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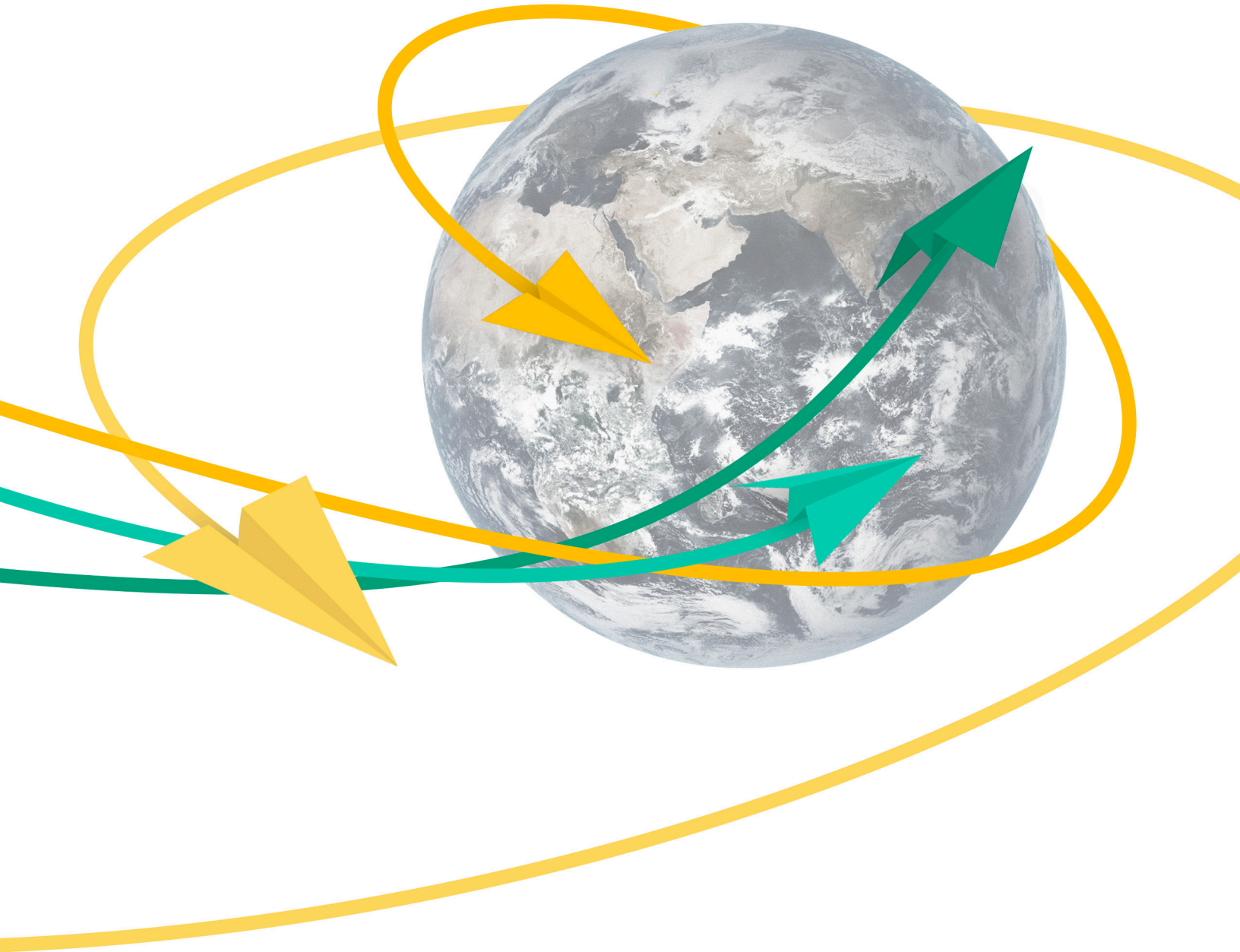
TRANSPORTATION PULSE REPORT 2022

Building a Better Tomorrow in Transportation:

