



WHITE PAPER

THE OTHER HALF OF YOUR NET LANDED COST OF GOODS

Companies increasingly focus cost-cutting efforts on Cost of Distribution, and it's paying off by quickly reducing net landed cost of goods and improving profitability.

EXECUTIVE SUMMARY

Net landed cost of goods, the total cost associated with getting goods into customers' hands, consists of cost of distribution (CoD) and cost of manufacturing (CoM). For years, manufacturers and brands have worked to reduce CoM as the means to reducing their net landed cost of goods to compete and succeed in increasingly competitive marketplaces. However, this strategy is reaching its limits, and therefore companies are increasingly turning to the often more rewarding, yet complex, opportunity to reduce CoD.

Some of the world's top brands are putting order fulfillment and parcel shipping software solutions in place in a matter of days to rapidly reduce their net landed cost of goods and boost shipping efficiencies – without renegotiating carrier rates – by simply relying on technology.

When a company's CoD represents a significant portion of its net landed cost of goods, opportunity abounds to reduce overall costs and increase margins. In fact, some of the world's top brands are putting order fulfillment and parcel shipping software solutions in place in a matter of days to rapidly reduce their net landed cost of goods and boost shipping efficiencies – without renegotiating carrier rates – by simply relying on technology. The right kind of parcel shipping system enables companies to reduce landed costs in four critical areas:

1. Dynamic carrier portfolio management for optimal rate and service selection
2. Carrier-compliant processing that prevents fines due to shipping errors
3. Labor savings by eliminating manual, labor-intensive processes
4. Visibility to audit shipping history and recoup incorrect delivery charges

For businesses with large parcel shipment volumes, the importance of these outcomes cannot be understated. In a recent study by F. Curtis Barry & Company, the cost of shipping for these companies is by far the number-one fulfillment expense, often exceeding the sum of wages, benefits, facilities, utilities and supplies.

Profit is directly linked to how much – or how little – they are able to successfully reduce landed costs, making parcel shipping systems with low barriers to entry and easy scalability an attractive ROI for many.

NET LANDED COST OF GOODS

Net landed cost of goods, the total cost associated with getting goods into customers' hands, consists of cost of distribution (CoD) and cost of manufacturing (CoM). To compete and succeed in increasingly competitive marketplaces, manufacturers and brands have historically worked to reduce CoM as a means to reduce their net landed cost of goods. Seemingly every conceivable strategy has been explored: reducing labor costs, increasing automation, negotiating reduced cost of materials, and so on.

But while these strategies may have paid early dividends, in many cases these dividends have reached their limit. Labor and materials in emerging economies have reached price levels that limit an ongoing cost reduction on CoM.

In the “2013 Global Manufacturing Competitiveness Index,” Deloitte Touche Tohmatsu Limited’s Global Manufacturing Industry group and The U.S. Council on Competitiveness noted¹:

“Cost and availability of labor and materials continues to transform the global landscape significantly with respect to creating manufacturing competitive advantage. Historically... numerous companies moved their production to emerging economies where labor and materials were cheaper. As a result, the economic prosperity of the citizens in these once low cost destinations has improved, giving rise to a growing middle class – and demands for higher wages. As these countries continue to evolve and move up the product complexity ladder – and in turn, grow their economies and become involved in the production of more complex products – they are becoming less competitive on their labor advantage.”

These companies, and in particular those with significant parcel shipping costs, are increasingly focusing on the opportunity to reduce the other side of net landed cost of goods: CoD.

As a result of these rising labor and materials costs, companies looking to remain competitive are left with no choice but to find new avenues for cost savings. These companies, and in particular those with significant parcel shipping costs, are increasingly focusing on the opportunity to reduce the other side of net landed cost of goods: CoD.

Instinctively, companies trying to reduce CoD often look to renegotiate carrier rates in their favor. While this may provide short-term benefits, this too has limited long-term viability. As carriers foot the bill for rising labor costs and historically high shipping volumes due to the e-commerce explosion, their rates stand to increase and their willingness to negotiate supplier-friendly discounts lessens.

