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Smaller is more beautiful than ever

By Paul Demery Managing Editor, B2B E-commerce

That’s because UPS and FedEx have extended dimensional weight pricing to all ground shipments. That will significantly increase shipping costs for web retailers, unless they can squeeze products into smaller packages.

Online sales are growing fast at Ampére Creations, a retailer and wholesaler of trendy vegan handbags and backpacks that are made to look and feel like leather.

“We’re projecting our Internet business will take off at a rate of roughly 20% to 50% in the next three years,” says Daniel Chen, Ampére Creations’ director of marketing and sales. “Now the web is about 5% of sales, but we’re projecting to have web sales in 2015 and 2016 reach 10% and 15%. And that’s just for our business-to-business sales. For retail, we expect the web’s share of sales to be even higher.”

There will be challenges ahead, of course, and one that just kicked in is a new method of figuring ground shipping rates that will sharply increase what it costs Ampére Creations, as well as other online retailers, to get their goods to customers. UPS Inc., which handles 80% of the company’s retail and wholesale shipments, as of Dec. 29 changed its formula for figuring ground shipping rates for the typical package sizes Ampére Creations uses to ship its handbags, purses and backpacks. Under the new “dimensional weight” pricing formula, which bases ground shipping rates on a package’s external dimensions instead of its actual weight, Chen calculates it will cost Ampére Creations an additional 20% or more to ship a typical box of handbags from California to customers across the United States.

“The rate change will affect us a lot,” he says. As the retailer grows, it may consider moving its distribution center from Los Angeles to the Midwest, he says. The move would decrease the average distance a package needs to get to its destination, which is another factor in the formula shipping carriers use to determine delivery charges.

FedEx Corp., the biggest competitor to UPS, also imposed dimensional weight pricing on ground shipments on Jan. 1, and the two companies’ changes will affect about 30% of the packages now carried by UPS and FedEx, industry experts say. The resulting average rate increases—when combined with other annual rate hikes and surcharges—will run up to 30% or more, they add. “It’s a game changer for lightweight shippers,” says Tim Sailor, a principal owner of Navigo Consulting Group, which advises companies on logistics operations. “It’s a whole new ballgame.”

The new rules have retailers and wholesalers scrambling to figure how the changes will affect their shipping costs, profit margins and sales, and what they can do to minimize the impact. Options include renegotiating shipping contracts, using more efficient packaging, and dropping some products that are suddenly far more costly to ship. “We’re doing everything we can,” says Robert Cassidy, president and chief operating officer of eBags Inc., a web-only merchant of handbags, backpacks, luggage and accessories, who says that about 20% of its shipping volume has been affected by the shipping policy changes.

Until now, dimensional weight pricing has applied only to packages sent by ground shipping that were 3 cubic feet or more, and to packages shipped by air. The new policies at UPS and FedEx have extended that to virtually all packages shipped via their basic ground services, including many of the goods shipped by online retailers as well as combined retail and B2B shippers like Ampére Creations. 75% to 90% of online retail orders ship by ground services, shipping experts say.

To minimize the hit on their shipping costs and overall financial performance, many shippers are also looking at making their warehouse operations more efficient, swapping in new packaging materials, changing their shipping offers to customers, and—no surprise here—checking out alternatives to UPS and FedEx.

"This is the single largest impact on shipping since the 1980s," when increases in fuel prices resulted in double-

digit percentage fuel surcharges imposed by shipping carriers, says Jack Mitchell, a former executive with FedEx, DHL and regional carrier Eastern Connection who is now president and CEO of shipping consulting firm Parcel Appraisal & Negotiations Consulting Group.

And it comes timed with other increases to shipping costs. Ken Wood, president and founder of shipping advisory firm LJM Consultants, notes that the extension of dimensional weight pricing coincides with the annual base rate increases by both UPS and FedEx. The base rates at the two carriers are up by an overall average of 4.9% this year—the same annual rate hike the carriers have imposed for several years—but the actual average increase in the base rate for many shippers is far higher, Wood says. That's because the 4.9% average is across all shipping zones and package sizes, including rate hikes of less than 3% for packages weighing more than 70 pounds.

But many of the packages that online retailers ship weigh 30 pounds or less, and in that weight range rate hikes vary between 6% and 8%, Wood and other experts say. Tack on other standard surcharges, such as for fuel and residential and remote deliveries (many of which have also increased), plus the dimensional weight pricing, and the overall rate hike for many online retailers can climb 30% or more, they say.

