

Rapid Response Transcript – Jennifer Bisceglie

“Inside ‘the most radical supply chain shift since World War II’”

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JENNIFER BISCEGLIE: It was a shock to the system. The attack on Ukraine and the sanctions on Russia, we are literally cutting parts of our economy off. At least 300,000 global companies are being impacted.

Never before has this conversation been at the CEO and the board level as it is today. Everyone is exposed — just accept it. There is no industry that's safe. So what do you do?

You have to map, you have to continuously monitor, and you also have to have an operational resilience plan thought of ahead of time.

BOB SAFIAN: That's Jennifer Bisceglie, CEO of Interos, a risk-management firm focused on supply chains.

As the business repercussions of the war in Ukraine continue to ripple out, Interos has seen its risk dashboards light up in new and far-reaching ways.

I'm Bob Safian, former editor of Fast Company, founder of The Flux Group, and host of Masters of Scale Rapid Response.

I wanted to talk to Jennifer because supply chains have been radically impacted by disruption in Ukraine and sanctions against Russia.

Jennifer explains that many businesses are far more exposed than they realize.

A bull-whip effect, she says, has already shown up in the defense sector, while technology firms have among the highest direct concentration of connections with Russia.

Businesses are struggling to establish new operational resilience, but there are silver linings too, she adds, as new market opportunities are opened up.

A more mature and more sophisticated supply chain is coming together in real-time, she explains, and those who get on board will have a competitive advantage in the long run.

[THEME MUSIC]

SAFIAN: I'm Bob Safian, and I'm here with Jennifer Bisceglie, the CEO of Interos. Jennifer, thanks for joining us.

BISCEGLIE: I appreciate being invited, Bob.

SAFIAN: It's nice to see you again. When we started talking recently about Ukraine and Russia and what's going on and the implications, you began with caveats, you said, "I'm not a foreign correspondent. I'm not an economist." So what are you? I know you're a CEO obviously, but how do you describe yourself?

BISCEGLIE: I'm a 25-plus year logistician. And what I mean by that is I was there back in the '90s when the U.S. and every other country started offshoring manufacturing. Fast forward to the last 24 months, whether it's the pandemic or a ship getting sideways in a canal or the unfortunate crisis going on right now in Ukraine, now we know that sometimes an extended supply chain is not a good thing.

SAFIAN: So you've talked about Putin's attack on Ukraine as an attack on the global supply chain. Can you explain that?

BISCEGLIE: By the attack on Ukraine and the sanctions on Russia, we are literally cutting parts of our economy, our developed economy off, which is really sending shocks through businesses around the world. We've found that at least 300,000 global companies are being impacted by the attack. And it's across industries, whether it's oil and gas, which we hear so much about, or agriculture.

SAFIAN: You called it the most radical supply chain shift since World War II.

BISCEGLIE: It was a shock to the system. You have titanium and palladium and neon gas and companies flying people around the world trying to figure out how to get access to these raw materials so that they can continue operations. It's a real big problem.

SAFIAN: In your research at Interos, you point out that there are more interdependencies for U.S. and European companies with Russia and Ukraine than many people realize. You've identified over 190,000 U.S. firms connected to Russian or Ukraine suppliers, 110,000 firms in Europe who are connected. Can you break that down for us? Because you look at what you call tier one, tier two, and tier three suppliers. What do each of those tiers refer to?

BISCEGLIE: Sure. In its simplest terms, Bob, it's proximity. So your tier one supplier is the company that you know you're doing business with because you have a contract with them, and they're invoicing you. So simply tier one is the one that you're directly connected to. Tier two is who they are connected to. And tier three is who the tier two are connected to, reliant on, contracted with. I think the thing to remember is, because we are so hyper connected, we need to be thinking broader than just a simple linear supply chain. If you're building an airplane, it's not just good enough to understand who

builds the wings and the pieces of the plane. You have to realize that all those companies have other customers and other suppliers that can create a cascading effect on you based on where they're sourcing materials and services from. And that's really what we're seeing play out.

