



PART 2: UNDERSTANDING THE LAYERS OF SUPPLY CHAIN VISIBILITY

Supply chain visibility means different things to different people. It covers everything from the physical "Where is my shipment?" to the virtual, like "Which customer/SKU combinations are profitable?" Depending on your role in an organization, you may be more concerned with the operational aspects of visibility or the more strategic. Either way, you need the information you need when you need it.

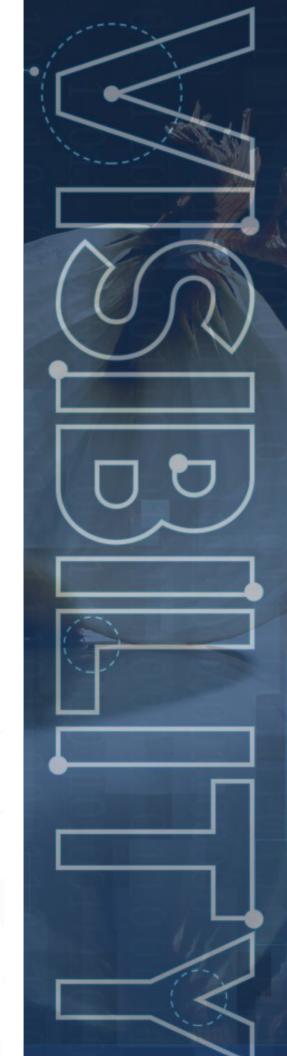
Beyond physical and virtual visibility separation, there's the difference between real-time data and real-time access to data. When it comes to data, there is a lot of it, and it is coming from a growing diversity of sources – often separated within your organization by operational and functional silos.

An expanding list of technology-driven solutions offer varying degrees of visibility, and you can gain improved supply chain clarity through internal efforts and external partners. In weighing these options, it is important to consider:

- Which solution is best for your business objectives?
- How do you leverage information in business decisions?
- What investments provide the greatest return?

Supply chain visibility can be complicated. It doesn't have to be.

Peeling back layers of visibility, you gain an understanding of the information you need to plan and execute your day-to-day activities as well as adjust your strategy; react to changes that impact performance; and enhance your service to partners and customers.





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VISIBILITY LAYERS: THE PHYSICAL

Where and when?

At its most basic, visibility gives you physical location of a product in the supply chain. This can include where an inbound shipment is, where you have inventory or when a shipment will arrive at a customer. When you have this type of visibility you can make decisions around production scheduling, facility/customer alignment and proactive communication to customers for delivery expectations.

Visibility allows the awareness needed to provide the highest level of customer service while maintaining cost control.

Where are the suppliers?

Understanding your suppliers' geographic location is critical not only to execute a robust network design but also in mitigating risk. **Understanding the production** and shipping locations of your suppliers during a period of disruption allows you to execute contingency plans developed during modeling exercises.

For instance, when an overseas disruption affects a foreign supplier of raw materials or finished goods, maintaining a geographical awareness of primary supply chain partners is vital. Combine location information with advanced understanding of alternative sources and you can facilitate a rapid crisis response that protects customer experience and prevents other breaks in the supply chain.

Where are the customers?

Your customers and their demand drives everything about your supply chain. From the locations of your distribution centers to the shipping options available to meet customer service requirements, having a detailed understanding of the concentration of demand means you can work backwards to develop efficient and reliable options to keep customers happy.

Take for example an emerging market in a different region of the country. Customer expectations for delivery are very high. Not providing a high level of service is not an option. Options exist to leverage expedited freight but may make the price point too high or erode the margin on the product. A partner warehouse may be a good option to position inventory to meet service levels without investing in owned brick and mortar.

Where is the inventory?

Your physical assets connect the vendor and customer locations. These assets allow you to position inventory to mitigate risk while providing the service customers expect. Having complete visibility to where and how much inventory you have is critical to making smart sourcing decisions:

- From which location can I fulfill the order?
- Is it cheaper to consolidate or split the order?
- · Can I drop ship?

Understanding all of the inventory options available enables you to leverage your vast web of connections throughout your supply and customer base to delight your customers.

VISIBILITY LAYERS: THE VIRTUAL

What and Why?

Visibility in the virtual realm – or strategic visibility – represents an awareness of all the activities that drive cost, service and reliability. Increased clarity in the virtual layer reveals indicators of emerging problems and the tactics required to improve overall performance.

Can I access all my data?

Your supply chain generates a tremendous amount of data. Accessing all of it isn't easy, especially when you are working across multiple vendors, customer segments, product categories or transportation modes. Consolidating your information across disparate systems and sources is the first step toward gleaning actionable improvement opportunities from your supply chain data. The more access to information you have, the more it can affect your bottom line.

An expert partner with significant technology capabilities can compile disparate data in an accessible repository and provide it in personalized dashboards, as well as apply experience-inspired analysis. Accessing that analysis in the same platform as operational data and tactical execution activities is critical to supporting quick, evidence-based decision-making.

