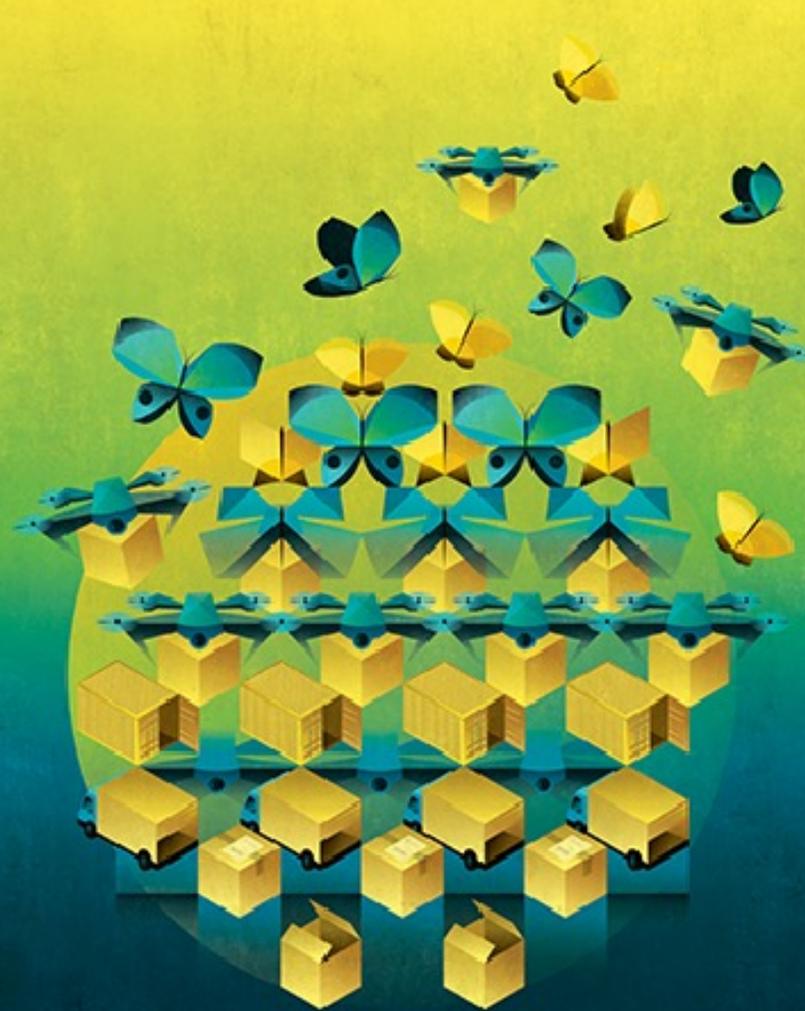


Deloitte.

Manufacturers
ALLIANCE



Meeting the challenge of supply chain disruption

September 2022



MAKING AN
IMPACT THAT
MATTERS
since 1845

Meet your presenters



Paul Wellener is a Vice Chair, Deloitte LLP, and the leader of the US Industrial Products & Construction practice. With more than three decades of experience in the industrial products and automotive sectors, Paul drives key sector industry initiatives to help companies adapt to an environment of rapid change and uncertainty. Based in Cleveland, Paul also serves as the managing principal of Northeast Ohio.



Aaron Parrott is a leader in the Supply Chain and Network Operations practice with more than 25 years of experience specializing in digital transformations, smart factory, and supply network advanced analytics. Aaron helps his clients complete large-scale transformations in the supply network, develop analytic solutions to address their most difficult business issues and implement digital solutions to manage complex supply networks.

About the 2022 Manufacturing Supply Chain Study



Deloitte and Manufacturers Alliance jointly launched a study in June 2022 to **understand the impact of disruptions** on the manufacturing supply chain and examine how manufacturers are **evolving their traditional supply chain** strategies to balance costs, efficiency, and resilience



Deloitte surveyed over **200 manufacturing executives** in July 2022



The survey findings were supplemented with a **series of interviews** with manufacturing and supply chain executives



A closer look at the current state

Eighty percent of supply chain executives surveyed report a heavy impact on their business, and the majority of executives agree frequency of disruption has increased



of surveyed executives experienced a **heavy or very heavy impact** on their supply chain by at least one disruption over the last 12–18 months



of surveyed executives have agreed that the **frequency of these disruptions has increased** over the last decade, and the pandemic has exaggerated the impact