Case in point, we did a study just recently on the connectedness of the aerospace defense industry and oil and gas, which oil and gas is getting their moment in the sun because of all the sanctions going on because of the crisis. And just in those top three tiers of proximity that you just outlined. So my direct supplier, their suppliers, and then their suppliers' suppliers, we found if we just looked at the top 20 companies, top 10 aerospace defense, top 10 oil and gas, over 1 million interrelated connections between those 20 companies. They are all doing business with each other, and they are all sourcing to each other. So when one thing happens to one of those 20 companies, the ripple effect, that's really what the crisis is bringing up.

SAFIAN: And so as a business, you may not realize that you're exposed until that crunch time comes, but you're probably more exposed or you may be more vulnerable than you realize.

BISCEGLIE: I would guarantee that you are. In the last 24 months, the last two years, we have seen this conversation rise out of the procurement and the supply chain world to the CEO. Honestly, Bob, in my whole 20 some years of experience, never before has this conversation been at the CEO and the board level as it is today. And the reason for that is we're literally cutting parts of the world off from our sources of supply. Businesses can't keep operating like this.

SAFIAN: Your research also looks at a variety of sectors for supply chain risk. And I was surprised to see software and IT cited among the most highly at risk sectors related to Russia and Ukraine: that you estimated that software and IT make up 14% of U.S. companies with tier one relationships in Ukraine and 11% of tier one connections in Russia. Those are big numbers.

BISCEGLIE: They are. Technology, and the advance of technology, is what's connecting us to companies and countries around the world.

Russia and Ukraine have exports that other parts of the world are reliant on and technology being one of them. Technology has connected us to these parts of the world in ways that we didn't realize, and that we were reliant on.

SAFIAN: And with software and IT, I guess that has implications for cybersecurity, cyber vulnerability as well.

BISCEGLIE: Definitely. And we've seen a 300% increase of attacks from a cybersecurity standpoint coming up through the supply chain. So if you take this all the way back to the early 2000s, when Maersk got hit, the large shipping company, and it got sent back to, kind of, slate and chalk in effort to create logistics patterns around the world. Target in

2014, same thing, that was through a small tax accounting package that came through a point of sale system through an HVAC system.

So you see this attack of the supply chain coming through the connections that you're not paying attention to. Some of them are on purpose, and some of them are just bad cyber hygiene. And because technology has connected us, unless we get ahead of it, map it, have transparency into the extended supply chain, and put the proper mitigations and protections in place, they'll keep happening to us.

SAFIAN: What do I do if I'm working in a business that has this kind of supply chain exposure? And how do I even know, if you're talking with tier two and tier three, do most organizations not know that they're exposed?

BISCEGLIE: The realization is that everyone is exposed. Just accept it. Acceptance is the first step.

There is no industry that's safe. So what do you do? It sounds very basic, but you have to understand the extended supply chain and who you're connected to. And then you have to continuously monitor. Bob, when I started in this industry, it was the survey once a year, and that was okay. You wanted to be a supplier with me, I'd give you a wad of paper. And then we check in once a year and just say, "Hey, has anything changed?"

You're now realizing that you can't wait just once a year to do surveys. This is not a manual process, and people can't stay ahead of it. You have to map, you have to continuously monitor, and you also have to have an operational resilience plan thought of ahead of time.

"When we get hit" — not "if we get hit" — "When we get hit, this is how we're going to operate," is really what the executive suite needs to invest in.

When the pandemic hit, we took a phone call from a very, very large agricultural company that had many people and factories over in Wuhan. And their supply chain, and I'm only talking about two years ago, Bob, their supply chain was on an Excel spreadsheet. And I think that's what we need to stop.

SAFIAN: You've mentioned a couple times about cutting parts of the world off. Is the risk that you've talked about encouraging even more separation in the name of self sufficiency, is that part of resiliency?

