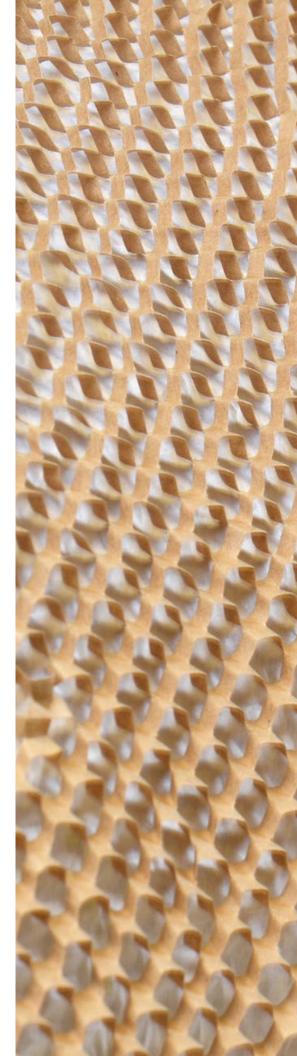


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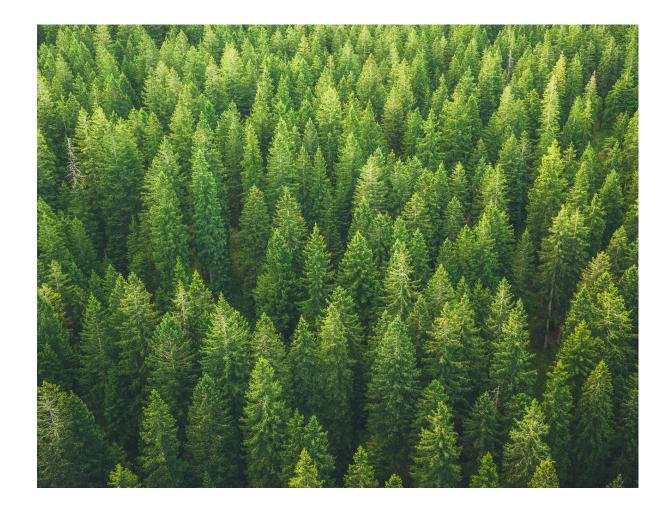


Introduction and Executive Summary

To better understand how consumer attitudes are changing around sustainability and their participation in e-commerce,

Ranpak partnered with Harris Research to collect data on 2,030 consumers in the US, as well as 1,032 in France, 1,029 in Germany, and 1,030 in the UK. The results of our research confirm that during the pandemic, consumers in both the United States and in Europe have been increasing their e-commerce purchasing, receiving more packages delivered to their homes in the form of meals, groceries, gifts, essential home goods and more. On top of this growth, we have also uncovered a strong preference for sustainable packaging that uses renewable materials and fits the items being shipped to the size of the box being sent, conserving space and improving efficiency.

The message from consumers is clear; not only do they want to support brands that provide them with better options for sustainable packaging and the reduction of plastic, but they also have a preference for sustainable paper packaging and would like to see more brands make the switch to paper in the future. By providing a fully renewable, biodegradable and recyclable choice without compromising on protection, Ranpak paper products help brands deliver their goods with protective packaging that their customers will appreciate.



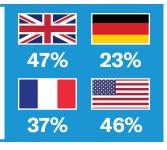


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E-Commerce and Changing Attitudes Around Sustainability

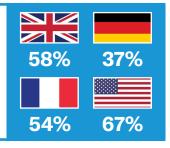
In 2020, nearly half of Americans consumers (44%) received more packages delivered to their homes during the holiday season than in 2019, with corresponding trends across Europe. As a bellwether for e-commerce trends, the holidays are a useful indicator of attitudes around purchasing in general in Europe and the United States.

I plan to order more food items to my home compared to last year, including delivery, meal-kits, and groceries.



With Adobe reporting 33% growth in e-commerce from 2019 to 2020 over the holidays in the US, it's clear that growth during the pandemic was explosive.¹ E-commerce, while already becoming an increasingly prevalent part of many consumers' lives, took off in response to the need for social distancing and corresponding impacts on the need for goods that are easily accessible from home.

