

# E-Commerce Packaging in Asia: How Accelerating Growth is Transforming Packaging

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PACKAGING



# MARKET OVERVIEW: E-COMMERCE

The e-commerce market continues to grow, outstripping the more traditional channels. Online sales of certain products received an unprecedented boost from COVID-19's shutdown of much of the retail industry, compelling consumers to undertake more shopping via the internet. The number of people shopping online is expected to grow further, a process likely to be accelerated by COVID-19's impact upon the global retailing industry.



Packaging manufacturers must therefore develop and tailor their products more specifically towards e-commerce applications, taking account of trends such as customer behaviour and attitudes, sustainability, appearance, logistics, and more.

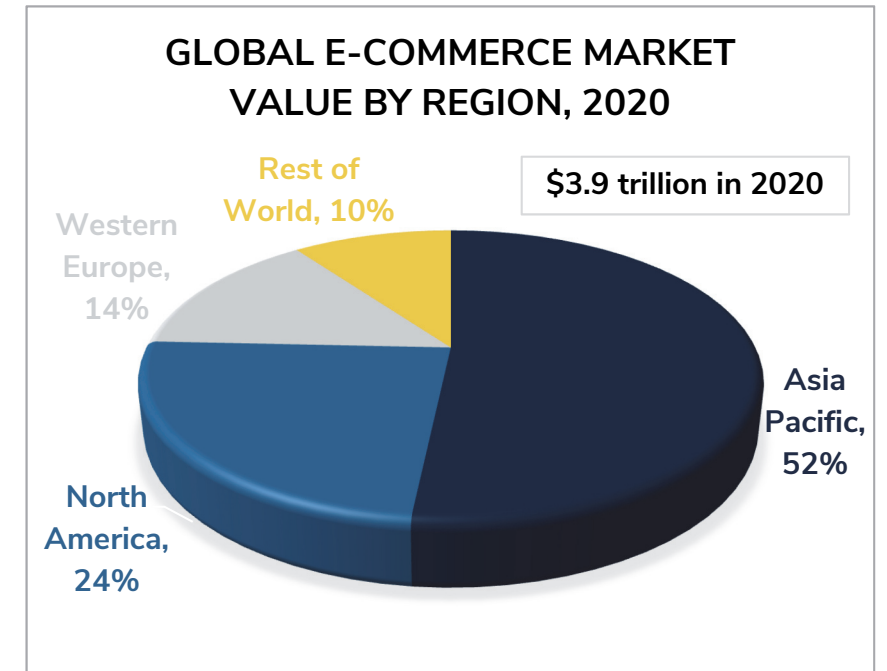
## DRIVERS



The global e-commerce market was valued at **over \$3.9 trillion** in 2020. Growth was driven by large individual markets such as **China and the US**. Contributing factors to growth in sales of e-commerce include internet and smartphone penetration, population size, economic growth and the reliability of the postal system.

Another feature of the e-commerce industry, especially as far as the more developed markets are concerned, is **the existence of certain sales peaks during the year**. In places such as the US and Western Europe, the most significant event is **Black Friday**, which takes place the day after Thanksgiving in November, and has become the busiest single day in terms of retail sales. In 2019, US consumers spent more than \$7 billion online during Black Friday, of which sales via internet-enabled mobile devices accounted for more almost 40%. However, Black Friday is dwarfed by **Singles Day** in China, another November event during which time sales are up to eight times higher. Between 2014 and 2019, gross merchandise volume (GMV) during Singles Day **grew by around 35% per annum**, with further growth expected to come from China's lower-tier cities.

**Clothing and fashion** accounted for a leading **28% of the e-commerce market** in 2020, **ahead of consumer electronics and media (20%)**. While these sectors continue to hold strong positions, the largest beneficiaries of COVID-19 have been products such as groceries, sports equipment, and cosmetics and personal care goods.

