FROM AN “UNPRECEDENTED YEAR” TO “BACK TO NORMAL”:

REMOVING SUPPLY CHAIN BOUNDARIES POST-PANDEMIC

Will Heywood (00:09):
Welcome to “All Business. No Boundaries.”, a collection of supply chain stories by DHL Supply Chain, the North American leader in contract logistics. I’m your host Will Heywood. This is a place for in-depth discussions on the supply chain challenges keeping you up at night. We’re breaking beyond the boundaries that are limiting your supply chain. Let’s dive in. This episode is “From an ‘Unprecedented Year’ to ‘Back to Normal’: Removing Supply Chain Boundaries Post-Pandemic.” My guests today are Chris Adderton, Vice President, Council of Supply Chain Management Professionals, and Bridget Typovsky, Senior Director of Solutions Design at DHL Supply Chain. Welcome to you both. And thanks for being here. Okay, so for starters, I gave your name and title and organization, but if you could take it maybe a step further and tell us who you are and a bit about your organization and the responsibilities of your role. Chris, why don’t you start?

Chris Adderton (01:04):
Thanks. Well, I’m Chris Adderton. I’m Vice President, the Council of Supply Chain Management Professionals, the largest professional association in the global supply chain. We serve our member community with a mission to connect, educate, and advance the supply chain profession. We produce the “State of Logistics” report on an annual basis, which was just released in June. We also collaborate with a number of academic institutions and produce the EPIC report in collaboration with the University of Tennessee and IHS Markit about global risk economy, politics, infrastructure, and capability. We’ve also partnered recently with MIT to produce a sustainability report, which has just been released this week. We have over 200 events a year in our local chapters in non-COVID environments. Those converted to virtual environments, and we have our annual EDGE conference every year in September, which we’re scheduling live in Atlanta this year. So we have a broad network of affiliates, associates. We also have a full-blown SCPro Level One certification protocol. But our mission is clear: to connect, educate, and advance the supply chain profession. So hopefully our contributions today will help do that as well. My role is a Chief Operating Officer role in maintaining industry relations.

Will Heywood (02:20):
Super thank you. And we are very much looking forward to being back face to face with you at the EDGE conference this year in Atlanta in a couple of months. Bridget, could you please introduce yourself?

Bridget Typovsky (02:30):
Yes. My name is Bridget Typovsky. I am part of our solution design and engineering team for DHL. My responsibility is to support our North American operations and facilities. We have over 50 professional design engineers on our team, and we work on integrated solutions from network transportation and warehouse with a primary focus of growing the business and working new business opportunities, pursuits looking at automation, looking at new technology, piloting technology, collaborate with our operations team, our business development team, and other parts of our organizations to continue to grow and service our customers.

Will Heywood (03:06):
Great. And thanks for joining as well. So we are, I think, I hope, almost post-pandemic and certainly feeling some different kinds of effects. And, you know, if you listen to the headlines today, or even as a consumer prior to certain things, you hear a lot of stories around the supply chain, not really working. Supply chain challenges, everything from semiconductors to cars, to basic consumer goods, not being able to find those things in stores. I wonder if we can maybe dig a little deeper into the

headlines and try to understand how we're seeing that manifest itself and maybe what some of the drivers are in the market? Chris, from your members, what are you hearing in terms of what's going on out there and how are they reacting to it?

Chris Adderton (03:48):
Well, I think the core of the pain and agony we've all experienced either as a consumer or as a business partner has been triggered by the dramatic impact of a consumer change, right? The impact of COVID on human-to-human interaction changed behavior dramatically. Look at food consumption. Virtually the restaurant industry was shut down temporarily and people shifted to home consumption and you just don't manage that kind of volume in a short time without basically having the classic bullwhip effect, right? One thing happened and it had a dramatic impact downstream. Similarly, you know, efficient supply chains that were predicated on timely transit times and documented transit times were disrupted as well. Just placement of cleats, displacement of crews all compounded those problems and prompted people to shift dramatically and drive significant demand in some segments of the supply chain and basically shutting down others. So that's the fact of what the daily operations are dealing with. And it's very hard, even if you're already agile, to be that agile to manage dramatic demand changes in the consumer behavior and ultimately in the operation of your organization.

