DESCARTES™

Why Real-Time Supply Chain Visibility is so Essential in Today's Environment

Why Real-Time Supply Chain Visibility is Essential in a Volatile Economy

Today, supply chains are in a state of flux. Some industries have experienced steep decreases in demand, while others are more stable or have even surged.

Many industries have morphed to meet new and challenging needs during the "new normal." Some manufacturers have even retooled to make completely different products.

Because entire supply chains have shifted, shippers and carriers have had to pivot to meet changing demands from end customers. While carriers have seen volume decrease in many lanes, they have also started servicing new lanes.

These changes make sustaining high standards of visibility even more challenging. In addition, rising economic uncertainty is compelling many companies to rely on staff at current or reduced levels to do even more. The result will be an increasing reliance on technology to mitigate the challenges of meeting visibility demands with constrained resources.

Visibility into freight location and status is absolutely essential, yet it has become increasingly challenging throughout the volatile industry fluctuations. In this document, we will help shippers gain a deeper understanding of the impact and benefits of visibility solutions by exploring the following topics:

- **Consequences of a late shipment** – Avoid wasting valuable time and money on disruptions

- **Importance of "On Time In Full"** – Meet customer requirements and deliver on service expectations

- **High Demand for Advanced Visibility** – Automate, consolidate and integrate your visibility data

- **The Crucial Need for Predictive Analytics** -- Manage by exception to focus on what really needs attention

- **State-of-the-art Visibility Technology** – Secure systemic visibility to as many carriers as possible

- **Building a Competitive Advantage** – Leverage real-time visibility to help win more business

- **What to look for in a Visibility Partner** – Make sure to do your research

Consequences of a Late Shipment

The fast-paced, often time-sensitive shipping process can be impacted at any moment by a variety of factors. To satisfy delivery needs, shippers monitor on-time delivery of goods. If they do not, the process slows down, leading to costly consequences.

The ability to quickly react to late shipments and potential delays can allow shippers to potentially correct the issue before it becomes a major problem, proactively notify consignees to reschedule resources and deliveries, and avoid penalties. A late load or an unreported delay can cause:

• The need for a factory to idle or ramp up a production line

• Adjustments to distribution staffing at an operation's loading dock to minimize unproductive time and ensure required personnel are on hand when the shipment finally arrives

• Work-arounds by grocers and other retailers due to the lack of inventory on store shelves

The surge phenomena impacting industries has exacerbated dock and yard scheduling, making visibility that much more critical in keeping supply chains running smoothly.
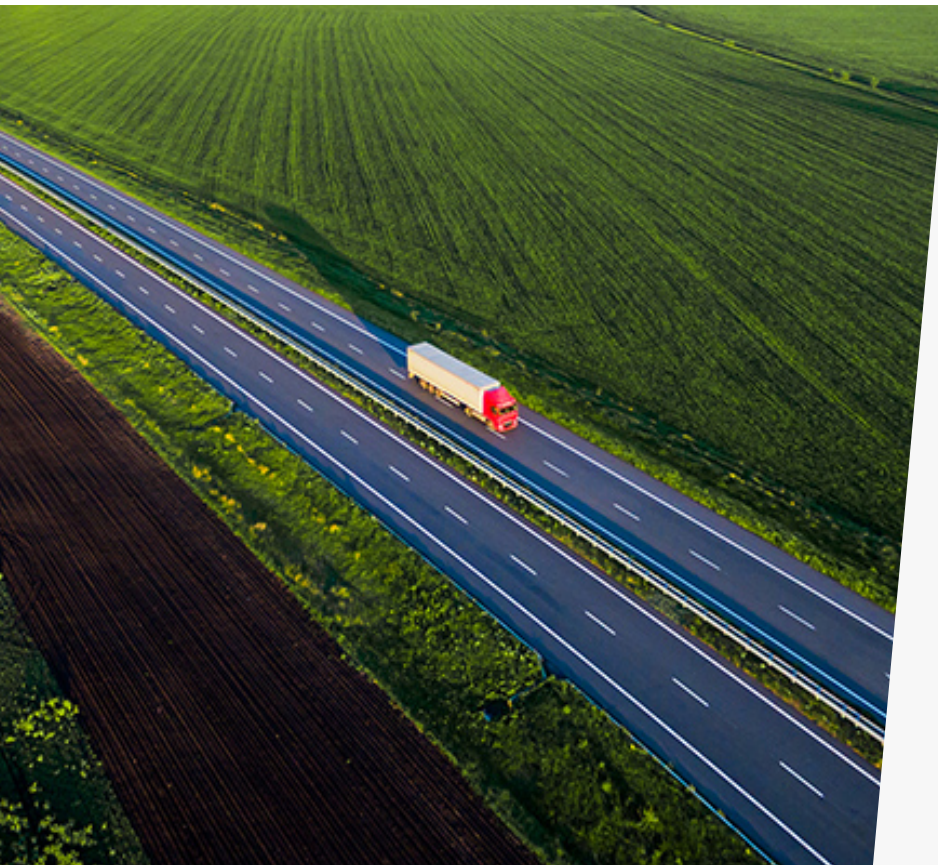
A recent industry survey conducted by American Shipper asked key supply chain decision makers which transportation and logistics challenges are most critical to their enterprises. Nearly three-fourths of the respondents ranked visibility second only to cost reduction. In another study, participants identified agility and risk reduction as the biggest benefits of supply chain visibility.

