

Expert Perspectives: Six Future Supply Chain Challenges

We convened our Experts in Residence (ExR) in May, excited to facilitate our inaugural discussion with experts representing most of our nation's 16 critical infrastructure sectors. Our first conversation sought to understand the forces shaping the global supply chain of the future, a topic affecting every organization, agency, and community. As these takeaways show, designing the future efficient, effective, and resilient supply chain will continue to expand beyond the mechanics of moving physical items from Point A to Point B.

1: The Last Mile Will Continue to be a Challenge

While the supply chain is a logistical marvel, it falls flat when the last mile goes wrong. This last mile, transporting goods from a distribution center or warehouse to stores or consumers, is inefficient and therefore expensive. Advances in delivery technology (drones, autonomous vehicles, tracking, scheduling) will provide some relief, but more delivery options, just-in-time consumer expectations, and circular supply chain support ensures the last mile—where shippers have the least amount of control—will still provide efficiency and quality challenges.



2: Sustainability Cognitive Dissonance Creates Optimization Dissonance

Stakeholder demands to reduce the carbon intensity of supply chains will continue to grow; however, we have not seen a clear understanding of the trade-offs between those demands and customer expectations around cost, availability, speed, and convenience. Optimization equations will get more complicated as the number of factors to consider, and varying customer priorities, necessitate highly dynamic and customized objectives to solve for.

3: More Data ≠ More Knowledge

More data has never been a direct path to better decision-making; data must be turned into the right knowledge. However, the tsunami of data from an IoT, item-level tracking, and constant-monitoring exacerbates both the



challenge of collecting and managing that data and turning it into meaningful and actionable knowledge. As with demands for sustainability, uncertain optimization objectives, and how they are weighted and prioritized, compounds the complexity and challenge of supply chain design and operations.

4: You Can't Hide from Value Judgments

Today, primarily consumer and well-known brands experience customer pressure to take public stances on issues. However, as ESG performance impacts investors, reporting identifies suppliers deep in supply chains, and employees seek values alignment, most organizations will feel pressure to state their values, or defend why they won't, on a wide range of issues. Organizations that don't proactively determine their positions can be forced into reactionary, impulse-driven statements that can cause more harm.

5: #teamworkmakesthedreamwork

As with our ExR, bringing together people with diverse backgrounds will be required to solve the complex supply chain challenges of the future. The COVID-19 vaccine illustrates how scientists were needed to develop the vaccine, but solving clinical, political, economic, operational, behavioral, and sociological issues actually got the vaccine into people's arms. Early collaboration by multi-disciplinary experts can help identify challenges and comprehensive solutions.



6: What Challenge Should Organizations Have on Their Radars?

Our experts foresee additional shocks that can lead to direct or indirect impacts on the future of supply chains. From political polarization to geopolitical protectionism, trust in institutions to shifting cultural norms, and economic instability to climate impacts—there are significant potential disruptors on the horizon that organizations need to explore and prepare for.

Toffler Associates helps organizations identify, understand, and lead through future disruptions. [Contact us](#) to learn more.