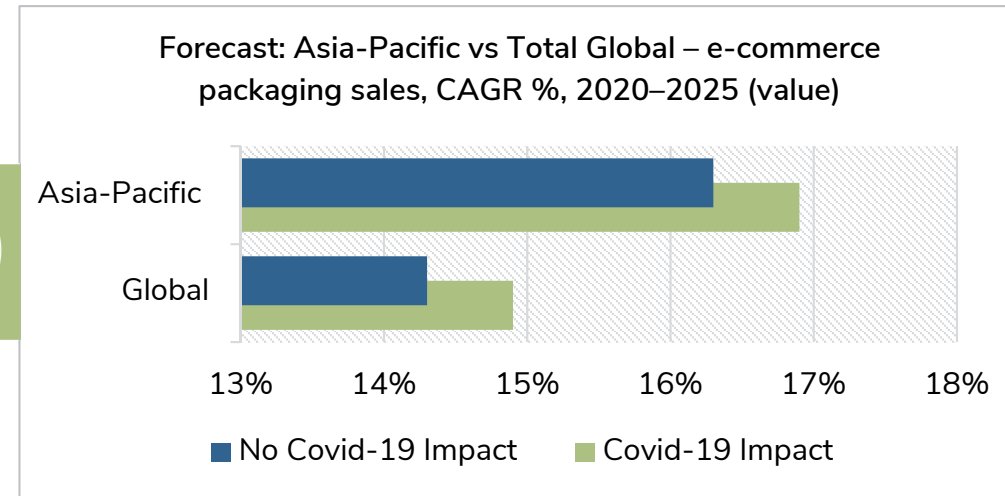
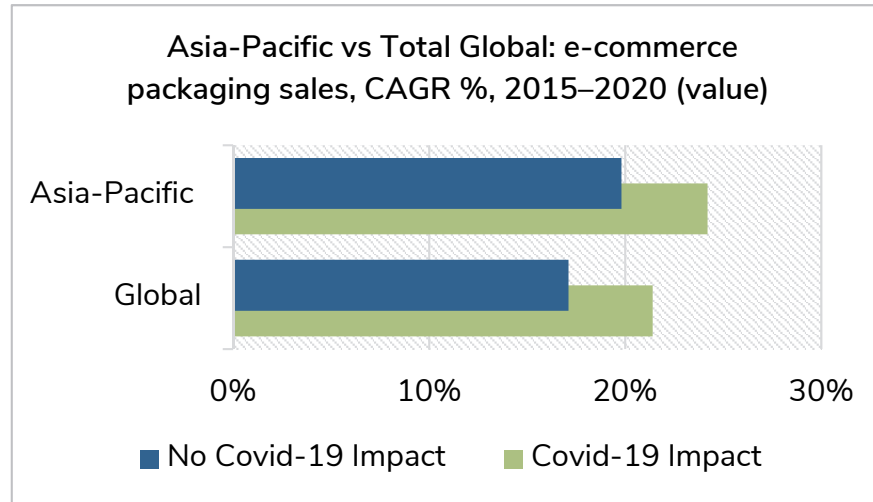


Source: Smithers/eMarketer

# MARKET PULSE: PERSPECTIVE

Consumption of e-commerce packaging globally tends to be skewed towards countries and regions where internet penetration and usage is highest. According to data from Internet World Stats, many of the world’s 4.8 billion internet users can be found in **Asia**. At present, Asia therefore accounts for over half of regular internet users worldwide. Expressed as a percentage of overall population, however, penetration of internet users is highest in North America, at just over 90%. Less than 60% of the total Asian population is classed as a regular user of the internet, a figure which decreases to around 42% for Africa.

**~\$49 billion**  
Market Value  
**Global**  
E-commerce  
Packaging Sales, 2020  
(\*with Covid-19 Impact)



The Asia-Pacific region as the **largest market for e-commerce packaging** by some distance, ahead of North America.

The dominance of the Asia-Pacific region is largely due to the presence of China and Japan, which represent the **world’s largest** and **third largest** single markets for e-commerce packaging respectively – both are **highly developed and lead the way in terms of technological advances**.