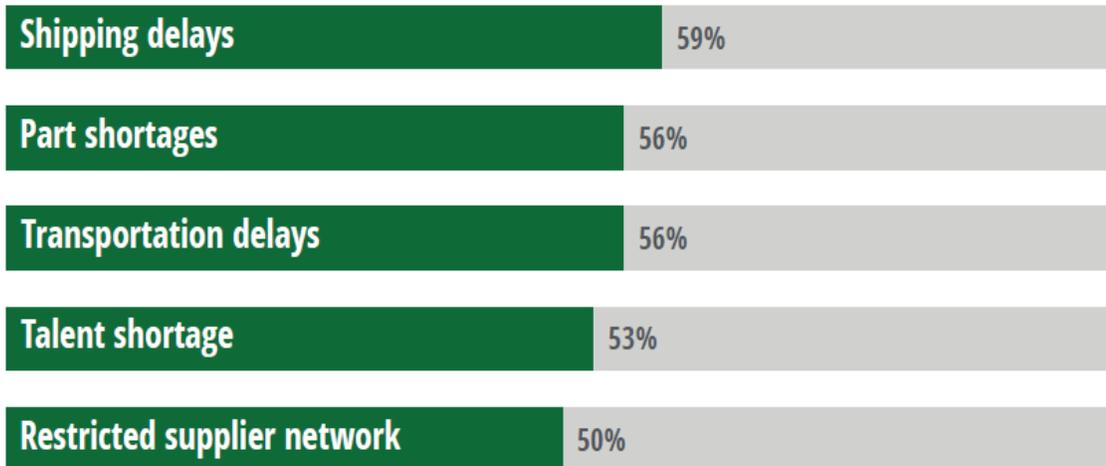


of surveyed executives agreed that these disruptions **significantly affected their productivity and profits**

Rising costs continue to impact supply chains and are the top operational concern for manufacturers

Supply chain executives are working to solve a new optimization problem with more stringent constraints: costs still need to be minimized, yet resilience and redundancy should be built in for supply assurance

Shipping delays, parts shortages, and transportation delays have impacted manufacturing companies in the past 12–18 months:



These disruptions impacted:



Production



Profits

The top operational concern among respondents:

Rise in shipping costs



Product issues from suppliers who are struggling to meet demand



Logistical challenges in contingency planning



Continued shortage of critical parts



Cost challenges in contingency planning



Shipping costs rose

>77%

during January 2021-August 2022

Labor costs in manufacturing

\$42

per hour worked in Q1 2022

Key approaches for assurance of supply

Mitigation strategies remain the same, but with enhanced tactics

Four components of a successful supply chain management strategy:



Supplier relationship management

Supply-constraints today require close relationship with suppliers to forecast lead times and inventory strategies

The four-pronged approach to strengthen existing supplier relations:



