The words intermodal and technology have been yoked together for years as providers across the industry continually look for newer and better ways to serve their customers. But how far have we come, and how much further do we have to go to consistently deliver timely, accurate information across modal lines?

It will be a complicated and ultimately rewarding road to reach that goal, according to expert comment from the 3PLs and technology vendors contacted for this article. Their comments, included verbatim in almost all cases, identified a wide variety of innovations to advance information flow among participants.

Chris Ricciardi, chief operating officer, Logistical Labs

“While we’ve seen some improvements in the flow of information between providers, progress has been slow. A lot of information is still transmitted through emails and phone calls instead of direct system integrations like updates concerning rates, schedules, capacity, etc. and tendering is mostly utilizing legacy EDI systems.

“If transportation providers worked to integrate their systems and automate the flow of information, we’d see huge efficiency gains. The first step is for providers to admit they have a problem. They don’t obsess about increasing customer satisfaction like they should. Now, companies have a jumbled way of gathering all the little pieces of available information by creating a messy ‘Frankenstein’ process. To improve the current state of information flow, providers need to adjust their culture, invest in advancing their own internal technology, then open the doors for others to interact with them through integrations.

“We’re trying to push for more visibility and communication in the industry by aggregating drayage, door-to-door, and ramp rates into a single, integrated platform, while also comparing with the current truckload market. One major goal is to enable IMCs to offer a complete door-to-door solution with minimal effort and grow their customer base via API connections.

“Theoretically, measurable benefits could happen right away. The technology for improving information flow is there. Instead of keeping information close to the vest, or making it confusing or difficult to obtain, the industry needs to be more open to sharing data. Open APIs and self-service systems have empowered many industries and if the rail industry moved in this direction, we’d see more people looking at intermodal as a viable shipping option.”

Adam Compain, CEO, ClearMetal

“The issue is not that there is not enough information shared between the parties intermodally. It is that the data doesn’t fully make sense or isn’t usable by the parties who need to have it. A network of data is important, but what is more important is...
how you as a user make sense of the information. That really requires finding different methodology for treating data — automatically interpreting it, correcting it, cleaning it up and normalizing it.

“We actually are in year one of what many in the industry are calling the ‘digital transformation’. It is no surprise that companies are leaning in and distancing themselves from competitors through information quality. Some are hesitating and will be left behind. We see people all along that digital spectrum.”

Shippers, and in particular retailers, as well as 3PLs generally have been the most progressive, Compain said, because they are in more direct contact with end-user customers who rely on timely information. He believes ocean carriers have to be as aggressive in problem-solving as a mobile phone provider does with a customer whose device is balky.

There still are issues with service providers’ ability to share the most updated information, Compain said, largely because data wasn’t a priority and wasn’t widely shared as the industry matured. That approach forced customers to use buffer stock to compensate. With the advent of “the Amazon effect,” he said companies are being forced to keep operations leaner, and freight providers must adjust. That required a priority shift toward software development instead of building more infrastructure in ports and elsewhere.

Stephen Bindbeutel, IT solutions analyst, Coyote Logistics

“Many shippers, carriers and intermediaries use obsolete systems to manage their supply chain. Though some utilize sophisticated TMS applications, EDI and API connections, the majority of the industry relies on phone calls, emails and faxes. Over the past few years, newer companies solely focused on integrating diverse systems have helped to bridge some of the communication gap. Further improvements will likely require widespread adoption of integration systems and/or the use of more comprehensive technologies — i.e., blockchain solutions.

“Everyone is clamoring for more data, but considering the sheer volume of available information, it’s easy to be overwhelmed by it. With the number of drivers, devices, pieces of equipment, facilities, etc. connected to the internet, a single intermodal shipment can easily generate thousands of unique data points. Companies that can translate that data into clear, concise insights will drive efficiency, both internally and to the wider transportation industry. Companies that can’t will just have a lot of data.

“In many regards, the transportation industry has not been at the forefront of new technology investment and adoption. That said, EDI integration between railroad providers, carriers and intermediaries has definitely been a bright spot. There has also been a lot of progress in online tracking capabilities, with many carriers providing real-time, on-demand shipment updates.

“Technological advancement within one mode is not mutually exclusive to progress in others. Most shippers and carriers are fully aware that manual, inefficient processes leave them extremely vulnerable to savvier competition, and are making the requisite IT investments.”

Brian Sepe, director of brokerage pricing and solutions, Global Tranz

“Although Intermodal providers have been slower to adopt technology than LTL and TL partners, there has been significant movement in terms of integrating directly via EDI and or API to provide real-time spot pricing and tracking updates.

“Providers will need to further invest in their own infrastructure to ensure information is free-flowing or look to partner with rail specific third party technology vendors.

“GlobalTranz is leveraging API and EDI integration methods from the carrier directly and through third party vendors. Our integration team focuses on obtaining the most accurate and efficient data, the method of data transport is agnostic.

“Any technology that reduces the number of websites visited, or phone calls made to provide real-time information is invaluable. In the current marketplace, customers’ demand information visibility is at an all-time high and the expectation to deliver this information is a requirement for competing in the intermodal marketplace.”

Harald Fritz, vice president, and Joseph Cook, product manager, TMW Systems

“Ocean, ports and rail historically share information via EDI and user account portals. There is a slow progress to improve or collaborate. New technologies are popping up to help shippers and carriers with freight visibility, efficient scheduling and rating.

“There are some systems that are being developed that enhance freight visibility across modal lines, particularly between ocean and rail carriers. There also are TMS that optimize rating and routing among all modes of transportation.

“Across the industry the need for data is trumping the manual cost savings. Intermediaries see the potential and are stepping in to make this exchange of data more and more seamless and less painful. Sure, a lot of it is still visibility driven, but the end game is the data. The technology already exists, but industry standards need to be put in place.

“The piece that has to come into the picture is getting the information on the container while it is on the ocean. If the cargo is valuable enough, you can have a beacon with telematics. But that isn’t perfect because if the cargo is far below deck the information may not be retrievable.”