Are We Navigating a Less Global World?

April 2021
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Executive Summary</td>
</tr>
<tr>
<td>4</td>
<td>Introduction</td>
</tr>
<tr>
<td>7</td>
<td>Analysis</td>
</tr>
<tr>
<td>9</td>
<td>International Trade Is Taking Place in Regional Blocs</td>
</tr>
<tr>
<td>17</td>
<td>Emerging Economies on the Cusp of Unprecedented Levels of Progress</td>
</tr>
<tr>
<td>20</td>
<td>Mindsets of Supply Chain Executives Shift to Regional Supply Chains</td>
</tr>
<tr>
<td>23</td>
<td>Asia/Pacific Region Is Reducing Its Dependency on Western Economies</td>
</tr>
<tr>
<td>26</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>
CSCOs are facing growing trade barriers and calls to bring manufacturing and supply bases back to their home countries. This report details the approaches that supply chain leaders are taking to adjust to these changes and adapt their operations to the likelihood of a less global world.

**Key Findings**

- Decades of globalization growth fueled by the desires of multinational corporations and the demands of emerging economies are under threat. These economies are now markets in themselves, attracting their own share of global trade and investment, and their rate of development has gradually eroded the cost and labor arbitrage previously attractive to Western economies.

- Globally, and across multiple industries, 71% of companies are regionalizing their manufacturing network, and 64% are reshoring or nearshoring their production operations.

- Fifty-two percent of supply chain executives believe that national interests and pressure to favor domestic operations will increasingly influence their future supply chain decisions. Thirty-six percent of executive leaders are expected to factor national interests into business decisions, regardless of government or regulatory influence.

- The Asia/Pacific region is reducing, but not removing, its level of dependency on Western economies. The November 2020 signing of the Regional Comprehensive Economic Partnership (RCEP) brought together 15 Asia/Pacific countries to form the largest regional trading bloc in history.
Globalization — the spread of products, technology, information and jobs across national borders and cultures — has been a dominant business model for many decades, creating complex value chains that span the world. But within the globalization context, one element — the operational focus of supply chains — is shifting toward more regional models and changing how companies and nations trade with each other. This change will alter the definition of globalization to allow regional trading blocs to flourish while still retaining a global outlook for the exchange of data, information and the use of global resources.

The globalization model of the past was defined by companies adopting a “think globally and act locally” mantra, whereas a more appropriate and contemporary viewpoint for today’s model is to “think regionally and act locally.” Such a view supports a localization approach, where a product may be designed globally, and have demand orchestrated regionally and met locally within the market or region. This segmented and balanced approach uses the appropriate, varied models across the supply chain.

This allows companies the opportunity to make specific decisions regarding the locations in which they will base their production to supply regional demand. Factors, such as low wages, have lost much of their attractiveness in sourcing decisions that are now predominantly made based on access to skilled labor, natural resources, the quality of infrastructure and proximity to market demand locations. Today, a raft of pressures threatens to pull apart trading arrangements between China
and the United States, the European Union (EU) and Australia, in particular.

The pandemic tore through global supply chains, preying on weak points that had gone unaddressed for years. Single sources of supply and limited diversification of manufacturing bases were taken out of action, exposing the scarcity of backup planning by the majority of organizations.\(^4\) In order to learn the lessons on which the pandemic schooled global supply chain leaders, companies in many industries will need to adjust existing sourcing arrangements to remove the risk created by single-country sourcing.

Within the Asia/Pacific region, a sense of decoupling also exists. Take South Korean car manufacturer Hyundai, for example. Hyundai selected Singapore as the location for its new innovation center — the first time it has chosen a country without an established car manufacturing industry. The facility, known as the Hyundai Motor Group Innovation Center, will cost almost S$400 million. It will house an electric vehicle factory and facilities for the research and development of automotive technologies. It aims to produce 30,000 electric vehicles every year by 2025.

The Singapore government’s Economic Development Board (EDB) offers skills development initiatives and sees these types of initiatives as opportunities to grow capabilities in new industries.\(^5\)

These multidirectional decoupling movements, in part driven by rising wage levels in China, indicate a wider trend for multinational corporations to diversify their manufacturing and supply bases.\(^6\)

Gartner’s 2020 Weather the Supply Chain Storm Survey, a cross-industry global research study, investigated the factors behind companies’ decisions to move sourcing and/or manufacturing out of China.

The two main reasons were due to tariff cost increases (73% of respondents) and to diversify their operations to provide greater resilience (45% of respondents) (see Figure 1).

---

**Figure 1. Factors for Decisions to Move Sourcing and/or Manufacturing Activities Out of China**

Percentage of Respondents

<table>
<thead>
<tr>
<th>Factor</th>
<th>Primary Factor</th>
<th>Secondary Factor</th>
<th>Not a Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff Cost Increases</td>
<td>73%</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td>Diversification for Resilience</td>
<td>45%</td>
<td>37%</td>
<td>18%</td>
</tr>
<tr>
<td>Regulatory Changes (e.g., environment)</td>
<td>32%</td>
<td>26%</td>
<td>42%</td>
</tr>
<tr>
<td>Technology Trade War Concerns</td>
<td>30%</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td>Labor Cost Increases</td>
<td>29%</td>
<td>43%</td>
<td>28%</td>
</tr>
<tr>
<td>Intellectual Property Concerns</td>
<td>27%</td>
<td>27%</td>
<td>46%</td>
</tr>
<tr>
<td>Need for Closer Proximity to Customers</td>
<td>19%</td>
<td>40%</td>
<td>41%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
<td>86%</td>
<td></td>
</tr>
</tbody>
</table>

n = 79

Q. What factors explain your decision to move sourcing and/or manufacturing activities out of China?

Source: 2020 Gartner Weathering the Supply Chain Storm Survey
Many industries, including agriculture, pharmaceutical and energy, have looked to reduce their reliance on economies such as China and the related logistical challenges, and relocate to countries such as Taiwan, Vietnam, Mexico, India, Bangladesh, Brazil or Turkey. Companies that were already in the process of moving key elements of their production supply chains to other regions are doing so, not just as a reaction to the pandemic, but also because of the longer-term benefits related to manufacturing infrastructure availability and market growth opportunities. These movements have the potential to create a permanent new world order of regionally focused, rather than globally focused, operations.

