

Rethinking supply chain models in the midst of uncertainty

Remaining resilient, embracing change

Sharing stories and strategies for resilience, CSCO Thinkers explored the impact of today's continuing challenges: inflation, the pandemic bullwhip, supply shortages, and demand variability, along with cyberattacks and increasing geopolitical uncertainty. This could have been a depressing conversation, but these organizational leaders are embracing the opportunity offered by these unique circumstances to consider a dramatic change to their traditional supply chain operating models.

Their common themes anchored on:

"Managing the present while shaping the future"

"Innovating through the drudgery"

"Pivoting from just-in-time supply chain design to just-in-case"

While some are using a bimodal approach and standing up separate organizations to rethink supply chains, others are structuring the future focus into everyone's jobs. *"If we have all our people working on the short term, we're dead in the long term."*

Building a transparent supply chain

The Thinkers identified visualization as one common approach to building more flexible "just-in-case" operations. Visualization can give a deeper understanding of what is occurring physically in the supply chain. Many are using digital twins as another tool for gaining the visibility they need. Digital twins offer a way to conceptualize the extended supply chain and uncover hidden bottlenecks and risks.

"We have to get to a point where we can model scenarios to get to clarity. Digital twins and visualization are about moving toward an ability to process and model data."

"Unified Logistics Interface Platform (ULIP) is an Indian multimodal platform that will be one of the largest national digital twins in the public domain. In the next 3-4 years, this may revolutionize the way logistics and supply chains work in India."

"The sheer number of variables it takes to run a supply chain and the interdependence of those variables requires visualization and modeling...digital twins may surface areas that are vulnerable."

Agility and velocity

The CSCO Thinkers agreed that speed and flexibility are critical components to enabling quick reaction and response as well as facilitating fast innovation for the future. But they debated how to define and measure agility in a way that matters most to their organizations.

"We've identified SWAT teams that are constantly innovating, and it is their job to focus on a crisis when there is one. Then once the crisis is over, they are focused on innovation."

"We are focusing on how to define agility—making faster decisions and implementing faster change..."

"It's important to apply agility and speed to the places in your supply chain that it matters. We can't do everything fast, so we focus on the things that matter to our brand to do those things well at speed and scale."

"I think we've spent 100% of calories on better decision-making cycles.... But we also need to focus on ability to act...the flexibility to act quickly is difficult."

Power of purpose

Before COVID-19, CSCOs might have joked that a crisis is a terrible thing to waste. But today's exhausted supply chain leaders continue to confront one obstacle after another. If it's not pandemic shutdowns, it's a supply disruption in the Suez Canal. If it's not the mother of all bullwhips, it's a critical global geopolitical situation. Crisis mode has become business as usual—which is not anyone's preference. In response, all the Thinkers said they are sharpening their focus on their organizations' purpose and core principles, using those to drive definitive decisions—decisions that are unique to each organization and that may not necessarily address a colleague's challenges.

"We went into the pandemic and really examined the kind of business we wanted to run and doubled down on our principles. For us, it is establishing core products around our value of timelessness. We are really investing on those areas that matter around that principle and not getting pulled down on things that do not."

"We need to empower decision-making and ensure that people feel a connection to what we are doing. Through that connection to purpose and empowerment, we can drive decisions outside of the hierarchy."

"We're not only aligning the culture to decisions and sensing and responding but also spending time to improve the organization's ability to act."

Imagining a sustainable supply chain

Looking ahead, addressing climate risk and carbon reduction targets across the supply chain ecosystem will continue to influence initiatives for these Thinkers. While they agree that preparing for a more sustainable future is the goal, they debate the value of net-zero pledges, especially when there is a significant "say-do" gap in consumer behavior. That is, consumers say they want sustainability, but few have changed their single-use consumption habits. For example, half of consumers surveyed by the IBV last year said they would pay a premium for sustainability, but fewer than 1 in 3 said that sustainable products made up more than half of their last purchase.¹

"If you look at the whole carbon footprint of the product through its lifecycle, most of the opportunity is on the consumer side and that requires behavior change."

"We're trying to have fewer products and ingredients, use less water, energy, less waste with concentration and dilution—it takes millions of miles off the road."

"We've got to design for the environment and to reduce emissions and improve efficiency in logistics. It does come back to visualization, and understanding the carbon overlay on top of the costs and risks gives a different perspective."

"I think it comes back to purpose. If sustainability works at odds to the business, then it is a hinderance. As we've approached this, we've said what does sustainability tie in with what we want to be? The more that we can make the supply chain goals and ambitions the same as the overall business, the better."

Pondering a post-pandemic supply chain

With 2 years of pandemic pressures behind them, Thinkers are considering the role of technology as they try to envision a supply chain model that can operate efficiently while withstanding the strain of future global stressors.

"A post-COVID world is one where we will continue to talk about resiliency and costs but will we have a lot of inventory suddenly? Will we have a lot of costs driven from our reactionary actions in the past years?"

"The technology infrastructure components are a big barrier when you look at all the data that we need to manage in the future. Edge computing will be important, but the infrastructure will need to shift to manage that."

"We believe that integration will give way to federation because the broader supply chain will not be under our control. What does that mean for the future? Is there technology that makes that easier?"

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A closing word: Next

What's next? That's the big question for CSCO Thinkers. In collaboration with the IBM Institute for Business Value, they've created a playbook for 2022 that can give them a good start on building the transparent, resilient, and sustainable supply chains they imagine for the future. Supply chain has emerged from the shadows, and these new CSCO celebrities know the world is looking to them to lead us to what's next.

Related IBV reports and other references

Forging the future of supply chains: A playbook of 5 essential strategies
ibm.co/supply-chain-of-the-future

Consumers want it all: Hybrid shopping, sustainability, and purpose-driven brands
ibm.co/2022-consumer-study

Sustainability as a transformation catalyst
ibm.co/sustainability-transformation

The quantum decade is here
ibm.co/quantum-decade

¹ "Consumers want it all: Hybrid shopping, sustainability, and purpose-driven brands." IBM Institute for Business Value. January 2022. <https://ibm.co/2022-consumer-study>