Overall, I plan to purchase more goods online across all categories compared to last year.



The US and UK saw the most pronounced response in terms of consumers planning to purchase more food and other goods online, with over two-thirds of consumers in the US increasing their activities across all categories. In the US and UK, online food delivery is maturing especially rapidly, with nearly half of consumers planning on ordering more food online.

In France, food delivery and general online purchasing are both increasing substantially, with over half of French consumers expecting that they will be buying more products online in the coming year.

German consumers reported comparatively more modest planned increases, however, nearly a quarter of consumers are planning to increase digital food purchases and over a third will increase their overall online shopping for goods.

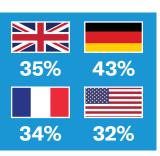


The Current State of E-Commerce

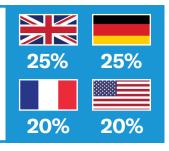
The presentation of the unboxing moment can have a decisive impact on how a brand is perceived and whether or not customers choose to continue to buy from that brand in the future. With more purchasing activity taking place online, consumers are increasingly aware of how the shipment of their products can impact the environment. Today, consumers want to receive their products with adequate protection so that they arrive undamaged, but they notice when there is excessive amounts of material in the box, the object being shipped is in an inappropriate container, and when unsustainable or difficult to recycle plastic is being used to protect their goods.

Without a proper fit, items in a box can be more likely to move in transit. Adding more void-fill can help, however it is a waste of material that could be conserved with a properly sized container.

I've received packages where the item is mismatched with the size of the box or outer packaging.



l've received packages containing unnecessary, extra plastic packaging material.



While German consumers are less likely to be increasing their online shopping than their peers in the EU and US, they are the most conscious of wastefulness in terms of the space within packages that they receive, with 43% stating that they have received items that are packaged in boxes that include wasted space. While US consumers are the least likely to have received oversized boxes or packaging, roughly a third of these consumers still have experienced this type of mismatch.





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Unsustainable Shipping Practices

The presence of unnecessary plastic within a package is unfortunately common, with one-in-four consumers reporting that they had experienced it in the UK and Germany, and one-in-five in the US and France. The prevalence of air bubbles and other forms of plastic packaging also increased in the experience of many consumers in each country represented, with the most substantial increases in the US and UK. In the US alone, nearly a third of consumers felt that they were seeing more plastic now than ever before.





Despite these reported increases in the amount of packaging, damaged packaging materials within the box are still commonly reported. Even worse, the arrival of broken or damaged items still occurs with regularity. The presence of plastic bubble cushioning was reported highest in the UK and the US. These countries also reported the highest rates of product and packaging damage upon delivery, where roughly one consumer out of every ten has received broken or damaged items. Unnecessary plastic packaging aside, the need to return and re-ship items also takes a toll on consumer confidence and our environment.



Consumer Preferences for Sustainability

Alongside the growth of e-commerce, 2020 saw increasing consumer awareness of the impacts of wasteful consumption on the environment and the importance of fully recyclable and sustainable materials. Consciousness of the importance of reducing waste is reflected in consumer attitudes around the packaging that they receive along with the products they buy. Within all countries represented in our study, a plurality of consumers indicated that they would reward brands that provide them with sustainable shipping options, reduce plastic use, and embrace paper alternatives to plastic for in-the-box packaging applications.

I would be more likely to purchase from brands that ship sustainably than those that do not.

In Europe, consumers were also asked about

their likelihood of purchasing products from

that bears a certification from a responsible

Stewardship Council® with similar results. In

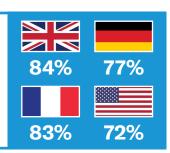
it has a palpable impact on their likelihood of

purchasing more from that brand in the future.

most situations where consumers receive a product that has been sustainably shipped,

