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The end-to-end supply chain: how are logistics organisations, suppliers and retailers using technologies to connect up data and build operational agility?

Roundtable Special

The end-to-end supply chain: how are logistics organisations, suppliers and retailers using technologies to connect up data and build operational agility?

Stories of supply chain disruption dominate the headlines, with the pandemic, Brexit and driver shortages leaving supply chain businesses battered by a perfect storm of risk.

In an age of rapid digital transformation, businesses from logistics providers and retailers, to suppliers and manufacturers, are all racing to modernise systems and build omnichannel connectivity to deliver the just-on-time service that customers have come to expect.

As a result, data accessibility and visibility of supply chain processes has become crucial. However, many businesses remain stuck in a maze of outdated legacy systems and siloed information, meaning that locating shipments, monitoring stock levels, and tracking orders across the supply chain are more of an aspiration than a reality.

To combat these challenges, many supply chain businesses are exploring the concept of a supply chain control tower, which connects the data within an organisation and its partners to streamline operations, leverage the insights within data, and improve flexibility and resiliency.

At a roundtable dinner hosted by National Technology News and InterSystems at The Gherkin in central London, senior leaders from across logistics, retail and CPG manufacturing explored the key challenges for businesses as they look to use data and technology to overcome supply chain disruption

Senior leaders from across logistics, retail, and CPG manufacturing explored some of the top challenges for companies as they try to harness technology to tackle supply chain disruption.

and build agility to cope with future uncertainty.

The event began with a discussion about the main supply chain and logistics challenges organisations have faced in the past 12 months.

"It's all about disruption in the supply chain with actionable insights," said Mark Holmes, senior advisor of supply chain, InterSystems, who kicked off the conversation.

One senior director of supply chain from a large multinational food and drinks company agreed that this was a significant issue at the moment.

"Continuity of supply is the biggest problem, with the aftermath of Covid ripping through the supply chain," he said. "How do you get connectivity between organisations?"

The head of supply chain at a luxury British clothing brand said that one of the biggest challenges the company had, and

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still has, is the different phases of lockdown, as well as Brexit.

"We've always gone to suppliers and our 3PLs, because they're the experts, but at the moment none of us are experts," he said. "They don't have the guidance because we're all learning."

He added: "Data and technology are not all in one place – it's all separated, amongst different providers, if we'd all had visibility across multiple suppliers, life would have been a lot easier."

One head of data science from a multinational technology company said that for the organisation as a whole, the biggest challenges have been the chip shortage and inventory over peak periods for retail.

"Coming from the data aspect, we're trying to demonstrate value in machine learning in data science and supply chain," he said. "The last two years have hugely impacted forecasting because how do you learn from history right now?"

One head of inside track at a large logistics company suggested that Covid forced companies to do things ahead of time.

"It's really about disparate parts coming together to make a decision based on the interests of all of those parts, not just one," said the head of integrated logistics at a global supply chain company. "Bringing that into what's happened in

"Our main challenge is data visibility and being able to see the end-to-end supply chain journey."

conflict we're currently seeing in Ukraine, because people will tell me it will 'never happen again' so why do I need to make these million pound investments."

One transition manager from a UK cosmetics company said that she is currently transitioning the services desk.

"Our company is trying to grow and restructure its IT team, we're trying to double in size for a company that has been more focussed on business strategy than IT," she said. "We're trying to lead strategically in IT."

When asked what the challenges have been for her company, director of operations at a luxury UK clothing company responded: "Where do you want me to start?".

She added: "Our brand is in transformation on top of Covid, Brexit, the supply chain crisis. Our main challenge is data visibility and being able to see the end-to-end supply chain journey."

The technology director at a large UK DIY retailer explained that the company is exploring how it can use data.

"We do so many different things, it's an incredibly complex customer to be serviced and we're running 60 fulfilment centres," she said.

One chief technology and information officer from a UK logistics company talked about his previous role at a large technology company, where he worked closely with the shipping industry.

From that period of time, he explained, digital twin tech was a top priority – with the company spending half a billion on a pilot. Decarbonisation was the second priority, he explained.

"It's a wonderful hypocrisy where we say we want to do the right thing

the past year - you didn't have the information to make decisions, there's not many options, what can you do?

"At some point you're going to move it by air freight and the demand from our customers is that we need zero carbon."

A head of data strategy from an international technology business said that he spends a lot of his time trying to get investment for new data initiatives.

