

Evolving Packaging for the E-commerce Market

THINK OUTSIDE THE BROWN BOX

AdeptGroup

ENGINEERING EXCELLENCE





Think Outside the Brown Box

Considerations for E-commerce

Are you developing a packaging action plan for e-commerce? If not, should you be? According to Statista, in 2017, retail e-commerce sales worldwide amounted to \$2.3 trillion and e-retail revenues are projected to grow to \$4.88 trillion in 2021.

With figures like this, companies have no choice but to acknowledge the growing potential of e-commerce. With this increase in e-commerce popularity, distribution environments change dramatically, and it is becoming more important to consider these changes when designing packaging.

As companies decide to enter the e-commerce channel, they'll need to consider these questions:

- What are the pain points and barriers?
- How should packaging be designed to ship directly to the consumer and less for brick-and-mortar (esp. when most manufacturers are built for production scale and not flexibility)?
- How can current offerings be optimized for e-commerce?

This white paper will review the different e-commerce distribution models, consumer interactions, packaging formats and optimization, 'going green' and regulations, as well as include valuable suggestions and considerations to develop e-commerce packaging that is robust, consumer-friendly and sustainable.





The Difference in Distribution

In the traditional brick-and-mortar channel, the consumer walks the aisle, finds and then chooses the product.

The main package functions are shelf impact, merchandising, communication, containment, and protection. The packaging is designed to stand out on-shelf, so it is not lost among competitive brands.

TRADITIONAL DISTRIBUTION ENVIRONMENT

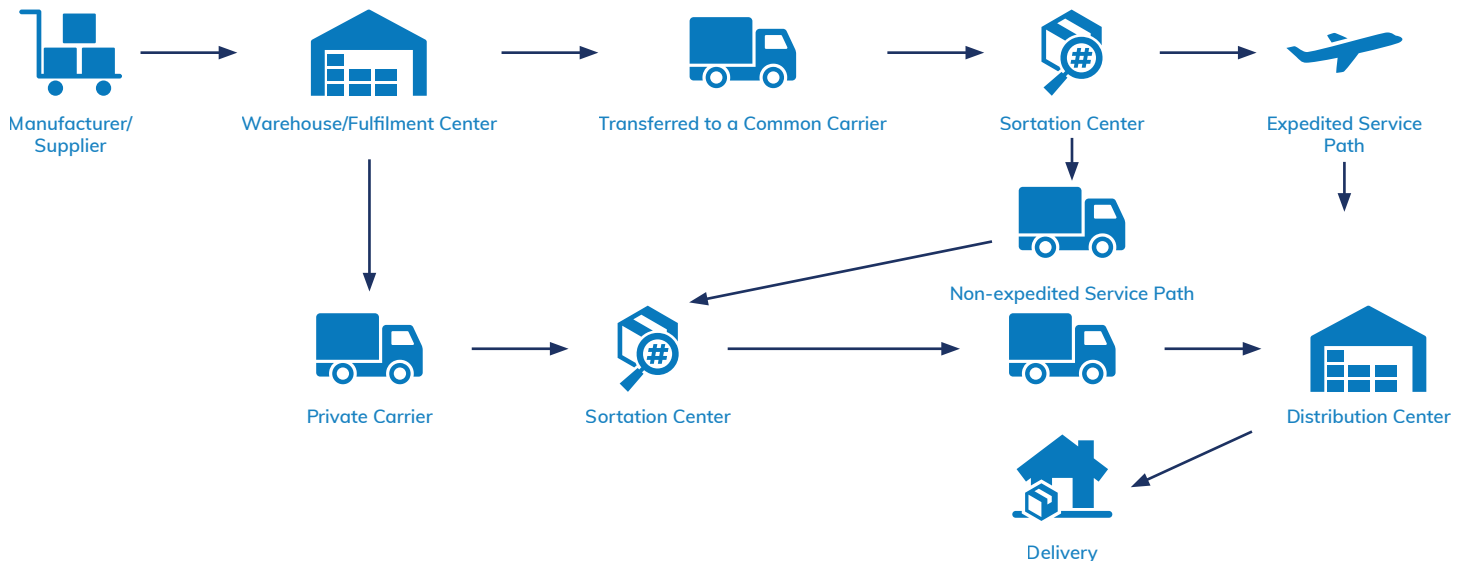
In this channel, the distribution cycle is straight-forward. The product moves from the manufacturing location, to a distribution center, to the retail store to the shelf. The product is packed and shipped in a specifically sized master-case (in a specific case count) and the pallet configuration is optimized.