So how can manufacturers and brands find CoD savings outside of carrier discounts? By identifying more efficient ways to distribute their products.

FORECASTING COST-SAVING OPPORTUNITIES

Any manufacturer or brand can benefit from CoD reductions, though cost savings will vary depending on the answer to one question: does my CoD represent a significant portion of my net landed cost of goods? If the answer is “yes,” then opportunity abounds to reduce overall costs and increase margins. And if the answer is “no,” the opportunity may be less substantial, but no less real.

For example, a maker of designer purses in the high-end luxury goods market may incur a high CoM, but with small volume, CoD may be low. However, there are still opportunities to reduce CoD and impact the bottom line, especially if the luxury goods company isn’t using processes and technology to ensure quality extends into its delivery experience.



For instance, if the delivery address on the parcel is incorrect, the designer purse will be delivered to the wrong person. Should the recipient choose not to return the item, the luxury goods maker now has lost inventory as well as what may be a lost customer. Since both are valuable to the luxury goods maker, the cost is unaffordable.

Most companies shipping B-to-B or B-to-C products hit the nexus between CoM and CoD where cutting CoD can significantly improve margins.

Luxury goods, however, are the exception. The reality is that most companies shipping business-to-consumer or business-to-business products hit the nexus between CoM and CoD where cutting CoD can significantly improve margins. In fact, companies that prioritize CoD reductions typically uncover a vast array of savings opportunities:

- **Carrier portfolio management:** With today's technology, companies can quickly onboard new carriers and perform "what if" analyses to identify lower-cost delivery services and shift shipping volumes accordingly.
- **Fulfillment processing:** Companies who take the time to map their fulfillment processes into a detailed workflow often identify labor-intensive steps that can be automated with technologies. Barcode scanning, for example, accelerates data input, and shipping system technologies use business logic to automate carrier selection. The result is a dual benefit: companies save time in the order fulfillment process and they also save money in terms of both shipping and labor costs.
- **Error reduction:** In a labor-intensive shipping environment, the more a company ships, the higher the potential for mistakes. Smart shippers, however, turn to automated shipping solutions to change this equation. Using technologies such as barcode scanning and parcel shipping software, companies can ensure orders are fulfilled based on accurate data and eliminate the unexpected costs (and various fees and fines) that result from common shipping errors such as order fulfillment mistakes, address label errors, and inaccurate product dimensions and weights.
- **Lost opportunities:** No one wants to lose a customer, but in a competitive retail environment, the smallest slip can do just that. In fact, 29% of customers won't place an order from an online store again if their order is incorrect. And the damage isn't limited to the lifetime value of that customer: a single negative online review can cost the average business an additional 30 customers. Companies looking to compete and win know the cost of losing a single customer is greater than they might expect, and so they prioritize accurate order fulfillment and delivery in their strategy for long-term success.



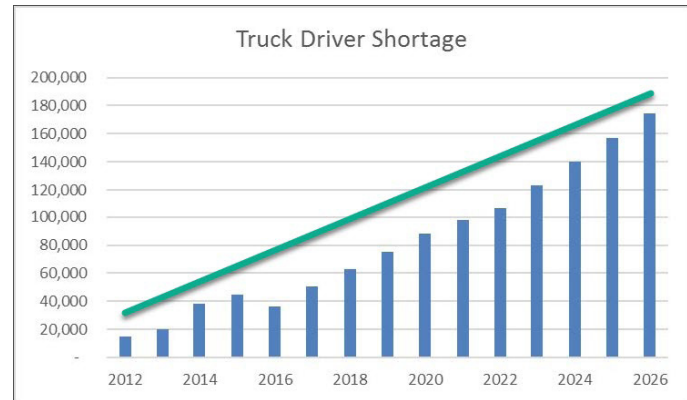
DISTRIBUTION COSTS ON THE RISE

Companies across every sector and market face increasing CoD due to transportation industry labor shortages (which create higher demand and fewer available shipping lanes) as well as rapidly increasing e-commerce volumes and growing consumer expectations worldwide for same-day delivery.

