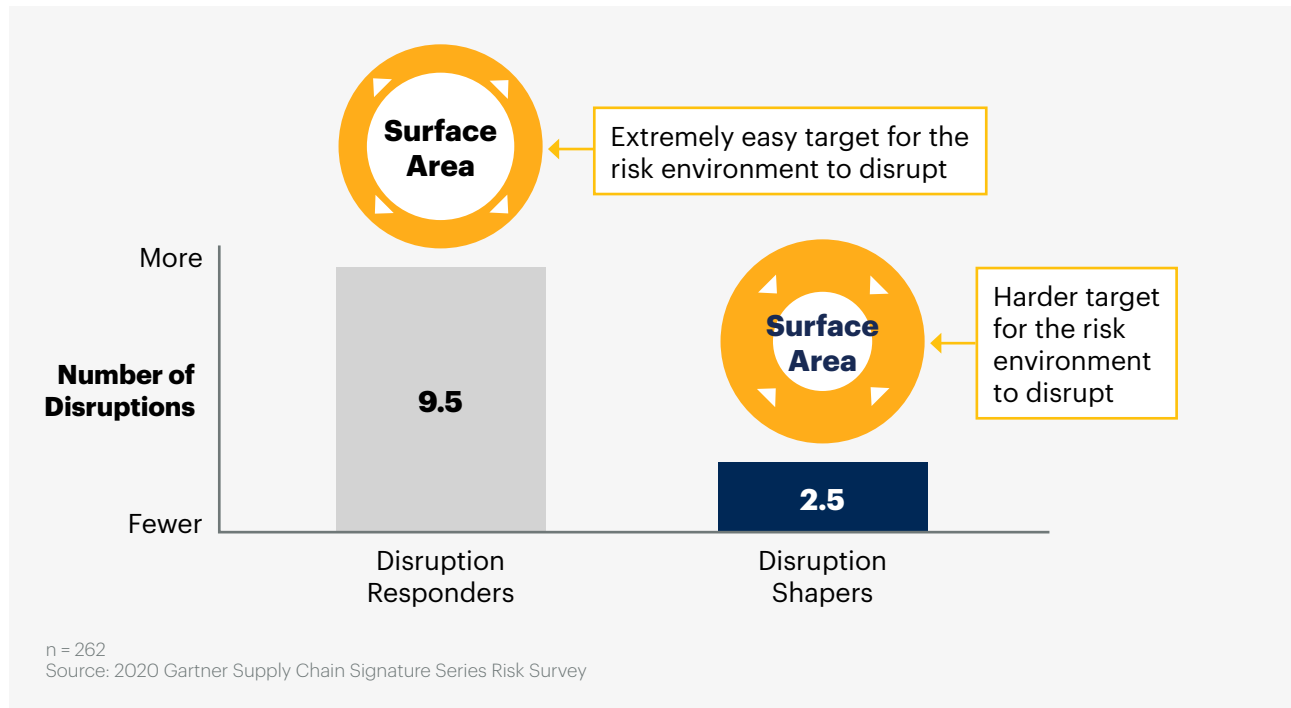
n = 262
Source: 2020 Gartner Supply Chain Signature Series Risk Survey

If the supply chain surface area is thought of as a target, it makes sense that smaller surface area organizations perform better than their peers in this risk environment. With a higher cadence of risk events, a smaller surface area is an asset, but a larger surface area has become a major liability (see Figure 5).

In that sense of surface area as a target, disruption responders are, simply put, easier to disrupt because they are a very large target. Understandably, they have responded to the forces driving enterprise and supply chain expansion over the past 50 or 60 years, never anticipating such a drastic increase in unfamiliar risk events. Consequently, their surface areas are bigger. They have dispersed familiar risk across a vast network that is spread out globally to optimize costs. Their processes are complex as a result of an extended network, requiring much more movement within the supply chain. And it all seems necessary in order to meet that changing customer demand.

