



Let's make the world a more efficient place, one link at a time.

OUR AUTHORITATIVE GUIDE TO SUPPLY CHAIN VISIBILITY



CONTENTS

INTRODUCTION: WHAT IS SUPPLY CHAIN VISIBILITY?	3
Multiple Definitions	3
The Role of Digitization	3
WHY DOES IT MATTER?	4
Matching Demand to Supply	5
Transparent Partnerships	5
HOW CAN VISIBILITY BE IMPROVED?	5
Data Management & KPIs	5
CONCLUSION: THE CRYSTAL-CLEAR IMPACT OF HEIGHTENED VISIBILITY	6



Maintaining visibility is critical to effectively addressing the challenges associated with the modern supply chain.

INTRODUCTION: WHAT IS SUPPLY CHAIN VISIBILITY?

The world as we know it depends on an increasingly complex global supply chain network. Indeed, virtually everything we consume, from the cars we drive to the food we eat, passes through an intricate chain of processes before finally reaching its destination. With roughly one half of all logistics operations outsourced to 3PLs and up to 80% of supplier network activity taking place outside of manufacturing facilities themselves, unanticipated disruptions and inefficiencies are becoming more frequent – and more costly to suppliers, manufacturers, and retailers alike.



Maintaining visibility is critical to effectively addressing the challenges associated with the modern supply chain. There is no single definition of "visibility;" like the [supply chain](#) itself, visibility is intricate, woven into the fabric of the supply chain and across a broad spectrum of applications. Despite its intangibility, it is useful to dissect these varying interpretations in order to gain a clearer understanding of the undeniable influence of supply chain visibility (SCV) – and its limitations.

Multiple Definitions

In the most basic sense, SCV is the ease with which stakeholders can track and trace both the order process and the actual physical movement of products from their production source to their final destination. Put another way, visibility provides actionable insights into supply chain activities, and in particular, those that are outside of one's control; in the simplest terms, visibility is information.

Within this broad definition there are different types of visibility, and this is where things get more complicated. According to [a recent study](#) conducted at Cranfield University for Logistics and Supply Chain Management in the United Kingdom, there are 52 sources of data across the supply chain, all of which need to be monitored and processed.

There is, for example, visibility into the order process, which includes the placement of an order, its adjustment, and its acceptance. Then there is inventory management, both at rest and in motion, as well as visibility of capital and information flow, not to mention supply chain risks. In an ideal world, all of this information is shared with every stakeholder, from the suppliers and shippers to business partners, and even the customer. In other words, visibility itself is quickly becoming a vast web, one that demands an equally vast set of management tools.

The Role of Digitization

Unsurprisingly, digital technology is rapidly changing these tools (or giving rise to new ones altogether). Big data and analytics are at the helm of the technological innovation driving the evolution of SCV, as advanced tracking devices, sensors, and management systems are providing companies with a more granular, real-time look into their supply chains. On paper, having more information immediately available from a variety of sources is exactly what organizations need to achieve a more comprehensive view of their supply networks – but not everyone is adopting these advancing technologies at the same pace.



This makes for a piecemeal implementation of tech solutions that can ultimately lead to more inefficiencies. For example, only 37% of manufacturers and retailers report using real-time shipment tracking tools, according to a [Deloitte study](#), which prohibits the transparent distribution of information among stakeholders. Moreover, [72% of shippers](#) increased their use of outsourced logistics services in 2015. The problem is further exacerbated by outdated legacy systems that cannot integrate into existing tech stacks, and the number of unique tools companies use to address these individual challenges only complicates operational processes.

That is not to say, however, that technology stands in the way of supply chain visibility. On the contrary, improving SCV is not possible without advancing tech solutions, and many companies are more than aware of their importance; in fact, [research by Accenture](#) reveals that 97% of executives possess an understanding of how big data analytics can benefit their supply chain. The real issue is that companies are slow to integrate such solutions into their operations: just 17% of those same executives report having already implemented analytics into one or more of their supply chain functions.



WHY DOES IT MATTER?

There's a reason that 90% of logistics and transport companies say improving operational visibility is either "critical and necessary" or "very important" – namely, the impact SCV has on inventory management. The birth of the omni-channel consumer, coupled with a growing tendency to outsource operations, has given rise to an incredibly complex supply chain landscape. No longer are customers satisfied with basic at-home deliveries: consumers now expect unprecedented flexibility, from how they place an order to where and when they pick up (or return) their purchase. On top of it all, they are less tolerant of late deliveries and order mix-ups, and are quick to publicly voice their grievances online and take their business elsewhere.

As a result, companies are scrambling to keep up, depending on a massive and diverse range of modes of transportation to meet these ever-stringent demands. Doing so makes the already difficult job of optimizing service levels even more arduous, and this is precisely why having a comprehensive, real-time view of your inventory – both at rest and in motion – is so valuable; it's also what makes supply chain visibility non-negotiable.

Those without such visibility (78.6% of organizations, according to a Business Constituency Institute survey) are at a much greater risk of experiencing significant disruptions. In fact, 76% of the respondents in that same BCI study had experienced at least one supply chain disruption in the last twelve months, with roughly one quarter reporting losses of more than \$1 million due to disruptions in the same time period. 13.2% had lost more than \$1 million as the result of a single event.



Matching Demand to Supply

Although interruptions in the supply chain are inevitable, a lightning-fast response is crucial to mitigate damage and reduce the associated costs. But an appropriately quick response isn't possible if you don't know exactly where the disruption took place, what caused it, and why. Improved visibility lets you isolate these sources of disruption as they arise, while facilitating coordination between you and your partners to effectively address the problem.