These shifts in sourcing strategies enable the Asia/Pacific region to move toward greater self-sufficiency and independence from Western economies. The November 2020 signing of the RCEP brought together 15 Asia/Pacific countries to form the largest regional trading bloc in history. The RCEP covers 30% of the world’s population and 30% of global GDP as of 2020, enabling companies to do more business in Asia, for Asia.

These global trends offer considerable new opportunities to companies, sectors, countries and individuals that embrace them successfully — but the downside for those who cannot keep up has also grown disproportionately. For business leaders, policymakers and individuals, figuring out how to navigate these skewed times may require radically rethinking their supply chain operations.

The primary business benefits of regional supply chains are shorter lead times, better customer service, lower logistics costs and less working capital being tied up in inventory. Meanwhile, for global supply chains, access to world markets and supply networks is overwhelmingly the dominant factor for globalization, proving far more important than low-cost labor — one of the original drivers of globalization.

Increasingly, however, the debate is becoming less about global versus regional or even regional versus local, and more about how to optimize the supply chain network based on a segmented approach to product portfolios, customer requirements and distribution channels. The implications for many companies’ supply chains will be so significant that complete business models of manufacturing (supply and demand) will need to be reviewed, adjusted and in many cases reinvented.

If we ever truly lived in a globalized world before, the chances of doing so in the future look remote.
Globalization will not disappear as a business model. Instead, elements of its supply chain operating model are being reshaped into regional trading blocs. The challenge for companies is to develop a balanced approach between global and regional for supply chain operations in order to remain competitive.
There are significant liberalizing effects such as favorable tariffs, quotas and export subsidies and also harmful interventions, such as unfavorable tariffs, duties and other barriers to, and enablers of, trade that could support further globalization in other industries.\textsuperscript{7}

Figure 2 illustrates the impact of these liberalizing and harmful interventions since 2008. In total, governments made nearly four times as many harmful interventions for trade as they made liberalizing ones. China was the dominant recipient of harmful interventions that discriminated against foreign commercial interests, with North America, parts of Europe and China benefiting most from liberalizing actions to encourage foreign commercial interests being taken by their governments.

In 2019, prior to the COVID-19 pandemic, investment analysts predicted that international trade as we know it was unlikely to exist in the future and would instead be replaced with a regional trading system and that geopolitical tensions were reversing globalization.\textsuperscript{7,8}

The COVID-19 pandemic has forced companies to look to mitigate the risk of future supply shocks to their networks. This will reshape global trade as predominantly Western companies look to reduce their dependence on Chinese manufacturing. In turn, the Asia/Pacific region makes clear its intention to decouple ties to Western economies and increase elements of self-sufficiency not previously seen. Additionally, the U.K.’s departure from the EU forces a resetting of how the remaining members trade with the rest of the world as a bloc and creates the potential for new country alliances for the U.K.

\textbf{Figure 2. The Impact of Liberalizing and Harmful Interventions Since 2008}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{The Impact of Liberalizing and Harmful Interventions Since 2008}
\end{figure}

\textsuperscript{Source: Adapted From Global Trade Alert}
Today, many government policymakers are consumed by the economic and geopolitical confrontation with China; and it’s not just economic ties between China and the U.S. that are in danger. Europe, too, is increasingly discussing rolling back the deep trade and investment ties it has developed with Beijing in recent decades. Other countries are also forming the opinion that today’s unprecedented level of economic integration has gone too far and is no longer achieving its original objectives for mutual trading growth.
Australia is also looking to diversify its own export markets and supply chains away from China. In the past few years, Australian political leaders have become frustrated with a series of specific actions directed at them from China, including an expanding list of product categories in which they will not import.9 These movements are all set in the context of a global trading ecosystem trying to recover from the COVID-19 pandemic and the ongoing disruptions it has caused, even as companies struggle to visualize, define and plan for an unclear future (see Figure 3).

Chief among the anticipated changes related to working environments is the growth of e-commerce and digitalization, and the related emergence of new business models. Tellingly, more than half of respondents (56%) cite an increase in restrictions related to the trade and movements of goods, with 46% of respondents expecting a reduction in the globalization of supply chains. Related to this, 61% of respondents anticipate a decrease in the offshoring of manufacturing, clearly indicating the growth in more regionally based supply chains.

Figure 3. Anticipated Broader Supply Chain Changes Following the Crisis, Within the Next Five Years

Q. What changes do you see to supply chains within five years following the current COVID-19 disruption? Please select one response per row.

Source: 2020 Gartner Opportunity After Crisis June Survey
The World Economic Forum in Davos last year highlighted a series of expected global trends in the next decade. One trend is the creation of major economic blocs impacting the flow of trade between countries and creating the need for new trading rules.

These and other anticipated shifts indicate a departure from global supply chains and toward the formation, and in some cases, the reemergence, of competing trading blocs — many of which were last seen during the Cold War.

China is already well into the creation of its own regional economic ecosystem with its Belt and Road Initiative. This program will run until 2049 and aims to connect Asia with Africa and Europe, via land and maritime networks, along six corridors. Its objective is to improve regional integration, increase trade and stimulate economic growth.

In 2019, Australia’s Department of Foreign Affairs and Trade, and the Japanese Bank for International Cooperation (JBIC) joined the United States in launching the Blue Dot Network concept. Its objectives, “to promote global, multistakeholder sustainable infrastructure development in the Indo-Pacific region and around the world” are broadly similar to those of the Belt and Road Initiative. It creates dual, competing digital infrastructures to power large-scale regional trading and economic transformations.

