

Antifragile Supply Chain: A Key to Success in the Post-COVID "New Normal"

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Although supply chain disruptions are not new phenomena, the disruption caused by the COVID-19 pandemic was unprecedented, affecting countless supply chains across a range of industries. This article introduces a new idea – anti-fragility – to begin thinking about supply chain models that benefit from random events rather than being the victims of them.

The COVID-19 pandemic has made many production plants and service delivery points, their suppliers, distribution centers, and transportation links temporarily or permanently unavailable. Compounded with other characteristics of today's supply chains, including being overly optimized and globalized, the COVID-19 has developed a runaway chain of material shortages or delivery delays that have extensively impacted companies globally. During the outbreak, supply chains that were supposed to be a source of competitive advantage have turned to be the Achilles heel of nearly 94% of Fortune 1000 companies. The Institute for Supply Management (ISM) reported that the number was about 97% for other firms.

The dominant mindset in the supply chain community is to see disruptions as a source of disadvantage. Companies typically try to first avoid disruptions. If disruptions are unavoidable, then companies build in resilience to bounce back and survive. However, in November 2020 Annette Clayton, the CEO of Schneider Electric North America, <u>said</u>: "We don't foresee a return to the old normal... we are preparing for a future of continual change. The key will be to thrive, not survive, in uncertainty. You will need ... anti-fragility, which goes beyond resiliency which means simply surviving the shock".

Disruptions are now the rule of the current world, not a choice. What if we change our approach toward disruptions? What if we think positively and embrace them? What if managers build supply chains that can gain from disruptions? Hence, these supply chains would "love" disruption rather than "avoiding" it. We believe that the status quo in the supply chain management theory and practice must be revamped, and the mindset must be shifted to consider disruptions as a potential source of gain. As Friedrich Nietzsche famously said, "What does not kill me makes me stronger." In this sense, supply chains should be reinterpreted as a system that *loves* randomness and gains from disruptions rather than losing ground.

This is what antifragility is all about: an approach to embrace rather than reject the world of randomness. Antifragile systems get stronger by being exposed to disruptions. Our immune system is a good example of an antifragile system. Worldwide, governments are hopeful they can flatten the curve of COVID-19 cases or even putting an end to the pandemic by giving a vaccine to their people—exposing people's immune systems to a disruption similar to what is induced by COVID-19.

Another example is a successful traditional fire management practice of the indigenous community in the Northern Territory of Australia: controlled fires at the right time in the right place to reduce uncontrolled bushfires. According to Willie Rioli, a member of the Indigenous Carbon Industry Network Steering Committee:

Fire is a tool and it's something people should see as part of the Australian landscape. By using fire at the right time of year, in the right places with the right people, we have a good chance to help the country and climate.

We believe it is time to take the next step and learn how the supply chain could become truly antifragile. An antifragile supply chain is a living supply chain that can gain from disruption. The antifragile supply chain is dynamic and living, not static, and it evolves and gets better with unpredictable disruptions, which are the inherent characteristics of the post-COVID "new normal".



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As an experienced academic, Ethan has previously held appointments at The University of South Australia and Flinders University. Ethan's research area predominately focuses on managing disruptions, developing resilience, and most recently, building antifragility in operations and supply chains.



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