



GLOBAL LOGISTICS & SUPPLY CHAIN STRATEGIES

Whatever You Call It, Just Don't Think of Last-Mile Logistics, Last

BY RUSSELL W. GOODMAN

Few things represent the "face" of a company more than that transportation portion of the supply chain often called last-mile logistics. It's unfortunate, then, that so many companies seem to treat it as an afterthought. That may be changing.

For something that ostensibly deals only with short and quick deliveries, last-mile logistics seems to cover a lot of territory.

Yes, it deals with the final transportation piece in a product's supply chain, but it's not just about transportation. There's a lot of technology involved as well. And who, or what, takes final delivery, varies greatly. It can be a consumer, waiting at home to take possession of the latest iPod. But it can be an assembly center production line as well awaiting equipment or raw materials. Or a cable repairman or other field tech that needs a crucial service part right away. Last mile logistics can even refer to a company's internal distribution of things.

Then there's some imprecision in the name. Sometimes the process may be called

last-mile services or last-mile delivery. So, if last-mile logistics is all over the place, what is it really? It depends on the expert you ask.

"It's the point from which the consumer or commercial address receives the individual order," says Dave Mathia, CEO of Distribution Solutions International, Traverse City, Mich. DSI, which calls itself a 4PL supply chain management company, has specialized in residential delivery for 15 years.

Similarly, Steve Senkus, president and CEO of NonstopDelivery Inc., says, "It's that final mile from a distribution point, from a warehouse, from a sale—usually from a store." NonstopDelivery, a 3PL based in Arlington, Va., has 165 delivery points nationwide. It purports to make daily deliveries to every zip code in the U.S.

It is those things, but it's about time as

well, says Erv Bluemner, RedPrairie's vice president of product marketing of transportation solutions. "We think about it not just as the last mile in the sequence in a delivery path, but often as same-day delivery. So we put a time element on the last mile." The transportation management solution provider is based in Waukesha, Wis.

Time seems to be the key defining element for Doug Brown, vice president of Critical Service Logistics for Kuehne & Nagel, Naugatuck, Conn. "It's the time-sensitive delivery of parts to the ultimate end user in a way that's time-specific as opposed to, you get there when you get there on the route or when the parcel delivers. It's a custom time delivery." Critical Service Logistics specializes in forward-positioning parts in 120 stocking locations in the U.S. and Canada.



Mark Skoda, CEO of Aegis InterWorld, reminds that last mile isn't just about home delivery. "It's the fulfillment at the line side, everything from the postponement strategies that occur to put product forward, to being able to sequence operations, such that product arrives at the line side for subassembly." Aegis InterWorld, Memphis, provides business process outsourcing solutions to the transportation and logistics industries.

Still, last mile typically is about a "street truck" making 20 to 50 high-density deliveries a day, traveling no more than 150 to 200

are two very important ingredients, and they add up to great expense, says Mathia. "If you're moving in bulk, you look at big piles of money—and if, for example, it's \$3m for outbound transportation, you attack that number," he says. "Worrying about \$25 or \$30 for local delivery is not at the top of your chart in terms of urgency and the cost impact."

That's a mistake in Mathia's view, but he says it's typical. He feels that transportation overall fails to get the proper cost-benefit analysis. If anything, the approach to trans-

over the years. Where sourcing and manufacturing accounted for perhaps 80 percent of the cost of a product years ago with transportation eating up the balance, that equation has been turned on its head, Walker says. "If 80 percent of the cost is associated with getting that product to the end user, where am I going to focus? Well, I'm going to start focusing on container load shipments, on airfreight, on full truck-load cross-country shipments from the dock in New York City to a DC in Boise, Idaho. I'm going to focus on the larger

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miles. "And we're looking at probably less than 50 miles between the distribution center and the end user," says Alex Walker, CEO of Cube Route, Toronto. Cube Route provides on-demand logistics service to manage delivery and field service fleets.

What Does It Cost?