On Trust, Relationships, Networks & Sustainability

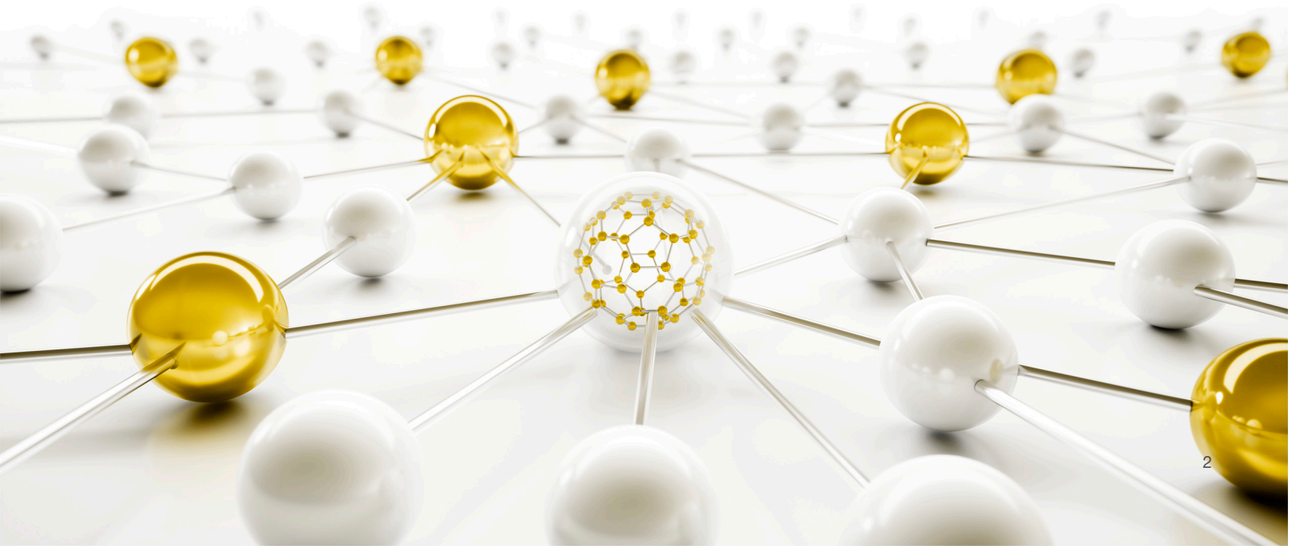


If 2020 and the outbreak of the Covid-19 pandemic were like an earthquake, shaking and fracturing the foundations of many supply chains, then 2021 has been like an ocean tsunami that follows an earthquake, causing additional pain and disruption.

One year ago, we couldn't wait to put 2020 behind us and start anew in 2021. Yet, in some ways, this year has proven to be just as challenging as 2020, especially in transportation.

Congestion and delays at ocean ports; trucking capacity constraints and driver shortages; surging transportation costs, especially with ocean and trucking rates; rising fuel prices; the list goes on.

What have we learned over the past 20 months?



"Everyone has become aware of how vulnerable global supply chains are," says Dr. Thomas Lieb, Chairman of the Supervisory Board of Hellmann Worldwide Logistics and former CEO of Schenker (he is also a member of Transporeon's Advisory Board). "We have also learned the importance of having real-time visibility of what is happening in your supply chain. You cannot avoid disruptions in the supply chain, but when your CEO asks you 'Where is our cargo currently?' you need to have a good answer available."

"Most importantly," Lieb adds, **"we have learned that we need to build trustful and reliable relationships with all stakeholders in the supply chain."**

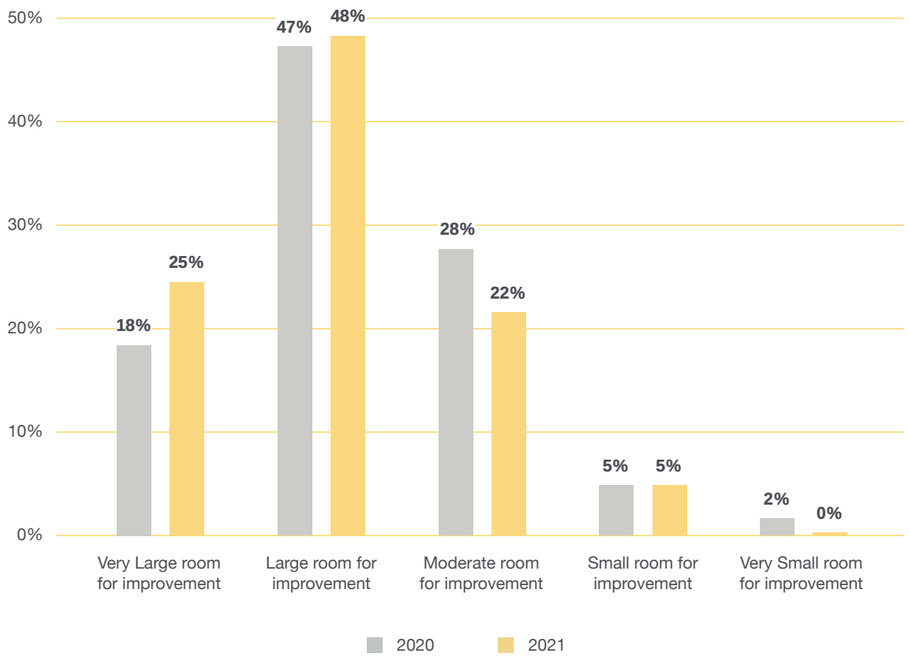
For Hermann Ude, former CEO of DHL Global Forwarding and Member of the Board of Deutsche Post AG (and current Chairman of Transporeon's Advisory Board), the biggest lesson learned is that "there are things we should have done earlier, but now it's evident they need to be done." In particular, "logistics needs to become more data-driven" to achieve smarter and more efficient utilization and allocation of capacity, for example.

"The Covid-19 pandemic has been a test scenario for what is coming with climate change," says Ude. **"It has been a catalyst for better use of data and digital solutions to make more informed decisions."**

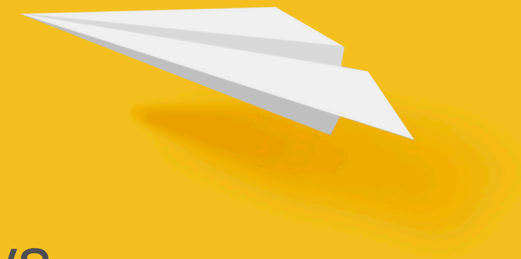
This past year has also strengthened the belief among industry stakeholders that very large opportunities for improvement still exist in transportation.

In a survey we conducted in October 2021 with more than 280 shippers, carriers, and logistics service providers from around the world, 73% of the respondents believe there exists a “Very Large” or “Large” room for improvement in the way transportation processes are designed and managed. This is an increase from the 2020 survey where we asked the same question. For example, a greater percentage of respondents this year (25%) believe there exists a “Very Large” room for improvement in the way transportation processes are designed and managed compared to last year’s respondents (18%).

