

Supply Chain Globally in a Post-Pandemic World

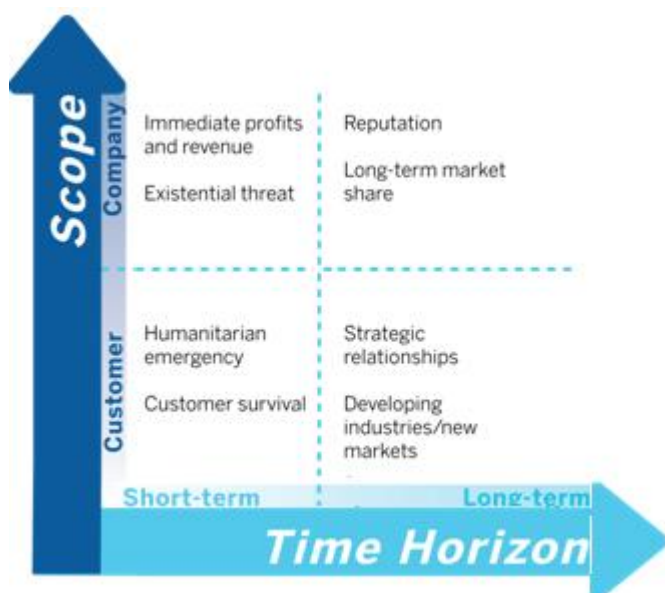
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1. Summary

The Global trade war for the supply and demand shocks introduced on by the COVID-19 crisis are forcing manufacturers everywhere to reassess their supply chains. For the foreseeable future, they will face pressure to increase domestic production, grow employment in their home countries, reduce their dependence on risky sources, and rethink strategies of lean inventories and just-in-time replenishment, which can be crippling when material shortages arise.

This article provides advice to make your supply chain more resilient without sacrificing competitiveness. Championing transparency guarantees more challenging-and more strategic-debate about what post-pandemic optimization means for suppliers and customers. Those optimization discussions and disagreements, in turn, lead to more rigorous definitions of transparency. Meaningful optimization-the ability to weigh measurable trade-offs-requires clearly delineated parameters. Greater clarity invites greater insight into options and opportunities. Greater insight ensures better and more timely decision-making. For example, increased visibility makes clearer whether better managing complexity or supply chain simplification is the better investment.

Leaders allocating scarce resources during a supply chain crisis have several tactics to consider. When weighing each course of action, they need to keep in mind both scope (do they prioritize the impacts on the company or how the decisions affect customers) and time horizon (do they need to center on short-term outcomes, or do they have the luxury of focusing on long-term considerations?).



Understanding and Accepting Challenges

Modern products often incorporate critical components or sophisticated materials that require specialized technological skills to make. It is very difficult for a single firm to possess the breadth of capabilities necessary to produce everything by itself. Consider the growing electronics content in modern vehicles. Automakers aren't equipped to create the touch screen displays in the entertainment and navigation systems or the countless microprocessors that control the engine, steering, and functions such as power windows and lighting.

Manufacturers in most industries have turned to suppliers and subcontractors who narrowly focus on just one area, and those specialists, in turn, usually must rely on many others. Such an arrangement offers benefits: You have a lot of flexibility in what goes into your product, and you're able to incorporate the latest technology. But you are left vulnerable when you depend on a single supplier somewhere deep in your network for a crucial component or material. If that supplier produces the item in only one plant or one country, your disruption risks are even higher.

Once you've identified the risks in your supply chain, you can use that information to address them by either diversifying your sources or stockpiling key materials or items.

Multi-Directional Supply

The obvious way to address heavy dependence on one medium-or high-risk source (a single factory, supplier, or region) is to add more sources in locations not vulnerable to the same risks. The U. S.-China trade war has motivated some firms to shift to a "China plus one" strategy of spreading production between China and a Southeast Asian country such as Vietnam, Indonesia, or Thailand.

Take Advantage of Process Innovations

As firms relocate parts of their supply chain, some might ask their suppliers to move with them, or they might bring some production back in-house. New technologies already or soon will allow companies to lower their costs or switch more flexibly among the products they manufacture, rendering obsolete the installed bases of incumbent competitors or suppliers. Many of these advances also present an opportunity to make factories more environmentally sustainable. Examples include the following:

- Automation
- New processing technologies
- Continuous-flow manufacturing
- Additive manufacturing

In many industries, technologies such as these promise to upend the traditional strategy of seeking economies of scale by concentrating production in a few large facilities. They will allow companies to replace large plants that serve global markets with a network of smaller, geographically distributed factories that is more resistant to disruption.

2. Conclusion

The economic turmoil caused by the pandemic has exposed many vulnerabilities in supply chains and raised doubts about globalization. Managers everywhere should use this crisis to take a fresh look at their supply networks, take steps to understand their vulnerabilities, and then take actions to improve robustness. They can't and shouldn't totally back away from globalization; doing so will leave a void that others-companies that don't abandon globalization-will gladly and quickly fill. Instead, leaders should find ways to make their businesses work better and give themselves an advantage. It's time to adopt a new vision suitable to the realities of the new era-one that still leverages the capabilities that reside around the world but also improves resilience and reduces the risks from future disruptions that are certain to occur.

References

- [1] Harvard Business Review-Supply chain management and related topics International business
- [2] Special Thanks for Willy Shah – Harvard Business School
- [3] Supply Chain Disruptions by Yossi Sheffi