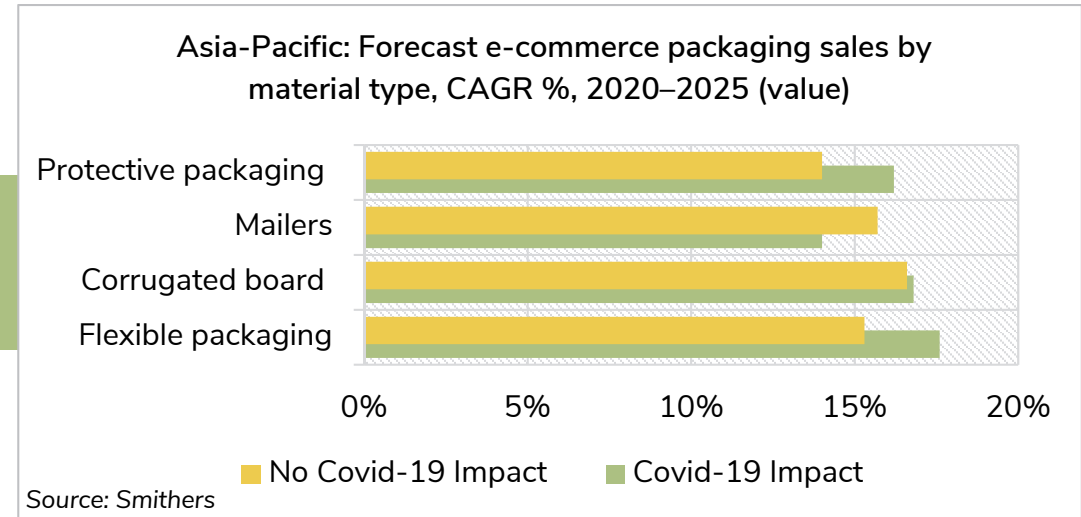
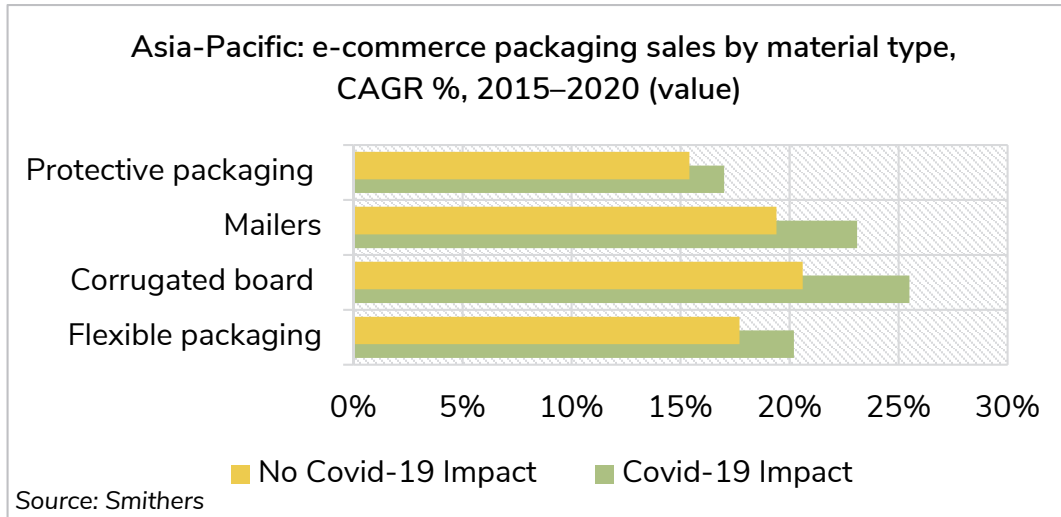
Although value sales rose by an annual average of more than 24% between 2015 and 2020, Asia-Pacific is not the fastest growing region as it is a more mature market. During this time, annual growth averaged more than 30% for both Eastern Europe and South and Central America, where demand for e-commerce packaging is beginning to pick up in countries such as Russia and Brazil.