Disruption responders experience more disruptions because their surface areas are larger; they are disrupted whenever these risk events and their supply chains are in the same place. This higher number of disruptions leads to the need for more and more visibility, resilience and agility, capabilities that are difficult for any organization to achieve. The situation is unsustainable in terms of cost, employee fatigue and opportunity costs. Worse, these organizations risk loss of customer confidence and market share. Eventually, some organizations may cease to exist at all.

Figure 5: Impact of Surface Area on Rate of Disruptions



Disruption shapers, on the other hand, have pursued these same strategies — cost optimization, portfolio innovation and meeting changing customer demand — but have managed to control the surface area of the supply chain along the way. They have constrained movement, simplified processes and controlled the number of sites they operate. That is, they have constrained the number of touchpoints risk events can have with their supply chains. In doing so, they have reduced the rate of disruption to their supply chains and are therefore better positioned for this risk environment.

Although supply chain leaders cannot control how many risk events the environment generates, disruption shapers show us that they absolutely can control the size of the target they want their organizations to be. It is that knowledge that informs the disruption shapers' strategic approach to risk management.

Although CSCOs cannot control how many risk events the environment generates, they absolutely can control the size of the target they want their organizations to be.

Disruption Shapers Strategically Reduce the Rate of Disruption

Disruption shapers understand that the risk environment and the supply chain surface area have both changed over the past several decades. They know visibility, resilience and agility are helpful but not sufficient anymore because there are too many risk events disrupting their supply chains. And they recognize that they can control the size of their surface area. Therefore, they establish a risk management strategy that actively shapes disruption rather than accepts disruption as a fact.

What do disruption shapers do differently? Figure 6 shows two key activities of disruption shapers.

1. Embed Awareness Into the Overall Supply Chain Strategy

Disruption shapers embed awareness of this higher rate of disruption into their overall supply chain strategy. They give it the same weight they would give to cost, quality or speed. But they do not do this by abandoning the strategic business objectives supply chains have typically been pursuing over the past 50 years.

Instead, they redefine cost optimization by adding the cost of constant disruption in this environment to their current cost calculations. They understand that the pursuit of innovation does not necessarily require an increase in surface area. When they must increase it for innovation, they make design choices that diversify their total risk profile and maximize their competitive risk advantage. They increase their reliability to customers by understanding that this environment will make it harder and harder to deliver reliable and profitable service. They act now to reduce disruption later.

Figure 6: Disruption Shaper Mindset and Activities

Goal	Reduce the rate of unfamiliar disruptions	
Strategy	Design unfamiliar risk out of the supply chain	
Key Activities	<p>1 Do integrate awareness of risk environment into overall supply chain strategy</p> <ul style="list-style-type: none"> Account for incurred cost of disruptions from unfamiliar risk events Pursue risk-aware innovation Increase customer reliability 	<p>2 Do reduce the surface area of the supply chain</p> <ul style="list-style-type: none"> Simplify processes Reduce movement Diversify risk exposure in network design
Key Cautions	<p>Don't sacrifice valuable outcomes achieved from past strategies</p> <ul style="list-style-type: none"> Don't increase costs Don't stagnate on innovation Don't reduce service levels 	<p>Don't over-expose the supply chain to a single, catastrophic event</p> <ul style="list-style-type: none"> Avoid extreme consolidation Don't eliminate all redundancies Don't locate all sites in a single region

Source: Gartner

2. Reduce the Surface Area of the Supply Chain

The second key activity disruption shapers pursue is to reduce the surface area of their supply chains. They reduce movement by simplifying and redesigning processes, and they reduce their physical footprint by reducing the number of sites and suppliers in their network. However, they are careful to avoid overexposure of the supply chain to a single catastrophic event. They are not opting for extreme consolidation, but instead opting for the right size for their organization to be. They balance exposure to the risk environment with exposure to any single catastrophic risk event. In sum, disruption shaping represents an intentional effort to reduce the rate of disruption to the supply chain in this risk environment.