When you consider the current way transportation processes are designed and managed – everything from procurement through planning, load tendering, track and trace, appointment scheduling, freight audit and pay, etc. –
how much room for improvement do you believe still exists overall?



What is the most broken? What needs the most fixing? We asked survey participants, as well as Dr. Lieb, Mr. Ude, and members of our Indago supply chain research community for their perspective on those questions.



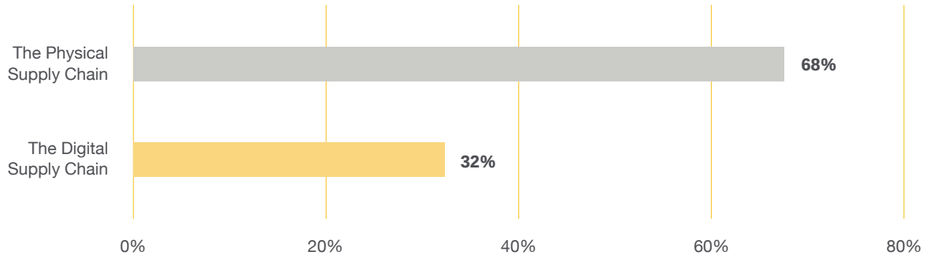
The Physical vs. Digital Supply Chain

There is the Physical Supply Chain consisting of infrastructure, assets, and people (e.g. trucks, trailers, roads, ports, containers, chassis, warehouses, drivers, warehouse workers). There is also the Digital Supply Chain, which involves connecting trading partners electronically to share real-time data, documents, and information with each other, and leveraging software applications to enable smarter and more automated transactions and business processes.

If you had to pick one, which supply chain is more broken – the physical one or the digital one? In other words, which one is more to blame for the current issues in the industry?

More than two-thirds of our survey respondents (68%) believe the Physical Supply Chain is more to blame for the current issues in the industry.

If you had to pick one, which supply chain is more broken, the physical or the digital one? In other words, **which one do you believe is more to blame for the current issues in the industry?**



"It's obvious," says Dr. Lieb, "it's currently the physical supply chain that is causing all the headaches, which is why building trustful and reliable relationships with your supply chain partners, having real-time visibility, and taking care of your people are so important."

A supply chain executive from our Indago community offered this perspective: "I selected 'physical' as the supply chain that is most struggling, but both are struggling. But I think shortcomings in both aspects result in material impacts on the physical side, but not the reverse. Said another way, **if we can improve the digital supply chain, then the physical supply chain will also improve."**

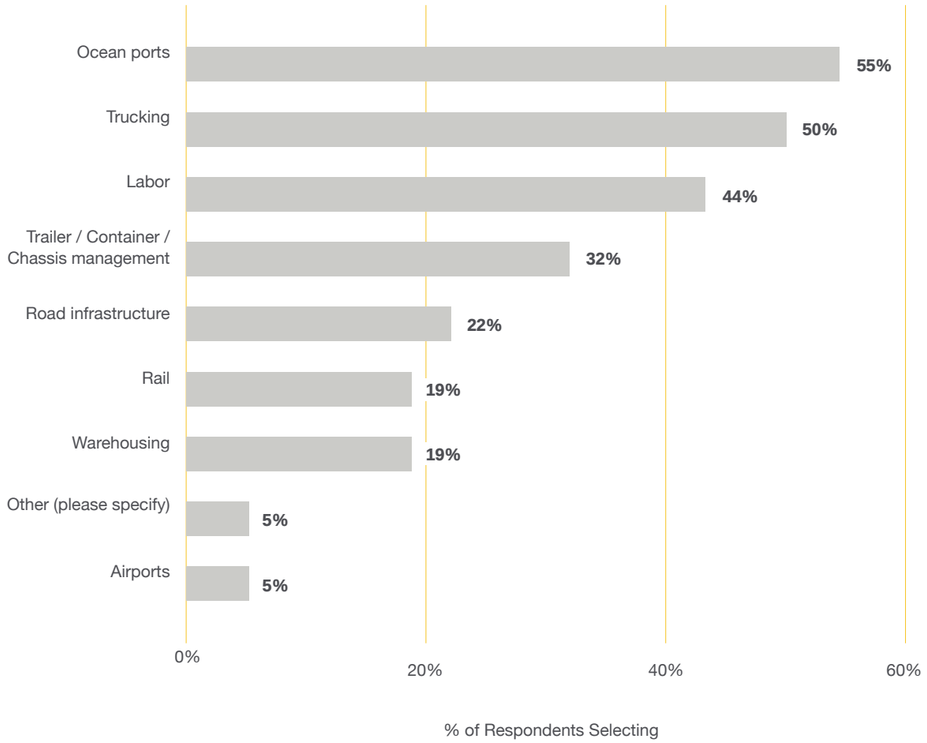
Mr. Ude shares a similar view: "Individual components of the physical supply chain are certainly broken, but I think the underlying issues are more with the digital supply chain, that is, with the availability and sharing of information [or lack thereof] across the supply chain." He also stressed the importance of having knowledgeable and adequately trained people who can use data and software to make smarter decisions, and the need for greater collaboration between all industry stakeholders.

Another Indago member summed it up this way:

> "I believe the digital has **brought to light the challenges** in the physical supply chain."