# MARKET PULSE: HISTORICAL AND CURRENT

In 2020, the Asia-Pacific region accounted for **over half (~52%) of global market value**. This figure has increased from almost 46% five years previously, reflecting the further strides in e-commerce made in the top markets in Asia-Pacific, such as **China, Japan** and **South Korea**. These are three of the world's largest and most developed markets for e-commerce packaging, as online shopping remains widespread and popular in this part of the world.

E-commerce is also starting to make a greater impact upon the retail industry in other South-East Asian countries such as **Indonesia, Thailand** and **Vietnam**, while significant growth is anticipated from the potentially large Indian market over the next decade. For consumers in many of these countries, the retail industry's recent development has largely skipped a stage, moving from traditional channels (i.e. street markets and small, independent stores) to e-commerce and thereby missing out on the large supermarkets and hypermarkets common to western economies.

**~\$25 billion**  
Market Value  
**Asia-Pacific**  
E-commerce  
Packaging Sales, 2020  
(\*with Covid-19 Impact)



The market for e-commerce packaging in the Asia-Pacific region has **grown by an annual average of more than 24% since 2015**, one of the highest rates worldwide during this time.

The corrugated board sector has been the market's most dynamic during 2015-2020, ahead of protective mailers. In value terms. The Asia-Pacific region has the world's largest regional market for mailers, accounting for almost half of the global total in 2020. In the future, the flexible packaging sector is expected to represent the most dynamic performer in the region.

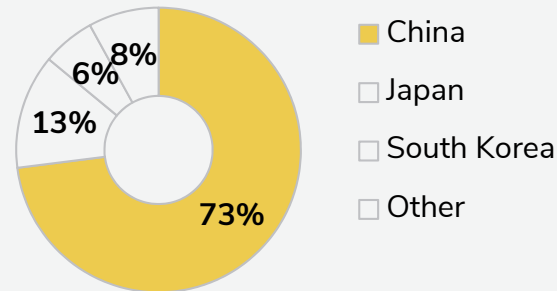


# MARKET PULSE: KEY MARKETS

## CHINA



Asia Pacific: e-commerce packaging market by country, 2020 (% value)



Source: Smithers

China has the world's single largest market for e-commerce packaging, accounting for almost 38% of global market value in 2020. This equates to almost 73% of the Asia-Pacific market, although this figure has decreased from almost 77% five years earlier, whilst other countries (i.e. South Korea) have grown.

The Chinese e-commerce market has expanded rapidly within the last decade, even though internet penetration for the entire country amounts to just under 60%, driven by the emergence of an increasingly affluent and urban consumer base and the popularity of buying luxury goods online from overseas.

## DRIVERS AND TRENDS

Technological advances have also contributed to the growth of China's e-commerce industry.

Many Chinese consumers frequently rely upon various apps for online shopping, examples of which include WeChat Pay and Alipay.

Livestreaming and short video apps (the latter of which are now used by over 300 million Chinese consumers) are also impacting upon the market, enabling retailers and brand owners to interact with their consumers in radically new ways.

Greater use is also being made of smart technology to enhance packaging within China's e-commerce industry, such as by using QR codes.



## KEY PLAYERS

The Chinese e-commerce market is dominated by three large companies, namely JD.com, Alibaba and Pinduoduo.

During September 2019, Alibaba acquired rivals Kaola, which has subsequently become part of its Tmall business, while Pinduoduo operates a slightly different business model offering two price options - one of which provides discounts for purchasers buying for teams.

All three retailers offer a diversified range of products, as well as efficient logistics operations and fast delivery options – some online retailers such as Alibaba now offer delivery times in minutes, rather than days or hours.