Will Heywood (05:02):
Okay. So a different degree of agile or maybe a different definition of agile. Bridget, go ahead. What are you guys seeing on the DHL side?

Bridget Typovsky (05:10):
Yeah, I would say, I mean, the landscape is changing and it's changing faster we're seeing. So, you know, pre-COVID, you know, the supply chain was starting to move more quickly than it had in years past. We were starting to get into technology, a lot of startups, you know, robotics in the industry that's popping up, it's migrating from manufacturing, where they've been in existence, they were migrating into supply chain and making those adjustments for those types of processes and activities. What you saw with COVID kind of coming in is supply chains were having to adapt to the consumer. Consumers couldn't go into stores, consumers were where everything was locked down. So that propped up supply chains that weren't into the eCom the B2C network. They had to figure out a solution, a very quick solution to accommodate that. Consumers who said they would never that route liked the traditional bricks and mortar were forced to migrate to that out of necessity. And I think what we're seeing now from that standpoint is how much of that landscape is going to stay in place, how's it going to kind of settle? I don't think it's going to go back to what it was before and may not stay to the height that it is right now, but all that was kind of changing within supply chain and as what Chris alluded to as far as the shutdowns, et cetera, you know, we're starting to see now the more pronounced wave within the design. Typically designs are six, eight months to get an operation up and ready. But because things are slowly starting back up, there wasn't enough in the process for steel chips. Everybody heard about it hitting the cars and et cetera, but it's also hitting, you know, the robotics that you're putting in your designs. Labor shortages, right, as far as people maybe move from certain areas, different geographic, they changed where they were living due to the COVID impact. So we're seeing labor shortages. We're seeing, you know, buildings themselves, lumber, steel, et cetera, that you would have for industries for your homes, et cetera, is also impacting supply chain and warehouses. So all that is kind of having a ripple effect as looking at your designs where before it was looking at labor, maybe putting innovation and having a two to three-year payback at minimum for technology to offset the cost of the capital. Now because of labor shortages and increases in salaries and demands of that nature, you're looking at ROIs that are a little bit longer because it's a necessity because you can't find enough labor in the market. You can't find a big enough building. So now you're doing the more compact buildings or you're going vertical, but then going vertical, you need steel. So we're seeing that kind of impact kind of change how you design and how you kind of plan forward. It's been a little bit of a challenge from a standpoint because you can't control it. It's slowly coming back on the market. We're starting to see momentum coming back up. Manufacturers are creating new plants, et cetera. So I think it's going to take a while for us to kind of see it kind of start to level out, but those are the challenges we're having. I'm sure, Chris, you've seen it in the industry as well.

Chris Adderton (07:59):
Yeah. That's exactly what's happening. I mean, they're components to your cost of operations, right? And transportation supply chain components are all one. There are costs of capital and all those other types of things, inventory carrying costs, and transfer costs. But the industry had been designing and working closely on a defined flow of materials and transportation that was pretty universally across the globe disrupted. And normally those disruptions happen in isolated geographies or industries. And it happened everywhere at the same time, which created a unique set of people competing for many of the same resources dramatically. And while we're talking about COVID during the COVID period, there were 22 major global

weather-related disruptions that got totally overridden by the COVID issue of human capital engagement. You couldn't predict this, right? It's one of those risk profiles that no one could cost. People are evaluating whether their design models were correct and sustainable. Given the other uncertainties we're dealing with in the EPIC report, we talk about economics, politics, infrastructure, and capability. Usually, it's one or two of those things you're dealing with in a risk profile and in a geographic part of the world. But right now it's been all four, whether it's tariffs, political disruption, political change domestically, changes in policy, which used to be longer-term views that you could plan for, now seem to have four-year cycles. That's very hard, to Bridget's point, to make a decision on ROI. Also, inventory costs are significant on anyone's balance sheet, but capital costs have been historically low. What's going to happen if there's a whole group of CFOs that have never had to deal with high inflation models, it's going to create a different mix. And I think people are trying to figure out what the future can and should look like. And it's not clear. Therefore you have to have scenario planning. You have to make a set of judgments and have contingency plans, probably more robustly than you've ever had. Classic cases in the supply network. Most of our members would talk about primary vendor qualification and visibility. Now people are looking at their secondary and tertiary suppliers in the marketplace. So they know their health, they know their capability, they know their security in so many ways that are critical upstream. And that was obviously evidenced in the issue we realized we had with protective equipment.

