

ith the growth of ecommerce and small businesses, pressures on the supply chain and LTL will continue to drive innovation and interest in how technologies like AI, IoT, advanced data analytics and machine learning to enhance automation, improve efficiencies and the quality of life for drivers.

As part of the recent SMC³ Connections '22 in San Diego, an expert panel discussed ways in which innovative solutions can impact positive change and successful operation in LTL transportation. The panel included Jim Geer, VP – Integrations at MercuryGate as the panel moderator, Darrin Demchuk, VP – Solutions at Platform Science, Pradeep Vachani, CEO at Lynxus and Ben Wiesen, President at Carrier Logistics.

IMPROVING OPERATIONS THROUGH DIGITAL TRANSFORMATION

A "digital transformation" involves adopting and implementing new technologies to change something for the better. For LTL asset-based carriers, there have been significant investments in technology to help improve how they manage their operations.

"I'm seeing digital transformation not always as something completely new, but as an inventive way to use data you already have in a new, creative way...like cube stations taking pictures of the freight – not just to report back to their customers, but to actually improve the flow of the freight through their operations,"

Wiesen said. "Leveraging existing data can be a revenue driver... show the dock worker so they can find it quicker and reduce labor hours."

There is a clear shift from on-premises to cloud-based and SaaS technologies which provides new connectivity, continuity of data, better visibility and other advantages. But it also unearths potentially decades of issues related to legacy systems. For modern large fleets, oftentimes the CIO is tasked with a broad digital transformation effort where they're deploying a new ERP, new HR systems to name a few so it's critical to empathize with the challenges of that type of big initiative.

"For fleets, cyber security is now top of mind...a lot of us are trying to extend single sign on into the cab to manage the identities of their drivers and make sure that there's a secure connection to the freight and the data," said Demchuk. "Not a lot of people have ever even had to do that, and the driver experience is often 10-15 years behind from a technology perspective."

HOW AUTOMATION IS ALREADY IMPACTING LTL TRUCKING

Everyone agreed that there are opportunities to use automation to streamline the volume of paperwork involved in moving freight. While some more advanced fleets are effectively digitizing information to support efficient customer updates, many companies are still processing reams of paperwork or free form capture from drivers without much visibility.



"It's amazing how common the problems are in LTL, where often the freight information is only being shared through a bill of lading on the day of the shipment or the day of pickup," Wiesen said. "The ability to read a document and process it into something digital is now really taking off with the advent of AI and enhanced OCR technology to electronically get information available sooner."

HOW AI AND MACHINE LEARNING CAN IMPROVE MANUAL PROCESSES

While trucking may seem like a simple concept, but the reality is there are many opportunities for an incremental loss if not done right. AI can help with routine decision making that should be supported by data. One concrete example is deciding what a driver should do with their trailer when they come back to the terminal.

"Let's use AI and the algorithmic computations to decide what happens to that trailer in the yard and identify the spot it belongs in," said Wiesen. "Artificial intelligence can help communicate that to the driver. Let your supervisors and line haul routers continue to optimize the line haul plan but give drivers the instructions before they get to the yard and wonder what to do."

With LTL, the product is the network and the ability to provide continuity through the network, instead of truckload where it's point-to-point. AI and machine learning can help companies take a more holistic approach to become more predictive and prescriptive. "Things like chat, bots and other types of technology that can automate a lot of the initial exchange in this context," said Demchuk. "A lot of efficiencies can emerge from something that otherwise people kind of ignore in other business settings."

CAN TECHNOLOGY HELP ADDRESS DRIVER SHORTAGES

If we don't have enough of anything, it's drivers. While there's a lot of talk about ways to gain efficiencies, most people aren't ready to see trucks driving on the highway without a professional driver behind the wheel. However, there are other opportunities to use technology in closed environments such as inside the yard where no one is going to be sharing the road with them. This could allow the repurposing of two drivers who are moving trailers on each shift to jobs that need a professional driver behind the wheel.

Within the cab, legacy systems leave a lot to be desired and there are opportunities to improve the daily quality of life for drivers by modernizing. To attract young drivers into the space, simply increasing pay doesn't necessarily move the needle. It's critical to get closer to replicating the experiences they're used to with smartphones by eliminating the jarring experiences they may have to use in the cab.

"You have to look at other ways to dial up quality of life amenities," said Demchuk. "Make sure drivers know you care about them and aren't just trying to automate them out of existence."

THE RISE OF RPA AT TRUCKING COMPANIES

RPA (robotics process automation) can automate some simple tasks, but it has created significant technology maintenance debt for companies. By rethinking where to use automation, companies are now moving to more intelligent automation with cognitive intelligence that's been built in to improve documentation and process optimization.

"I would say one good example is the ability for companies to do channel shift by moving from expensive channels like voice to less expensive channels like email or chat SMS, where you can have lower costs," said Vachani.

"We're focusing more on LTLs to help avoid, or at the very least, minimize redundancy," said Demchuk. "A lot of the time that phone call from a driver is the result of software not doing a good enough job. Some of those basic gaps and potential opportunities shape how you look at the landscape and impact what problem can we solve with process automation tasks."

HOW CAN TECHNOLOGY EMPOWER PEOPLE FOR STAYING BEHIND THE WHEEL?

Trucking is the lifeblood of the economy and it cannot survive without the industry. The panel agreed that there are opportunities to make driving less frustrating and more appealing with automation. By removing some of the daily headaches so drivers don't just feel like a data entry clerk on the road, a lot of people might take another look at driving as an interesting job.

"No one ever calls you and says, 'boss, thank you for dispatching me perfectly today' – but you go into any driver break room and you find out exactly how your dispatchers didn't do perfectly," said Wiesen. "Let's make it a little better experience for the driver. You all are delivering solutions out there for your customers...I think we can deliver some solutions to our own staff and make it just a little cooler." •