What is cost to serve?

For each product and customer, executive leadership needs to understand cost to serve, which reflects all the activities and costs incurred as movement and conversation occurs from vendor through your network out to the customer.

Cost to serve metrics provide actionable information by enabling visibility into the profitability of individual customers and products, and finding a fulfillment configuration that balances service and margin.

By utilizing actionable data derived from historical shipment information and running what-if scenarios with regional data and characteristics, you can develop the most responsive and efficient supply chain that meets customer demand for the best cost.

Why is my cost going up/down?

Leveraging robust score cards can provide insight into the factors that are driving your financial performance. Not all drivers are completely controllable. You cannot make your customer need another part, order from a different location or change what they want to buy. There is an old adage "you cannot change how other people act, only how you react to them." The same holds true for the supply chain. Develop plans to react to supplier performance and customer behavior to set up your company for success.

It is absolutely critical to have an unbiased party developing and interpreting the scorecards and information produced. You want objective viewpoints that highlight all options available to contend with dynamics in the marketplace. Not only do you want a view into your data, but you also need awareness into what is going on within the marketplace. In the new environment, it is more critical than ever to leverage every bit of available information.



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REAL-TIME DATA VERSUS REAL-TIME ACCESS

There's a big difference in real-time data and real-time access, the latter can be far more valuable because allowing data to solidify can increase accuracy. The most important real-time data is track and trace. Although from the standpoint of being actionable, there is likely limited actions that can be taken to impact it other than communication.

There's a balancing act between the information you have and the amount of lag time required for the information to be validated and integrated across the reporting. The length of time the data needs to "soak" depends how you intend to use it. You want to be able to correct performance before it gets out of hand, but at the same time you don't want to make decisions based on incomplete data.

For instance, bidding on an LTL shipment in the TMS, you don't want your financial reporting to reflect cost until the carrier has invoiced with any additional accessorials applied. Real-time access to your latest data gives you the power to identify trends so you can validate or eliminate services for improved cost control.

PEEL BACK THE LAYERS

The Physical

Physical visibility to shipment, service and costs can be accessed through very basic solutions that exist in the marketplace, some at low or no initial cost. There, customization often requires additional investment, and visibility is black and white based on data made available by vendors, clients or carriers. A basic Transportation Management System provides tactical visibility to all of the connections in the supply chain, and a customized solution can require significant investment.

Combined, all layers of physical visibility offer deeper guidance into your organization's cost to serve for each client. Considered alone, your physical visibility can enable cost savings.

The Virtual

The more information you have, the more impact you can have on your bottom line. Delving into the "what" and "why" around supply chain performance systematically and regularly requires investment in people, process and technology. Visibility does not just happen, and it is not free. Corporate alignment from the top down is required to successfully achieve a complete solution. You want knowledgeable resources with broad experience to help guide you. It is likely there will not just be one component to your solution, although you want centralized access. Consider where data originates and where it is most accurate. Accuracy is an absolute necessity.

Through solutions personalized to your business, Transportation Insight offers a combination of industry experience and the flexibility to build off a very robust TMS, parcel and freight invoice audit technology, and advanced analytics within one operational environment.

Our solutions facilitate visibility beyond shipment location, service level and cost. We give you the decision-support tools required to develop strategies that drive performance improvement across your entire enterprise.

UNCOVERING THE END IN MIND: PLAN, ADJUST, COMMUNICATE

Visibility gives you the ability execute tactically in a more efficient way and develop a strategic plan for procuring services and serving customers in a more cost-effective way.

Visibility, however, is just one piece of the puzzle. Your ability to act on that visibility is the key.

You can know where to find the load, the inventory or the vendor, but you need technology, tools and talent to execute three steps integral to monetizing that information into cost savings or enterprise growth:

- 1. Supply chain visibility is vital to initial network design, as well as contingency planning that may be required during an era of disruption.
- 2. Supported by a contingency plan or evidence-based analysis, visibility empowers tactical operators and executive leadership to adjust their strategy to mitigate risk or seize an opportunity.
- 3. Close the loop by communicating those adjustments to customers and supply chain partners, and enhance experiences while controlling costs across your supply chain.

Ultimately, visibility into your end-to-end supply chain helps you understand how to pull different levers across your network and increase the return on investment of the whole supply chain.



"Transportation management systems that integrate vital transportation information from freight and parcel service providers, along with historical shipping data can offer a strong basis for building actionable intelligence that improves supply chain performance and bottom-line profitability" John Richardson, Vice President, Supply Chain Analytics

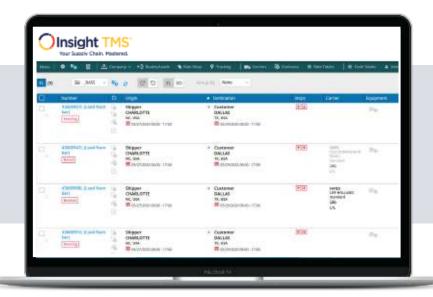
MASTER YOUR SUPPLY CHAIN

Deep, multi-layered visibility is a fundamental ingredient in elevating your supply chain to its optimal performance. Solutions for achieving that visibility are widely available, but none deliver greater supply chain mastery than Transportation Insight.