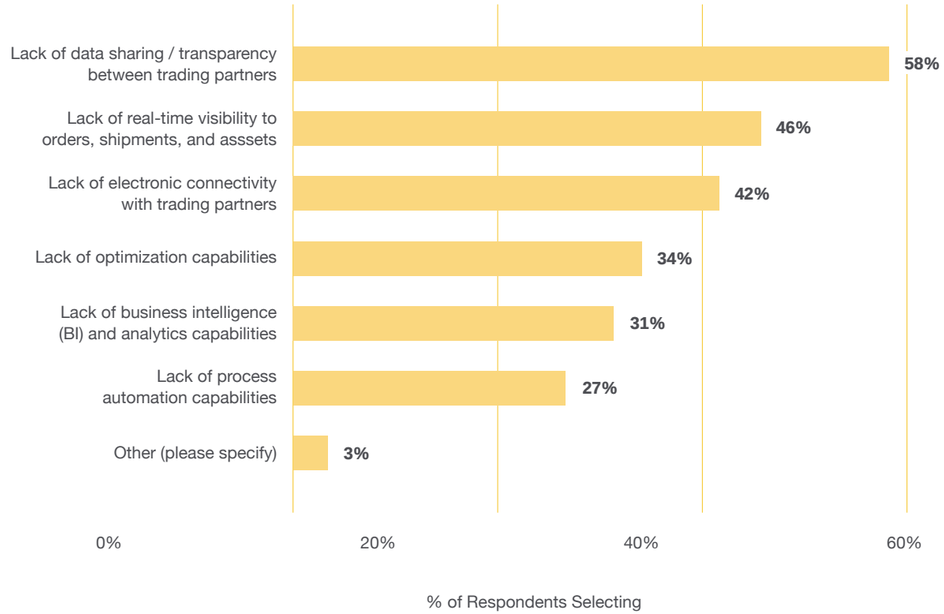
Overall, “Ocean ports” topped the list of physical supply chain components that are most broken, or need the most fixing, selected by 55% of survey respondents. “Trucking” (50%) and “Labor” (44%) ranked second and third, respectively.

Which part of the physical supply chain are the most broken (need the most fixing)? *Select 1 - 3 responses.*



“Lack of data sharing/transparency between trading partners” topped the list of digital supply chain components that are most broken or need the most fixing among survey respondents, gaining 58% of the vote. “Lack of real-time visibility to orders, shipments, and assets” (46%) and “Lack of electronic connectivity with trading partners” (42%) ranked second and third, respectively.

Which part of the digital supply chain are the most broken (need the most fixing)? *Select 1 - 3 responses.*



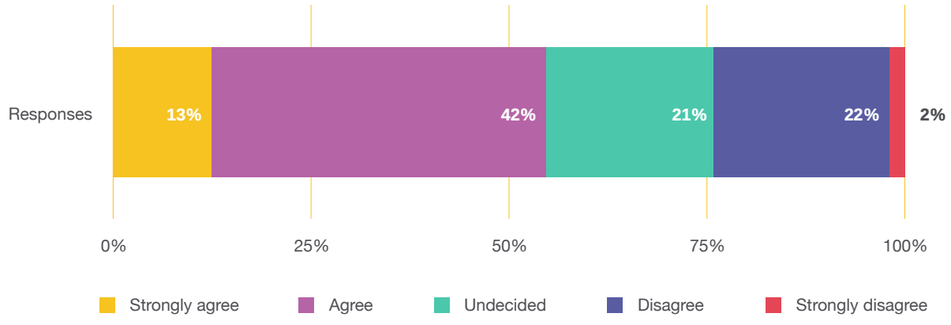
The lack of data sharing and transparency is a key contributor to something else that is broken in the industry: **a lack of trust between trading partners.**

A Trust Problem in Supply Chains

Do you agree or disagree with the statement **“you can’t be too careful” when dealing with people across your supply chain?**

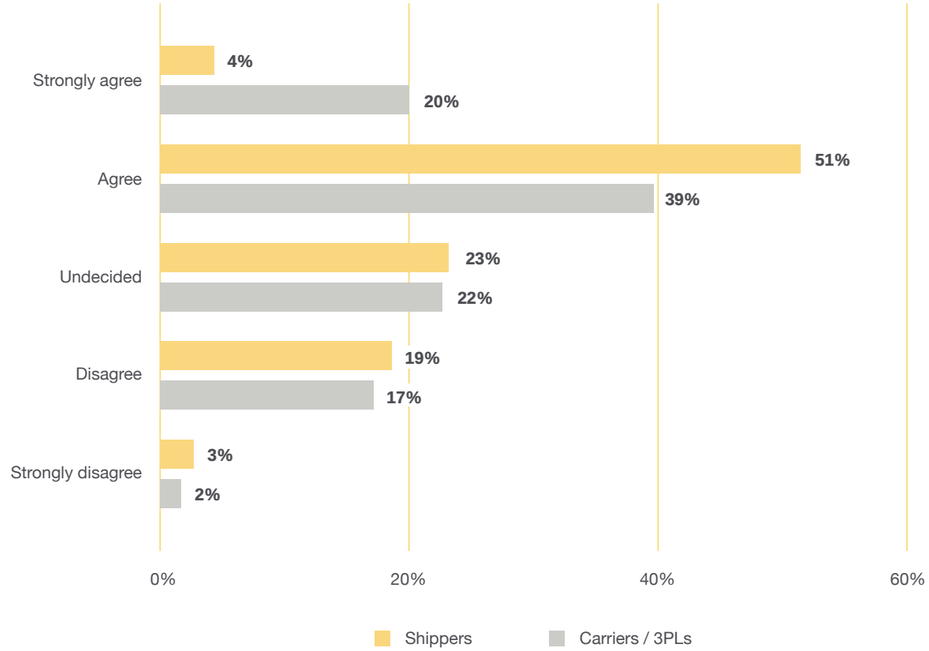
More than half of survey respondents (55%) either “Agree” or “Strongly Agree” with the statement that “you can’t be too careful” when dealing with people across your supply chain. In contrast, about a quarter of respondents (24%) either “Disagree” or “Strongly Disagree” with the statement.

