Shared shipping is slowly gaining ground between market rivals

Companies cut expenses and carbon when they ‘compete on the shelf and collaborate on the back of a truck’. But how to build the trust it needs to succeed?

Justin Gerdes
theguardian.com, Monday 11 August 2014 08.08 EDT

Companies already collaborating on shipping are saving money and cutting their carbon footprints. Photograph: 145/Ocean/Corbis

When Ocean Spray opened a new distribution center in Lakeland, Florida in 2011, the facility’s proximity to a rail yard used by a competitor created a behind-the-scenes opportunity to work together.

Ocean Spray wanted a cheaper and more efficient way to ship its products from a New Jersey facility to Lakeland, while rival juice company Tropicana was paying to send empty rail cars south on a “back haul” from New Jersey to Florida.

Working with an existing logistics partner named Wheels Clipper, over the course of a year Ocean Spray shifted 80% of its shipping along the New Jersey–Florida route off trucks and into Tropicana’s empty rail cars. The change reduced carbon emissions by 20% and slashed transportation costs by 40% – about $200 per load – on that route, according to a 2013 analysis by the MIT Center for Transportation and Logistics.

Over the last year, Ocean Spray has ramped up to 100% rail on the New Jersey-Florida route.

In a similar move, competing confectioners Hershey and Ferrero announced a partnership in 2011 to reduce costs and cut carbon by sharing facilities and creating one North American supply chain. The alliance has removed 584 trucks from the road according to Hershey and prevented the release of 6.5m pounds of carbon dioxide over the past two years.

These seemingly oddball examples of cooperation between market rivals are examples of "collaborative shipping". Proponents say the practice could help make the global goods movement system – which has not changed much since the introduction of the standardized shipping container more than a half-century ago – more sustainable.

"It's not broken – literally – product does still get to where it needs to go," says Alex Stark, marketing director at Kane Is Able, a third-party warehousing and logistics company. "But it's broken in the sense that it can be done much better".

Too big to change?

Global shipping is a $60bn-a-year industry that makes it possible for companies of nearly all sizes – from small-hold coffee farmers in Brazil to multinational tech giants like Apple – to move between countries and continents with remarkable speed and at relatively low expense.

But the system is riddled with inefficiencies that cost manufacturers and consumers money, waste fuel and dump planet-warming emissions into the atmosphere. Just one link on the chain – road freight carried by medium- and heavy-duty trucks – creates nearly 6% of all global greenhouse gas emissions (pdf) according to a 2012 analysis.

In the United States 15% of those trucks run empty while the remaining 85% run on average at just 64% capacity, according to Jason Mathers of the nonprofit Environmental Defense Fund (EDF). The group – which sponsored MIT's study of the Ocean Spray-Tropicana shipping partnership – is encouraging collaborative shipping as a means to lower costs, save fuel and wring carbon out of supply chains.

"If we could only capture half of that unused capacity, you're talking about 100m metrics tons of carbon savings annually, and billions of dollars of savings", Mathers says.

In a 2012 report called "Smart Moves," EDF documented the most effective ways for shippers to cut freight costs and improve the efficiency of their supply chains. It distilled from them "five rules of greener freight": demand cleaner equipment and practices, choose the most carbon-efficient mode of transport, collaborate internally and externally, redesign logistics networks, and get the most out of every move.

Since the report came out, says Mathers, "The place where we're seeing most momentum is this concept of getting the most out of every move – making sure that the trucks that are on the road are as full as possible".

Inertia, tradition and risk aversion

But collaboration in shipping faces some of the same barriers confronting most ideas that challenge convention: inertia, tradition and risk aversion. With the economy still recovering "the temperature of the business world is such that people don't want to take risks," says Kane Is Able's Stark.

Part of the problem, says Chris Kane, chief customer strategy officer at Kane Is Able, is that firms with products to ship are typically interested only in their own supply lines to retailers, and fail to consider opportunities to collaborate.

Kane is so sold on collaborative shipping that he's written an free e-book about it (pdf), in which he likens current shipping practices to "taking a taxi to the airport, only to discover that five of your friends were going at the same time, and you could have paid less (and burned less fuel) to ride a shared shuttle bus."

Ceramic tile manufacturer Dal-Tile decided to change its established practices because shipments departing its Monterrey, Mexico, production facility were running at just 20% of capacity. The reason was intrinsic to the product: the company's heavy loads of tiles were at the US legal weight limit for the type of truck trailer the firm was utilizing.

Working with Transplace, a third-party logistics provider, Dal-Tile determined that by shifting these shipments to a high-capacity rail boxcar the firm could send more of its own freight per shipment - with room to spare for goods from nearby manufacturers. Transplace located firms such as Whirlpool that were willing to pack their bulky-but-lighter freight into Dal-Tile's not-yet-full boxcars.

This consolidation of shipments yielded a 30% net reduction in shipping costs.

Building trust between market rivals

Managers face competing priorities for their attention, says Edgar Blanco, research director of the Carbon-Efficient Supply Chains Research Project at the MIT Center for Transportation & Logistics. "Even though there may be opportunities for collaboration in transportation," Blanco says, "it's not as clear that that's where their managers will invest their time because there are still so many things to do in their more critical areas".

Trust is another hurdle. "Companies are concerned that competitors may learn details of their product shipments, or that their products might be delayed as a competitor's are given priority", says EDF's Mathers, "The companies that are having success have invested time in building trust between the collaborators and [third-party logistics] service providers".

Stark is convinced the trust barrier can be overcome. After all, he says, products "don't compete on a truck. They compete in the hearts and minds of the consumers who are buying them".

Indeed, for Ocean Spray sustainability manager Kristine Young, the collaboration on shipping with Tropicana was simply a smart business decision. "As there are more environmental, social and financial pressures put on business, we need to be more comfortable collaborating with unexpected partners", she says. "We can compete on the shelf and collaborate on the back of a truck. This collaboration has signaled to our transportation partners that we are open to innovative solutions that reduce carbon emissions and costs".

"What these case studies show," says MIT's Blanco, "is that as you get more maturity and more examples, [distrust] becomes a lower barrier to try and collaborate."

Justin Gerdes is a San Francisco Bay area-based independent journalist specializing in energy and the environment, with a focus on energy and climate policy.

The supply chain hub is sponsored by the Fairtrade Foundation. All content is editorially independent except for pieces labelled advertisement feature. Find out more <u>here</u>.

;