Subsequently, developing effective mitigation plans becomes easier – especially when big data is incorporated into your process. If need be, you can quickly find an alternative source of supply, whether by re-routing products on the move, or by dipping into your safety stock. Not only does this limit the impact of a given disruption – it also improves the customer experience by keeping them informed of the reasons for any delay in their shipment.

In the same way, SCV helps companies match demand to supply because they can immediately determine the status of incoming goods and customer orders. Companies with visibility into both transportation and distribution channels can anticipate the impact of demand on their supply chains, writes Lisa Terry of Inbound Logistics. They could, for example, interpret how a 10% increase in business in a given region would affect their supply network.

Such insights help organizations more accurately determine how best to allocate their resources, and with real-time updates, those decisions have an immediate effect. This agility simultaneously cuts out unnecessary middlemen and redundancies in the process, reducing inefficiency while simultaneously increasing revenues by enabling companies to quickly react to (and meet) surges in demand. Indeed, companies with tools facilitating end-to-end visibility can expect to see up to a 110% increase in operating margins, with 25% faster response times.

Transparent Partnerships

Matching demand to supply simply isn't possible without active collaboration between all partners, however, and advancing visibility tools take the mystery out of these supply chain partnerships. For instance, many companies lack a granular view of their payments records, which means they often don't have an accurate understanding of what their suppliers actually provide, explains *Spend Matters'* Kaitlyn McAvoy. Cloud-based data management systems optimize record-keeping, which reduces onerous duplications or incomplete SKU documentation, while streamlining communication between the supply chain stakeholders.

This clarity between partners is becoming increasingly important as supply chains become more globalized and regulatory demands tighten. Whether it's managing trade regulations or

complying with transportation rules, greater visibility helps you and your network navigate this evolving landscape.

Subsequently, all this added information and improved collaboration bolsters a company's ability to forecast future performance. The combination of current and historical data gives business partners and suppliers access to an in-depth analysis of their supply chain environment, improving both immediate performance and the ability to plan for the future.



HOW CAN VISIBILITY BE IMPROVED?

While the value of supply chain visibility is clear, what may be less obvious are the ways companies can improve their own SCV in the most cost-effective manner possible. To begin with, organizations need an "information hub," a foundational platform that allows for the easy exchange of information between your operational systems, according to a [Gartner research report](#). It also needs to include a "connectivity layer" that blends filtering and evaluation with data collection from various plans and events; and finally, an "integration layer" that enables you and your business partners to seamlessly share and exchange all the information gathered.

Of course, not all systems will fulfill the same demands equally. For some, it might make more sense to outsource IT needs to third party logistics (3PL) providers, while other companies may find it more suitable to build their own platforms from the ground up. [Starting on a small scale](#) that only includes a limited number of shipping lanes, providers, and/or shipment events is an effective way to test out a specific system, and it helps you prepare for widespread implementation later on.

Data Management & KPIs

Regardless of what you choose, it's not enough to simply gather all that data; you must have systems in place that make it easy for you to monitor and evaluate its impact. With so many more sources of information now available, from tracking devices and

sensors to truck drivers' phones and even social media, managing such massive amounts of data can prove cumbersome. Here, too, advancing tech has proven critical, with cloud-based solutions facilitating rapid data analysis so you can immediately see exactly what's working, and what isn't – and adjust your processes accordingly.

Before deciding on a particular management system, however, it is first necessary to clearly define what visibility means to you and your partners. This means that you need to be proactive in your relationships with every stakeholder, clearly establishing your KPIs and the roles you and your partners need to play to reach those benchmarks. Developing such concise goals – whether it's boosting international tracking or shortening lead times by a specific amount – helps you to take the precise steps needed to meet those objectives.

As you begin to implement a new system, you must set expectations, open lines of communication, and involve every partner in the process. Understanding the limitations of your operations' capabilities – as well as those of your cohorts – limits surprises and ensures smooth integration throughout your network. Similarly, choose only the most consequential visibility events to track, as every event requires a substantial amount of

time and money to properly monitor; you can always expand scope as your budget allows.

CONCLUSION: THE CRYSTAL-CLEAR IMPACT OF HEIGHTENED VISIBILITY

To be sure, establishing an effective IT infrastructure to improve visibility is a costly investment, but it pays off. In a survey conducted by Lora Cecere of [Supply Chain Logistics LLC](#), 70% of respondents reported a return on investment (ROI) on global trade management (GTM) software in just 13 months, with 59% experiencing an ROI in one year or less.

This is unsurprising, given the impact that total supply chain visibility has on performance and operational costs. But it is not just a matter of adopting digital solutions: because many software products are compatible with just a limited number of systems and devices, choosing a platform that [clearly integrates](#) with existing infrastructures makes all the difference. With demands continuing to shift and disruptions continuing to evolve, risks to the supply chain have never been greater – and end-to-end visibility has never been more critical.

ABOUT SUPPLYCHAIN[®]

Our goal is to make supply chain relatable and understandable (and maybe even a little sexy). Our promise is to deliver intriguing and insightful commentary expanding perceptions and exploring the unlimited frontiers of our world.

We welcome you to "Raise your supply chain game[™]"

<http://supplychainx.highjump.com/>



WE WOULD LOVE TO HEAR FROM YOU!

Feel free to drop us a line with your questions or comments. We want to help you "Raise your supply chain game[™]".

<http://supplychainx.highjump.com/contact.html>