Do you agree or disagree with the statement ***“you can’t be too careful”*** *when dealing with people across your supply chain?*



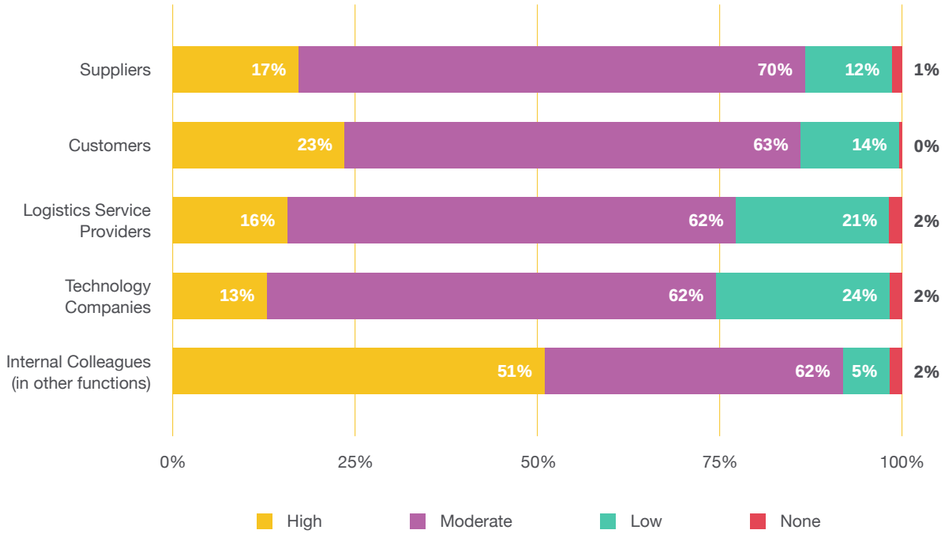
A much greater percentage of Carrier/3PLs “Strongly Agree” with the statement compared to Shippers (20% vs. 4%).

Do you agree or disagree with the statement ***“you can’t be too careful”*** *when dealing with people across your supply chain?*



In terms of who is trusted the most or the least, 51% of survey respondents rated their trust level with “Internal Colleagues” as “High.” At the other end of the spectrum, only 13% of respondents rated their trust level with “Technology Companies” as “High”, with 24% rating it as “Low”. That said, the majority of respondents (62%+) rated their trust level with all stakeholders (except for “Internal Colleagues”) as “Moderate.”

Overall, **what is the level of trust you have with following stakeholders in your supply chain?**



"These results do not surprise me," says Dr. Lieb. "Historically, lack of trust was built into the business model of forwarders. **The more volatile and less transparent the market, the higher the profits for the forwarder."**

An Indago member responded with sarcasm to these findings; **"I trust my suppliers to miss deadlines, my carriers to be delayed in transit, and IT to never give me what I need. I'm pretty rarely surprised as a result."**

Here are a couple of other comments submitted by Indago members, who are all supply chain and logistics executives from manufacturing, retail, and distribution companies:

"Maybe I'm willfully naive, even as I approach 60 yrs. old, but I believe most people are trustworthy. **I think a lot of it depends on the quality of the relationship.** People trust one another more when they know each other better. I try to know something about the people I work with, both internally and externally, and I want them to know something about me. That sort of relationship leads to trust and confidence. As far as actions that can erode trust, #1 is dishonesty. If someone lies to me, I will never trust them again. Period."

> **Empathy builds the most trust;** bad data erodes trust the most.

Mr. Ude is not surprised by the survey results either. "I can confirm the diagnosis," he says, "and the response is more sharing of data and information, as well as joint optimization. All of these solutions that are available now, like real-time freight visibility and Transporeon's Trust Center, are valuable because they provide transparency, they are an investment in building more trust. Having everyone looking at the same data will enable joint optimization, which was not possible in the past.

"When I was at DHL, it was us telling the clients how the quality was and we were managing the exception codes. Clients had no control or visibility over the data. **Now they can see for themselves how their supply chain and partners are performing."**

Dr. Lieb adds that there are two ways to build trusted relationships: "First, you hire reliable and trustworthy people, and second, by having reliable and high-quality data. Having greater visibility to real-time shipment status, accuracy of invoices, damage claims, and so on will play a bigger role in selecting your partners."