Bridget Typovsky (10:40):
Yeah. It's also even flexibility too of the facilities, right. Of being able to pivot, to adjust as the market adjusts. I've been in the industry for over 20 years. For the landscape to change, it was, you know, it was a long horizon. You know a slow migration from my standpoint. I would say, five, six years ago, you start to see it speed up. And what I'm seeing now, it's getting faster and faster, right? Things are getting implemented, tested and within the supply chain a lot quicker than in years past. Those are things that you have to embrace. The consumer's driving it a lot, you know, from a standpoint, the expectation of our consumers, you know, speed, service level, customization, being able to have it when they want it delivered to wherever they want it. The flexibility of being able to have it delivered to your work, your house, et cetera, you're starting to see them drive the changes that you have to adapt to. So that flexibility of, you know, you're looking at capital to offset some of the labor impacts that we're seeing, but also you want capital that can be flexible, that can accommodate the change that you don't know what's coming two, three years out, but you want to have operations that can be flexible enough to absorb those changes and grow with the consumer as they change the playing field. And that's becoming a lot shorter of a horizon than we've seen in years past.

Will Heywood (11:58):
Yeah. So I'm hearing a lot about how the rate of change is increasing. I'm also hearing that the complexity level has gone up pretty considerably in a short period of time, or maybe accelerated a lot. I'm wondering both from an industry perspective and then Bridget, from a provider perspective, how are you guys thinking about human resources or innovation, et cetera? And how does it change the way that you think about how your organization, how the industry's evolving?

Chris Adderton (12:25):
Yeah, it certainly has. There's a couple of major trends. One is demographics are shifting, right? But there's also a major shift in the operation of the supply chain, from a physical to a digital and to a technical need in that marketplace. As more things go to automation, the demographic shift is, you know, some core workforces in manufacturing and in transportation are aging out and it's been very difficult to attract new workers to those jobs due to location and lifestyle. Obviously, everyone knows it's not an easy job being an over-the-road trucker, but it's also not an easy job being a plant operator. Particularly as people who were originally trained in those jobs in the later stages of their career were doing physical, electrical, mechanical things. And now a ton of the work has gone to sensors and automation and production runs. That's had a big impact on that. But the technical requirements for a more dispersed and complex network are important too. We were fortunate to have Arthur Valdez, Chief Supply Chain Officer at Target speak at our virtual conference last year and he talked about them implementing programs they had on a five-year horizon in months, and the need to have their vendors understand that they went from a hub-and-spoke classical distribution model with warehouses and local trucks to distributing from stores in their eCommerce. Walmart has the same model, and now they have 1100 distribution points or more, and that's a very much more complex and difficult model. And the need for accuracy and visibility in those types of networks is incredibly important. So you can satisfy that consumer that is not walking a store, looking at choices, but already has decided, and you have to fulfill with a unique level of accuracy. The same thing applies in other industries as well. That's just the most recent example I can give.