Indeed, veteran retail executives are sounding the alarm about dimensional weight pricing and the effect it may have. "Write this article as soon as possible, because many people don't understand dimensional weights," Jack Kiefer, CEO and founder of BabyAge.com Inc., a web-only retailer of strollers and other baby and bedding products that is ranked 337 in the Top 500 Guide, told Internet Retailer when asked for comment.

So what exactly is dimensional weight pricing (it is also referred to as DIM pricing), and how does it work?

The new rate formula, instead of relying solely on a package's weight, figures the rate for all packages sent via UPS Ground or FedEx Ground by measuring a package's external dimensions (length times width times height) and dividing the total by a "DIM factor" of 166 to determine the "DIM weight." The formula then bases the final shipping rate on the larger of the DIM weight or the actual weight. And because the DIM weight figure is almost always bigger than a package's actual weight, the shipping rate is typically at least 25% higher than the rate based on actual weight, Mitchell and other shipping experts say.

For example, Wood notes that a 1-cubic-square package with an actual weight of 4 pounds would have a DIM weight of 11 pounds and cost 32% more to ship across two delivery zones.

Here's how that DIM pricing increase gets figured for the 4-pound, 1-cubic-foot package: 12-inch width × 12-inch height × 12-inch length = 1728 inches, divided by a DIM factor of 166, equals 10.4 pounds, which under the DIM pricing formula gets rounded up to the next full number, resulting in 11 pounds. Under the 2014 rate schedule and based on the actual weight of 4 pounds, that package would cost $7.11 to ship to Zone 2, or the first zone over from the shipper's zone. Under the 2015 DIM pricing schedule and this year's increase in base rates, with the same package now figured to be 11 pounds, the cost of shipping it to Zone 2 is $9.40, a 32% increase.

Both UPS and FedEx stand to gain financially from the rate hikes, although they're also investing in technology and services to help their shipping clients transition to more efficient packaging and shipping, says Kevin Sterling, who closely follows the shipping carriers as managing director of the Transportation Equity Research unit at BB&T Capital Markets. Neither UPS nor FedEx responded to requests for interviews about their new DIM pricing policies, except to provide corporate statements on their policies and related packaging services. Each company asserts that, over the long term, they will help more shippers learn to package products and ship more efficiently.

On an annual basis starting this year, UPS will gain $350 million in operating income as a result of its new DIM pricing policy, Sterling says, equivalent to about 5% of the total $7.03 billion in operating income it reported for its fiscal year ended Dec. 31, 2013, its most recently available annual financial data. For FedEx, which ships fewer parcels by ground than UPS, he adds, the new DIM pricing policy will add about $180 million in annual operating income, equal to about 5.2% of the $3.45 billion in operating income it reported for its most recent fiscal year, which ended May 31, 2014.

Both carriers are also investing to make shipping more efficient in the long run. UPS, for instance, is rolling out a new On Road Integrated Optimization and Navigation system, or ORION, a GPS system designed to "increase our network capacity, and improve operational efficiency, flexibility and reliability," UPS said when releasing its financial figures for the third quarter ended Sept. 30, 2014. The company hasn't said what it's spending on ORION, but it spent $442 million on information technology capital projects in 2013, followed by $300 million through the first three quarters of 2014.

ORION is already helping about one-third of its 70,000 delivery drivers take the most efficient route to make deliveries, and it expects to extend the routing technology to half its driver fleet by the end this year, Sterling says. "UPS expects to save about $400 million annually once it's fully operating," he says.

FedEx is investing similar amounts on information technology, having spent $403 million on it for the fiscal year ended May 31, 2014. Without going into details, it says much of its investments are for "growth initiatives" at FedEx Ground.

In addition, UPS and FedEx each operate technology labs and consulting services designed to help shippers use more efficient cartons and other packaging materials.

Some merchants, however, say such assistance will have limited effect. "Most online retailers, especially ones that scale up, have been looking at right-sizing packaging for many years now," Cassidy of eBags says. "It's a little disingenuous to say we can offset the DIM pricing change by starting to modify packaging."

Retailers and other shippers, plus an army of ready consultants, meanwhile, are checking out a broad range of ways to mitigate the near-term effects of the shift to DIM pricing. One good place to start is to get figures from UPS and FedEx—or from a shipper's own internal records—that show the number of packages a retailer shipped last year under 3 cubic feet and that will now be subject to DIM pricing. "UPS and FedEx have that information," ex-FedEx executive Mitchell says. "They know the impact on every single client they do business with." Shippers can then work with the carriers, or with internal or outside shipping experts, to estimate the cost of DIM pricing in 2015, factoring in any adjustments in expected changes in order volume.