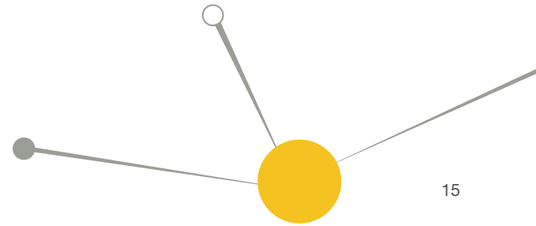
The need to become more data-driven in logistics, as Mr. Ude commented earlier, and the need to gather and share reliable and high-quality data across supply chain partners, as Dr. Lieb states above, is driving another trend in the industry: **the convergence of logistics networks and technology platforms.**

Not Just Software Eating the World Anymore

In 2011, the entrepreneur and investor Marc Andreessen famously stated that **"Software is eating the world".** Over the past decade, however, we've witnessed logistics networks and technology platforms coming together (via M&A, in many cases) to enable broader and more powerful network effects. This trend seems to be accelerating too. Therefore, does Andreessen's quote need to be updated, that it's not just software eating the world anymore, but the combination of software with connected networks?

"Every stakeholder in the supply chain can have great software internally," says Mr. Ude, **"but connecting everyone is also important, and scale really matters"** – that is, achieving a critical mass of connected shippers, carriers, and data. "It's network data along with predictive capabilities that will lead to a better world."

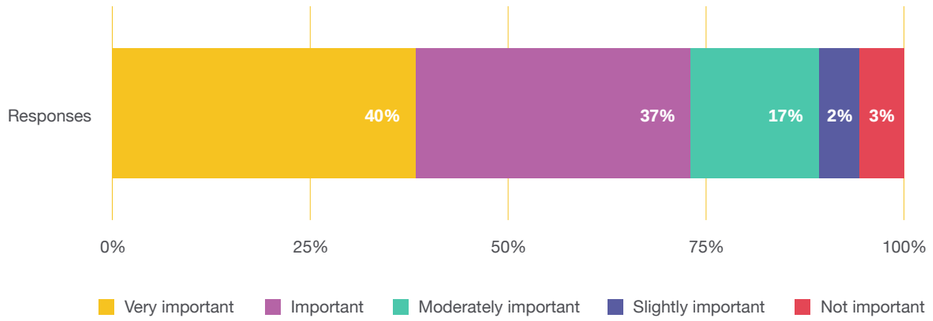
"Historically, the business model of logistics service providers was dominated by having a global network and people on the ground," adds Dr. Lieb. "Economies of scale has always been important. **What's different today is that technology is now part of it too.** We're seeing a lot of mingling and collaboration between technology companies and LSPs, as well as an increase in investments by venture capitalists in the industry."



When selecting a transportation management system (TMS) or logistics service provider partner, how important is the size and scope of their logistics network?

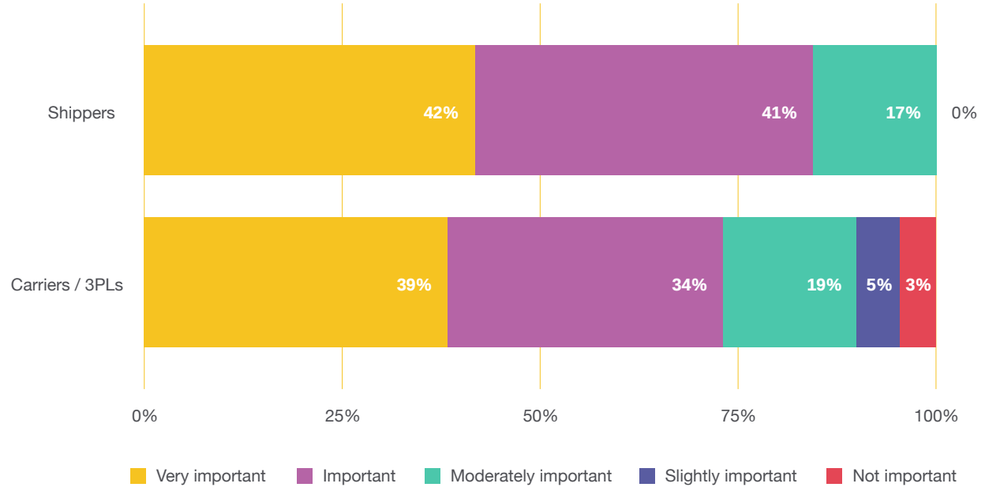
More than three-quarters of the survey respondents (77%) said that when selecting a TMS or logistics service provider partner, the size and scope of their logistics network is either “Important” or “Very Important.”

When selecting a transportation system (TMS) or logistics service provider partner, **how important is the size and scope of their logistics network – that is, the number of carriers, shippers, and other trading partners connected to their network, across different modes and industries, and the number of transactions executed annually on their network?**



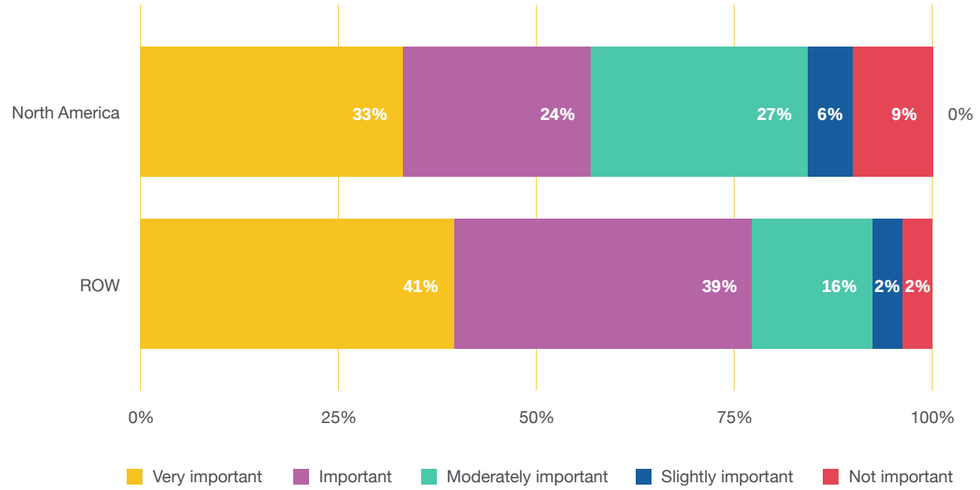
A greater percentage of Shippers (83%) said that it was either “Important” or “Very Important” compared to Carriers/3PLs (73%).