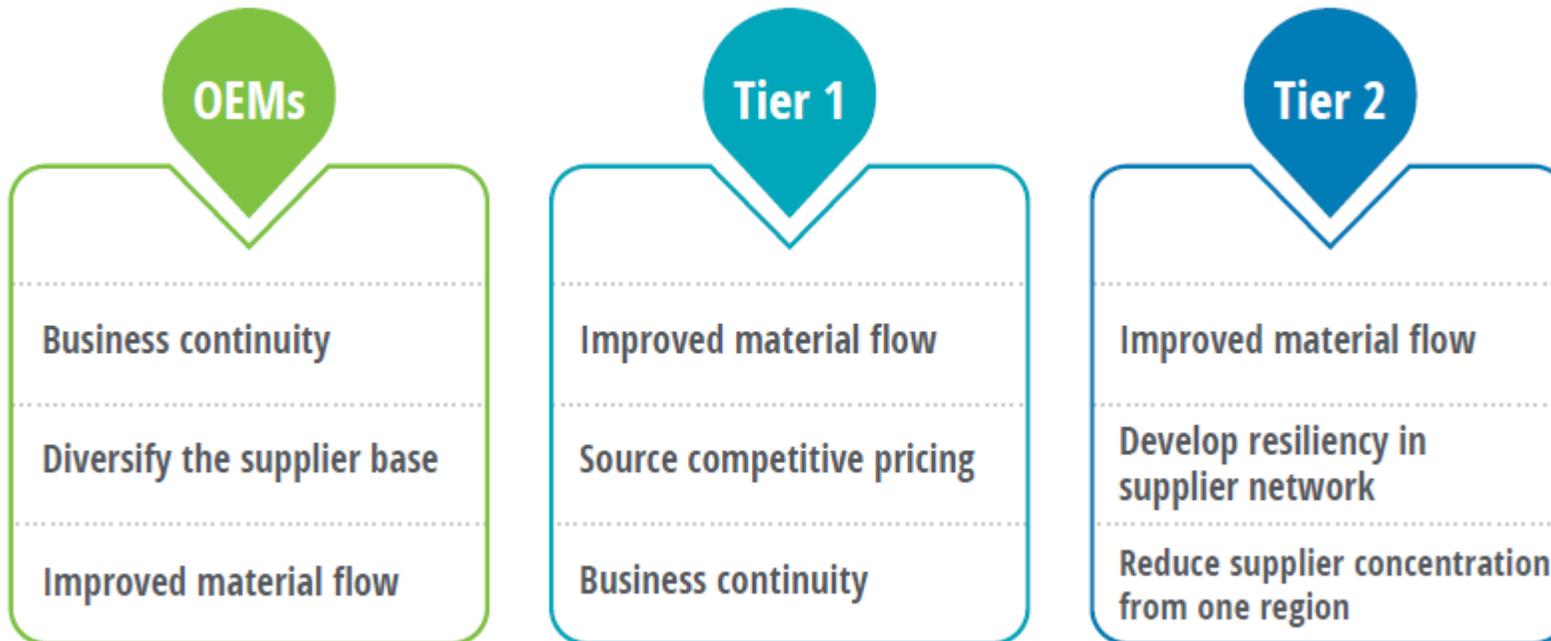
Proactively managing multiple tiers

Management of not just primary suppliers, but also of secondary and tertiary suppliers has become important

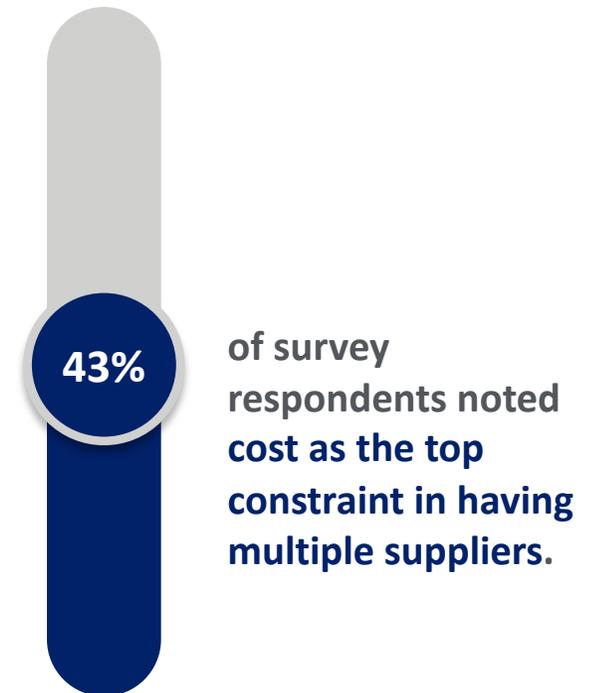
Several executives interviewed noted that previously they were not involved beyond Tier 1, but **dynamics of the current environment drove a need to increase visibility.**

Nine out of 10 survey respondents have multiple suppliers, but only 44% have regional diversification
Companies with regional diversification were less affected by recent supply chain disruptions than companies with suppliers concentrated in one region

The benefits of engaging multiple suppliers are well known but may vary according to company type—OEM or supplier