With so much variation in the types of customers serviced, not to mention the degree of customized service they expect, it's difficult to peg just how much it costs to manage last-mile logistics. Could it be that as much as 28 percent of all transportation costs occur in the last mile? At least one statistic cited by the former Council of Logistics Management (now the Council of Supply Chain Management Professionals) suggests so. Whatever the figure, clearly there is a lot of money at risk. So it is a bit ironic that so many companies get around to dealing with last-mile logistics, well, last. Many front-end operations (and the associated technology needed to optimize them) seem to take precedence over last mile, say the experts. And the admittedly much larger sums at stake in longhaul operations draw attention first as well.

Manufacturing requires more than parts or raw materials. Transportation and time

portation costing took a wrong turn somewhere, he says. "Most people's strategy for business—which they don't seem to do in transportation—is to look at what's the end gain and you work your way backwards. If you're going to sell a product to the market, you look at the end. You say how many people are in the market, how many can I sell to, will my product be acceptable to these people? And then you work backwards and build a product that meets those goals. In transportation, for some reason, we don't do that. We look at the beginning and say, we have this stuff sitting in a warehouse, we have these raw materials, we've got to get them to the factory, got to get them out of the assembly line, we've got to get them to the marketplace. And then we worry about the person who's actually going to be buying this stuff at the end, from a transportation perspective, not from a purchasing perspective. We worry about that last.

"We should look at that first and say, what is it going to take to get that into the consumer's hands so they have a good positive experience?"

The inattention to last mile is explained in part by the way we traditionally segmented supply chain expense. But the allocation of costs has changed dramatically

components of the supply chain. That's been the approach."

But tremendous technological developments have optimized performance in transiting freight in all modes and on all routes. "Now the last frontier in the supply chain is the last mile," Walker says. But many providers are reluctant to venture there, and that's understandable. Like any frontier, the territory is fraught with risk.

"It doesn't seem like it would be that difficult," Walker acknowledges. "I've got a DC and 20 miles to drive. It shouldn't be that hard. Well, there's a tremendous amount of complexity."

And because it is not a simple exercise, it really shouldn't be surprising if last mile often is thought of last, says Brown. "People probably are thinking of what they perceive as the larger and more difficult leg—getting the product overseas and it into a big warehouse. They pretty much take for granted that you can always get it where it needs to go."

And you can, but at what cost? "Last-mile logistics takes the most overhead and involves the most care," Senkus says. He tips his hat to LTL, TL and 3PL providers, who do a "really good job getting it from A to B, but getting it from B to C is sometimes the trickiest part. You have to utilize different equip-



ment and different expertise. It takes a lot more overhead to get that delivery done, whether it's inside delivery with two men or unpack, haul away, set up and installation. Those are areas where very few providers have specialized, but they all know it's a very important part of the supply chain."

Risk v. Return

John Chorley, Oracle's vice president of product strategy, says, "I think from the perspective of where the obvious savings are, sometimes the longer hauls are easier to consider."

Trucks are not the only necessary equipment. Mapping, tracking and monitoring software is critical as well, but many providers have hesitated to make the investment. Walker thinks vendors are largely to blame. They've simply not balanced return on investment with the risk. The expense of hardware, software and service contracts can be enormous.

Oracle recently entered the transportation management arena in a big way with its acquisition of G-Log, King of Prussia, Pa. The most recent iteration of G-Log's GC3 software contains functionality to manage local routing and delivery, Chorley says. Aegis InterWorld uses GC3, Skoda says. "It

allows you to define and optimize routing on the last mile to the street level address."

Obviously, the nature of one's business determines transportation priorities. If you have a relatively small number of final destination points, then the difference between your last mile and longhaul costs may not be that great. The problem is most acute—and most complex—when there are a lot of destinations, Chorley says.

If you can quantify your costs by destination and volume, you gain insight into which mode makes sense for delivery. "You may need different solutions, and each one would have a different cost basis compared to if you have a uniform set of destinations with uniform volumes."

Though business customers of last-mile services are wide ranging, manufacturers and retailers are perhaps the largest user groups. But regardless of one's business, it's useful to bring in consultants or third-parties to help determine some basic questions. The primary one, of course, is whether last-mile logistics should be handled in-house.