When selecting a transportation system (TMS) or logistics service provider partner, **how important is the size and scope of their logistics network – that is, the number of carriers, shippers, and other trading partners connected to their network, across different modes and industries, and the number of transactions executed annually on their network?**



Interestingly, a greater percentage of “Rest of the World” (ROW) respondents (80%) said that it was either “Important” or “Very Important” compared to North America respondents (57%). However, two-thirds of North America respondents were Carriers/3PLs, compared to 42% of ROW respondents, so this difference in profile likely influenced these results.

When selecting a transportation system (TMS) or logistics service provider partner, **how important is the size and scope of their logistics network – that is, the number of carriers, shippers, and other trading partners connected to their network, across different modes and industries, and the number of transactions executed annually on their network?**



Why is the combination of software with large networks of connected trading partners important for shippers and carriers? Simply put, these platforms will help them achieve their desired outcomes more quickly, efficiently, and intelligently than ever before.

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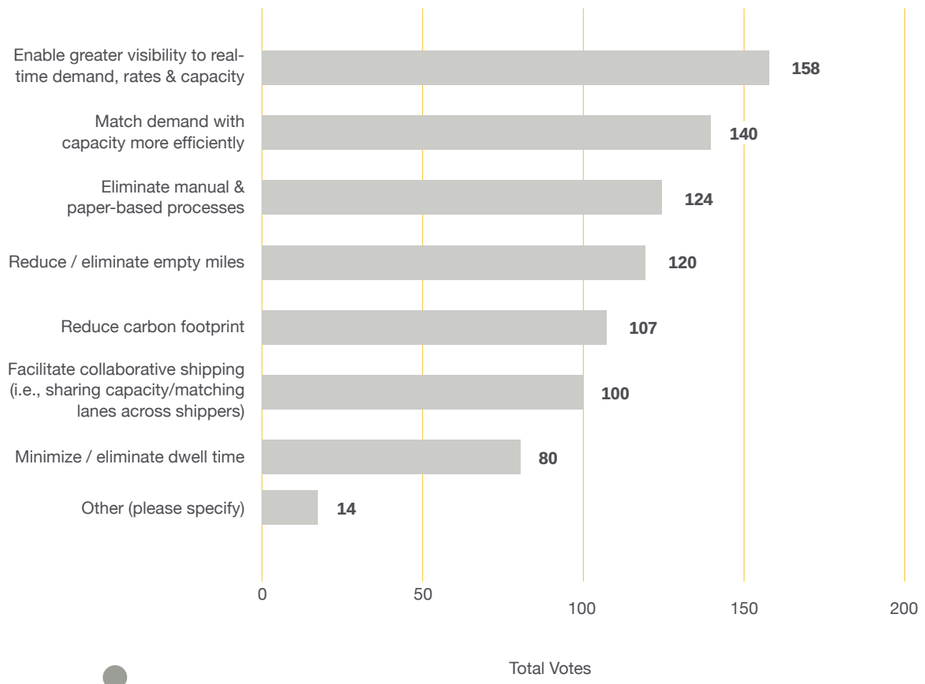
Top Desired Outcomes:

Enable Greater Visibility & Match Freight Demand with Capacity More Efficiently

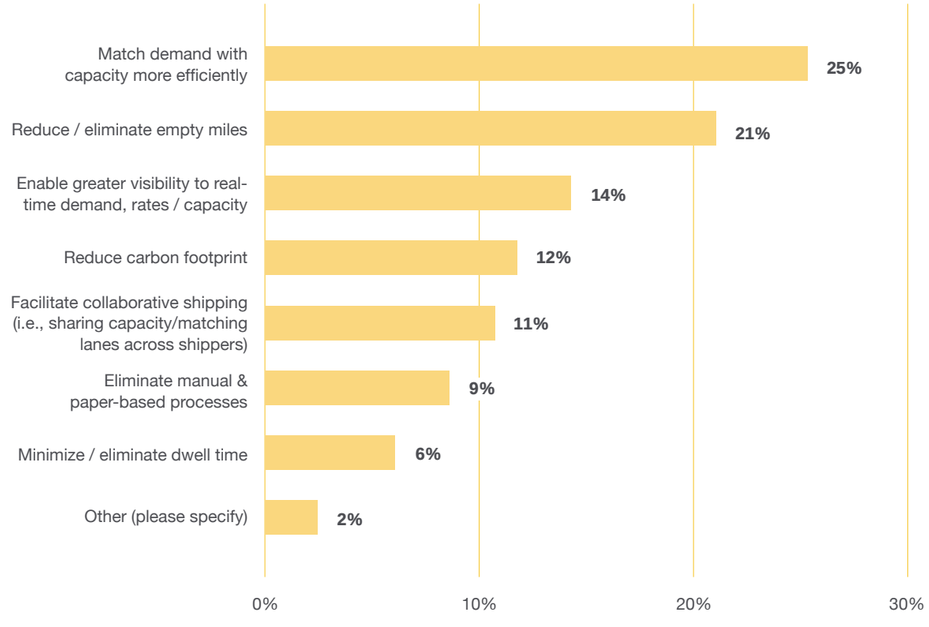
The top three desired outcomes in terms of total votes received in this year's survey were the same as last year. "Enable greater visibility to real-time demand, rates, & capacity" topped the list, followed by "Match demand with capacity more efficiently" and "Eliminate manual & paper-based processes".