BISCEGLIE: So great question. And it is. I actually think this is a positive. Back in the nineties, we built supply chains to be very short, very just-in-time, and very fragile. And so the opportunity now that we've all felt the shocks repeatedly is, "How do I build operational resilience and agility? When is an extended global supply chain not a good

thing?" That's a really good conversation to have. And that's really coming down to alternative sources.

It's giving other parts of the world the opportunity to get into the developed economy. And so if you think about what's happening with Ukraine and Russia, it's giving China the opportunity to diversify and to get stronger, but it's also getting other economies like India to say, "Hey, we can do this too."

SAFIAN: When you diversify your supply chain this way, that sort of reshuffles where the global economy hits, where it reaches. But if you're also becoming more self-sufficient in some ways, are you changing the way it operates at the same time?

BISCEGLIE: You are. I think it's a positive that we are taking innovation, we're taking the cost of doing business, and we're taking the proximity of doing business and shifting. We were so mired in these just-in-time supply chains for so very long. And we just assumed, and when I say, "we," global economy, we just assumed they would continue to operate. And so this has been a really big wake up call where every country, every company of every size has now been educated that the status quo is not good enough anymore.

[AD BREAK]

SAFIAN: Before the break, we heard Interos CEO Jennifer Bisceglie talk about how the war in Ukraine has radically shifted supply chains. Now she talks about what she calls the bullwhip effect that's taking place in the marketplace, and the opportunity for innovative solutions. She also talks about how brand reputation and sustainability will be critical pillars in the supply chain of tomorrow.

A lot of the news about supply chains lately has been: it's lagging and organizations are trying to catch up and how long will it take for supply chains to return to normal. But it sounds, listening to you, like there is no more normal.

BISCEGLIE: This is the normal, Bob. This is it. Technology is what has created the cascading ability and the cascading effect of the supply chain. Technology has connected us globally. It's not going to stop. We're not unplugging. So we should all just understand that we are one large global economy. And when an event happens anywhere in the world, there is going to be some sort of an impact on me.

SAFIAN: It sounds like the war in Ukraine is almost like a 9/11 moment. It becomes this sort of prism to reset expectations and risks that the playbook we thought we could work under is now obsolete.

BISCEGLIE: Well, if you think about the pandemic, some people called that a black swan event. And it was the slow path across the world. So we actually, on our platform, visualized the pandemic, and everything went from red starting in Wuhan and kind of

white on the rest of the world. And then everything went pink, and suddenly everything was red. This situation with Russia and Ukraine, it's very severe. The pandemic was more of a ripple effect, whereas Ukraine and Russia, it's a cutting off of the economy.

And people do weird things when severe things happen, like you have a large aerospace defense company buying up all the titanium available in the world. And then everybody else reliant on that same source of supply doesn't know what to do. There's what they call a bullwhip, which is you have companies that are buying everything available and what does that do to the rest of the industry and the lashing that comes to the tail end of it.

SAFIAN: It all sounds a little scary the way you talk about it. Is there a silver lining?

BISCEGLIE: I'm hoping we're not creating, kind of, a fear situation here. I think it's a wake up call.

I think that there's the opportunity for unique innovation. I think there's the opportunity just to do business in a better way.

When I started the supply chain was, kind of, warehouses and trucks, and that's what everybody thought it was. We've realized that literally the strength or the weakness of your supply chain is your brand, your reputation, and just your ability to meet orders and satisfy what your shareholders are looking for.

The other thing that we've seen really become part of the mainstream conversation is ethical sourcing and sustainability. We are seeing large procurement and supply chain organizations actually absorb the corporate ESG mantra because the consumers are making a decision on how you are sourcing? Are you giving back to the earth? Are you making the world a better place for years to come? And so you're seeing a mashup of just making the world a better place as well as business continuity in a way that I've never seen before.

