

Supply chain visibility: Big promise, great hesitation



A key factor of supply chain visibility is real-time transparency over ongoing processes

Supply chain visibility – the IT-supported management of all processes and information within the supply chain, from supplier to end customer – improves quality of services, controls impacts of disruptions, and lowers operating costs. But many businesses still struggle to approach the matter comprehensively. What’s the holdup?

E-commerce and the ability to easily compare products and services are key drivers for change in today’s modern supply chains. Consumers can shop around the clock and expect delivery within hours, leading to a sharp increase of small parcel volumes with highly individualised ‘last mile’ requirements around the world, and with the corresponding number of returns. Shorter product cycles, more complex products, global procurement, volatile markets, and natural disasters further emphasise the need for visibility. The only way to manage such complexity is through comprehensive IT support.

A key factor of supply chain visibility is real-time transparency over ongoing processes, e.g. the status of a customer order, the scheduling of a picking order, the customs clearance progress, or the location of a container. This information facilitates the planning of capacities across departments and organisations and the selection of carriers or transport modes by cost or lead time, resulting in more reliable deliveries, fewer empty runs, shorter wait times, and faster inventory turn-over. Adding transparency over costs to the equation, further supply chain savings can be achieved. Transport costs rank high on the supply chain balance sheet and reliable information on shipping volumes and costs form the basis for establishing successful carrier contracts and performance levels in line with service requirements.

Comprehensive supply chain risk management, of course, is unthinkable today without end-to-end transparency, which makes it possible to identify, understand, and qualify existing risks. A Deloitte study¹ found that the most common risks within a company’s



Above: Comprehensive supply chain risk management is unthinkable today without end-to-end transparency

own supply chain were interruptions to the procurement, production, and distribution networks. In the extended value chain, the primary risks came from fluctuations in demand, changing customer preferences, and problems with suppliers, economic changes, resource scarcity, geopolitical events, and natural disasters.

While supply chain visibility clearly offers tremendous benefits, in practice there is a major discrepancy between how important businesses say the topic is for them, and how often they actually implement visibility projects. Many still compensate for a lack of visibility by throwing money at the problem: maintaining high levels of safety stock, changing modes of transport, or paying for special trips and overtime. Businesses that have already achieved relatively sophisticated supply chain visibility have more efficient processes and boast higher performance.

So, what’s the holdup? The need for information and the interpretation of specific data can vary greatly from one supply chain partner to the other, and this represents a great challenge because of the number of participating parties and the corresponding varying data requirements. The same diversity is reflected in data standards, the scope of data collected, and the semantics of the in-house IT systems used by the various supply chain parties across sectors and regions.

To make things even more difficult, IT tools deployed across supply chains are non-harmonised, and typically designed for a particular company’s internal processes. Direct processing of outside data is either impossible or technically

very difficult. The result is information that does not flow easily or seamlessly from one supply chain party to another. The basis for functioning cross-company visibility and collaboration in procurement and distribution networks, however, is the exchange of data between all involved parties. It can be difficult to get all supply chain participants on board and make all relevant data available. This begins with the overseas supplier who needs to issue a prompt alert if a container misses its ship. It applies to the forklift operator who accidentally drops a package. And it applies to the truck driver who needs to let everyone know he’s stuck in traffic.

The core technology required for end-to-end collection and electronic analysis of relevant information is already available: touch-free identification via RFID, geolocation via GPS or GSM, ubiquitous computing, voice recognition, and digital image processing. Powerful IT solutions in the form of visibility and collaboration platforms are available and affordable, too, but their implementation often fails because businesses don’t take an integrated approach by involving all parties – internal and external – and connecting all systems. The technology can only deliver its full benefit if all supply chain partners take part and agree to cross-functional knowledge transfer and information sharing. Where this is in place, businesses are set up to reap the benefits.

REFERENCE

1. MARCHESE, K and PARAMASIVAM, S, *The ripple effect. How manufacturing and retail executives view the growing challenge of supply chain risk*, Deloitte, 2013