Bridget Typovsky (14:26):
Yeah, I would say from a supplier standpoint, what we're seeing is, again, the influence of the consumer. So speed to market,

changing the platform from going into a store, the bricks and mortar, you know, a lot of our customers, you would have brand recognition, you'd go into a store, you would see displays, you would have that brand loyalty. That's slowly harder to get and establish because now your interface is the internet when you can search and you're searching and a lot of different options popup. Creating that brand loyalty for any of that connectivity is now more challenging. The other part is, you know, during their comparisons, they can see stuff side by side. So the speed of getting to a consumer is forcing it from the supply chain of late-stage customization. So getting the components in close proximity to the end-user, and then at the point of sale is customizing to what that user wants. Everybody wants a different color, a different thread put into their component to make it personalized to them. And that's how they're getting that loyalty to the customers where they can actually customize it and make that connection to the end consumer. So we're seeing a lot of that from that standpoint, late-stage customization, again, being closer to the end consumer. So you're going from national DCS to more regionals, to maybe even more metro areas to get to that service level so the consumer has it within three days within two days. You now see a lot of requests in certain areas where you can get certain select SKUs within hours delivered to that consumer. So those are the changes that we're seeing within supply chain is that flexibility to bring components in, without the SKU being a sellable SKU into the warehouse, or the supply chain is the components are coming in and then you can do the late-stage customization and have the right SKU or the configuration for the end consumer once they place those orders. SLAs or Service Levels Agreements are getting tighter and tighter, as far as getting to that end consumer. And if you're not able to do that, your competitors are driving that. So there's a lot of competition from that standpoint that we're seeing. And if you're not playing in that market, you're going to slowly fade away because everybody's migrating to having that flexibility or capability. And again, the consumer is driving it. The other thing that we're also seeing is you're the GoGreen elements for the consumer. So how are you delivering that? It's customizing to that person, but it's also the presentation. That's where you're going to get the consumer that goes, "I like it. You gave me the right product, but did I have a good experience receiving it? When I opened up the package, was there a lot of dunnage in there? Was it an oversized box?" So the customization is not just the actual product itself, but it's also the package which it arrives in. And that's how you're establishing more of that brand loyalty or repeatable consumer coming back to that same account because they had a great experience receiving the package as well as purchasing it.

Chris Adderton (17:11):
Yeah. Will, I think that Bridget's basically highlighting a key position of the supply chain. And the c-suite is picking up on this. It is no longer just cost. It is value creation. All the things that Bridget just said, create the consumer experience, right? And it's closer to the consumer than it's ever been before. I spent the first half of my career in sales and marketing. And the lifetime value of that consumer is something you work on hard every time, every day. Availability, packaging experience, user experience for every type of product is critical. And we don't talk about supply chain as a value creator enough. And that experience is what the successful people highlighted by someone like Target, who spent the money, invested aggressively, increased their timeframes, had two of the best quarters they've ever had. Now, granted, the demand swing was massive in their direction, but they were in a position to invest, to harvest the value of that consumer franchise that appears to be staying in Walmart and some of the others that were leading in this space, there are many, have seen the same benefit. But it's not just cost. It's how you invest to create value over time. And it's pretty clear that those that invested and recognize that are getting a return on investment in their supply chains and their consumer experience. They're tied together.

Will Heywood (18:41):
Yeah. So that's interesting. I want to stick with this concept of time. Bridget, as you guys, work with your customers putting solutions together, how long of a contract are you talking about? What does that imply from solution viability over time, given that there's all of this massive uncertainty that's come around in the pandemic and things are going faster? Has that changed the way that you guys are thinking about solution design? What's the overall effect?

Bridget Typovsky (19:06):
Timeline is definitely speeding up, you know, pre COVID, designs would come in, you could stand up an operation within six months. You're looking at, from an ROI standpoint, you would look at manual versus putting in some layers of mechanization or automation. And your contract terms are usually at three to five years. You're looking for that three-year or so payback to kind of justify the technology to implement it. As we're coming out of the COVID, you're looking at what is the impact of supply chain? Well, now we're having issues with sourcing parts, right? Steel computer chips which run robots, run our RF units, run the controls within our mechanization. All those are having tremendous lead times. With mechanization, you could put something up in 30 or so weeks. We're seeing the lead times now for installing a mech solution of 50 plus weeks. So it's a year. So those are drastically kind of having an impact from that standpoint. And then you lay in the other factor, which is real estate shortages, having availability for building, the labor market is getting saturated in traditional campuses. So now we're