The product travels on a unitized pallet from the manufacturing location to the retail location - remaining in the upright position through the entire journey.



E-COMMERCE DISTRIBUTION ENVIRONMENT

In the e-commerce channel, the way products are chosen and distributed varies greatly from traditional brick-and-mortar. Often, the consumer researches and purchases the product online without the “touch & feel” available in a traditional retail environment. The main package function is to protect the product and ensure it is delivered in its expected condition. Once purchased, the product is shipped direct to the consumer. Throughout this distribution cycle, a product can have up to 3 times the amount of touch-points.





E-commerce Distribution Environment

In addition to the unique challenges, companies must consider the “last mile” of transit the product travels.

Even if the rest of the cycle is accounted for, the final delivery is difficult to plan for - how the package is handled by the carrier, if it's left outside or exposed to weather, etc. is often out of the company's hands.

When the package is finally received by consumer, the experience they have is not with carrier, it's with the e-retailer. Damaged packaging and/or product can significantly impact a brand's reputation. According to [eMarketer](#), e-commerce damage is estimated to set companies back around \$6 billion per year, with 58% of Americans saying their relationship with the e-retailer would be impacted with damaged product.

Companies need to have a pulse on the future of e-commerce and how items will be delivered in the future. It's closer than it seems. Companies like Amazon, UPS, and Google are already experimenting with delivery drones. According to an article in [recode](#), in 2017, two states passed legislation to permit unmanned, ground-based delivery robots to rove around on sidewalks across the state. When designing e-commerce packaging, companies need to consider what's around the corner.





Consumer Interaction

When it comes to packaging, the retail shelf and the consumer, many studies (i.e. eye tracking) have been published to help brands enhance package design and their go-to-market strategy for optimum shelf performance/presence.



When evaluating e-commerce packaging consider brand opportunities and consumer experiences with the first moments of truth.

The first moment of truth is when the consumer first encounters the package at their doorstep, not necessarily the product. How the package looks on the outside may impact how the product is perceived and the relationship it will create with the company, even if the product is not damaged. As more consumers move to e-commerce, brands should consider new ways to improve the packaging experience at the first moment of truth.

Companies like Birchbox, Julep, Trunk Club, FabFitFun and Glossier make the receiving and opening of their pretty packaging fun with personalized notes for the consumer. With more and more of the unboxing experience being posted to social media (according to [Sealed Air](#), unboxing videos are growing at 57% per year), the impact of packaging is growing. Just because a consumer is not standing in front of a store shelf doesn't mean the packaging should lose its importance and does not significantly impact the way the consumer perceives the product within.



Package Format



When designing packaging for e-commerce, the package format may need to differ from the traditional design.

The primary package may need to change to better enable successful e-commerce transit. For example, laundry soap in pods vs. a liquid container or baby food in a flexible pouch vs. a glass container – these formats may survive e-commerce transit better than the package designed for the traditional brick-and-mortar shelf.

Also, retailers should research and understand their consumers' size preference, then match accordingly. For products with predictable usage cadence, consider setting quantities to align with a months' consumption (for example), allowing them to easily subscribe to the product's delivery.

Brands also need to consider their flexibility when it comes to designing channel and e-retailer specific offerings in the event that it is necessary to develop package extensions that are uniquely designed for each.



Optimize Packaging

There is no “one size fits all” model for selling consumer packaged goods online.

When designing packaging for e-commerce, think beyond current situations, but if the primary packaging will be able to perform in future environments as well. It may be worth investing in redesign or innovation and robustness of the primary pack. If a primary package redesign is not feasible – consider the following:

- How can the secondary packaging be optimized for products to avoid excessive packaging and the use of void fillers?
- Is it cost effective to design specifically sized secondary packaging for each product or develop fewer sizes and ship some products with access space and void fillers?
- How do companies find the right combination between product size and package size ranges?