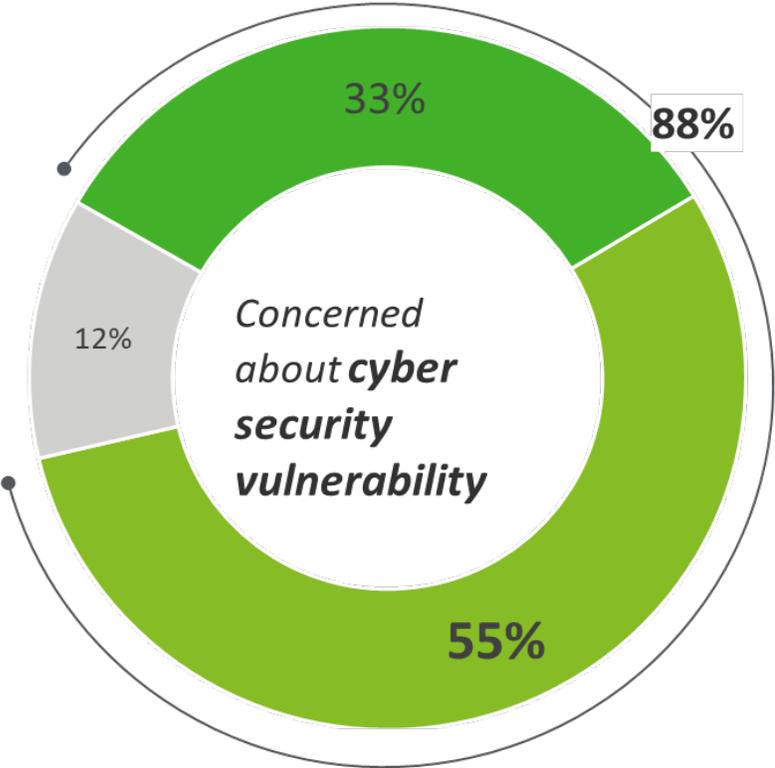


However, dual sourcing may increase costs



Digital technologies are a key enabler to risk mitigation

Among survey respondents, 88% are concerned about legal, financial, privacy, IP theft, or cybersecurity



■ Yes, and have no strategy in place **■** Yes, but have a comprehensive strategy **■** No concerns

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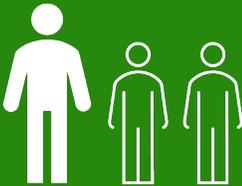
Gaining supply chain visibility is the top use case for ongoing digital initiatives

For most survey respondents, the lines of visibility start to blur beyond Tier 2+ of their supply network



78%

respondents agreed using digital solutions and/or monitoring tools would enhance visibility and transparency throughout the supply network.



1 in 3

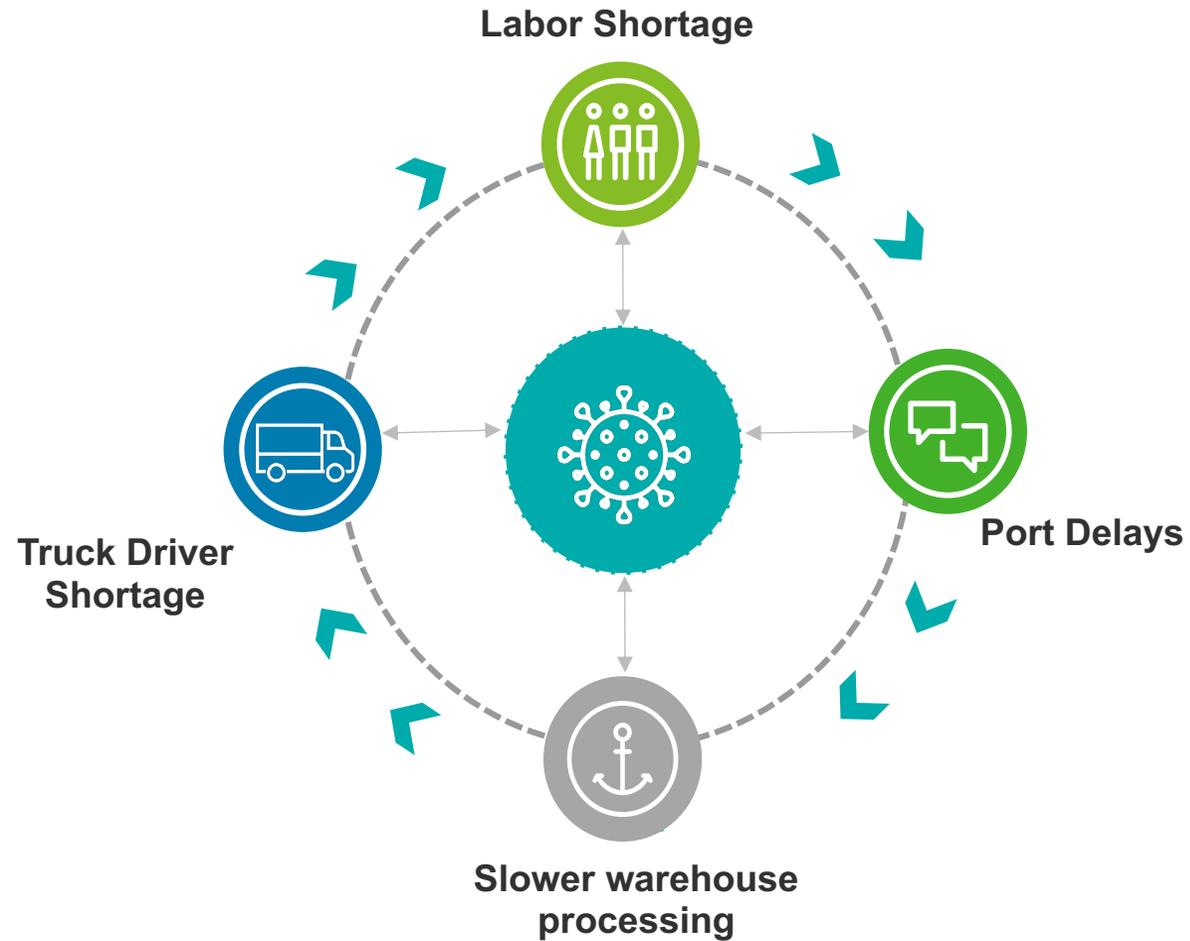
respondents agreed to have visibility beyond tier 2