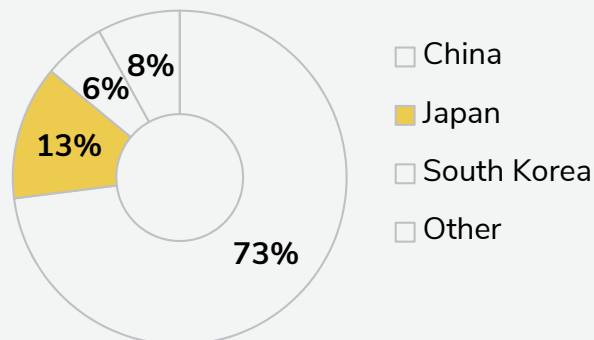


# MARKET PULSE: KEY MARKETS

## JAPAN



Asia Pacific: e-commerce packaging market by country, 2020 (% value)



Source: Smithers

Japan has the second largest e-commerce industry in the Asia-Pacific region.

The country's share of the Asia-Pacific market for e-commerce packaging is expected to increase, driven by the high penetration of the internet and smartphones amongst Japanese consumers, as well as further investment from online retailers such as Rakuten and Amazon.

One potential challenge within the next decade is Japan's ageing population and the corresponding shrinkage of the country's labour force.

## DRIVERS AND TRENDS

Online spending amongst Japanese consumers continues to rise despite a consumption tax increase from 8% to 10%, which came into effect in October 2019. This was the first increase in five years and was introduced by the Japanese government to fund social welfare programmes.

Sales of e-commerce packaging benefit from the fact that Japan has a highly technologically aware population, with internet penetration rates amounting to 94%. Unlike other parts of the world, internet and e-commerce penetration are high amongst the country's sizeable population of older consumers, which also represents a wealthier demographic than their younger counterparts.

Japanese consumers tend to be more loyal to domestic brands, with cross-border shopping accounting for just 10% of e-commerce sales. There is a further move towards online grocery shopping and the possibility of drones being used for delivery purposes, a trend that is likely to increase demand for lightweight packaging options.

## KEY PLAYERS

Since Japan is a relatively small country with excellent infrastructure, many e-commerce operators can operation speedy deliveries – for example, **Amazon offers same-day deliveries to around 80% of the Japanese population.**

Amazon continues to invest in the Japanese market, where it competes alongside Rakuten (an online retailer of products such as clothing and consumer electronic goods) and Yahoo! Shopping. The latter (owned by Softbank) acquired a majority stake in the online fashion retailer Zozo (owner of Zozotown brand) for \$4 billion in 2019 to increase its present in the e-commerce market. At present, Rakuten is believed to be investigating drone delivery in Japan, in partnership with JD.com.



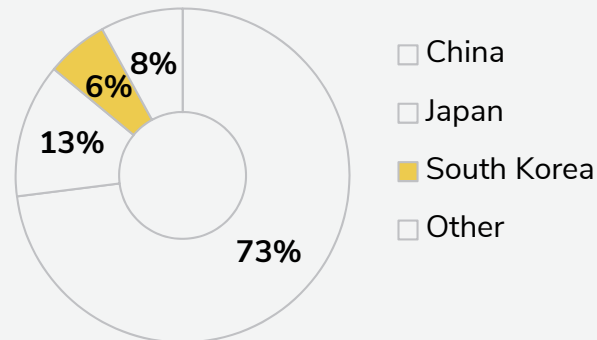


# MARKET PULSE: KEY MARKETS

## SOUTH KOREA



Asia Pacific: e-commerce packaging market by country, 2020 (% value)



Source: Smithers

South Korea has Asia's third largest e-commerce market, while also ranking as one of the world's most developed. At around 96%, internet penetration in South Korea is very high (each consumer is estimated to spend on average over 14 hours online every week), while it is also one of the world leaders in terms of smartphone ownership and usage.

E-commerce now accounts for up to 20% of total retail sales in South Korea, with up to two-thirds of regular internet users making monthly purchases via online channels. **Mobile devices** account for over half of all e-commerce sales.

## DRIVERS AND TRENDS

Demand has been driven by the growth of South Korea's online grocery market, with a greater variety of foods now being purchased via e-commerce. This trend is likely to be accelerated by COVID-19.

The prospects for future growth in demand for e-commerce packaging in South Korea remain favourable, even though the market is more mature than many others in the Asia-Pacific region.