While evaluating the above, consider how to enhance packaging for sustainability. According to the [Fiber Board Association](#), in 2017, 38 billion cardboard/corrugate boxes were produced with about 90% recovered and made into new boxes. E-commerce packaging has the potential for material optimization and sustainability opportunities. By investing in packaging formats (which use less secondary packaging), companies may be able to reduce shipping costs, prevent damage, provide better consumer functionality, and have a more sustainable message.

If new to e-commerce, brands should create pack-out scenarios that evaluate if they should outsource packaging, partner with a 3rd party or co-packer or build an in-house packaging & fulfillment center. For companies currently selling in the e-commerce channel, they should evaluate the current process. Can any process improvements be made for better efficiencies?

The final decision will be determined by cost, inventory, customization and the environment footprint.





Go Green

According to [Nielsen's report](#), 66% of global respondents said they would be willing to pay more for products and services that come from companies that are committed to positive social and environmental impact (up from 55% in 2014, and 50% in 2013) – with Millennials continuing to be the most willing to pay extra for sustainable offerings (almost three-out-of-four respondents in the last findings).



Even more than in the traditional retail environment, e-commerce presents an even bigger responsibility to the consumer to reduce waste. In the traditional retail channel, the consumer is responsible for disposal and recycling the primary package. In e-commerce, the consumer is responsible for disposal and recycling of all the packaging. Because of this, brand owners should consider the following:

- Is it feasible to design with recycled content?
- How easily can the packaging be broken down?
- Can the package be re-used for potential returns?

As companies investigate packaging materials, they should consider the ease of packaging disposal, recycling, recovery and re-use.



Be the Expert

When it comes to the e-commerce channel and developing e-commerce packaging, it is important to understand the current terminology and regulations.

“OVER-BOX” OR PREP FREE PACKAGING

In an over-box situation, the product is broken down from the original master-case and inventoried at a fulfillment center. It can be packed with other products or with void fill then shipped in an Amazon over-box. The product weight determines the over-box size. However, to reduce packaging waste and improve efficiency of e-commerce shipping for its vendors, Amazon will require select products to arrive in its fulfillment centers in certified packaging under its Frustration Free Packaging program (please see below). The deadline to certify is August 1, 2019. The program offers an incentive to vendors, a one-time early adopter credit to assist in the transition costs. After August 1, 2019, there will be an ongoing charge back for every package not certified.

“SHIPS-IN-OWN CONTAINER” (SIOC)

With SIOC packaging, the product is shipped to the end consumer without an Amazon over-box.

“FRUSTRATION FREE PACKAGING” (FFP)

Amazon’s FFP is packaging specifically designed for the e-commerce channel. It is defined as “100% recyclable (curbside recyclable), easy to open (opened and items removed \geq 120 seconds) and protects the product (not using excessive void fillers).” Amazon is setting the standard for ways to improve e-commerce packaging for a better consumer experience and waste reduction.

To qualify as FFP, submit the proposed product/package concept to Amazon (Amazon has an FFP library of acceptable materials) and apply for an FFP “Amazon Standard Identification Number” (ASIN). If the concept is approved, vendors must work with an Amazon approved testing facility and pass the ISTA 6 Amazon.com test protocols. Once the packaging is approved, send inventory to Fulfillment by Amazon (FBA) (FFP products are only FBA) for shipments.

Why design FFP or SIOC packaging? Simply put – it’s sustainable (good for the environment), it reduces product damage and consumer aggravation when opening the package (good for the consumer), and it’s often cheaper to ship than traditional retail packaging (good for the vendor).

For more information on Amazon’s FFP program, please visit [Amazon.com](https://www.amazon.com)

For all the scenario’s listed, specific ISTA testing is required. For more information, please visit www.ista.org



Get in Touch

Partner for Success

To understand the e-commerce channel, companies need to establish a solid packaging strategy.

Adept Group has channel audit and market research expertise, internal innovation panels and an established relationship with an Amazon approved testing facility. With a team of over 70 packaging engineers, Adept has the capability and expertise to help companies create an e-commerce road map and implementation plan.

Adept Group is the trusted expert for packaging engineering and serialization, providing teams with focused capability through staffing, engineering services, business processes and technology. With wholly-owned operations in the US and Europe, Adept Group has experience and expertise from a successful track record of delivering thousands of projects for over 100 clients.

[Contact Us](#) for any assistance with your e-commerce strategy or packaging development.



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