Importance of "On Time In Full" (OTIF)

In the past, this industry measured delivery performance purely in terms of "case-fill rate", particularly in the consumer sector. However, it has since evolved to include "n-time" measurement as well, creating the notion of "On Time In Full" standards.

There currently is no standard definition for OTIF. Each business defines it differently. "On time" can mean on the date requested by the customer, or by the delivery date and time promised by the shipper. How broad or narrow the "On-time" window is can also vary greatly. Also, "In full" can mean complete at the order, line-item or case level.

In general, OTIF refers to the right products in the right quantities delivered at the right time. The most effective approach is to have the shipper and the customer agree on target OTIF standards. Lack of compliance with OTIF standards can have real financial impacts on many industries.

US-based food retailers lose an estimated combined $15–20 billion in sales annually due to out-of- stock items and damage/expiration/spoilage.

In a recent article from The Network Effect: Beyond Supply Chains, it is estimated that companies in some sectors hold $8-$10 billion in excess inventory, caused by poor OTIF performance. In response, stiff penalties for failing to meet OTIF standards that can reach as much as $10 billion, have been imposed on suppliers and carriers. In the end, it becomes a net problem of up to $10 billion impacting the industry.

Punitive measures taken by shippers have had an adverse effect on supply chain efficiencies. With late penalties becoming significant, 25% of deliveries have been arriving more than two hours early for appointments. This has created dock and yard management issues such as tying up assets and can lead to demurrage charges.

Experts agree that while there are several components to implementing and meeting OTIF standards, real-time supply chain visibility for freight is a key factor. By investing in an automated visibility solution such as Descartes MacroPoint™, shippers can provide their teams with the necessary tools to improve on-time performance in compliance with OTIF standards.

Two Different Angles to Implementing OITF Compliance

As of September, freight will be expected to meet a new standard of 98% "On Time and In Full'. Failure to meet these standards triggers a fine of 3 percent of the value of that order, with the fine to be paid by the carrier or the supplier, depending on where the fault lies. The new standard applies to all product categories.

On the other hand, *Publix*, one of the largest grocery chains in the United States, defines OTIF as 100% fulfilled and 100% within the delivery window. While many of its peers, including big box stores like Walmart, mete out fines for non-compliance, Publix simply reserves the right to refuse a load if either metric is violated. They also can restrict expansion opportunities for the supplier within their stores.

High Demand for Advanced Visibility

To offset challenges threatening to disrupt their supply chains, manufacturers, wholesalers, retailers and other shippers are requiring 100 % visibility into freight location and status. The way the market views freight visibility has changed over the last few years and continues to evolve. Simple track-and-trace methods are no longer viewed as providing true end-to-end supply chain visibility. Today, business intelligence and analytics tools are ranked much higher in importance.

"The Amazon Effect" has created an elevated expectation for freight visibility that requires state-of- the-art visibility solutions for shippers and carriers alike.

"Everybody is expecting shipments to be like Amazon with complete visibility," said Ryan Rogers, chief transformation officer of Covenant Transport Services.

Higher demand for increased load visibility is driving requirements for tracking loads and accessing information about current load status. This includes arrivals and departures at pick-up and destination locations, and in-transit updates using actual GPS-based positioning.

An advanced load tracking solution designed to automatically provide more frequent and detailed shipment status updates through a single point of integration, regardless of the mobile device in use, can address visibility needs effectively. Additionally, tracking information can be directed to shippers faster and more frequently through integration with a carrier's enterprise and transportation management systems.

In order to insure that all partner carriers are connected systemically, it is critical to provide integration to ELD/GPS,TMS and dispatch solutions, as well as provide an industry-leading, robust, and easy-to-use mobile app to connect both long-tail and infrequently used carriers.

"Because we're dealing with fresh products, having real-time tracking is extremely important to ensure we're managing our business effectively. Descartes MacroPoint gives us the opportunity, the technology and the partnership to work through the challenges of knowing what's happening with loads in real-time. This allows us to make better buying and inventory decisions."