"The challenge over the past couple of years has been everyone wanting everything immediately, and obviously this stuff doesn't manifest straight away," he explained. "Moving forward in terms of justifying the investment, actually the benefits case is more difficult because of Covid and Brexit and potentially the

and then as soon as the bunker price of oil goes up, the ships sail around the Horn rather than through the canals because it's cheaper," he said. "People are a real concern at the moment across the business, particularly in technology - it takes a long time at an operational level for somebody to be effective and competent, to be able to understand the landscape of carrier complexity, tariffs, stock pricing, the ability to get people in quickly and effectively is a real challenge."

He added: "The pivot from trying to help organisations to be predictive in a just-in-time environment to suddenly rolling back from that going 'we don't think we can be just-in-time', we now need to stockpile more and we're trying to pivot our business to warehousing but we're not really geared for that operation."

One head of operations at a hospitality business highlighted staff shortages in the industry.

"There are 177,000 unfilled vacancies," he warned. "We've kicked into online

> **"It's about bringing all of that data together from a visibility standpoint but also to be able to act upon it and make it actionable."**

sales. There have been dome darker moments but we do seem to be coming out of it."

The head of accelerated digitalisation and innovation at a large logistics firm explained that the labour shortage was a big issue for the business as it has had to run with 24,000 plus vacancies.

"It's coming down gradually, but you can't keep doing that - there is this competition for talent - there isn't the talent of people who do data analytics, it's warehouse operatives, it's drivers," he said. "Our constraint now given the effect of

Brexit and other factors that have caused migration, is no longer warehouse space and pallet spaces, it's how many operatives we have."

A fulfilment planning productivity and insight manager at a UK food company said the company is at the start of its journey.

"Over three or four years the management team and operations have been growing quickly," he said. "We've had to maintain growth while dealing with labour shortages."

The director of logistics at a poultry meat producer agreed that labour shortages had been a huge issue. He added that avion influenza, Brexit, and an aging workforce were also a challenge for the market.

"It's moving away from just-in-time to just-in-case," explained one business development consultant from a large car manufacturer. "I think there's an element of talking about the culture within the industry as well, how do you shift people's

mindsets to get everyone to come and solve common problems, but do so in a way that won't disadvantage the business commercially?"

Mark Holmes, senior advisor of supply chain at InterSystems, said that to truly optimise inventory you need a data view point

"It's about bringing all of that data together from a visibility standpoint but also to be able to act upon it and make it actionable," Holmes told the group.

The attendees moved on to talk about how logistics providers and retailers are using data and technology to overcome disruption and build operational resilience.

The director of logistics from a poultry meat producer said that there were a huge amount of algorithms allocated to animal feed.

"There's analysis to understand where the birds are clustering," he said. "The aim of tech for us is to go carbon negative – farming with data science."

The conversation moved on to explore some of the main roadblocks for supply chain businesses in rolling out new technologies to connect up data, processes, and workflows across the business.

One chief technology and information officer at a logistics firm said it's all about the ability to make choices.

"Do you want it quick, cheap, or green?" he said. "No one has cracked that one. So much time and money is offered by businesses to solve the same problem, we're not sharing data yet."

The group also spoke about the role of supply chain control towers in enabling agility and managing operational risk.

The senior director of supply chain from a food and drinks business said that a challenge associated with control towers is the integration of a multitude of systems. He said that while it's a great idea to talk about, the practically of bringing 20 systems together is another matter.

"The challenge we face at the moment is that it works, so we don't need to

change it, but it's not scalable," explained the director of operations at a luxury fashion brand. "So people are reluctant to change to open things up and to move into that space for alignment and scalability and transparency, because they're quite happy to do a little plaster fix rather than doing a proper fix that will take you forward as a business, also the speed of change is quite slow."

One head of data strategy from a technology business said that the company is making a significant effort with data integration.

"It's a system-by-system challenge, if they're legacy systems, it's likely to be a bigger challenge than newer systems with developed APIs that we can utilise, then it

becomes somewhat easier," he said. "It's just a slog to be honest - and we have to do a lot of it before we realise any value.

"That's part of our challenge, justifying that and finding the right bit."

A chief technology and information officer from a logistics firm explained that it's important not to focus too much on the technology itself. "Fall in love with the problem, not the solution," he said.

One business development consultant from a large British car manufacturer said that his team learned the hard way that one of the most important things to consider is championship.

"So finding that one champion that sits at the board level who really supports what you're trying to do," he added.