The high penetration rates enjoyed by the internet, e-commerce and m-commerce are likely to keep the consumer base for online shopping sizeable, with the result that the e-commerce market can expect further expansion. Furthermore, the fact that South Korea's economy appears to have weathered the COVID-19 storm better than many Western nations also augurs well for future consumer spending on e-commerce.

## KEY PLAYERS

Although foreign websites continue to attract many South Korean consumers due to their lower prices, industry supply features several domestic suppliers.

One of the most significant is Coupang, which is described as the Amazon of the local market – it offers an extensive range of goods at low prices, as well as a next-day Rocket Delivery option.

One recent trend has been the **convergence of e-commerce with other platforms, such as social networks and TV shopping**. This is because South Korean consumers are increasingly demanding a 'one-stop' online shopping experience, incorporating product reviews and prices, as well as a range of purchase and payment options.

Other players include 11<sup>th</sup> Street and G-Market (eBay Korea), offering a wide range of goods.



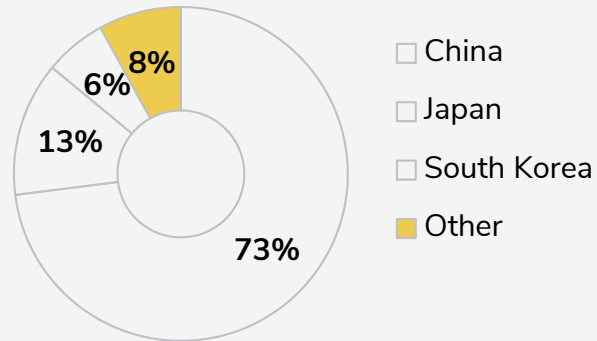




# MARKET PULSE: KEY MARKETS

## OTHER ASIA-PACIFIC

Asia Pacific: e-commerce packaging market by country, 2020 (% value)



Source: Smithers

Many of the e-commerce markets within the South-East Asian region are displaying high growth levels at present. Internet penetration rates rank above the regional average in certain countries. Examples include Taiwan (92%), Singapore (88%), Thailand (82%) and Malaysia (81%).

Furthermore, ownership of smartphones continues to increase, fuelling growth within the m-commerce sector.

Against this must be balanced some of the logistical and infrastructure difficulties common to the region – for example, broadband penetration is low to non-existent in many rural areas, many of which are not served by paved roads. Delivery also poses a major challenge in countries such as Indonesia and the Philippines, which are made up of numerous islands.

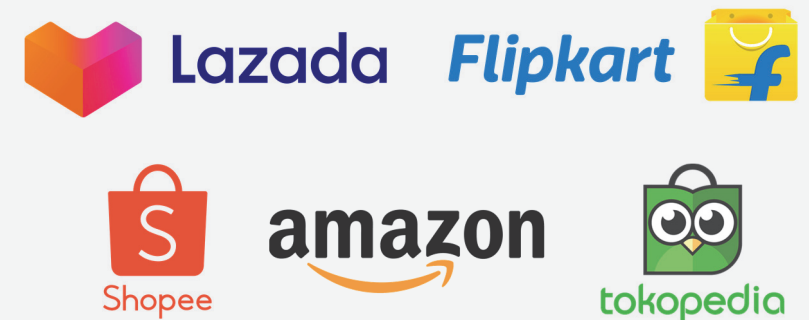
Growth should be spurred by increased sales of smaller items such as food, drink and cosmetics, although demand for some plastic-based products may be impacted by regulatory actions. For example, Amazon announced in June 2020 that its Indian-based operations had eliminated all single-use plastic to conform with new legislation. This was achieved by replacing bubble wrap with paper cushions, as well as ensuring its based fulfilment centres deliver products packaging-free to customers in up to 100 of India’s major cities.

## KEY PLAYERS

E-commerce markets across South-East Asia tend to be dominated by local operators, although cross-border transactions account for a large percentage of sales in countries such as Thailand and Indonesia.