Only **25%** of respondents are implementing or have achieved the desired level of digital supply network

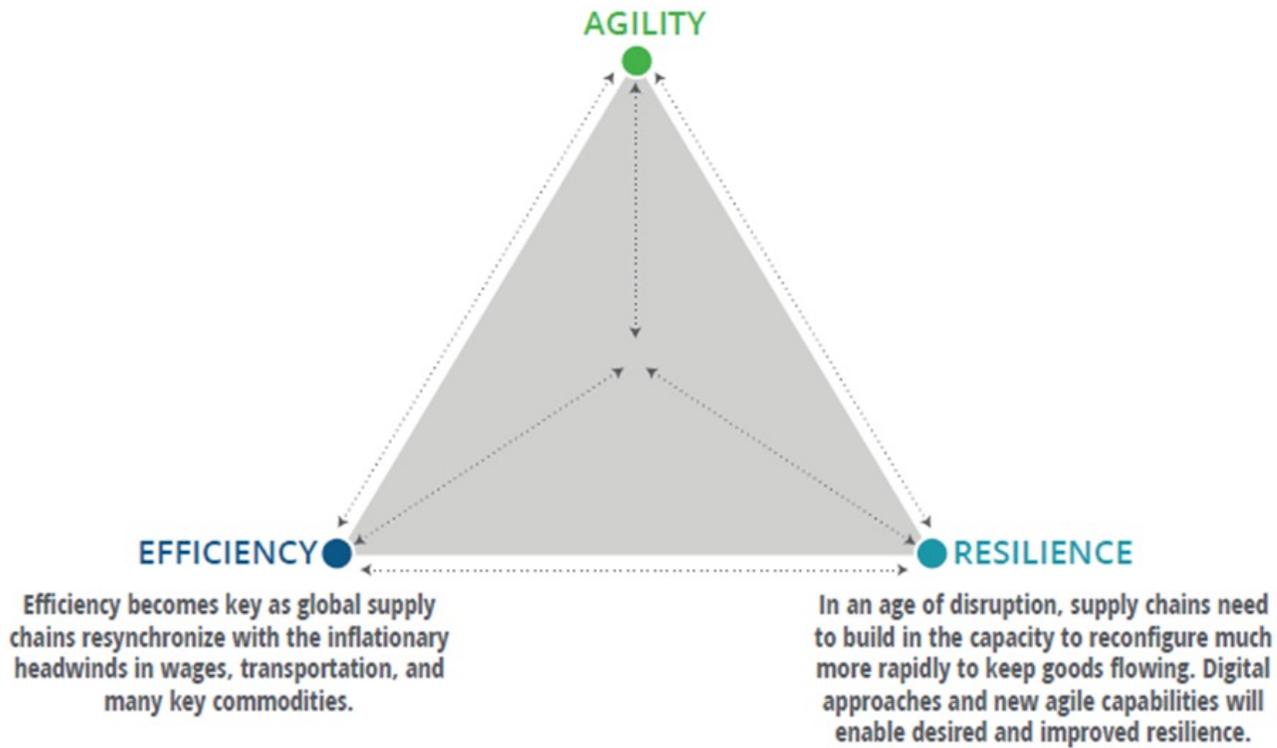
Drifting away from just-in-time approaches to address external challenges....

The persistent labor shortage in manufacturing has been exacerbated by the pandemic, hampering related operational activities



...by striking a balance between agility, efficiency, and resilience

Agility creates the difference between operations that thrive with those that merely survive. An agile supply chain will have the ability to execute faster and better than the competition.