Chorley gets to the essence of that question in short order. "It's a control issue, isn't it?" he asks. "If you can afford to run a fleet, it's going to give you control of capacity

and the timing and so on. But clearly there are costs associated with that, and is that the core competency of the enterprise?"

"So, when you entrust your enterprise to a third-party, you give up a certain amount of control, because you think you're buying expertise, and you may be saving costs."

Senkus says control isn't worth the expense generated by having the responsibility for equipment, drivers and the associated costs of insurance and benefits. He notes that The Dome Depot relinquished its own delivery program about seven years ago. He says that more than half of NonstopDelivery's customers have outsourced their delivery programs over the last five to 10 years.

"There isn't a service drop-off," Senkus says, "because the outsource providers are really hustling to see that they are rated highly in the eyes of the customer."

Brown says he takes pains to try to show customers that they can enhance their control over distribution if they outsource to a third-party provider.

"The customer's perception is that, 'I can always do it better myself, and if I hand it over to somebody, I'm giving up control.' In our experience, that's not true because our core competency is controlling the distribution network. You tell me what you're con-

cerned you're not going to get. Are you concerned about information flow? I can get you that information. Are you concerned that I might lose your inventory in a regional stocking location? I can show you 99.9 percent inventory integrity over \$55m of service parts at 100 sites. I can show you better inventory accuracy than you can get in a big warehouse and probably better than what you're achieving yourself.

"Control is critical," Brown says. "But the question is, do you have to do it yourself to have control?"

Pharmaceutical delivery is a niche specialty of DSI, and it probably epitomizes both sides of the control issue. Clearly the pharmaceutical industry is highly regulated and monitored by governments. Manufacturers must accord with stringent guidelines regarding a number of things, including distribution. Getting drug samples to the many pharmaceutical company sales representatives is a job that many manufacturers don't seem to mind relinquishing control of. For DSI, it's money in the bank. "We deliver the product that the sales reps take to the doc-

tors' offices, tens of thousands of deliveries every month to these reps," Mathia says.

Cost allocation is not the only way the supply chain is evolving. Sales channels have multiplied as online commerce has developed. Today, last-mile service is largely driven by consumers' online purchases. Someone has to deliver that merchandise—and, possibly, assemble it. Curbside drops are cheaper than premium logistics services, but consumers often demand white-glove treatment.

If ever there was a customer-facing element to the supply chain, it's delivery to either a home or home office. Most of those involved in last-mile logistics tell their clients not to expect to make money off these services. To use Senkus's phrase, you can mitigate cost by "shipping smart"—matching legs and routes with the appropriate mode.

Full-Service Process

Whether they outsource the delivery themselves or outsource the work, retailers and manufacturers are being forced to look at

last mile very carefully. A bad experience can be damaging to the bottom line, says Mathia. "If all the factors that go into successful last mile delivery aren't there, people start making decisions on that."

Senkus says that most major companies that Nonstop deals with know what consumers expect, and they look for best-in-class logistics providers. The "disconnect" is with some online retailers, he says. He feels that some have highly unrealistic expectations about services and their costs. "I think there is still a little bit of education and tweaking that needs to be addressed so they understand that customers don't want something dropped off at the curb or a mattress thrown over the side of a truck. They need a full-service process."

Brown is more concerned with parts delivery, and he tells prospective customers that prompt last-mile services are a definite money-maker. "If you're delivering a service part or installing a piece of equipment to a job site, and you can get that organized and delivered in a time-definite way in a two-hour window from the time you ordered, then you can sell that as a premium service," says Brown. "You can say, 'Mr. Purchaser of My Commodity, I have a platinum contract that guarantees you're going to have the part you need within two hours after we've identified the problem.' That's worth money to you."

Last-mile logistics, or delivery or whatever, may be a lot of things, but it isn't insignificant. Brown says it's the intersection of all the work that you've done with the ultimate consumer of a product. What's the world's best-designed supply chain worth if you bungle the hand-off at delivery?

Says Brown: "That last mile is really the face to the consumer, right?"

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