

— Successful inbound supply chain management

Five opportunities for optimizing the planning, monitoring, and efficiency of your supply chain



Contents

Executive summary	3
Five opportunities for optimizing your inbound supply chain	4
Opportunity 1: Inbound transportation management	4
Opportunity 2: Freight cost management	5
Opportunity 3: Integrated loading dock management	6
Opportunity 4: Inbound customs management	6
Opportunity 5: Supply chain visibility and collaboration – end-to-end planning for transparency and efficiency	7
Summary: Leveraging potential with IT	8
What is a white paper?	9
Document credits	9

Executive summary

The management of inbound logistics – controlling all workflows from procurement and goods receipt to the supply of your production or distribution centers – is an area where many businesses still have an enormous potential for optimization. Five areas in particular warrant special attention.

Distribution logistics grabs the spotlight in the public debate, in the industry press, and at events. Many businesses have already optimized their own outbound process chain to the end customer – but they overlook the untapped potential in

their inbound supply chain management. The inbound supply chain extends from the suppliers to the in-house production centers of industrial enterprises or the logistics centers of retailers.

This white paper uses real-world examples and theoretical models to illustrate where the inbound supply chain still harbors a great potential for optimization, then offers specific recommendations for streamlining your processes. Let us begin by exploring five basic themes:

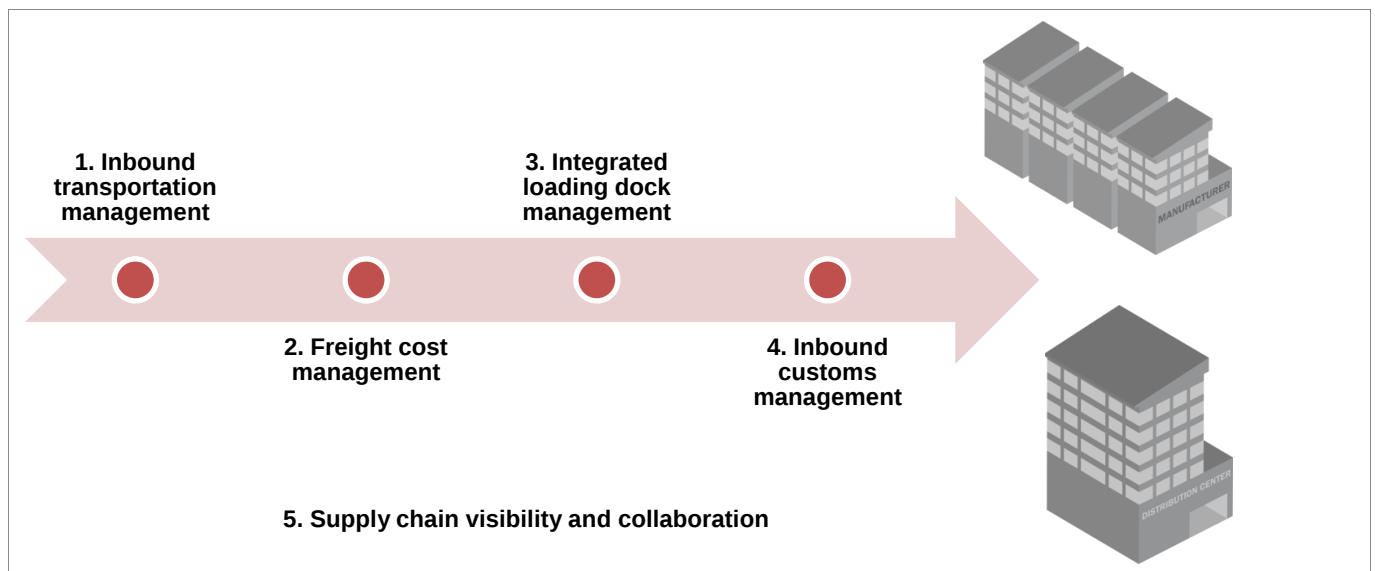


Figure 1: Opportunities for optimizing your inbound supply chain management

— Five opportunities for optimizing your inbound supply chain

Opportunity 1: Inbound transportation management

When businesses look for ways to optimize their supply chain, transport processes are always part of the equation. Transport costs have long been the target of efforts to lower costs and increase efficiency, but these efforts typically focus on distribution logistics. Outbound shipments are the interface to the customer, after all, and literally “drive” in revenues.

But focusing optimization efforts on outbound shipments alone is simply not enough in a comprehensive supply chain strategy. The longer delivery routes inherent in the growth of international procurement together with the high transport intervals that arise from lower inventory levels and supply concepts like “just in time” make inbound shipping one of the most important cost factors in the supply chain. And general conditions such as rising energy and fuel prices, personnel costs, and additional charges such as tolls and environmental certifications are also significant cost drivers here, just as they are in outbound shipping.

