

REDUCE SHIPPING COSTS *with* PACKAGE REDESIGN

Beginning December 29, 2014 and January 1, 2015 respectively, UPS and FedEx Ground will use dimensional weight pricing to calculate shipping costs. If your business ships at least one of the roughly 8 million packages the carriers transport every day, your business' freight costs may increase in the coming months.

What is Dimensional Weight Pricing?

According to FedEx, dimensional weight pricing is a “common industry practice that sets the transportation price based on package volume—the amount of space a package occupies in relation to its actual weight” (FedEx Newsroom).

To justify the switch to dimensional weight pricing, both companies argue that packages have become lighter over the years in relation to their sizes. As a result, their operational costs and inefficiencies have increased because those lighter packages are still consuming the same amount of space throughout the transportation process.

Previously, FedEx only applied dimensional weight pricing to packages that measured three cubic feet or greater; but the application of dimensional weight pricing to all ground deliveries is now expected to impact about 30% of FedEx Ground's volume.

Most importantly, the shift to dimensional weight pricing could mean as much as a 30% increase in costs for lightweight shipments in larger boxes. As a result, it is important to take the opportunity to re-evaluate your current packaging solutions in order to combat the price increases and to identify opportunities for your business to become more efficient so that it does not absorb the costs.

$$\text{Dimensional Weight (LBS)} = \frac{L \times W \times H}{166}$$

*All measurements are in inches

Source: UPS Website,
“How to Determine Billable Weight”

So, How Can Your Business Meet the Challenge of Dimensional Weight Pricing?

Answer: Packaging Redesign.

With any redesign project, consider modifying the materials and structural design for both primary and secondary packaging.

- Primary packaging touches the product directly
- Secondary packaging is used mainly for transportation and shipping

Re-evaluating both sets of packaging at the same time in relation to the product itself:

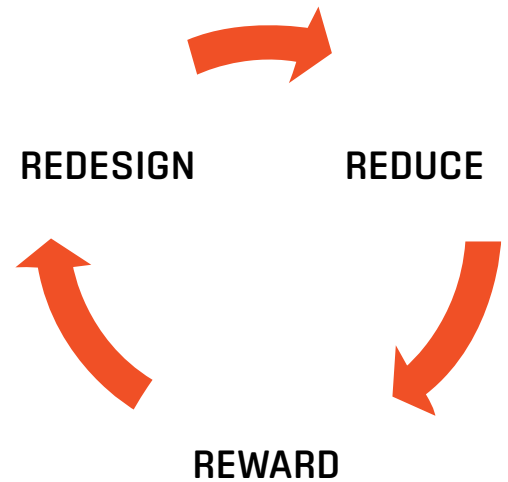
- Maximizes efficiency
- Ensures that the design is customized for the product
- Protects the product throughout the shipping process and in the retail environment
- Provides the most cost-effective solution

Redesigning any piece in isolation could have a negative impact on the entire packaging solution as a whole.

For both primary and secondary packaging, your business can re-evaluate packaging materials and structural design to:

- Reduce the weight of materials
- Reduce the cost of materials
- Improve product protection to reduce shipping damage costs

Redesigning any or all of these packaging elements can significantly reduce overall packaging costs and ultimately reduce or eliminate the effects of the shipping carriers' price increases.



Primary Packaging

Examples of Efficient Material Redesign

Before redesign, Walmart sold its yogurt in individual, cylindrical cups. The company decided to transition to selling its yogurt in packs of 4 cube-shaped containers. By doing so, Walmart removed more than 2 grams of plastic from each cup. The cube shape was also better suited for shipping and allowed Walmart to pack approximately 200,000 more cups per pallet. (<http://www.chainalytics.com/wp-content/uploads/2011/11/2011-APICS-Smart-Packaging-for-Sustainability-and-Savings-Tom-Blanck.pdf> pages 26-33). With one minor change to the primary packaging, Walmart was able to ship more units per box, reduce its overall material costs and saved 34% on packaging weight costs alone.

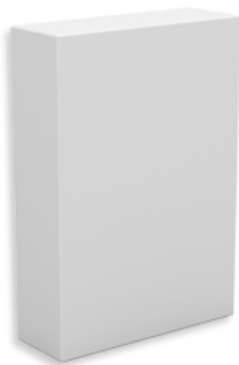
PUMA recently made a name for itself in this area with its “Clever Little Bag.” The design incorporates a piece of corrugated that folds up into a PET bag. With the packaging redesign for this product alone, PUMA lowered the costs of its shoebox manufacturing by 60%. The redesign is also setting the company apart in the marketplace and setting into motion a plan to make its packaging materials entirely sustainable by 2015 (<http://www.industryleadersmagazine.com/clever-packaging-a-great-way-of-capitalize-on-cost-cutting-rebranding/>).

