

>> 19 "The rise of e-commerce and the returns market during the pandemic have only elevated automation to greater heights," SupplyChainBrain's August report says.

For Hapag-Lloyd, high-tech solutions became even more important with quarantines and lockdowns, Belusa says: "Our digital capabilities and agile methods implemented already helped us to navigate through stormy weather and accelerate digitalization far more than we have expected."

As early as March, Hapag-Lloyd launched an aggressive digital-capabilities campaign. The company mailed nearly 2 million advertising pieces to market online workshops and its Quick Quotes platform; the fully automated solution generates real-time rate quotations, the carrier's website says.

"We were a bit surprised on how positively this campaign worked out, as it seems to have matched the demand of our customers perfectly," Belusa says. "We were able to significantly boost the digital share of our business, exceeding our initial plans by far."

In Turkey alone, Hapag-Lloyd's bookings just through Quick Quotes grew by more than 50%, Belusa notes.

Leveraged Solutions

"Freight forwarders that offer innovative online solution offerings in freight matching, custom brokerage, and transportation management solutions are expected to transform the segment with enhanced customer experience," ResearchAndMarkets.com reported last June.

For instance, the analytics company noted that in India, where 80% of freight is overland, the trucking industry is adopting tracking technology, and Thailand is using a blockchain project from Maersk and IBM to streamline shipment monitoring.

Closer to home, BNSF Railway continues bolstering

its advanced-data operations to fulfill demand and service delivery, says Tom Williams, the line's Group Vice President, Consumer Products.

"We leveraged analytics to optimally position equipment where and when it was needed," he says. "Digital capabilities and a sound understanding of agile processes and working methods can be a big asset when you are facing a crisis."

"An engaged workforce can pivot quickly to meet unexpected challenges."
-- Geoff Muessig, PITT OHIO.

At Wen-Parker, Singleton says some of its 27 offices around the world were closed at various times, but employees continued to work remotely through the company's global cloud-based systems.

COVID Impact

Despite the industry's most aggressive efforts, COVID-19 did a number on the supply chain. According to a June 2020 McKinsey & Co. report titled, "U.S. freight after COVID-19: What's next?", trucking volumes increased in the pandemic's early stages by about 30% because of panic buying, then fell, but are "now ticking back up again." During the same period, compared with the previous year, the report says, "Last-mile deliveries have surged more than 10 times over, but ocean shipping is down by 25%."

Statista, in its October report, also noted the pandemic hit railways hard. Last April, rail traffic saw 25.2% fewer carloads compared with the same month in 2019.

At BNSF, volumes were down 10% in the second quarter of last year—half the decrease in volume that McKinsey & Co. reported. The rail line, however, saw a surge in demand for expedited and domestic shipments due to a rise in e-commerce sales in May and June, Williams says.

With the relaxation of stay-at-home orders, BNSF's volume increased about 30% in some



of its key facilities, "creating a peak-like surge in demand," he says, adding that the summer's volume increase continued through the peak season to the end of 2020.

What's Next?

In October, ResearchAndMarkets.com reported the freight and logistics market's compound annual growth rate is expected to be approximately 5% into 2025.

"The next steps," Hapag-Lloyd's Belusa says, "are to further build and make our online products and services as easy and convenient as possible—that for our customers working with Hapag-Lloyd is easy, transparent, and efficient. We will see great things coming up in 2021."

Wen-Parker's Singleton agrees: "It's hard to believe that only one year ago, not many of us had heard of Covid-19, yet today our personal and professional lives are completely at its mercy. We learned many things in 2020, key among them is that in times of crisis, flexibility and ingenuity are key to success."



US Air Carriers on the Front Lines

Air carriers have been on the front lines of the global pandemic since the very beginning by providing essential travel. Now, they are on the front lines supporting COVID-19 vaccine shipments. This was the case for Delta, which flew vaccines from Detroit to Atlanta and San Francisco following successful shipments of test vaccines earlier this year.

Delta Cargo launched a Cargo Charter operation in March to provide safe and reliable transportation of goods around the globe by working primarily with Delta's established world-leading logistics partners.

These critical vaccines are being shipped with the highest priority on Delta aircraft, with the entire journey monitored in Delta's unique Vaccine Watch Tower that enables full end-to-end visibility for all vaccine shipments. With 24/7 centralized monitoring and customer reporting, the Tower works closely with Flight Operations to ensure the safe and secure transportation of the vaccines at the required temperature.

"Within three hours of being engaged, Delta Cargo had the vaccines in hand and on their way," said Rob Walpole, Vice President - Delta Cargo. "Our vaccine task force, which was created months ago to understand the shipping requirements and work with healthcare and pharmaceutical experts, has built scalable critical shipment capabilities to support this effort."

Delta's extensive experience

in shipping vaccines involves years of building an operation validated against Pharma industry standards and includes being the first U.S. passenger airline to receive IATA's Center of Excellence for Independent Validators Pharma Logistics Certification (CEIV Pharma) at our Atlanta hub and headquarters. Even before the COVID-19 pandemic, Delta offered four tailored pharmaceutical shipping options which meet specific temperature requirements for vaccines - ensuring integrity through the entire journey.

With large warehouses and cooler facilities in Atlanta, Detroit, Los Angeles, New York-JFK and Seattle, and a network of 49 certified Pharma airports across the globe, Delta has the necessary infrastructure in place to support COVID-19 vaccine shipments. In addition to robust domestic shipment capabilities to support rapid distribution within the US, Delta has a broad and nimble global distribution network in coordination with strong airline partners - providing worldwide reach with stop-gap reliability and greater ability to warehouse and ship vaccines from more global hubs.

American Airlines is also engaged in moving COVID-19 vaccines across the US and around the world.

In December, its cargo team carried its first shipment of COVID-19 vaccine. Working in close collaboration with pharmaceutical and cargo partners, the airline received the shipment by truck at

Chicago O'Hare and loaded the shipment onto a B777-200 aircraft flying to Miami International Airport. The vaccine shipment arrived at its final destination in a US territory in the Caribbean that same day.

"We were able to mobilize within hours of getting the call to move thousands of doses said AACargo President Jessica Tyler. "We know this was the first of many shipments to come, and we are ready to scale our operation as additional vaccine is produced and ready for distribution."

American began conducting trial flights in November to simulate the conditions required to transport the COVID-19 vaccine, stress testing the thermal packaging and operational handling process to ensure it remains stable in transit.

American is internationally recognized for its work in cold chain logistics and has an established network of facilities and team members who specialize in temperature-critical shipments to more than 150 cities in 46 countries around the world. It is CEIV Pharma certified.

In addition, American has the largest dedicated temperature-controlled pharmaceutical shipping facility operated by an airline in the United States. That dedicated, purpose-built facility located in Philadelphia is 25,000 square-feet in size. From the time a shipment arrives at one of American's facilities, it is tracked throughout its journey on the ground and from the airline's Cargo Control Center, located within its Integrated Operations Control in Fort Worth, Texas. - Karen E. Thuermer

Delta shipments of COVID vaccine are monitored via its Vaccine Watch Tower. (Delta photo.)



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- Ralf Belusa, Hapag-Lloyd.