If you could redesign or enable new transportation processes, **what would be your top three (3) desired outcomes from the list below?**



Looking at the percentage of "#1 Desired Outcome" votes, topping the list this year was "Match demand with capacity more efficiently" (25%), followed by "Reduce/ eliminate empty miles" (21%), which took last year's top spot. The fact that these two desired outcomes swapped places in this year's survey is not surprising when you consider how much tighter trucking capacity has become this year.

If you could redesign or enable new transportation processes, **what would be your top three (3) desired outcomes from the list below?**



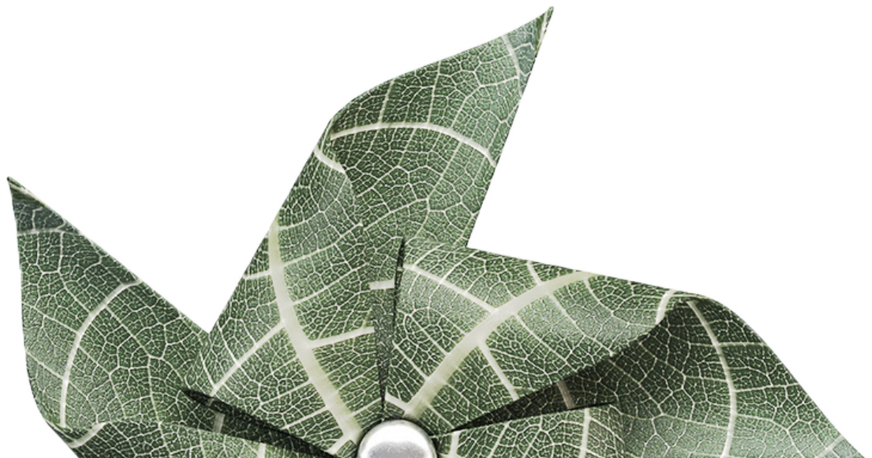
It is worth noting that "Reduce carbon footprint" moved up one spot in the rankings compared to last year, from fifth place to fourth place. Does this mean that transportation executives are getting more involved with helping their companies achieve their sustainability objectives?

Supply Chain at the Center of Sustainability

Dr. Yossi Sheffi, Director of the MIT Center for Transportation & Logistics, commented in an October 2019 LinkedIn post that “No self-respecting company is without a sustainability strategy, and at the center of these strategies lies the supply chain.”

How will supply chain sustainability continue to evolve in the industry moving forward?

“Everyone is looking at the hardware side of things, like electric vehicles,” says Mr. Ude. “But we have 20% of trucks running empty, another 10% that are not fully loaded, and you have trucks idling while they wait to be loaded or unloaded. However, you can achieve 65% of the Paris Agreement 2030 targets by leveraging data to eliminate this waste and inefficiency – and you’ll save money too by reducing fuel consumption. **It’s a win for shippers, a win for carriers, and a win for the environment.”**



“Sustainability is more than global warming,” says Dr. Lieb. **“It’s also about poverty, fair wages, child labor, responsible sourcing, and other things**. Transportation is a main contributor to CO2 emissions around the world, which is why the logistics industry is in the spotlight in political discussions today.”

Dr. Lieb adds, “However, you can’t just look at transportation; you have to look at the design of the entire supply chain, and you can only design a supply chain with low CO2 emissions if you have the data available.”

Mr. Ude concludes by saying, “If you invest now, if you are quicker in applying data, if you are quicker in using digital solutions and connecting to networks to reduce empty miles and eliminate other sources of waste and inefficiency, **you will [have an advantage] over those who are less efficient because they will experience serious problems when carbon costs are applied.”**

The Way Forward

What's going to happen with transportation rates and capacity in 2022? What about fuel? Will they continue to rise in the weeks ahead? Should we do an annual procurement bid or more mini-bids throughout the year? Will the driver shortage get better or worse?

Those are some of the many questions shippers and carriers are asking, and the reality is that it's impossible to predict with high certainty what will happen in the weeks and months ahead.

What we do know is that very large opportunities for improvement still exist in transportation, and that to achieve them, **the logistics industry needs to become more data-driven, and there needs to be greater transparency of data across all stakeholders.**

We know that there are parts of both the physical and digital supply chains that are broken, but instead of playing the blame game, shippers, carriers, logistics service providers, and other trading partners **need to collaborate more and focus on building trusted relationships.**

We also know that the combination of software with large networks of connected trading partners is becoming important for shippers and carriers because these platforms will help them achieve their desired outcomes more quickly, efficiently, and intelligently than ever before.

And we know that supply chain, and transportation in particular, is becoming the center of sustainability strategies for companies.

Focusing on what we know will help us prepare and respond effectively to the unknowns of tomorrow.

Adrian Gonzalez,
President of Adelante SCM, Founder of Talking Logistics

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