As these examples prove, companies can maximize efficiency and reduce costs by eliminating excess material in the primary packaging. However, reducing the amount of material without considering and testing for possible shipping damage as a result can be counterproductive. Ensure that your business evaluates both factors together for a successful redesign.

PRODUCT



EXISTING PACKAGING



REDESIGN OPTIONS



Secondary Packaging

There are a variety of target areas to consider in secondary packaging redesign.

Structural Design

Corrugated boxes will most likely remain the most effective form of secondary packaging for your product. However, evaluating the board and liner combinations is another potential area for material optimization and cost savings. For example, switching from 200# to an ECT or high performance liner can reduce the weight of the corrugated and thereby the company's shipping costs without sacrificing product protection or consumer impression.



Cushioning and Void Fill

Selecting the proper cushioning depends entirely on the product itself, but it is an important packaging element to consider in the redesign of secondary packaging. Does the product require a void fill solution to block it or brace it in order to prevent shipping damage like Ranpak paper or loose fill peanuts? Or does the product need a cushioning solution like bubble wrap or a foam-in-bag solution that molds around the product? There are a variety of cushioning and void fill solutions available, each with its own strengths depending on the product it supports.

Mailers

While standard corrugated boxes are the most common options for secondary packaging, it may be beneficial to evaluate other forms of secondary packaging as well (depending on the product). For example, a padded or bubble mailer can be a cost-effective form of secondary packaging for products like home-delivery prescription drugs, since a mailer can still provide the necessary protection from shipping while decreasing the overall weight and size of the package being shipped.

In any case, the key to cost-effective shipping is to design both primary and secondary packaging around the product itself.

Additional Benefits of Packaging Redesign

Though this article's primary focus has been on redesigning packaging elements that directly affect the weight and size of packages in order to decrease shipping costs, the redesign process is also an ideal time to re-evaluate the visual appeal and design of the packaging.



Increase Visual Appeal

To maximize brand visibility in a packaging redesign, consider the message it conveys, trends in consumer demand, competitor designs and overall industry trends. By making changes to the color, shape, text and imagery you use, you can significantly enhance the impact the packaging will have on the consumer.

For example, on primary packaging, focus on one key textual message and try to create an emotional impact on the consumer with images. Also, consider how you can incorporate your brand and its visual appeal into the secondary packaging design. The labels, sealing tapes, exterior liners on mailers and printing on corrugated are all potential surfaces to incorporate branding elements on in order to create a unique experience for your consumer.

In addition, evaluate competitor designs during the redesign process to ensure the new design is unique and stands out from competitor packaging in the market.

Lastly, there are also key industry trends concerning what consumers find valuable in packaging. According to Smithers Pira (<http://news.thomasnet.com/IMT/2014/03/26/5-consumer-trends-shaking-up-the-packaging-industry/>), there are 5 key trends hitting the market in 2014:

1. Sustainability
2. Healthy Living
3. Convenience
4. Authenticity and Trust
5. Cost-Effective Shopping

These five trends indicate that consumers want to be more efficient as well, so ensure that you consider these trends as you redesign your packaging in order to create a design that conveys your product is consistent with these trends.

Conclusion

Ultimately, both shipping carriers and businesses have the opportunity to become more cost-effective and environmentally friendly with packaging solutions. Though these pricing changes may be inconvenient or ill-timed, businesses can transform this challenge into an opportunity for cost-savings by re-evaluating their current packaging solutions before the changes take effect.

But, this whitepaper also proves that packaging redesign offers additional advantages beyond combating increased shipping costs. By redesigning both the primary and secondary packaging for your products, your business can reduce material and operational costs, ensure that your business is more in line with consumer trends and values like sustainability, and attract consumer attention with rebranding or restyling certain elements.

As you begin to consider redesign, consider consulting with a Landsberg Orora packaging professional. With a personal approach to service and more than 66 years of industry experience as a total solutions provider, Landsberg Orora will collaborate with you through every stage of the process to help you take your redesign process from concept to your consumer. Contact us today at solutions@landsberg.com or contact the closest location to discuss your project with us.