In addition, and away from its involvement in working with other countries, China itself has a specific policy, Made in China 2025, a state-led industrial policy that seeks to make China dominant in global high-tech manufacturing. The program aims to use government subsidies, mobilize state-owned enterprises and pursue intellectual property acquisition to catch up with, and then surpass, Western technological prowess in advanced industries.

This deliberate dismantling, and eventual re-creation elsewhere of some of the sprawling cross-border supply chains, has defined globalization and, especially, the U.S.-China relationship in recent decades. Ironically, the modern version of the concept traces back to Chinese policymakers in the 1990s who were worried about overdependence on the U.S. dollar and high-end American technology.

One key uncertainty, as we look to the future, will be the stance that the Biden administration takes regarding trade with China. The Trump administration looked to create the Economic Prosperity Network, an alliance of trusted countries to partner with the U.S., formed in the wake of the COVID-19 pandemic, and viewed as being disruptive to global supply chains. Its discussions include trade, health initiatives, development and aid. The aim of this initiative is, in part, to convince U.S. firms to extricate themselves from China and instead partner with each other to reduce U.S. economic dependence on Beijing. The U.S. government wanted this network to include Australia, India, Japan, New Zealand, South Korea and Vietnam. If a U.S. manufacturing company can’t move jobs from China back to the United States, for example, it could at least move those jobs to another more U.S.-friendly country, such as Vietnam or India. In many ways, these moves from America are consistent with China’s desire to decouple its reliance on non-Asia/Pacific trade, and so both initiatives align on the same outcome — greater regional independence.

The U.S.-China trade war that escalated during the Trump administration remains in place as the Biden administration commences its four-year term. On 24 February 2021, President Biden signed an executive order focused on reviewing the systemic risks in the supply chains of multiple high-priority industries, from agriculture to pharmaceuticals. The order specified digital and cyber issues within these supply chains, and identified critical and single points of failure. The signing of the order indicated a strategy to mitigate future disruptions, such as the COVID-19 pandemic and its far-reaching impacts, across economic, business, political and social systems.

However, this reorientation of supply chains would require vast efforts and bring about substantial costs. Instead, supply chain diversification, which will benefit different trade lanes and could lead to interesting dynamics in Asia — where some countries will attempt to compete with China for manufacturing capability, is much more likely to occur.
Nearshoring is a threat to some air and sea freight forwarders’ volumes, given that intracontinental trade almost by definition opens more opportunities for land-based transport options.

Gartner’s Future of Supply Chain 2020 report revealed that 47% of companies are already moving manufacturing to different locations (including nearshore and/or onshore), with another 24% of companies citing that they will do this in the next two years (see Figure 4).

Figure 4. Strategies for Resilience and Agility
Percentage of Respondents

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Investing Now</th>
<th>Invest Within Two Years</th>
<th>No Plans to Invest Within Two Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deepen Collaborative Relationships With Key Customers and Suppliers</td>
<td>77%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Diversify the Supply Base (Multisourcing)</td>
<td>63%</td>
<td>23%</td>
<td>14%</td>
</tr>
<tr>
<td>Diversify Markets (Including Geographies or Product Lines)</td>
<td>60%</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>Redesign Products (Reduce Variety, Increase Common Components, etc.)</td>
<td>60%</td>
<td>22%</td>
<td>18%</td>
</tr>
<tr>
<td>Supply Chain Segmentation</td>
<td>55%</td>
<td>31%</td>
<td>14%</td>
</tr>
<tr>
<td>Shift Manufacturing From One Country/Region to Another</td>
<td>47%</td>
<td>24%</td>
<td>29%</td>
</tr>
<tr>
<td>Increase Outsourcing of Manufacturing, Logistics, etc.</td>
<td>46%</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>Increase Inventory (Safety Stock)</td>
<td>43%</td>
<td>11%</td>
<td>46%</td>
</tr>
<tr>
<td>Stronger Government Lobbying</td>
<td>42%</td>
<td>14%</td>
<td>44%</td>
</tr>
<tr>
<td>Coalitions With Peer Companies to Influence Policies or Joint Development</td>
<td>42%</td>
<td>21%</td>
<td>37%</td>
</tr>
<tr>
<td>Additional Vertical Integration of Core Operations</td>
<td>37%</td>
<td>29%</td>
<td>34%</td>
</tr>
<tr>
<td>Reduce Manufacturing and/or Warehouse Utilization (for Redundant Capacity)</td>
<td>36%</td>
<td>27%</td>
<td>37%</td>
</tr>
</tbody>
</table>

n = 1,328
Q. What investments or adjustments is your company making, or planning to make, to achieve greater resilience and/or agility?
Source: 2020 Gartner Future of Supply Chain Survey

Given the U.S.-China trade war and the general pullback of many Western countries from sourcing as extensively from China, China sees the importance of continuing to develop technology on its own. China’s new five-year plan, which covers development from 2021 through 2025, will accelerate its decoupling from the West and emphasize regional trade links within Asia at the same time.14,15 China’s dual circulation framework, announced in 2020, is intended to emphasize greater reliance on its domestic
supply chains and domestic demand, alongside its long-standing emphasis on transforming itself into an export powerhouse.\textsuperscript{16,17} This does not mean that China is retreating from globalization. Rather, it makes it more important that China continues to deepen its relationships with willing partners within the Asia/Pacific region, even as it expects a continued deterioration in integration with Western supply chains.\textsuperscript{18} RCEP offers economic scale and population diversity. It also provides China a way to participate in globalization and use it as a way to meet the need for cost-efficiency that is essential in stoking and sustaining domestic demand. However, this agreement has only recently been signed and has yet to demonstrate that it can achieve its intended goals.

This conflict between cost-efficiency and national interests influencing global supply chains was visible in Gartner’s 2020 Future of Supply Chain Survey. In the survey, more than half of respondents agreed that national interests and pressure to favor domestic operations will increase in influence on future supply chain decisions. At the same time, they also largely agreed that customers still care about low prices (see Figure 5).