Examples include Shopee and Lazada (both of which are based in Singapore) and Tokopedia, a leader within the developing Indonesian market. Amazon, which is establishing a presence in markets such as Singapore and the Philippines, is believed to be speaking with the local ride-hailing firm Gojek to expand its footprint in Indonesia.

One of India’s leading operators is Flipkart, which is part owned by Walmart.





# CONSUMER BEHAVIOUR & ATTITUDES

Consumers are increasingly switching from traditional forms of shopping towards e-commerce, a trend which has been accelerated by the COVID-19 pandemic. The strongest consumer influences for online shopping include:

## ONLINE SHOPPING 'MADE EASY'



Reliable and/or free delivery, a free returns policy and a reliable website for ordering.

Speed of delivery – according to Accenture, two-thirds of millennial-aged online shoppers want e-commerce websites to offer a one-hour delivery option in metropolitan areas.

## AVAILABLE OF VARIOUS PAYMENT OPTIONS



According to data from Shopify, digital methods of payment (i.e. PayPal) are becoming increasingly popular in Western Europe and China, although credit cards are still used as the primary method by over half (53%) of global online shoppers.

## PERSONALISED / CUSTOMISED PACKAGING



Consumers across many parts of the world, especially within the younger groups, continue to demand more personalised forms of packaging. Personalisation is one of the quickest and least costly ways of giving a packaging product a more unique appearance, as well as offering companies a mechanism to increase brand awareness and engage with their consumers.

## THE UNBOXING EXPERIENCE



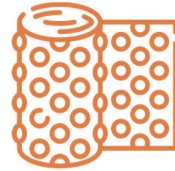
Consumers today tend to pay more attention to the shopping experience. With e-commerce growing at a fast pace, consumers that buy goods online have higher expectations when it comes to packaging. The unboxing experience is considered by many essential for e-commerce customer satisfaction.

Unboxing (i.e. capturing the unpackaging process for new products and then sharing it with others) remains a notable feature of the e-commerce packaging market. Since millions of people worldwide are now willing to watch others 'unbox', this process has often become a core part of online research carried out by consumers prior to purchase, with the result that some forms of packaging are now designed with unboxing in mind, utilising concepts such as unique shapes or textures, or alternatively offering some other form of individual experience.

# SUSTAINABILITY

The sustainability issue is one of the strongest forces that drives the packaging industry and consumers' behaviour. The focus on environment is top of everyone's mind. Sustainability is set to remain a major driver for packaging companies and brand owners within the e-commerce industry.

## Companies across the supply chain present environmental concerns revolving around the use of plastic



Due to growing concerns over the use of plastics, many companies have been switching away from plastics towards alternatives made from paper and board, especially for secondary protective packaging. Examples include the use of paper void-fills instead of air cushions, as well as the replacement of bubble-wrap with jiffy bags made from recycled materials.

The Ministry of Commerce in China has put forward requirements for e-commerce companies in some key economically developed areas to gradually stop using non-degradable plastic bags, disposable plastic woven bags and reduce the use of non-degradable plastic tapes.

During the Single Days period in 2020, Cainiao (Alibaba's logistics company) replaced the use of some plastic packaging bags with bio-based eco-friendly bags. This 'plastic-reduced environmental protection bag' is made of renewable raw materials such as grains. Compared with other express bags of the same size, each environmental protection bag can directly save 4.4g of plastic in the production process.

## Recyclability is another sustainability-related issue which has been widely tackled within the e-commerce industry



This remains important to consumers – data from 2019 indicates that 92% of consumers considered environmentally friendly packaging to mean an item that could be recycled.

In April 2021, China State Post Bureau announced that the industry standard "Regulation for Restricting Excessive Packaging in the Express Delivery" will be published soon. Meanwhile, the special program for excessive packaging will also be launched. It is expected that a long-term mechanism to prevent excessive packaging will be established within one year.