Another starting point, at least for retailers with substantial shipping volumes, is to try to negotiate a contract that uses a DIM factor more beneficial to the shipper. Instead of the standard DIM factor of 166, some shippers may be able to negotiate for a DIM factor of, say, 195, or a sliding scale of factors over a typical three-year contract term that might start with 250 the first year, followed by 200 the following year and then 166 in the third year, Mitchell says. In the example above for the 1-cubic-foot package with an actual weight of 4 pounds and a DIM weight of 11 pounds, a DIM factor of 195 instead of 166 would result in a DIM weight of 9 instead of 11 pounds, for a Zone 2 shipping cost of $8.72 instead of $9.40, a savings of 7%.

An option BabyAge, eBags and other shippers are also considering is using carriers other than UPS and FedEx to avoid DIM pricing. The options are many: In addition to the U.S. Postal Service, there are hundreds of regional and local carriers, and shippers can send small packages through the SurePost and SmartPost systems of, respectively, UPS and FedEx, with local deliveries handled by the USPS. Germany-based DHL recently rebranded its DHL Global Mail service in the United States to DHL eCommerce, providing a broader range of services to domestic as well as international shippers. They include fulfillment and targeted marketing services in addition to shipping packages of up to 15 pounds six days a week. None of these options charges DIM pricing.

Shifting business away from UPS and FedEx, however, may mean an e-retailer loses a volume discount those carriers offer. And the USPS, though its overall services have been improving, doesn't offer the same level of tracking as UPS and FedEx, experts say. Plus, shipping via SurePost and SmartPost is only for smaller packages of about 10 pounds or fewer, and these services don't offer guaranteed delivery times, says Mitchell of PANC Group.

Veterans of efficient packaging and other warehouse operations use software as well as operating policies designed to pack products in the most efficient packaging materials and keep them flowing quickly down conveyor belts and bundled snugly into delivery vehicles. "It's all about managing space better in the warehouse, in cartons and on the truck," says Ian Hobkirk, managing director of warehousing and logistics consultants Commonwealth Supply Chain Advisors.

Cartonization software from companies like Manhattan Associates, Intelligrated Inc., Datex Corp., Invata Intralogistics Inc. and SCT Software, for example, are designed to automatically recommend the most efficient carton, by size as well as cost, from a shipper's on-hand supply of packaging materials, often with instructions on how to most efficiently pack multiple items in the same carton.

Sometimes it's easier to just discontinue products too costly to package and ship. BabyAge, for instance, started adjusting its product lines and packaging materials years ago to deal with the DIM pricing for items of more than 3 cubic feet. It dropped large baby bath tubs because, though lightweight, they were simply too costly to ship, CEO Kiefer says.

While it has left that market to others who are now selling easier-to-ship collapsible bath tubs, BabyAge is developing new ways to ship other products—such as pillows it sells through BabyAge.com and Adorably.com—hit hard by the new DIM pricing rules. "We designed a special clamshell machine that takes a pillow and smashes it down and stuffs it into a thick poly bag," Kiefer says. "We're letting it sit for a few months to see if the elasticity in the pillow is still there when we open it up again."

EBags and other merchants are also looking at substituting poly bags for boxes, but recognize that's an imperfect solution. "They're not for all products or customers," Cassidy says. "If a customer spends a lot of money on a handbag, she won't want to receive it in a Mylar bag."

Chen at Ampére Creations has similar concerns, since many of his company's handbags come with decorative jewelry studs. "If we stack them on top of one another in packaging bags, we could ruin the studs," he says.

And even when bags or other forms of packaging may work, such as when shipping things like basic T-shirts, such packaging can upset the complex networks of conveyors used by warehouse material handling systems—for example, when the corner of a flat bag catches the side of conveyor and ceases to move toward the packing station, Hobkirk says.

Companies like Intelligrated specialize in providing systems designed to nudge oddly shaped bag packages along a conveyor. But even a bag that gets to its destination in the warehouse can present a problem because the bag may become crinkled, making it difficult for automated scanners to capture the bar code. "What may work for 99.9% of boxes may only be good for 80% of bags," says Tim Kraus, product management supervisor at Intelligrated. That's why the vendor works with companies like Germany-based Sick Inc., which designs scanning systems specially designed to pick up codes even off of crinkled bags.

Such innovations are among the bevy of tools and strategic options merchants are using—or in some cases just beginning to learn about—as they search for the right balance of cost savings and product and service offerings that go with their branded image and generate the best financial results. Merchants that figure out how to work out the kinks and clear the hurdles of DIM pricing will pave a smoother road into the new reality of shipping.

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