looking at alternative campuses, we're looking at alternative locations that still balance service level, still have a great population, a dense population for staffing those operations, more automation, more robotics are coming into our designs, not just for the cost of greater throughput, but also to subsidize the labor shortages, to look at those tasks that may be more repetitive that we can kind of automate, and maybe the ROI is a wash or close, but it also gives you less dependency on a labor force from that standpoint. So all of that is kind of impacting how we're looking at those designs approaching it. The other part right now, just because of the lead time on things, is operations businesses are still growing. So we're still implementing. We're still driving. That is how can we phase into starting out at either a manual or starting out in phase one of a design and how can that design continue to grow as the supply chain turns back on, as our volumes continue to increase. So now where you kind of do a design for three to five years out, you're now looking at your designs, can I do a phase one? How can we make that as efficient as possible? And then also how's that going to go into a phase two phase three to a final state solution, and it may be three separate implementations that you're looking at. So it's taking smaller chunks of a big picture and how to make that seamless to our customers from a standpoint of implementation startup and ramp-up.

Will Heywood (21:41):
Yes, Chris, similar question to you, whether your members are outsourcing or insourcing supply chain activities, and you mentioned a couple of examples of some companies that have maybe invested ahead and benefited through the pandemic. Are you seeing more of a groundswell in terms of how your companies are resourcing or adapting their supply chain organization?

Chris Adderton (22:02):
I think they're looking at multiple alternatives. You know, even if the sourcing model, people talked about reshoring, it's truly alternative shoring, right? The shifts from other politically challenged areas or long transit times. So others nearshoring is obviously a big trend having alternatives and having the ability to adjust scenarios as they unfold is really what people are doing. Getting greater visibility. There's an old economic rule, do what you do best or do what you do least worse. So if you're trying to adopt new technology, oftentimes it's better to go to an outsource model unless you have a core competency, that's a differentiator, right? And people are looking at greater use of 3PLs because they have greater visibility to the market. They have a better understanding of network design. Even large corporations, it's difficult for them to remain agile and resilient if they're dedicated to an internal mechanism, right? You always have to be looking for external benchmarks and external reference points. You know, we do research in that area. We have a document called "The Process Standards." A lot of people use that to compare themselves externally. But yes, I think people are much more open to saying it doesn't necessarily have to be built internally, but there are still major investments that preclude people from pivoting quickly. The reason you're seeing a lot of new technology come up, it's easier to start from a greenfield and design and build than it is to remodel and refit, normally. Unless you have a great real estate location and it's got great labor and then everybody else would like it, and you might want to sell the asset and go someplace else if you're having an extraordinary return. But I think the bias to tradition is gone. It's just been wiped out because it's so hard just to stay where you are and hope for the best, which, you know, in some cases people would've considered. I'll just hunker down until the hurricane blows over. Well, this is a long hurricane. It's a 12-month blizzard if you will. We're all living through it. And it doesn't seem like it's ever gonna, you know, there is no return to normal. There's a new set of situational issues that we're all going to deal with in all aspects of supply chain. And it's buy, make, move, sell, right? Everything from how you source materials, how a chip can cause you to be unable to sell a $45,000 vehicle because of one component part. That's pretty rare, but the system was designed that way, right? Lean principles would have said, you know, what's my risk profile? You know, single plant sourcing, how good is your co-packer relationship, and how much you're paying a premium to allow them to be on call, if you will, versus your own plants, being able to run or running less than capacity. And certainly, you know, we keep talking about this, the change in consumer behaviors has never been this dramatic. And I think Bridget made the point. People that would never have considered some of the digital purchasing or a shift to take place, and the low cost of shifting, I mean, we have some pretty amazing supply chains out there. There's a new book out on Amazon if you want to read a pretty classic story of evolution and continuous investment, it's a pretty amazing story.

Will Heywood (25:28):
So acknowledging the fact that we'll never get back to pre-pandemic if you could sort of look in your crystal balls. When do you think this aftershock stuff that we're working through now will normalize a bit? How far out do you think that is? I won't hold you personally to your forecast, but I will ask you to go first, Bridget.