More and more businesses – especially in the United States, it seems – are discovering the benefits of organizing and controlling their own inbound shipments instead of leaving them to their suppliers. Retail giant Wal-Mart, for example, announced in 2010 that it would gradually take control of its inbound shipments from its suppliers. The aim is to manage the shipping through Wal-Mart’s own fleet of trucks and regional carriers. Food and beverage multinational PepsiCo also organizes its own inbound shipments in the United States instead of leaving them to its suppliers.

Significant potential cost savings

But what motivates Wal-Mart and PepsiCo to manage their own inbound shipments? The main argument for taking

such measures is generally the potential for significant cost savings. A look at some of the factors:

- Large multinationals such as Wal-Mart and PepsiCo often handle a much higher shipment volume than their suppliers, so they can negotiate more favorable conditions for inbound shipments from their carriers. Adding the inbound shipments also increases their total freight volume, giving them even more leverage in negotiations.
- The additional inbound shipments give carriers an overview of the entire shipping network, opening the door to comprehensive optimizations such as combined inbound and outbound shipments or all-inclusive milk runs. The savings can be passed along to shippers.

Another benefit: When suppliers control the inbound shipments, they often roll shipping and material costs into one composite supplier price, but when you manage your own inbound shipments, you can parse out the freight costs from the material costs. This added transparency makes it possible to have material prices and shipping prices negotiated separately – and by the appropriate departments.

The beverage industry, for example, has experts with a lot of knowledge and experience purchasing specific packaging types – aluminum cans, glass bottles, plastic bottles, etc. – but who know little about purchasing shipping services. If the supplier maintains control over the inbound shipments, the purchasers may successfully negotiate a lower bottle price with the argument of lower commodity prices, but the supplier could offer the counterargument of higher shipping costs and seek to obtain a higher overall supply price.

Businesses who separate freight costs from material costs are also able to calculate the true transport costs at the level of the stock keeping unit (SKU), for example, so they can offer their own customers fairer pricing.

Simulate various scenarios

But how can you tell whether managing your own inbound shipments really makes sense – and if so, for which

suppliers, routes, or regions? Freight management simulations can serve as an important guideline here. Business can run various scenarios for managing their transport logistics based on past data – or forecasts – to calculate the costs of assigning inbound shipments to carrier A, B, or C, for example.

Opportunity 2: Freight cost management

In addition to simulations, businesses can also benefit from analyzing their other inbound freight cost management processes – the workflows associated with selecting, hiring, billing, and monitoring their transport service providers. Respondents to a study by the Aberdeen Group¹ saw the potential to save up to 8.8 percent of their freight expenses through optimization measures in this area.

But where exactly is the greatest potential in freight cost management? AEB experts see four primary fields here:

1. Freight invoice auditing, automated or manual: finding the best way to check your incoming carrier invoices
2. Measures with immediate impact: optimizing freight management through smart freight cost calculation and carrier integration

3. Requests for proposals, contract negotiations, and simulations: how to achieve a successful long-term partnership with your transport service providers
4. Reallocating freight costs: automatic allocation of costs to controlling accounts, cost centers, departments, and products

AEB examines these issues and provides practical tips and recommendations in a special series of white papers on lowering costs and increasing efficiency through smart freight management. Please visit <http://www.aeb-international.co.uk/uk/media/white-papers-freight.php> to request your free white papers.

¹ Winning Strategies for Transportation Procurement & Payment, Aberdeen Group, February 2007.

Opportunity 3: Integrated loading dock management

Efficient management of your own transport processes can't stop at the edge of your property, however. Loading dock processes are a challenge that is attracting particular attention in today's logistics. In the retail and consumer goods industry, unscheduled wait times and even gross inefficiencies in everyday inbound delivery and pickup processes are a matter of routine.

Companies that manage their own incoming shipments typically have a much clearer picture of which goods are arriving with which carrier at the production or storage facility. This information advantage can be fully exploited with the help of time slot management software that makes it easier to manage inbound deliveries and pickups at your loading docks. A company's transport partners can then

easily access the system at any time to check and book time slots with just a few clicks.

Such solutions let you quickly and easily manage all your loading dock traffic, assigning and reassigning specific time slots as needed. Businesses running this type of solution have the big picture on their shipping processes and always know which forwarder has booked which time slot – and which orders are expected in goods receipt at what time.

In the event of any disruption to the supply chain – the vagaries of weather, traffic jams, or the like – most systems provide automatic, proactive alerts if the booked time slot has been missed. This makes it possible to respond immediately to the new circumstances – sending the delayed truck to an alternate loading dock, for example.