Consumption of packaging by China's e-commerce industry is sizeable. Environmental campaigners such as Greenpeace have claimed that China's e-commerce and express delivery sectors accumulated 9.4 million tonnes of packaging waste in 2018, a figure which if left unchecked may rise to over 41 million tonnes by 2025. More than 60 billion e-commerce parcels were delivered in China by express delivery during 2019, equivalent to more than 50% of the global total. Comparatively, in the EU, 86% of all paper and board packaging is now recycled, a figure which falls to below 42% for plastic packaging.

# SUSTAINABILITY

Other sustainability concerns which are especially relevant to packaging for e-commerce applications include the issue of excessive packaging and the empty space that often results, as well as rightsizing/lightweighting and returnable/reusable packaging.

## Excessive packaging and empty space



Use of excessive packaging by e-commerce operators is one sustainability concern which ranks highly amongst consumers, as well as packages that feature significant quantities of empty or wasted space.

Although this has traditionally been done to minimise the risk of damage during the delivery process, wasted or empty space is widely considered inefficient and contrary to the whole sustainability agenda.

Additionally, excessive empty space can prove costly since price is often determined by the size and weight of parcels.

However, technological advances are now helping companies achieve greater organisation of e-commerce packages, largely via the use of data and analytics to establish a digital representation.

## Rightsizing / Lightweighting



The desire to reduce the amount of empty space within packages while still protecting the contents is usually known as 'rightsizing'. Consumers, retailers and logistics companies have all led the way in demanding better optimised e-commerce packaging, with technologies such as Box on Demand (BOD) increasingly being applied throughout the industry.

Within e-commerce applications, the lightweighting trend has been evidenced by the emergence of more lightweight boards, as well as greater use of packaging formats such as flexible pouches (though some of these have recycling issues due to their use of laminate materials).

## Returnable / Reusable packaging



Recent evidence suggests that companies have been thinking more about returnability when designing packaging for e-commerce applications. Introducing more returnable or reusable packaging is therefore expected to become more widespread within the e-commerce industry.

JD.com of China launched eco-friendly reusable packaging in late 2018, as part of its Green Stream Initiative. This consists of green boxes made from recycled plastic, which can be reused up to ten times and are designed for shipping smaller items such as jewellery, watches and skincare products.

# KEY QUESTIONS TO CONSIDER



The COVID-19 pandemic caused an unprecedented boost to e-commerce sales, and this growth looks set to continue. How e-commerce friendly is your packaging?



China has the world's largest single market for e-commerce packaging, a huge opportunity for packaging manufacturers and converters. Are you set to be able to take advantage of this?



The possibility of using drones to deliver goods in Japan is being investigated, a trend that will require lightweight packaging. How ready is your e-commerce packaging for this opportunity?



South Korean consumers are increasingly demanding a 'one-stop' online shopping experience, combining e-commerce with other platforms such as social media. Is your business set up to offer this?



The unboxing experience is considered by many to be essential for e-commerce customer satisfaction. Does your e-commerce packaging have the 'wow' factor?



Sustainability is a huge driver behind the packaging industry and consumer behaviour. How prepared are you for new sustainability regulations and changing consumer expectations?



## FIND OUT MORE

Smithers have produced a number of cutting-edge market reports that focus on various sectors within the packaging industry. The reports provide exclusive content, including market forecasts, major drivers and trends, critical analysis of technological developments, and more.

Just some of our industry-leading reports include; **The Future of E-Commerce Packaging to 2025**, **The Future of Packaging: Long-Term Strategic Forecasts to 2030**, **The Future of the Global Folding Carton Market to 2026**, and more.



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## HAVE A QUESTION? GET IN TOUCH

### Europe

Bill Allen | [ballen@smithers.com](mailto:ballen@smithers.com)  
+44 (0) 1372 802086

### Americas

Sean Walsh | [swalsh@smithers.com](mailto:swalsh@smithers.com)  
+1 330 762 7441 ext. 1134

### Asia

Ciaran Little | [clittle@smithers.com](mailto:clittle@smithers.com)  
+44 (0) 1372 802079



Website  
[www.smithers.com](http://www.smithers.com)



Twitter  
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