One company building resilience and agility into global supply chains by making it more regionally interdependent is Stanley Black & Decker (SBD). SBD is restructuring its supply chain network to improve its levels of resilience and agility in order to be more responsive to regional customer needs.

**Figure 5. The Future of Global Supply Chains to Improve Resilience and Agility**

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Cost Country Sourcing Has Run Its Course</td>
<td>19.37%</td>
<td>39.79%</td>
<td>40.83%</td>
</tr>
<tr>
<td>Our Customers Care More About Low Prices Than Where Our Products Are Sourced and Made</td>
<td>45.19%</td>
<td>21.55%</td>
<td>33.26%</td>
</tr>
<tr>
<td>National Interests and Pressure to Favor Domestic Operations Will Increase in Influence on Our Future Supply Chain Decisions</td>
<td>51.61%</td>
<td>15.56%</td>
<td>32.83%</td>
</tr>
</tbody>
</table>

n = 1,342

Q: Do you agree or disagree with the following statements? Please select one response per row.
Source: 2020 Gartner Future of Supply Chain Survey
Restructuring Supply Chain Network for Resiliency, Agility and Responsiveness to Customers

In late 2019, Stanley Black & Decker (SBD) created an enterprisewide operations function to provide maximum ability to scale operational activities across the company. This also provided an enterprisewide command of operations — from sourcing, to manufacturing, to product delivery. The integrated Global Operations organization allows for higher market responsiveness, a coordinated approach to data and functional best practices to increase decision-making speed. This increased SBD’s ability to meet the operational challenges in the volatile environment of 2020 and beyond.

SBD is on a multiyear transformative journey, restructuring its manufacturing footprint and supply base to increase resiliency, agility and responsiveness to customers while adding redundancy. In 2020, SBD had a significant portion of its footprint in China, with an average total end-to-end lead time (supplier to customer delivery) of nine months. This is a global end-to-end supply chain network initiative that — with leadership support and investment — will optimize the supply network to bring products closer to customers, improve productivity and drive lean-led Industry 4.0 to the end-to-end supply chain.

SBD has executed a series of localization initiatives to move product sourcing and manufacturing closer to the regions in which product is consumed and to mitigate supply chain risk by shifting spend from high-risk countries into alternate regions. SBD’s Global Tools and Storage business unit has increased its manufacturing workforce in the U.S. over the past five years, with a goal of producing a majority of the products sold in North America in the region. Manufacturing jobs continue to be returned to the U.S., which will grow the region’s manufacturing, reduce lead time by 60% to 75%, build product availability and enhance customer service.

SBD has also implemented strategic thresholds for finished goods’ costs of transfer to limit risks within any single facility and allow for future organic growth. It is relocating the production of tens of thousands of SKUs across the globe. SBD is leading a human-centric transformation in skilling and upskilling through organizing the ecosystem of stakeholders — companies, academia, technical schools, nonprofits, governments, community organizations and civil society — to develop programs and solutions that are accessible to all. Due to the displacement of many jobs and workers from the global pandemic, these programs must be accessible to the broad base of new entrants into manufacturing that can continue to help accommodate the growth of manufacturing in the U.S.

In SBD’s industrial business, the goal is to optimize the supply chain network by rightsizing capacity to customer demand and significantly consolidating rooftops. It is driving increased resilience and cost-efficiency through supply base reshoring and spend consolidation. It is also pioneering implementation of Industry 4.0 across the entire product value chain. Technological adoption provides data-driven manufacturing efficiencies from suppliers through end users. SBD is using its lessons from its own manufacturing process transformation to ensure connectivity to the distribution centers and customers, and back to suppliers. Specific implementations include modernizing facilities with new technologies such as smart fixturing, flexible automation and Industry 4.0 connectivity. Its manufacturing capabilities will be more responsive in leveraging scale and equipment to more rapidly alter manufacturing reconfigurations. Goals include reducing lead time, improving order on-time fulfillment to customers’ requested dates and building capacity for business growth.

In tandem, SBD’s Next-Generation Procurement Initiative, that started in 2019, is a purposeful transformation that enables transparency and builds a sustainable and resilient supply base. One critical aspect of this work relates to supplier risk mitigation. The Global Procurement and Strategic Sourcing team has prioritized financial and operational risks to support customer excellence, developed and strengthened suppliers’ capabilities, and advanced service performance levels through improved supply visibility.
For a growing number of multinational corporations, such as SBD, this pursuit of a regional sourcing strategy is the preferred approach. Sectors such as bulk chemicals, automobiles and pharmaceuticals have shifted from a national to a regional focus in North America, with companies setting up regional headquarters responsible for North American Free Trade Agreement (NAFTA) countries. In only a few industries, such as consumer electronics, is a global sourcing strategy considered the most appropriate strategy.

The car industry is another example that illustrates that a Globalization model can coexist and enable regional supply and demand strategies to operate without compromising the nature of global infrastructure. Global alliances such as Renault-Nissan-Mitsubishi bring business scale for areas such as R&D, but the supply chains operate with distinct regional sourcing strategies catering to regional demand. For example, more than 85% of automobiles sold in North America are built in North American factories. More than 90% of the cars produced in the EU are sold in that region, and more than 93% of all cars registered in Japan are manufactured domestically.

Clusters provide regions with the armory to attract talent and investment that may otherwise have gone to more established cities and countries with existing infrastructure.

Although many of the car manufacturing brands involved are global conglomerates, they have regional sourcing strategies that largely cater to regional demand. This highlights the point made earlier in the introduction section, namely that a globalization model can coexist and enable regional supply and demand strategies to operate without compromising the nature of global infrastructure.

Although globalization enables companies to source goods, technology, information and capital from across the world, it also provides the flexibility to support very local concentration of specific activities. These activities, taking the form of new industry clusters, continue to emerge in certain cities or city regions across the world.