SAFIAN: Interos produces something you call an Iscore, it's like a single measure to quantify risk. And I'm curious, how does that work? Does it describe a sector or a specific supplier? Does it combine various kinds of risks like geopolitical and ESG and cybersecurity, or is there a score for each one?

BISCEGLIE: So the answer is yes. So we have a score for six different categories, everything from financial risk to cyber, to ESG, to restricted countries, operational risk. And then we actually create an overarching Iscore. We have all of the information below it, but I, as a professional, need to have one answer that says, yes, I need to take action, or no, I don't need to take action. And that's the Interos score or the Iscore.

And so we're able to give you your supply chain health at any moment's notice because we are continuously monitoring. When we provide a company the Iscore, it's not for them in an isolated world, it's for the next two tiers out. Because we've already taken into consideration, using artificial intelligence, that cascading effect, because no company can do this by themselves.

SAFIAN: You use a lot of visualizations, which I've seen. Why are visualizations useful?

BISCEGLIE: So personal story is I get really overwhelmed with a lot of information quickly. And I think the world we live in right now, we are inundated with information. And so a picture's worth a thousand words, and we just took it back to basics. Our job is to distill and to direct. And that's what we do with our visualizations.

SAFIAN: And they don't just simplify. Sometimes that's what single numbers, single snapshots, can do, not that I'm against simplicity.

BISCEGLIE: Yeah. I think we don't want to be known as a scoring platform because I think the world is just too dynamic for a simple scoring platform. In our platform right now, Bob, we're monitoring over 350 million business entities globally. If I can distill everything that's happening in the world across 350 million entities, across 220-some different risk areas into six categories into one score and then visually queue you with a red light that says you need to pay attention to right here, I think I've done my job.

SAFIAN: And how much are the numbers you're looking at, this information, shifting around in real time right now. Whether it's your Iscores or other data you're sharing about Russia and Ukraine. Is the velocity particularly intense?

BISCEGLIE: I would tell you throughout the platform, it's dynamic. Part of what we've been able to do is build a very strong methodology that says when we actually change a score, we changed it because it's material. And so we've actually made sure we don't over-alert, because the crisis with Ukraine was so severe, pretty much everyone's score changed somewhere in their extended supply chain. It just mattered whether it was, proximity wise, tier one, tier two, or tier three. You saw a shift, you saw a different visual queue, you saw a red dot pop up, but the intent was not to have 15 changes as much as one or two to point you exactly where you were exposed.

SAFIAN: What do people most misunderstand about supply chains?

BISCEGLIE: I think that what has improved over the last couple years is that folks really thought the supply chain was just: Am I getting my clothes, my shoes, my food to the right place at the right time? Now we're really understanding that the supply chain is core to the brand and the reputation of every company around the world, which is why the CEO and the board are having discussions around the health of their supply chain at least twice a month, which has never happened to us before.

Right now, you can literally, Bob, buy a pair of sneakers based on the health of the supply chain. If you go to Nike's website, it actually shows you the provenance of sneakers. You can partner with different health food companies based on the provenance of their supply chain, back into the rainforest. Consumers are making these decisions, and so I think brand reputation, the companies that are going to be strongest, that's really tied to the supply chain in a way that hadn't been there before.

SAFIAN: And I guess as we talk about the situation in Ukraine, there's so little clarity about what comes next; when it's going to end or whatever ending even means that it almost makes it, I don't know, less of a crisis and more endemic, like it's just a reality.

BISCEGLIE: It's a crisis, and we're very sad for the people that are being impacted, but from a supply chain standpoint, it's just one more example of why you need to be continuously mapping and monitoring your supply chain because these interruptions will continue to occur. If it's not Ukraine and Russia, it's some other part of the world, it's a cyber breach or just a business failing, and you really need to understand what that means to you before it actually impacts you.

SAFIAN: Well, this has been fascinating. Thank you Jennifer. We really appreciate having you with us.

BISCEGLIE: Thanks Bob, appreciate the time.