According to the American Trucking Association, the trucking industry currently faces a shortage of roughly 25,000 drivers, with expected increases pushing the total closer to 200,000 over the next decade.

And America isn't alone. Europe is also experiencing unprecedented shipping demand – and a shortfall of drivers. The Netherlands reported a driver shortage of

17,000 at the end of 2017 (a 36% increase since 2016) and Germany predicts a driver deficit of 150,000 in the next 10 to 15 years. Shifting demographics, changing regulations and the need to spend a lot of time away from home have led fewer potential drivers to enter the profession each year, and there are no clear solutions for luring them back.



Simultaneously, and driven in large part by e-commerce, parcel shipping is experiencing strong – and accelerating – growth worldwide. Global package shipping grew by 48% between 2015 and 2017, and according to FedEx Corp. chairman and founder Fred Smith, B2C e-commerce sales are expected to reach \$3.2 trillion by 2020. This will likely translate into never-before-seen shipping volumes over the next couple of years.

Adding another layer of complexity: same-day delivery. As of 2017, 15% of global retailers offered same-day delivery service to their customers, and the same-day delivery market is expected to grow significantly. While same-day delivery is a big opportunity for all retailers to improve their service level, it requires a high degree of order fulfillment and logistics sophistication. Major challenges, such as very short fulfillment lead-times and flexible last-mile delivery have to be overcome while bringing cost down to a level that consumers are willing to digest.

Carriers are facing unprecedented demand for their services, which in turn forces them to invest in labor, technology and facilities. Not surprisingly, the carriers have passed these costs on to manufacturers and brands.

Put it all together, and the result is carriers are facing unprecedented demand for their services, which in turn forces them to invest in labor, technology and facilities to control volumes and maintain service agreements. Not surprisingly, the carriers have passed these costs on to manufacturers and brands. UPS and FedEx have both increased published rate tariffs by a minimum of 4.9% per year since 2010, in addition to introducing oversize and handling surcharges as well as dimensional pricing for lightweight and bulky packaging. DHL Express also employed a similar strategy, raising rates by approximately 3.9% in Germany in 2017 to boost services and prepare for future demand.

Even the U.S. Postal Service (USPS®) is in on the game, reacting to e-commerce activity (and in particular the increase in last mile e-commerce fulfillment and Sunday delivery demand), by increasing rates an average of 3.9% in 2018. While this increase came as no surprise – package volume rose by 589 million in 2017 and the USPS is widely known to be cash-strapped – it does mark the beginning of what is likely an upward trend in USPS rates for the foreseeable future.

For manufacturers and brands that haven't already, it's time to examine the impact these trends will continue to make. Any efficiencies achieved in the distribution model can help to offset these rising costs. The mounting delivery capacity shortage and increasing e-commerce volumes further raise the stakes; shippers who can invest in parcel shipping systems that quickly determine the most efficient shipping option for each parcel they ship - considering delivery deadlines, carrier rates, performance and other factors - stand a better chance of keeping costs in check. Do nothing to create efficiencies, and CoD will automatically increase.

PRIORITIZE EFFICIENCIES ON TOP OF RATE NEGOTIATIONS

Because these trends make negotiating carrier rates an even less desirable or sufficient option than before, manufacturers and brands of every size are increasingly reconsidering cost-savings strategies and finding ways to use carriers more efficiently.

Fortunately, regardless of environment, there are numerous apps and solutions available to automate every phase of the shipping process within any warehouse or fulfillment system to achieve these savings. While order fulfillment and multi-carrier shipping software solutions save money on manual fulfillment for small organizations, fully automated transportation execution systems or "black box" shipping solutions integrate multi-carrier shipping software with warehouse management, order management, enterprise resource management and transportation management systems to help the biggest, most sophisticated shippers improve their high-velocity systems.