Bridget Typovsky (25:45):
Yeah. I mean, talking to some of our vendors, I really think it's going to take us through next year, to be honest with you. I

think it's probably the middle of the year we're going to start to kind of see it starting to flatten, plateau. And then how far is it going to come back down to what we saw before, but it's a slow burn. I think we're starting to see industries address it by working extra shifts and creating manufacturing plants that are producing that stuff. But to get it through the supply chain, through the till, and it's not just hitting one industry, it's hitting multiple. The chips are hitting supply chain, but it's hitting the car manufacturer, it's hitting the computer industry, et cetera. So we're all vying for these same components, but I really do believe it's going to be probably through the middle of next year. We're starting to kind of say, hey, we're coming down. I don't think it will be back to where it was, but I do think it's going to come back to normal expectancy as we get into 2022.

Will Heywood (26:37):
So Chris, is she right?

Chris Adderton (26:38):
Yeah. You know, I have the benefit of being able to lay off the liability because IHS Markit is a great partner for a couple of our pieces of work and I get to see their economy and risk teams' forecast. And I think it's pretty consistent with what Bridget said. It's more timing and magnitude of the change. Is it a gradual ramp up or is there going to be this exploding demand? The only caution I have, I've kind of a mongrel dog pedigree: sales and marketing, spent time at Nielsen, spent time with a CPG company, and now I'm in the supply chain, but the uncertainty is really around the consumer and the human behavior we've got going on in the world. I mean, there's still so much uncertainty relative to this. And we just did a review of the upcoming release of the EPIC report. And normally that's a demographic view and an infrastructure analysis, a lot of economics, but it really is human behavior, politics. We're seeing things that haven't happened in decades. You know, you're looking at the political unrest in significant parts of the world that are critical to growth, a significant shift in demographics in China, as their economy is elevated, you know, low-cost countries were always sort of the source. We've seen India and Vietnam and others benefit, Mexico benefit, from the increased costs in China. But then the politics, the uncertainty, even in our own domestic market, I think is something that's uncertain. I think if we don't have another unrelated activity, I think we could actually see improved growth above the forecast. I mean, that's the piece, but I'm not naive enough to think there isn't some other hurricane coming from somewhere that we can't see. Or maybe it's a meteor. Who knows what's next. We've all been watching way too much Netflix, and the disaster movies I deleted from my inventory.

Bridget Typovsky (28:31):
I think the one good thing though, is I think these events that we've had over the last year or so I think a lot of businesses have taken note from a standpoint. So I think you're starting to see, you know, I mean, we've always had contingency plans. That's part of our process and our DNA for our customers. But I think you're starting to see our customers and our vendors and suppliers, I think it's becoming more of an awareness. You've got to have these plans in place, flexibility, alternatives. You know, the single node network is, you know, people are now like redundancy. What happens if something happens in a certain geography, etc. So I think this awareness has, it has been big enough and long enough, you know, the duration of it, I think it's making our customers, the suppliers, vendors, et cetera, more aware of contingency planning, flexibility, and having alternate source points to meet and continue to grow and survive through these kinds of episodes. Because you're right. There will be something else down the road, right? Hopefully, it's not as what we just experienced or as large, but I think it has raised awareness with everybody to have those plans and contingency plans in place.

Will Heywood (29:36):
So I guess we should be expecting the unexpected from here on, okay. Well, you both for joining today, I really enjoyed both of your perspectives on this and we'll look forward to whatever comes next in the market. And I think it sounds like we're operating in a much more flexible way than a month ago.

Bridget Typovsky (29:52):
Thank you. Enjoyed the conversation.

Chris Adderton (29:53):
Very much. Enjoyed it.

Will Heywood (29:56):
If you enjoyed the conversation today, please share it with a friend and rate us on Apple Podcasts. You can find us online at dhl.com/allbusinessnoboundaries and follow us on LinkedIn and Twitter @DHLSupplyChain. We'll see you next time.