Matt Geurts, Corporate Traffic Manager, Albertsons Companies

The Crucial Need for Predictive Analytics

Today, shippers are requiring more than 100% visibility. They are demanding the ability to focus on late and off-schedule shipments that threaten to disrupt their operations. In order to survive, especially during economic volatility, companies need to leverage predictive analytics to manage by exception. With predictive analytics, more informed decisions can be made to ensure efficiency and productivity across the supply chain.

In a recent study of shipments tracked using the Descartes MacroPoint freight-tracking platform, 12.1% arrived after the originally scheduled time. In other words, over 10% are "off schedule" or "significantly delinquent."

Based on that data, shippers with predictive analytics capabilities would only have to address issues with a small percentage of loads instead of expending management time on every load in their supply chain.

Today, approximately 70% of shippers use carriers' tools or rely on outside software providers for that information. Only 6% of shippers have real-time visibility due to EDI latency and the inability of those systems to provide up-to-the-minute information.

State-of-the-art Visibility Technology

Just a few short years ago, it was unrealistic to expect total visibility into load locations and status across a supply chain. Today, visibility tools and technologies are readily available.

Manual processes can mean spreadsheets, emails, and endless check-calls. In a manual environment, tracking freight relies on operators exchanging phone calls and emails with carriers and relaying this information to the relevant parties.

Manual tracking not only means excessive labor consumption (and with it, increased costs associated with elevated head count), but also inherent human error which is common with any manual process. It also does not reduce detentions and chargebacks to the extent realized with automated processes.

A state-of-the-art visibility solution means less time spent manually gathering tracking information from all transportation parties. Securing systemic visibility to as many carriers as possible requires the three pillars of carrier connectivity:

- Connection through ELD or GPS
- Connection through a TMS or Dispatch system
- Connection through the driver mobile application

A best-of-breed visibility solution not only has to leverage the hands-free data feeds provided by ELDs and GPS solutions, as well as integrate with transportation management and dispatch systems, but also must provide an easily used mobile solution in order to systemically connect carriers not so equipped.

There may be several reasons that connecting through ELD/GPS or a TMS/Dispatch system may not be feasible or possible with some carriers. It may not make sense to connect carriers that are used sporadically or just once, and other carriers simply don't have the technology required. The obvious alternative is to have a complementary mobile app that can easily connect these other carriers and is widely adopted by the drivers.

Building a Competitive Advantage

The strength of any supply chain is in both its individual links and in the connections between them. As shippers, manufacturers, wholesalers and retailers increasingly require load location visibility, real-time freight tracking is quickly becoming a vital necessity.

The ability to meet freight visibility requirements from a growing number of companies can mean the difference between securing their business or losing out on a significant number of freight hauling opportunities.

Moving forward, technology will be instrumental in helping shippers create agility and gain a competitive edge.

What to Look for in a Visibility Partner

For maximum effectiveness, a visibility partner should have these attributes:

- A comprehensive global, multimodal carrier network providing visibility across the entire supply chain, improving customer service and retention
- A platform that delivers high-quality data in real time -- the foundation of predictive analytics
- An extensive history of servicing large and complex logistics companies
- A track record of continually innovating its products to meet customer, industry and regulatory needs
- A universally connected network that creates efficiencies and reduces costs for management and operations
- A mobile app with wide driver adoption, to ensure that carriers without a viable connection through ELD/GPS or Dispatch/TMS solutions can still provide visibility.

In addition, the selected visibility partner's technology should be device-agnostic and easily able to integrate with a wide range of transportation management systems currently in use by enterprises across all industry segments.

A freight tracking solution provider that demonstrates all of these benefits – along with the ability to understand and develop a visibility strategy to meet specific needs and circumstances – can become a truly valuable partner by making its technology work for each of its customers.

"An increasing number of end-user companies are investigating or implementing visibility solutions, led by real-time visibility solutions. Companies looking into visibility often start with the real-time visibility solutions."

– Gartner "Market Guide for Real-Time Transportation Visibility Platforms", February 2020

About Descartes MacroPoint™

Descartes MacroPoint is a global freight visibility platform for shippers, brokers and 3PLs to get real-time visibility on the freight they have given to 3rd party carriers. Our patented, automated load monitoring and tracking software provides load location visibility, predictive analytics, and an automated communication platform to truly enable "Manage by Exception" capabilities. We own the largest supply chain visibility network of connected carriers and continue to grow by integrating with new technologies and onboarding hundreds of new carriers monthly.

About Descartes

By combining innovative technology, powerful trade intelligence and the reach of our network, Descartes delivers the industry's most complete offering of cloud-based logistics and supply chain management solutions. Our Logistics Technology Platform digitally combines the world's most expansive logistics network with the industry's broadest array of logistics management applications and most comprehensive offering of global trade related intelligence. It helps get inventory, information, assets and people where they're needed, when they're needed.

Learn more at www.descartes.com and connect with us on LinkedIn and Twitter.

Uniting the People & Technology That Move the World.