Prominent examples of new industry clusters include:

- 5G telecommunications in China.
- Textile manufacturing in Northern Italy.
- High-tech Silicon Fen in the U.K., Silicon Valley in the U.S. and Boston's Route 128 (a great example of a cluster that provides proximity to, and leverage of, the Massachusetts Institute of Technology’s Innovation Labs).
- Wichita State University in Kansas, along with Deloitte, launched their “Smart Factory @ Wichita” initiative — an “experiential learning environment that will accelerate the future of manufacturing.”

- Thanks to decades of investment from the government, Singapore is now an emerging hub with several promising biotech startups making their way into the market.

Clusters provide regions with the armory to attract talent and investment that may otherwise have gone to more established cities and countries with existing infrastructure. While that may be considered a less-risky option, it has the effect of stunting the dispersion of innovation, education and development that emerging clusters can provide. This also drives employment opportunities away from traditional heartlands, which, in turn, diversifies the risks of future manufacturing supply constraints.

Weighing this approach and its possible ramifications enables leaders of multinational corporations to take a segmented snapshot of global supply and demand by viewing the world according to four entities — city clusters, nations, regions and the globe. Also, and with a limited number of exceptions, regions are becoming the focus of strategy analysis and organization. DuPont and P&G, for example, have rolled their three separate country subsidiaries for the U.S., Canada and Mexico into one regional organization, respectively. This is true of other multinational corporations operating in the NAFTA region. The same is also happening in Europe with the EU’s push toward greater economic integration.

Many foreign subsidiaries will assume the role of sales and service organizations, responding to the local needs of foreign
customers. However, subsidiaries that take on a more demanding leadership role in a region (and in the parent's global network) can add considerably more value to the firm worldwide. One of the theoretical advantages of being global is the ability to tap into lessons and innovation worldwide — a multinational corporation’s leading subsidiary can make this happen. In addition, leading subsidiaries can take on global and regional responsibilities for R&D, manufacturing, product management and key marketing functions.

The top executives of foreign subsidiaries have a special role to play in turning their operations into more than mere sales and service outlets. Specifically, subsidiary leaders can promote the development of world-class business capabilities that position their unit of the company to win broader regional responsibilities for achieving corporate goals.

For example, a subsidiary’s capability could be its skill in developing and manufacturing a product line. • Pratt & Whitney Canada manages a critical line of engines for Pratt & Whitney worldwide. • Nokia in the U.K. leads the Finnish telecommunications company’s product development for several key products. • Panasonic in Spain handles key aspects of the company’s Pan-European strategy.

The role of subsidiaries in these cases represents a form of internal outsourcing, where the subsidiary provides a service to the entire company from a single location and the output of its service is available across multiple regions.
Due to high levels of inflation, currency volatility and debt repayments, many emerging market economies have limited capacity and flexibility to continue stimulus packages for their economies. Even Indonesia, long lauded as an emerging powerhouse, entered its first recession since the Asian financial crisis of 1998. Malaysia is also witnessing its sharpest contraction since that time. Meanwhile, Ghana entered its first recession in over four decades as the COVID-19 pandemic set in.
Despite the recent problems that these and other countries have recently endured, recovery is predicted. However, with limited domestic fiscal flexibility in many of these markets, any revival will depend on stimulating and sustaining increased global demand. Many of these countries, especially in Asia, have become more balanced in recent years as economic growth has been driven by both consumer spending and exports, rather than just the latter. This potential ability to rebound from the pandemic will be dependent, to varying degrees, on demand from North America, China and Europe for goods and services.

The 2020 Gartner Smart Manufacturing Strategy and Implementation Trends Survey, which focused on supply chain manufacturing professionals across many industries, showed that 71% of the respondents are regionalizing their manufacturing networks, with 64% resourcing or nearshoring production (see Figure 6). These two surveys paint a similar picture — resourcing and nearshoring of manufacturing bases is happening now, and at scale, as companies shift toward greater regionality in their supply chain operations.

However, the economics of this are also sometimes challenging. While some level of supply chain restructuring appears likely post-COVID-19, trading conditions caused by the pandemic are expected to remain conducive to solid air and sea freight forwarding growth over the midterm.

The impact of the pandemic has been particularly felt across the 50 emerging markets that make up the Agility Emerging Markets Logistics Index. This index is an annual snapshot of industry sentiment and a ranking of the world’s 50 leading emerging markets by size.²²

---

**Figure 6. Smart Factories and the Manufacturing Network**

*Summary: True*

- **Our smart factory initiatives are focused on upgrading existing sites (n = 431)**: 78%
- **We have a smart factory initiative (n = 425)**: 74%
- **We are redesigning factory layouts to meet social distancing requirements (n = 435)**: 73%
- **We are regionalizing our manufacturing network (n = 431)**: 71%
- **We have different technology configurations for smart factories (n = 424)**: 70%
- **We are restoring/near-shoring production (n = 428)**: 64%
- **Our smart factory initiatives are focused on completely new sites (n = 431)**: 56%

*Base: Excludes “Don’t know” responses*

Q. Which of the following statements are generally true with respect to smart factories and the manufacturing network?

Source: 2020 Gartner Smart Manufacturing Strategy and Implementation Trends Survey
It showed that 52% of global executives say that the global economy won’t recover until at least 2022. Tellingly, Asia/Pacific-based executives are the most optimistic at 56%, ahead of their less optimistic European and more pessimistic U.S.-based counterparts (see Figure 7).

The optimism emanating from the Asia/Pacific region may well be linked to the strength of the recoveries already seen in China and its smaller neighbor, Vietnam. Thanks to their handling of the pandemic and their ability to keep trading through it, even though their economic growth was slowed by COVID-19, they both showed GDP gains in 2020.

Figure 7. Pandemic Recovery in 2021? Or Beyond?

Percentage of logistics executives who expect particular regions to recover in 2021:

- North America: 49%
- Europe: 53%
- Middle East and North Africa: 45%
- Asia Pacific: 56%

Percentage expecting recovery in other regions between 2022 and 2024:

- South America: 51%
- Sub-Saharan Africa: 42%

52% say the global economy won’t recover until at least 2022.
The experiences of running a supply chain during the COVID-19 pandemic was a challenging and, in some cases, harrowing time in the careers of chief supply chain officers (CSCOs). The universal response was to be better equipped to deal with and, to strengthen, supply and demand operations during the next significant disruption.