Opportunity 4: Inbound customs management

Customs barriers – whether physical or regulatory – can stop your logistics in its tracks, slow down your processes, and jeopardize the success of your business. Navigating the flow of goods with efficiency and compliance is no simple task – especially across far-flung, multi-level procurement networks. Businesses that manage their own inbound shipments should think about organizing their own import processes as well. A 2011 study by the Aberdeen Group² found the cost of in-house import management up to 85 percent lower than outsourced import management.

Ideally, import management is then embedded in the transport processes to ensure there are no delays – such as might occur due to incorrect, missing, or delayed import declarations. Businesses with high import volumes should try to have customs officials process the declared goods electronically while they are still en route.

To help make this happen, it's a good idea to have the right customs software integrated into your logistics processes. This is even easier if you organize your own inbound transports through your own shipping or transport management system, which ideally is linked to your customs processes.

Another benefit of this type of IT support is much higher levels of productivity and import processes that are much less prone to error. The Aberdeen study cited above found productivity gains of about 90 percent in import management when steps such as classification or document creation are also automated. Such a system also makes it possible to electronically share the appropriate documents and information with suppliers, transport partners, and customers.

² Globalization – Linking Supply Chain Transformation to the Profit and Loss Statement, Aberdeen Group, September 2011.

Opportunity 5: Supply chain visibility and collaboration – end-to-end planning for transparency and efficiency

Transport control, time slot management, and import management: Organizing your own inbound supply chain processes yields greater transparency over incoming shipments, their current status, and any problems or delays.

But all this depends on high-quality data, without which even the most sophisticated and powerful IT systems cannot operate at their full potential in the real world: The greater the distance to the supplier and the longer the lead time of the goods in the procurement logistics process, the more important it is to seamlessly track incoming goods. Visibility or track & trace tools can help you monitor consignments over the longest possible time period so you can respond as early as possible to any problems.

But how can you obtain and consolidate such information? Unfortunately, there is still no uniform standard – no “lingua franca” of collaboration – for exchanging information throughout the supply chain. This often makes it very difficult to integrate partners. A common solution is to communicate using electronic data interchange (EDI). EDI messages involve the electronic, largely automated, software-to-software transmission of structured data using defined messaging standards. The EDI system thus allows your in-house system to transmit data to the in-house system of your partner. The participating companies should agree on a common messaging standard: EDIFACT, ANSI X.12, etc.

But some solutions go beyond EDI, because smaller companies in particular are often not capable of communicating via EDI. Simple online portals combined with scanning or OCR solutions are one option here. They can be used to process shipping papers or order confirmations and extract the information from such documents. This way, a combination of purchase order and order confirmation can provide a good base of information and give an overview of the flow of goods – because the delivery date, goods, and quantities are already known and confirmed.

This information extracted from paper documents or EDI messages can be collected in a centralized IT system that renders all resources, capacities, inventory, and processes in the supply chain transparent and standardizes, supports, and streamlines the rapid exchange of information among the partners. Such a solution functions as a central hub, integrating all partners and systems and providing all relevant information in a standardized format.

Working with an exclusive, reliable group of suppliers is also helpful in establishing high-quality transport processes. It's much easier to calculate the individual links in the supply chain when the carrier uploads good, informative data to the system about lead times and supply bottlenecks early on.

This type of transparency offers benefits for your own downstream logistical processes, because the more precisely you can estimate which transport volumes will arrive at your production or storage facility and when, the better you can plan and coordinate your own downstream processes. This makes it possible to issue picking and stock removal orders with much greater precision and ensure you have the necessary resources when you need them – the right number of workers, or the conveyance technology you need to stage or put away the stock, for example. Not only does this streamline your processing time at the loading dock, it also makes more efficient use of your warehouse resources and improves the overall coordination of the logistics chain.

Your procurement logistics also benefits, because the potential for efficiency in your inbound processes is much greater when your procurers use a “pull” process to call goods to your sites only when they are actually needed. But this means all the upstream processes must run smoothly and be synced.

— Summary: Leveraging potential with IT

Greater transparency, faster and more reliable processes, significant costs savings – that's the potential that lies within many inbound supply chains. As this white paper shows, this potential is best realized when you use the right software. Businesses choosing an IT solution should pay special attention to end-to-end system integration. Ideally,

the entire inbound process – from transport, customs, and loading dock management to complete visibility over all processes – should be managed in one system. This reduces and eliminates interfaces, data redundancies, and the likelihood of errors while ensuring transparency, efficiency, speed, and stability.

Potential in the inbound supply chain:

- Transparency across your process chain
- Greater control over your national and international supply chain
- Better capabilities for responding to unexpected disruptions
- Higher quality of internal planning
- Generally higher cost efficiency and control
- Better information to pass along to your customers
- Efficient utilization of the capacities of service providers and carriers, which leads to lower prices

What is a white paper?

AEB defines a white paper as a document providing qualified, unbiased information on a particular topic. White papers may deal with laws and regulations, standards, technologies, solutions, or processes – analyzed and

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