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Agility and flexibility are potential game changers in supply chain risk mitigation



Flexibility of design could be used to standardize product-specific parts, allowing a standardized part to be used across products that would require minimal customization

The road ahead

Optimizing for agility considerations

Employing digital solutions to boost efficiency and resiliency

- Implement automation to overcome workforce shortage
- Move to digital solutions that increase visibility beyond Tier 2

Strengthening existing supplier relationships to increase resilience

- Agree on mutually beneficial KPIs
- Train newer employees on relationship management

Engaging with multiple suppliers to balance efficiency and resilience

- Make contingency plans and conduct practice drills
- Evaluate benefits of engaging multiple suppliers

Let's Talk

Learn more at www.deloitte.com/us/er&i

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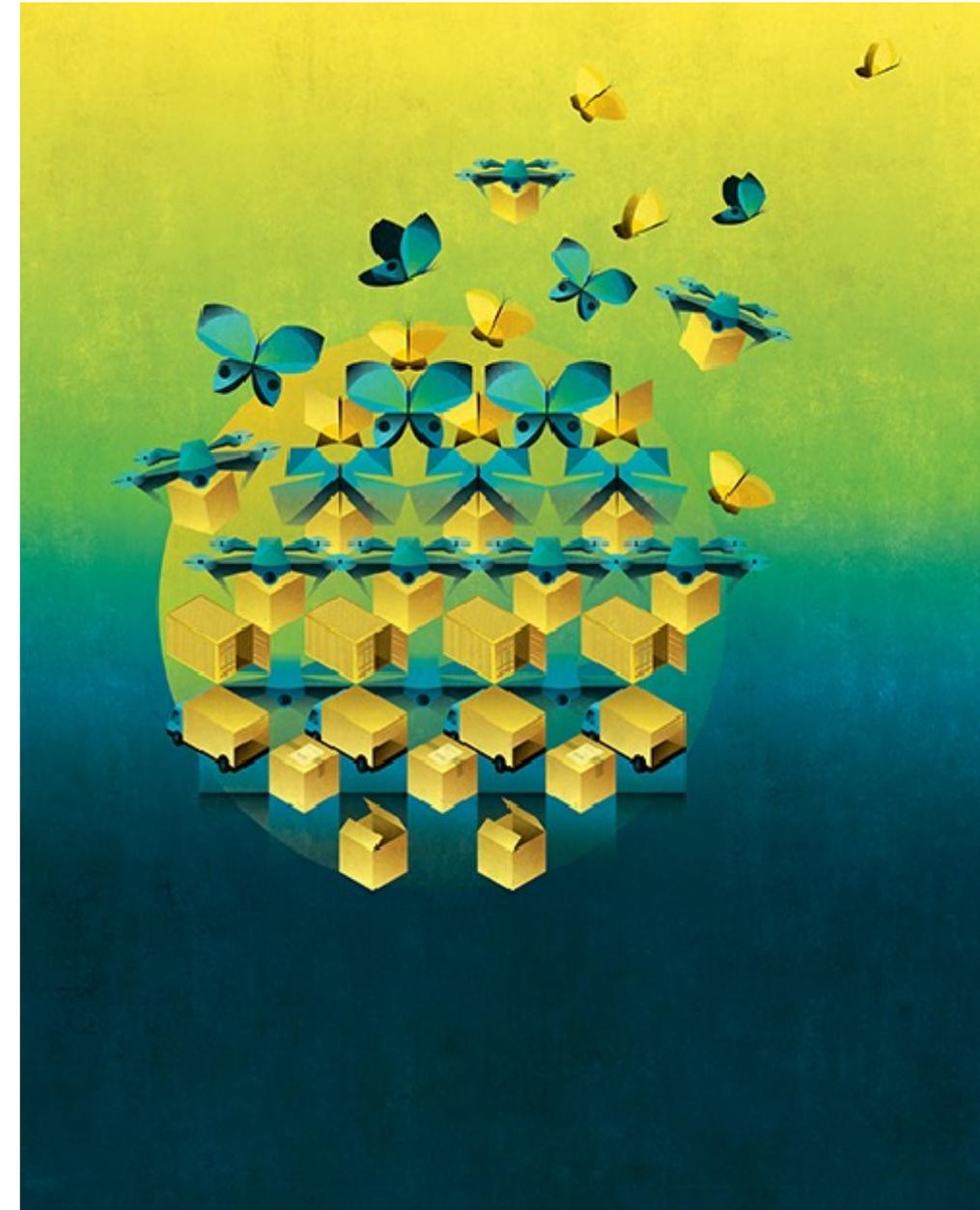
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