The findings of the 2020 Gartner Future of Supply Chain Survey illustrated an overwhelming desire of executives to build resilience and agility into their supply chain operations within the next two years (see Figure 8).

Figure 8 provides an indication as to the extent of this desire to alter supply sourcing:

- Thirty percent of 1,346 respondents said that they are shifting from a global supply chain model to one that is more regionally based.
- And 30% also believe that serving the world from distant global factories is unsustainable.

Although nearly equal percentages of respondents do not wish to follow this path or are neutral toward doing so, the fact that 30% are taking this relocation direction is nevertheless significant.

This study also provided insight into the mindsets of these supply chain executives regarding how they intend to alter their supply chains to introduce these new capabilities. Earlier in this report, it was advised that companies should look to diversify their sourcing locations to build a model that reduced reliance on single-sourcing locations, wherever possible.

This has the objective of protecting supply chains from future sourcing shocks caused by unforeseen disruptions.
**Figure 8. Responding to a Disrupted World**

Percentage of Respondents

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resilience &amp; Agility</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Two Years We Will Invest to Make Our Supply Chains More Agile</td>
<td>89%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Within Two Years We Will Invest to Make Our Supply Chains More Resilient</td>
<td>87%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Our Supply Chains in the Past Have Been Designed Primarily for Cost Efficiency Rather Than Resilience or Agility</td>
<td>60%</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>Our Executive Leadership Understands and Accepts the Investments Required to Be More Resilient and Agile</td>
<td>58%</td>
<td>29%</td>
<td>13%</td>
</tr>
<tr>
<td>Resilient and Agile Supply Chains Are More Costly to Operate</td>
<td>31%</td>
<td>37%</td>
<td>32%</td>
</tr>
<tr>
<td>National Interests and Pressure to Favor Domestic Operations Will Increase in Influence on Our Future Supply Chain Decisions</td>
<td>52%</td>
<td>33%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>National Interests</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our Customers Care More About Low Prices Than Where Our Products Are Sourced and Made</td>
<td>45%</td>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td>Our Executive Leadership Will Support Factoring National Interests Into Business Decisions, Regardless of Government or Regulatory Influence</td>
<td>36%</td>
<td>46%</td>
<td>18%</td>
</tr>
<tr>
<td>Our Customers Want Locally Sourced and Made Products</td>
<td>27%</td>
<td>45%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Network Design</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automation Will Enable Us to Make Onshore Manufacturing Economically Viable</td>
<td>56%</td>
<td>34%</td>
<td>10%</td>
</tr>
<tr>
<td>We Are Shifting From a Global Supply Chain Model to One That Is More Regionally Based</td>
<td>30%</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td>Serving the World From Distant Global Factories Is Unsustainable</td>
<td>30%</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>Lean and/or Just-in-Time Supply Chains Will Be Less Applicable in Our Future Strategy</td>
<td>19%</td>
<td>34%</td>
<td>47%</td>
</tr>
<tr>
<td>Low-Cost Country Sourcing Has Run Its Course</td>
<td>19%</td>
<td>41%</td>
<td>40%</td>
</tr>
</tbody>
</table>

n = 1,346

Q: Do you agree or disagree with the following statements?

Source: 2020 Gartner Future of Supply Chain Survey
The study illustrated the real action that companies are taking to build greater resilience and agility into their supply chains (see Figure 9).

- **Diversification of the supply base:** Sixty-three percent of companies are already investing in multisourcing activities to minimize the risk to supply from too narrow a supply base, and a further 23% plan to follow suit within the next two years.

- **Diversification of markets:** To widen both the geographical extent of demand or to add to product portfolios, 60% of companies are making investments now, with an additional 21% having plans to do so within the next two years.

- **Relocation of manufacturing bases:** Just under half (47%) of the survey respondents are investing in moving their manufacturing bases from one region or country to another. A further 24% will do so in the next two years, meaning that at that stage, nearly three-quarters of the respondent companies will have invested in relocating their manufacturing bases.

---

**Figure 9. Strategies for Resilience and Agility**

Percentage of Respondents

- **Deepen Collaborative Relationships With Key Customers and Suppliers**: 77% are investing now, 18% within two years, and 5% plan no investment.
- **Diversify the Supply Base (Multisourcing)**: 63% are investing now, 23% within two years, and 14% plan no investment.
- **Diversify Markets (Including Geographies or Product Lines)**: 60% are investing now, 21% within two years, and 19% plan no investment.
- **Redesign Products (Reduce Variety, Increase Common Components, etc.)**: 60% are investing now, 22% within two years, and 18% plan no investment.
- **Supply Chain Segmentation**: 55% are investing now, 31% within two years, and 14% plan no investment.
- **Shift Manufacturing From One Country/Region to Another**: 47% are investing now, 24% within two years, and 29% plan no investment.
- **Increase Outsourcing of Manufacturing, Logistics, etc.**: 46% are investing now, 21% within two years, and 33% plan no investment.
- **Increase Inventory (Safety Stock)**: 43% are investing now, 11% within two years, and 46% plan no investment.
- **Stronger Government Lobbying**: 42% are investing now, 14% within two years, and 44% plan no investment.
- **Coalitions With Peer Companies to Influence Policies or Joint Development**: 42% are investing now, 21% within two years, and 37% plan no investment.
- **Additional Vertical Integration of Core Operations**: 37% are investing now, 29% within two years, and 34% plan no investment.
- **Reduce Manufacturing and/or Warehouse Utilization (for Redundant Capacity)**: 36% are investing now, 27% within two years, and 37% plan no investment.

n = 1,328

Q: What investments or adjustments is your company making, or planning to make, to achieve greater resilience and/or agility?