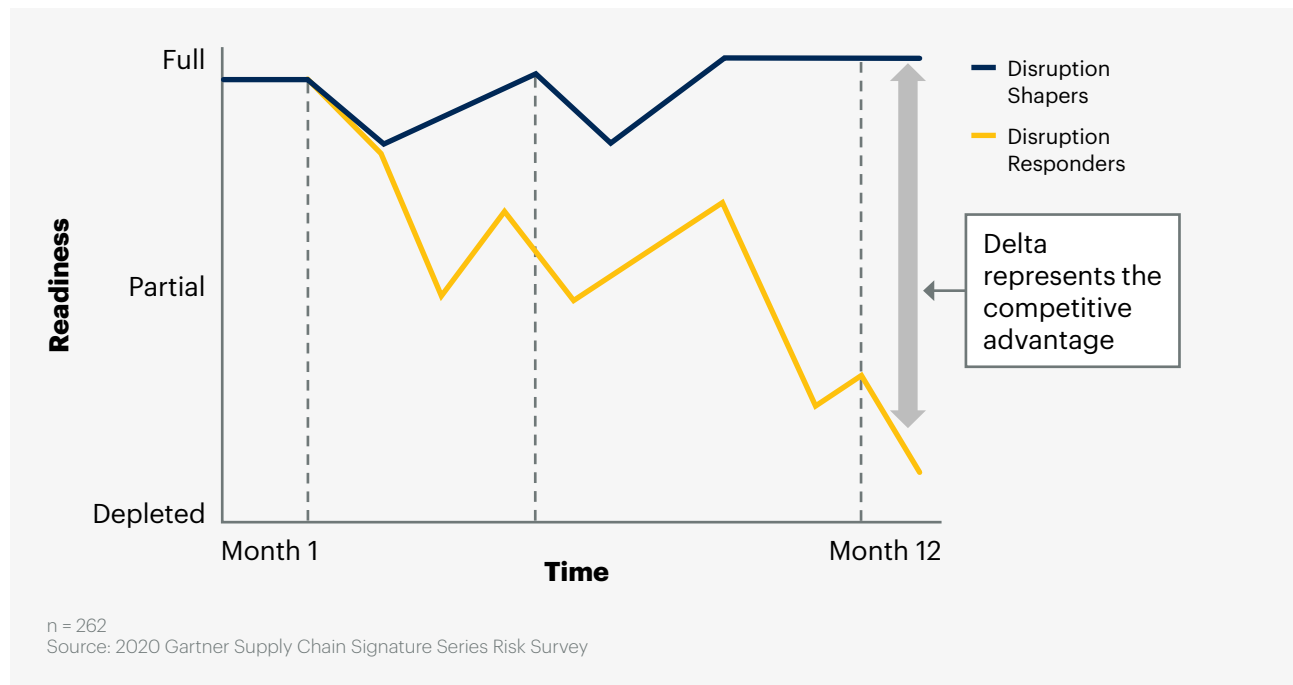
Disruption-shaping organizations benefit in multiple ways from the disruption-shaping strategy (see Figure 7). First, the approach reduces costs to the supply chain because it experiences fewer disruptions overall.

Second, by reducing the rate of disruption, the supply chain can once again leverage visibility, resilience and agility to reduce the impact of disruption when it does occur. The supply chain can return to the full recovery necessary for its response strategy to work.

Third, and perhaps the ultimate value gained by the supply chain, competitive advantage is created through this strategic risk posture. Disruption shapers are ready and waiting to service the customers that their closest competitors are losing because those competitors are too busy responding to risks.

Figure 7: Comparison of Disruption Shaper and Disruption Responder Strategy in Current Risk Environment

Illustrative



Supply chain risk management: How we help

Key tenets of supply chain risk management are enhancing resilience and improving competitiveness. But supply chain risk management today must account for unprecedented, fast-developing market disruptions as well as transformation inside the organization, making it difficult to achieve agility and competitive advantage. To succeed, supply chain risk management must be a collaboration between supply chain, procurement and enterprise risk management (ERM) managers. Innovative technology solutions and advanced analytics enable continuous review and integration of supply chain risk management with the business. Gartner provides supply chain leaders with insights, advice, data and tools to increase supply chain risk readiness. Visit [gartner.com](https://www.gartner.com) to learn how we enable supply chain risk management to combat disruption.

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