Stephen: In the wake of the COVID-19, everyone has been talking about supply chain resilience. The pandemic made it really clear how most companies’ supply chains simply couldn’t handle disruptions. We’re still dealing with the aftereffects, which have now been further complicated by factors the war in Ukraine has made worse: instability of supply, price inflation, logistics disruption, and labor impacts. Clearly, the need for supply chain resilience has never been greater. But how can companies build resilience? New Accenture research sought to answer that important question by exploring the relationship between visibility and resilience. We interviewed 30 supply chain executives and analyzed their commentary and other data. And we found that companies with more visibility across their supply chain are more likely to perform well during periods of disruption.

Our research has important implications for companies looking to become more resilient. Here to talk more about our research and why it matters are Stéphane Crosnier and Maria Rey-Marston.

Stéphane, why is visibility so important to resilience?

Stéphane: Stephen, as you know, supply chain resilience is at the top of every executive agenda these days. But companies can invest a lot of money trying to build resilience across their supply chain if they pursue a redundancy or “just in case” strategy. A more cost-effective approach is to gain greater visibility into your operations. Visibility works because it gives you insights into where your supply chain is most vulnerable. And that helps you target your investments to have the biggest impact in improving resilience.

The concept of visibility certainly isn’t new. But advancements in analytics and technologies are helping companies take big steps in this area. These new tools are enabling companies to see things in their operations that they couldn’t before. And with those insights, they can make better and faster decisions to respond to disruptive events. So companies no longer have to keep more inventory and build redundant capacity across the board to protect themselves from potential disruptive events.

Stephen: When we talk about visibility, Maria, what do we really mean?

Maria: In our research, we look at two types of visibility—structural and dynamic.

Structural visibility is about knowing what your supply chain looks like. It’s like an X-ray that gives you a snapshot of your operations at a point in time and helps uncover hidden issues. It includes traditional activities like network mapping, risk assessment, network assessments, and modeling. Most companies we talked to have fairly strong capabilities in this area.

Dynamic visibility is knowing what’s happening across your supply chain. It’s more like a video that enables a company to monitor and respond to events in real time. There are four types of dynamic visibility: monitoring, predicting, prescribing, and autonomous execution. Maturity here is lower among the companies in our research, but they are making progress.
The combination of structural and dynamic visibility, supported by analytical techniques and artificial intelligence, forms what we call intelligent visibility. As we found in our research, the companies we studied that have greater intelligent visibility tended to be more resilient. And that translated into more stable financial performance during disruptions.

Stephen:
Did our research tell us anything about how companies can boost their structural and dynamic visibility to build resilience?
Stephane:
Yes, it did. One way is to create a digital twin—a virtual replica of your supply chain. With a digital twin replicating the typical behavior of your supply chain, you can simulate and scenario model your supply chain’s performance. You can understand where your suppliers and points of manufacturing are, what logistics routes you use for which products and customers, and the relationships across your supply chain network. You can also conduct a stress test, like the one we’re doing with MIT. This test enables you to look across your end-to-end supply chain to expose risk areas where you need to focus your resilience investments.

Maria:
A supply chain control tower is also a powerful tool. It’s a dashboard that connects data from across the supply chain that gives you greater dynamic visibility so you can respond to events in real time. It can even take some actions on its own in response to what it sees. And you should set up a dedicated supply chain resilience team. From a strategy perspective, you need to have people who are focused on resilience and aren’t distracted by day-to-day activities and pressures. With a digital twin and control tower, your dedicated team can get the intelligent visibility they want—to build the resilience your supply chain and company needs.