Since the onset of the COVID-19 pandemic, consumers across the globe have been heavily reliant on e-commerce to purchase everything from essential goods to holiday gifts. Despite the lockdowns, the global pandemic has also highlighted the urgent need for air cargo to accelerate its digital and sustainable transformation, develop collaborative business models and speak with a united voice to emerge from this unprecedented crisis more resilient.

Total online retail sales 2021

- **U.S.** 15.0%
- **U.K.** 28.3%
- **CHINA** 52.1%
- **SOUTH KOREA** 28.9%

**27.6% GROWTH WORLDWIDE**
Representing USD $4.280 trillion

Source: eMarketer.com
Cargo is now one-third of the airline business

Consumer behavior is likely to change for years to come, with the widespread of e-commerce. We have covered a decade in days when it comes to digital adoption. Air cargo represents 30-35% of airline revenue owing to the increase in demand and decrease in capacity, due to the drop in passenger travel. 18% of air cargo is e-commerce and is expected to rise to 22% by 2022.

This has pushed the industry towards transformation and quick action, with the introduction of ‘preighters’ and a move towards a more efficient, fast and automated airline industry.

Preighters: Agility to capacity constraints

In response to these cargo capacity constraints, a substantial number of airlines have been able to make use of the otherwise spare capacity of passenger aircraft, using them for cargo-only operations, also referred to as ‘preighters’.

Source: IATA Economics

Global airline industry cargo and passenger revenues, USD billion

- Share of operating revenues
- Cargo revenues
- Passenger revenues

% of total operating revenues


Scheduled Cargo Tonne-Kilometres by Type of Operation*

- North Pacific
- Europe + Asia
- North Atlantic

Source: IATA Economics

*Data refer to the period of April to December of the respective year
Logistics evolution one year on

COVID-19 has pushed the industry to focus on speed, digitization, automation, and efficiency to ensure demands can be delivered. According to an industry survey from Euromonitor International fielded in November, 72% of retail professionals said the crisis accelerated their digitalization plans by at least one or two years, with 21% saying it fast-forwarded plans by at least three years.

3 transformation areas

<table>
<thead>
<tr>
<th>DIGITAL</th>
<th>SPEED</th>
<th>AUTOMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital logistic platform, integrating partners for speed and efficiency</td>
<td>Fast delivery, creating a global network</td>
<td>Innovative technologies, including autonomous transportation</td>
</tr>
<tr>
<td>Data-driven digital ecosystem embedded in a logistics value chain</td>
<td>Partnership with airlines on specific routes</td>
<td>Internet of Things (IoT), data analytics and blockchain</td>
</tr>
<tr>
<td>ONE Record, an end-to-end digital logistics chain where data is easily and transparently exchanged</td>
<td>Smart order consolidation, multiple parcels into one shipment, brings greater delivery efficiency</td>
<td>Operation efficiency in the warehouse through Robotics and ‘eHubs’</td>
</tr>
</tbody>
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Sustainability is a key element in the three transformation areas listed above. It is transversal and is fundamental to operational efficiency.

SUSTAINABILITY

CO2 emissions in France due to digital technologies are almost as high as air transport, **15 and 17 million tons equivalent per year**, pre-COVID19.

A closer look at sustainability

COVID-19 has made people stay home, which has given rise to the e-commerce boom. China anticipates a jump from **67.1 billion** to **127.5 billion packages** being ordered in 2025.

**127.5 billion | 2025**

equivalent to a carbon footprint of

**116 million tons**

One of the major themes through all of this has been the need for sustainability. More than ever before, there is a need and desire for sustainable aviation fuel to reduce CO2 emissions. Using electric vehicles and encouraging others to take sustainability seriously, the industry is continuously preparing itself for a cleaner future.

Source: Euromonitor, Science & Vie, June 2021
Cainiao leads the green initiative

China will implement a national ban on plastic packaging in the logistic industry by 2025.

86 Million
Meters of plastic tape were saved due to the use of 190,000 zipper boxes during 11.11.2020

Enough to wrap around the world twice

China deals with about 10 million tons of packaging waste every year, around 23% of which will end up being burned or buried in landfills as they can’t be recycled or reused.

Cainiao installed more than 80,000 recycling centers around the country.

With a smart packaging algorithm, logistics provider Cainiao can assess items based on their category, volume, weight and area, and then match them to the most space-efficient form of packaging. Today, nearly 100% of the packaging shipped from Cainiao warehouses is biodegradable, and close to 50% of the paper packaging is tape-free.

430 billion sheets of paper saved in 6 years equivalent to 43 million trees

Consumer shift towards more sustainability

The e-commerce packaging market was valued at $27.04 billion in 2020 and is expected to reach $61.55 billion by 2026. COVID-19 has brought about a shift in consumer behavior to more sustainable packaging and delivery. This has also come about due to changes in government rules with single-use plastic.

81% of consumers would prefer carbon neutral delivery

61% of consumers would prefer sustainable packaging

Source: www.scmp.com; https://adeptpackaging.com/, IPC, deloitte