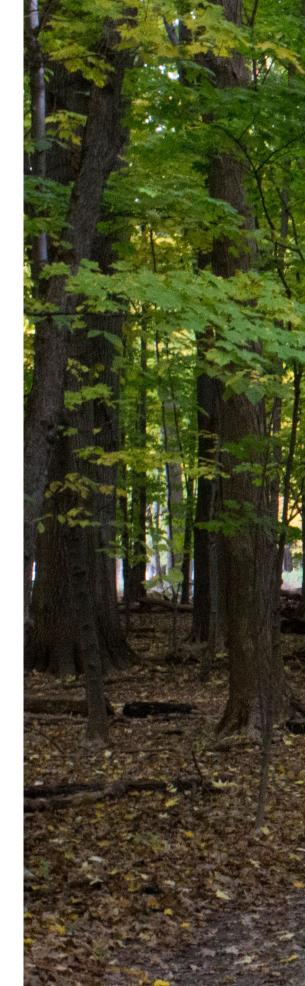
forestry management group such as the Forest

companies that sourced paper packaging





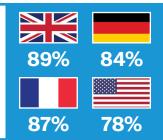




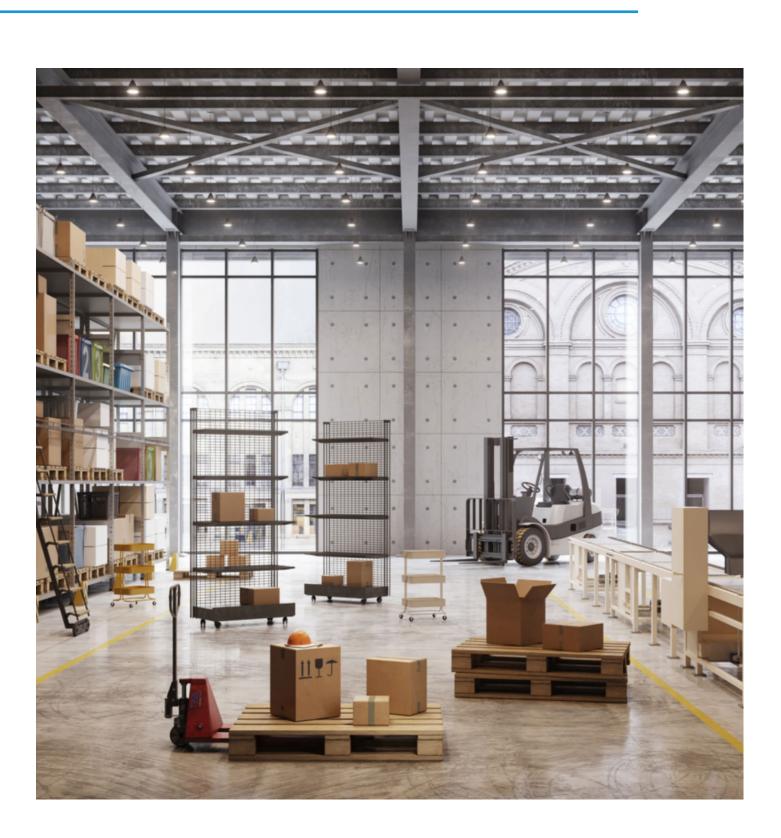
Sustainability as the Way Forward

The linear consumption of resources in the form of plastic packaging is not only unsustainable for the planet, but also not what consumers want to see when they receive their packages. In each country surveyed, most consumers would prefer it if more brands adopted sustainable paper packaging to replace plastic. In the UK, this sentiment is held by nearly nine out of ten consumers, while in the US, 78% feel the same, with Germany and France falling between the two.

I would prefer to see more paper and less plastic used in packaging.



At Ranpak, our mission and purpose is to support the growth of global commerce by providing 100% sustainable and recyclable paper solutions for in-the-box packaging. By helping to eliminate unnecessary plastic from the supply chain, we are doing our part to help Deliver a Better WorldTM.





FOUNDED IN 1972, RANPAK'S GOAL WAS TO CREATE THE FIRST ENVIRONMENTALLY RESPONSIBLE SYSTEM TO PROTECT PRODUCTS DURING SHIPMENT. The development and improvement of materials, systems and total solution concepts have earned Ranpak a reputation as an innovative leader in e-commerce and industrial supply chain solutions.

Ranpak is a global organization of approximately 650 employees that is headquartered in Concord Township, Ohio.

Ranpak is listed on the New York Stock Exchange under the symbol 'PACK.'

Learn more about Ranpak's protective paper packaging here! www.ranpak.com



