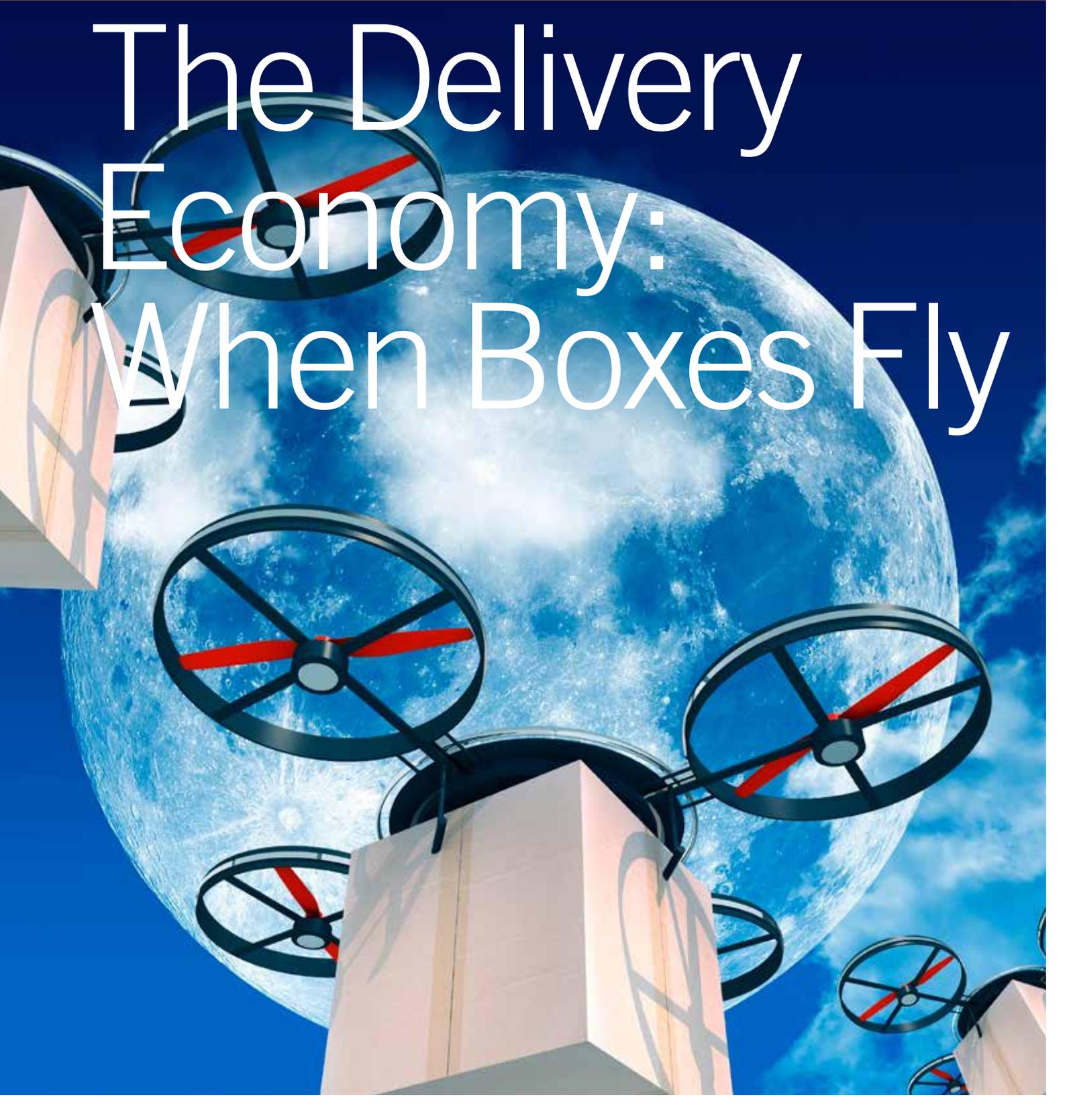


# The Delivery Economy: When Boxes Fly



# The Delivery Economy

Is an unmanned aerial vehicle going to deliver your next online purchase? E-commerce is changing the way Americans shop, and creating unique opportunities for containerboard mills and converters.

## BORN OUT OF CONVENIENCE

Innovation in the United States has often been driven by the idea of making life more convenient. The microwave has saved countless hours of cooking time and reinvented the way Americans eat. The dishwasher has saved Americans innumerable hours of cleaning dishes. The remote control has saved immeasurable trips from the couch to the television.

The Internet and e-commerce have made shopping from your home, your car and your office possible and extremely convenient. You can sit on your couch and order nearly anything imaginable, as you continue to use your remote and eat microwaved popcorn as your dishwasher hums in the background. Sit back and enjoy all this saved time and effort as you wait for your order to be delivered in a brown box on your door step.

Statistics show Americans are in love with the delivery economy. According to the U.S. Census Bureau, while total retail sales increased 2.3% in Q2 2016 versus the previous year, e-commerce sales went up nearly 16%. Furthermore, e-commerce's share of total retail sales reached 8.1% in Q2 2016, compared to 6.6% in Q2 2015. As Americans increasingly shop from their tablets, phones and computers, implications for the containerboard market will continue to intensify.