Source: 2020 Gartner Future of Supply Chain Survey
In November 2020, 15 countries in Asia/Pacific signed the RCEP agreement. This brings together the 10 countries of the Association of Southeast Asian Nations (ASEAN) with China, Japan, South Korea, Australia and New Zealand into a regional trading bloc. This will enable companies to do more business in Asia, for Asia.
The signing of the RCEP has created the world’s largest trading bloc. It is also critical to demonstrate the power of multilateralism and globalization during a spate of protectionist moves that began in 2016 with Brexit and more recently, the U.S.-China trade war.

The RCEP covers 30% of the world’s population and 30% of global GDP as of 2020, making it the largest trade bloc in history (see Figure 10).

The RCEP ensures that importing countries accept the production standards of other member countries from where goods originate, allowing companies to take advantage of common rules of origin. This creates a trading bloc, whereby goods can be made to a single set of criteria and supplied to all 15 markets. Effectively, firms in the region will now be able to consider Asia/Pacific, with the notable exception of India, as one sourcing region and one market, diluting the effects of tariffs on any one nation.

This change can facilitate tighter integration of supply chains across the RCEP member countries. A key benefit of this approach is the ability to attract and retain a larger share of global trade in goods at a time when the U.S.-China trade war has been reconfiguring global supply chains for resilience.

However, the net result of the RCEP is much more than just consolidation. It goes beyond any existing ASEAN trade agreements in its harmonization of rules on trade for goods. Its most important feature for supply chain executives to take notice of is the alignment of rules of origin for all 15 countries.

The long-term benefits of the RCEP might rest in its ability to evolve in the future, similar to other ASEAN agreements. In areas where the agreement falls short, such as the handling of disputes on investment, there are provisions for the establishment of a secretariat. Therefore, there will be a group of member country representatives meeting regularly to continue evolving the agreement.

In the long term, given the scope of the influence of the member countries on world trade, the RCEP agreement has the potential to influence international trade rules in evolving areas of technology.
These areas include 3D printing and the use of data in artificial intelligence (AI). In these areas, rules created within the bloc on questions such as who owns patents or designs, and how material or data are handled, can help a fragmented Asia become more consolidated. In addition, it will create rules that become world standards. This would be a huge win given how disparate technology ecosystems, such as AI, exist across the world in emerging areas.

An interesting feature of RCEP for global supply chain executives to take note of is how it brings together widely disparate countries in terms of size, population, skills and economic might. These include China, Japan and South Korea on one hand, with Laos, Vietnam and Brunei on the other.

In terms of integrating regional supply chains, this brings together countries with the potential for technological innovation with countries that can offer competitive labor costs to create products that are competitive from both technological and cost standpoints. Given the shift we’ve already seen in global value chains from countries such as China to Vietnam and Indonesia, an agreement like RCEP is bound to provide global firms with more certainty to encourage regionalization of supply chains within Asia.

According to the International Monetary Fund’s World Economic Outlook January 2021 Update, four of the five countries with the largest GDP growth projections by 2022 will be RCEP countries (see Table 1).

### Table 1. World Economic Outlook Update

<table>
<thead>
<tr>
<th>Country</th>
<th>Actual 2019</th>
<th>Estimate 2020</th>
<th>Projection 2021</th>
<th>Projection 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>4.2%</td>
<td>-8.0%</td>
<td>11.5%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Philippines</td>
<td>6.0%</td>
<td>-9.6%</td>
<td>6.6%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.0%</td>
<td>-1.9%</td>
<td>4.8%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.3%</td>
<td>-5.8%</td>
<td>7.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>China</td>
<td>6.0%</td>
<td>2.3%</td>
<td>8.1%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, World Economic Outlook, January 2021 Update
The formation of trading blocs and country alliances is breaking apart some global supply chains and reforming them into more purposeful, directional and geographically specific models. This does not represent a direct threat to the entire concept of globalization, but does so to the concept of global supply chains, while retaining the essence of globalization in how information, technology and resources are utilized.

Although this necessary realignment of the world trade order was already underway before the pandemic, the damaging effects of COVID-19 have moved the mindsets of supply chain executives across all industries. They no longer consider disruptions to be potential future events through which they need to survive and emerge from, while anticipating a return to predisruption operations. Instead, they recognize the need to plan for a world defined by the ongoing occurrence of disruptions, with periods of comparative calm being the exception, rather than the norm.

This shift in the impact and occurrence of disruptions presents CSCOs with the challenge that may last for the duration of their careers — how to lead their organizations through a world that will continue to feel less global in how it trades, while achieving the goals of global growth.

The definition and concept of globalization is being rewritten by companies that wish and, in the light of the COVID-19 pandemic, need to adjust and strengthen how they source and trade across the globe.
CSCOs should:

- **Capitalize on regional capabilities and the strengths of partners and subsidiaries by creating a geographically segmented approach to supply and demand.** To do so, carry out feasibility studies as to the operational capabilities in each regional subsidiary. Some may have excellent manufacturing capabilities, which can be harnessed to operate as a manufacturing hub. Others may have additional raw material sourcing networks and skill sets to serve both their local region and supply to other manufacturing subsidiaries. In some regions, it may be possible to create full buying offices to source materials for global usage as an alternative to having multiple regional offices operating at various levels of efficiency, but without delivering the global economies of scale to service the wider organization.

- **Change the organizational mindset of globalization by adopting a “think regionally and act locally” strategy.** This means diversifying responsibility and decision making when value-adding from a centralized model to a regional one. This will be necessary in situations where regional product demand and consumption patterns vary from one region to another, and may need to be locally supplied to meet regulations and legislation requirements or customer expectations regarding product cost, order fulfillment lead time, packaging, labeling, or customer environmental and sustainability preferences.