Data analytics and performance reports empower the retailer to tell the carrier what the shipping rate needs to be in order to win the business.

From apps to enterprise level technology, at their core these shipping solutions give manufacturers and brands choice. They enable companies to quickly and automatically determine the most efficient shipping option for each parcel they ship, considering delivery deadlines, carrier rates, performance and other factors. In addition, the data intelligence companies derive from these solutions provide them with significant negotiating power.

For example, let's say a popular online retailer has grown 25% to 30% year over year since 1999, and during peak season, order volumes increase from 100 orders to 8,000 orders a day.

Now, let's say the online retailer is manually exporting orders from the order management system and importing them into the shipping system to fulfill. The retailer lacks real-time data to maximize order fulfillment efficiency and cost, and customer service suffers.

However, when the online retailer invests in an integrated order and parcel shipping software solution, it can rapidly compare carrier rates and transit times to determine the most efficient and cost-effective delivery method for each order, improving the order accuracy rate, increasing order throughput and reducing shipping costs. Even better: data analytics and Key Performance Indicator reports empower the retailer to tell the carrier what the shipping rate needs to be in order to win the business.

All told, the retailer has multiple paths to substantial savings over the course of a fiscal year.

With more informed decision-making in a fraction of the time otherwise required, parcel shipping technologies enable brands and manufacturers to take control of shipping variables such as labor shortages and carrier rate increases without renegotiating carrier rates or increasing staff workload. In addition, these technologies can eliminate multiple steps in the order fulfillment process, creating a “one touch” shipping system and yielding tremendous gains in efficiency, labor-related savings and even employee satisfaction. Companies who prioritize their shipping and leverage these technologies can find serious savings and benefits - reducing their net landed cost of goods and maintaining a competitive edge in an increasingly competitive and “same-day” market.

Case Studies

Logistyx, a provider of transportation execution systems and multi-carrier shipping software solutions, has helped numerous brands and manufacturers across the globe optimize their distribution processes.

The following examples show Logistyx’s flexibility to adapt to the unique needs of shippers with complex distribution scenarios to reduce their net landed cost of goods and positively impact the bottom line.



INTERNATIONAL MCT MANUFACTURER

Around the world, public agencies and private companies rely on vehicles equipped with power take-off and hydraulic pump equipment. Utility buckets, fire engines, refuse haulers and dump

trucks are just a few applications. Without hydraulics, critical systems and the services they support simply come to a standstill.

For the world’s largest Motion Control Technology & Systems (MCT) manufacturer, keeping things moving meant finding the right shipping solution for critical delivery of new equipment and replacement parts. With eight distribution centers and customers in 48 countries, the MCT Manufacturer relied on Logistyx to meet their unique requirements:

1. Integrate with existing Oracle OTM applications used to maintain transportation management rules, contracted carriers and enterprise-exclusive rating tables.
2. Integrate with existing Oracle JD Edwards OMS and WMS applications used to support the MCT Manufacturer’s LEAN value stream improvement initiatives.
3. Support unique fulfillment workflows, including manual part-picking, premanifest consolidation and a dynamic mix of freight and parcel shipments.
4. Add new management tools to streamline execution, minimize labor, cut material, and reduce transportation related expenses.

Logistyx was integrated to handle the MCT Manufacturer’s existing applications and configured to support their unique mix of freight and parcel shipments. As a result:

1. Orders for new equipment and replacement parts originate in Oracle JD Edwards OMS Application.
2. Orders are released to one of eight North American manufacturing and distribution centers for fulfillment.
3. Large orders are consolidated & palletized for LTL /TL freight shipment and small orders are sent to Logistyx RF mobile application devices for pick-to-tote assembly.
4. Tote and Pallet LPNs are scanned and pack contents are verified against OMS order detail.
5. Shipments are weighed with integrated dimensional equipment for rating
6. Rules-based rating and routing data is retrieved from Logistyx's global network of carriers and the MCT Manufacturer's business rules are retrieved for rating and routing in OTM for LTL and TL shipments.
7. Handling fees and supplementary adjustments are automatically applied to base carrier charges.
8. Shipment detail is automatically filed, and ITN numbers are automatically retrieved from ACE (formerly AESDirect).
9. Bills of Lading, export documentation, and labels are automatically generated.
10. Shipment information, including carrier tracking and adjusted charge data is automatically transmitted to their Oracle JD Edwards system.
11. Inventories are automatically decremented and invoice data is automatically compiled.
12. Proof of Delivery (POD) is automatically sent to permit billing to support post-shipment analytics from within their OTM system.



D. B. SCHENKER

DB Schenker's original shipping system was costly, inefficient and error-prone. Monitoring daily shipments, checking lead times and statuses, pulling PoDs from websites and loading

information into a database for customers were all manual processes. D. B. Schenker relied on Logistyx to meet their unique requirements:

1. Deliver a system that facilitates proactive, rather than reactive workflows to improve the customer experience.
2. Produce invoices more quickly and improve cash flow.
3. Improve carrier integration and speed of implementation.
4. Remove the need to manually manage each shipment and enable the company to focus on exception management and customer service.

Logistyx enabled D.B. Schenker to offer their clients end-to-end supply chain visibility and multi-carrier management, and D.B. Schenker actively uses this USP when seeking new business. Results include:

1. Invoice cycle time is reduced by four weeks by being completed directly as the shipment leaves the warehouse, reducing manual labor and improving cash flow.
2. Carrier integration time was reduced from six months to one week.
3. Customer satisfaction rates have increased from 58.7% to 81.3%.
4. Cost improvements from pick-pack shipping have been relayed directly to their customers.
5. D.B. Schenker has full visibility into every shipment and ETAs are sent as orders leave the warehouse.

About Logistyx

The leader in transportation execution systems and multi-carrier shipping software solutions, Logistyx Technologies works with customers to reduce costs of their shipments while boosting efficiency and choice. Three unique strengths separate Logistyx TME Transportation Management Execution™ solutions from other vendors:

- **One of the industry's largest multi-national carrier networks.** We maintain direct integrations with more than 500 carriers, regularly refreshing these integrations and adding new ones to accommodate clients' needs and best interests.
- **A powerful predictive analytics engine.** Our data collection capabilities transform our customers' shipping operations with a two-pronged view that produces platform-wide enhancements to benefit all Logistyx clients and empowers them to easily glean insights from their own data for substantial cost reductions and service enhancements.
- **A robust portfolio of products, solutions and expertise.** We can help any business that is shipping small parcel, LTL and truckload shipments reduce their costs, often by as much as 40 percent. Our desktop shipping solution saves money on manual fulfillment for small organizations, while our fully automated solutions help the biggest, most sophisticated shippers improve their high-velocity systems. Regardless of the environment, numerous apps and hardware solutions can automate any phase of the parcel shipping process within any warehouse or fulfillment system.

With a team of more than 100 logistics professionals, Logistyx Technologies represents more than a millennium (1,000 years) of industry experience. Headquartered in Rolling Meadows, Illinois, Logistyx Technologies also has U.S. offices in New York, Philadelphia, San Diego and St. Louis and international offices in Canada, the Netherlands, the UK and Singapore.

FOOTNOTES

¹ http://www.deloitte.com/assets/DcomUnitedStates/Local%20Assets/Documents/us_pip_GMCI%20report_

ABOUT LOGISTYX

Logistyx Technologies optimizes businesses' transportation management execution with industry-leading software, hardware and knowledge. This unique, comprehensive package offers a configurable solution for smarter shipping anywhere by leveraging a multi-national carrier network and predictive analytics for data- and value-driven decisions.

www.Logistyx.com

info@Logistyx.com | 847.884.1940