## LIGHTWEIGHT DELIVERS OPPORTUNITIES

Critical to this new economy is shipping costs, as every ounce and pound counts. For an online shoe retailer like Zappos that offers both free shipping and returns, surely they must be paying close attention to the cost of their corrugated boxes and how much it costs to ship each pair of shoes. If they can switch to corrugated boxes made from lighter liner and medium combinations without sacrificing structural integrity, the savings multiplier could be significant.

Imagine ordering a new pair of shoes or a pizza or groceries and having it delivered out of the sky by an unmanned aerial vehicle. Drone package delivery may not be here yet, but there are numerous companies such as Amazon, Google and UPS working on its development. Aviation authorities are still developing the rules for drone delivery, and some say not to expect widespread usage until 2020. That number used to sound a lot more distant and futuristic. The future is fast approaching, and this future provides another opportunity for lightweight boxes. A package's weight must factor into drone delivery efficiencies. If you are a mill or a converter that can provide the paper and board for that package, cutting precious ounces from the corrugated container, you could have a lot to gain from this once far-fetched reality.



Industry statistics hint at the emergence of lightweight containerboard in the delivery economy. Lightweight liner and medium, in this instance defined as 33 lb. and below and 26 lb. and below, respectively, have been chipping away at heavier grades' shares, based on AF&PA statistics. At the same time, according to the Fibre Box Association (FBA), average corrugated sheet weight has continued to slightly inch downward. New lightweight containerboard capacity has been added in the last few years to meet the market demands for lighter weight packaging materials. Cascades' Greenpac mill in Niagara Falls, NY, PCA's DeRidder, LA conversion and Pratt's mill in Valparaiso, IN are focused on lightweight supply. Kruger's ongoing conversion at Trois-Rivières and the recently postponed Corrugated Supplies' Alsip Minimill project in the Midwest will also focus on lightweights. Could even more supply be needed to meet the demands of the delivery economy?

## MULTIPLE TRAILS LEAD TO NEW BUSINESS

The delivery economy provides multiple business development paths for a corrugated manufacturer. New startups, for instance, are popping up constantly, offering subscription services for razors (e.g. Harry's), healthy snacks (e.g. NatureBox) and vinyl records (e.g. Vinyl Me Please) to name a few. All of these companies need means to effectively



ship their monthly offerings to their customers, and increase awareness of their brands. Packages need to stand out with unique designs, intricate die cuts and partitions, and colors and graphics that pop. The path to success with such start-ups may be lined with investments in value-added equipment.

In addition to start-ups, major retailers such as Walmart, BestBuy and Target are also aligning their business models with e-commerce. These giants are assessing their corrugated packaging, looking for innovation and cost savings. Walmart has developed a system to improve box utilization by more than 30%. After studying how goods were being shipped, it was determined fulfillment centers needed to increase their assortment of boxes. In this case, more is less as more box sizes equals more efficiency, which means less waste. Box makers able to serve the programs of such giant retailers will benefit.

Another way box suppliers can benefit through the growth of the delivery economy is by closely following the footprint of giant retailers. With every new distribution center that opens comes an opportunity to provide that location with corrugated. Amazon has built over 50 new facilities since 2010. The distribution networks of Walmart, Target and P&G are also growing. Following this “yellow brick road” of distribution networks will lead converters to corrugated box business.

Pizza delivery has been around for decades, but ordering pizza online is relatively new. You can even text your order to Domino’s using emojis! In the delivery economy, even the pizza box is being reexamined. Pizza Hut, which by one estimate goes through 675,000 boxes per day, made a rather simple design change to their boxes. By reducing the front edge of their box they were able to save more than 9,000 tons or 46 million square feet of corrugated board. If you’re competing for a major pizza chain’s business, maybe it’s time to get creative to save your customer some costs in order to win the account.

#### **TIME TO PERFECT FOOTPRINT**

Not only goods are moving in the corrugated box sector. M&A activity has been rampant, with over 30 major acquisitions of box and sheet plants by integrated mills since 2014. More and more independent players are getting snatched up, becoming part of integrated systems.

In parallel to the industry consolidation trend has been the box converting plant rationalization trend. Since 2015 over 40 corrugated converting plants have been closed. Leading the trend have been the largest integrated corrugated manufacturers: International Paper and West Rock. Acquisitions of new box plants have enabled companies to close high cost operations and align their market footprint with where

the market is. Mid-West and West Coast regions especially have seen a positive trend in box plant investments, drawn by their high concentrations of consumer goods manufacturing and agriculture, respectively.

#### **HERE TO STAY**

Mega trends support the idea that the delivery economy is here to stay. The convenience of the delivery economy is supported by increasing urbanization and households where both parents work fulltime jobs and do not have time for trips to the store. Efforts for more sustainable solutions, whether done to reduce costs through lighter and less packaging, or for environmental stewardship, are not going away. America’s population may be aging, but older generations are also getting tech savvy and embracing e-commerce. Millennials have practically lived their whole adult lives with e-commerce and have formed shopping habits around its existence.

Opportunities are out there in the delivery economy, whether you are a mill or a converter. The key to success is to deliver on customer needs. Some fundamentals never change – even when boxes fly.

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