- **Ensure the organization seizes opportunities presented by the emergence of regional manufacturing clusters by participating in suitable institutionally organized or funded developments.** To capitalize on these opportunities, it will be necessary to continually research and become involved in regional governmental schemes designed to promote startup operations or the development of new dedicated manufacturing bases in various global regions. Companies wishing to take advantage of these opportunities, some of which may present themselves at short notice, will need to be operationally and culturally agile. Not all companies will be able to take advantage of these opportunities, as a managed risk-aware and innovation-oriented approach will be needed. Large global organizations will need the abilities to think and act as startup operations to move at the required pace and agility.

- **Determine if existing reliance on China as a supply source is an optimal position by assessing the infrastructure of neighboring countries in the Asia/Pacific region as more viable alternatives.** Companies that have established and reliable supply arrangements in China will need local knowledge and resources to successfully navigate and seize alternative opportunities in neighboring countries in the Asia/Pacific region. This may be achieved through existing capabilities, or new partnerships may need to be established from scratch. Carry out extensive studies into country-specific sourcing and manufacturing operations in the region. Look at the capabilities that were previously invested in. Understand local governmental objectives for building or strengthening alternatives to Chinese operations, and act decisively and with agility to capitalize.
**Evidence**

---

**2020 Gartner Future of Supply Chain Survey.** In September and October 2020, Gartner Supply Chain Research sent invitations to complete this online survey to its community members, to Gartner clients and to a wider group of practitioners in supply chain and other functions globally. We received 1,346 completed responses during the survey period. We had participants across industries, for example, high tech (20%), healthcare and pharma (14%), CPG (11%), industrial (10%), food and beverage (9%), and retail (9%), and that mostly worked in supply-chain-related functions, for example, supply chain (49%), logistics and/or transportation and distribution (9%), purchasing and/or procurement (9%), and operations (7%). Of the respondents, 57% were from North and South America, 29% were from EMEA, 13% were from Asia and Australia, and others were from the rest of the world. Sixty-three percent of the participants were from $10-billion-plus companies. Sixty-two percent of the participants were at VP or director levels, or above.

**2020 Gartner Opportunity After Crisis Survey.** In May and June 2020, Gartner Supply Chain Research sent invitations to complete this online survey to Gartner clients, community members and to a wider group of practitioners in supply chain, and other functions globally. We received 528 completed responses during the survey period. We had participants across industries, for example, high tech (15%), industrial (14%), CPG (12%), and food and beverage (10%), and that mostly worked in supply-chain-related functions, for example, supply chain (36%), purchasing and procurement (10%), logistics and/or transportation, and distribution (9%). Of the respondents, 44% were from EMEA, 37% were from North and South America, 18% were from Asia and Australia, and others were from the rest of the world. More than half (55%) of the participants worked for $10-billion-plus companies. Fifty-four percent of the participants were at VP or director levels, or above.

**2020 Gartner Weathering the Supply Chain Storm Survey.** In February and March 2020, Gartner Supply Chain Research sent invitations to complete this online survey to Gartner clients, community members and to a wider group of practitioners in supply chain and other functions globally. We received 260 completed responses during the survey period. We had participants across industries and that mostly worked in supply-chain-related functions, for example. supply chain (43%), purchasing and procurement (11%), logistics and/or transportation, and distribution (10%). Of the respondents, 42% were from North and South America, 38% from EMEA, and others from Asia and Australia, and the rest of the world. Forty-six percent of the participants were from $10-billion-plus companies. Fifty-seven percent of the participants were at VP or director levels, or above.

**2020 Gartner Smart Manufacturing Strategy and Implementation Trends Survey.** This study was conducted online between 23 October 2020 and 3 December 2020, to help develop and ratify roadmaps, assess organizations’ strategies against a collective market perspective, and ensure their strategies for recovery and renewal are as future-proof as possible.

In total, 439 respondents were interviewed in their native language across North America (36%, n = 160; countries include the U.S. and Canada), Western Europe (42%, n = 184; countries include the U.K., France, Germany and Sweden), and APAC (22%, n = 95; countries include Australia, New Zealand and Singapore).

- Qualifying organizations operate in the manufacturing industries and report enterprisewide annual revenue for fiscal year 2019 of at least $500 million (at least $1 billion in the U.S.) USD or equivalent. Companies must have a smart manufacturing strategy or plans to deploy.

- Qualified participants have a role tied to a supply chain function and are in director or above roles. All respondents are involved in their company’s decisions regarding manufacturing operations and/or overall manufacturing strategy.

The study was developed collaboratively by Gartner Analysts and the Primary Research Team. Disclaimer: Results of this study do not represent global findings or the market as a whole, but reflect sentiment of the respondents and companies surveyed.
Evidence


5. Australia-China Trade Disputes in 2020, CNBC.


7. Coronavirus Will Reverse Globalization and Create Regional Supply Chains, Economists Predict, CNBC.

8. Here’s a List of the Australian Exports Hit by Restrictions in China, CNBC.

9. What the “Blue Dot” Infrastructure Network?, Silk Road Briefing.


12. Trump Administration Pushing to Rip Global Supply Chains From China, Reuters.

13. China Proposes Development Targets for 14th Five-Year Plan Period, XINHUA.NET.


15. What We Know About China’s ‘Dual Circulation’ Economic Strategy, Reuters.

16. China Has a Plan for That, NUS.

17. Deloitte and Wichita State University Join Forces to Launch New Smart Factory, Wichita State University.


20. China Proposes Development Targets for 14th Five-Year Plan Period, XINHUA.NET.
<table>
<thead>
<tr>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
<tr>
<td>Singapore’s Promising Biotech Startup Scene, Tech Collective.</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>The Consequences of COVID-19 on Developing and Emerging Economies, Elcano Blog.</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>Emerging Markets Logistics Index 2021, Agility.</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>RCEP: An Economic Architecture for the Indo-Pacific?, ORF.</td>
</tr>
<tr>
<td>24</td>
</tr>
<tr>
<td>How Your Supply Chain Should React to Tariff Uncertainties in the United States and China, Gartner.</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>Policy Support and Vaccines Expected to Lift Activity, International Monetary Fund.</td>
</tr>
</tbody>
</table>