We build personalized solutions that give you visibility to rate savings, optimization opportunities and behavioral changes across the organization that reduce cost and can fund your initial start-up in the process. These solutions come not through one application or tactic, but through an enterprise solution that addresses management of the entire supply chain, from end-to-end.

Insight TMS:

Our web-based transportation management solution provides all the tools you need to maximize productivity, save time and improve decision making in one place. Through our digital interface, you can rate and shop carriers across multiple loads, create shipping documents, and track and tender shipments. Our system is scalable as your company grows, and because it's hosted in our secure servers, anyone on your team can access it.



Freight/Parcel Audit

You do not need data consolidation thanks to our freight and parcel audit process, which collects information from more than 200 data points and stores it in a data warehouse, providing you access to information and intelligence that allows you to make decisions that drive continuous improvement in your operations. Our clients enjoy the benefits of not only ensuring they are receiving the guaranteed service at the right rates, but also collecting refunds on overpayments and management of loss and damage claims.

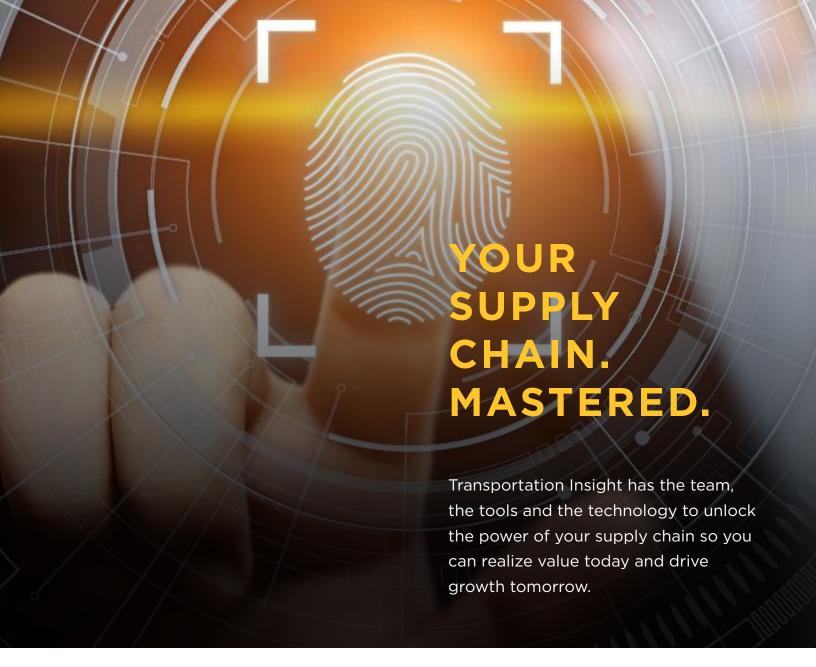
Insight Fusion

Our big data solution empowers you to make evidence-based decisions by assimilating data from across your supply chain to give you comprehensive views into your logistics network. Real-time access to historical performance data from your company helps you project future opportunities, and identify external threats and weaknesses of your business. Access detailed and summary-level reporting, data visualization, interactive mapping and transportation document storage in one operational platform.



Transportation Insight excels in technology execution and seamless implementation of your solutions. We have the expertise and the tools required to collect data and apply it toward process improvements throughout your operation, giving you both a holistic view of your supply chain and a deep dive to the actionable intelligence you need to serve your customers and grow your business. Contact us today to access the supply chain visibility you need to master your supply chain.





About Transportation Insight, LLC

Transportation Insight is a multi-modal, lead logistics provider that partners with manufacturers, retailers and distributors to achieve significant cost savings, reduce cycle times and improve customer satisfaction rates through customized supply chain solutions. Transportation Insight offers a Co-managed Logistics* form of 3PL, carrier sourcing, freight bill audit and payment services, state-of-the-art transportation management system (TMS) applications, parcel technology platform (audit, engineering, advanced analytics) and business intelligence. The Enterprise Logistics division of the Transportation Insight Holdings, LLC, (TI Holdco) portfolio, Transportation Insight operates alongside transactional freight brokerage Nolan Transportation Group (NTG) to help client shippers engineer efficient supply chain networks. Combined, the \$3.2 billion TI Holdco organization serves 7,000 clients with logistics management services that include domestic transportation (TL, LTL, Parcel), e-commerce solutions, supply chain analytics, international transportation, warehouse sourcing, LEAN consulting and supply chain sourcing of indirect materials including secondary packaging. Headquartered in Hickory, NC, Transportation Insight has secondary operating centers and client support offices across North America.

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