



WHO IS DHL?

Europe's largest postal service



540,000 employees & associates in 221 countries & territories

Partner for e-commerce and a pioneer in secure digital communications

Deutsche Post DHL Group



Leader in the forwarding business



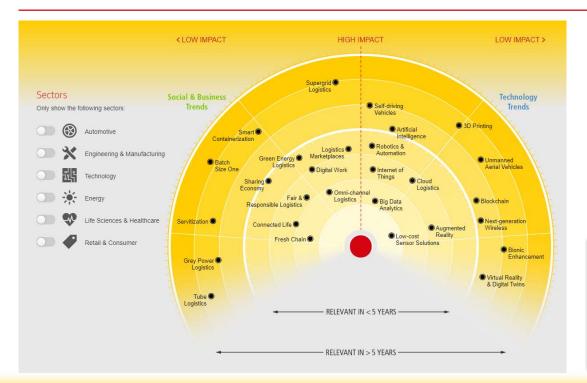


No. 1 in contract logistics





TREND RADAR







TREND RADAR – URBAN CONSUMER

www.dhl.com/content/dam/dhl/local/global/core/documents/pdf/g0-core-wp-shortening-the-last-mile-en.pdf

Over the past 10 years, 3 independent but highly impactful changes have occurred:

- Since 2008, urban populations ballooned from 3.4 billion to 4.2 billion—over half of today's global community.
- 2. Ten years ago, 1 in 100 individuals owned a smartphone. Today, 1 in 5 have one.
- 3. Internet retail sales quintupled between 2008 and 2018, from \$290.4 billion to \$1.6 trillion.

These 3 facts are emblematic of a fundamental shift, and the logistics and transport industry is currently striving to adapt regarding consumer expectations of the last mile.

Consumers are more urbanized, more connected, wealthier, and shop more than ever before.

WHO IS THE URBAN CONSUMER?

- Urban consumers today live in an increasingly populated, connected, and fast-paced environment.
- Urban consumers show unique loyalty to products that find a way to resonate with them via social media. They also show a preference for environmentally friendly transport alternatives.
- When shopping, online consumers are seeking a seamless experience where deliveries adapt to their schedule





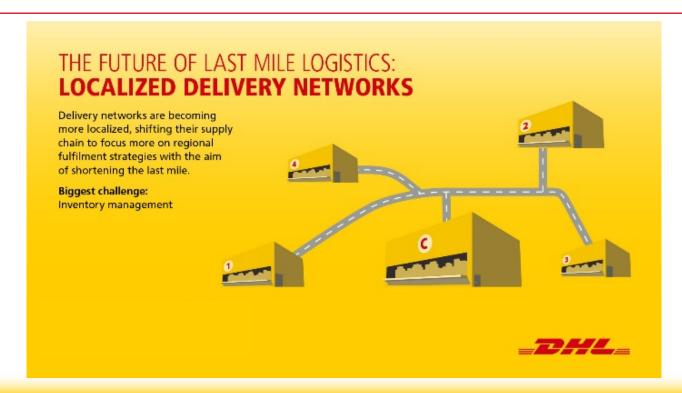


TREND RADAR - LAST MILE LOGISTICS

THE FUTURE OF LAST MILE LOGISTICS: **FLEXI DELIVERY SOLUTIONS** Customers increasingly expect to select when, where, and how parcels are delivered. Developing flexi-delivery solutions has transformed the way transport operators service the last mile. Biggest challenge: Same-day delivery requests may soon outstrip the capacity to deliver.



TREND RADAR – LAST MILE LOGISTICS





TREND RADAR - LAST MILE LOGISTICS

THE FUTURE OF LAST MILE LOGISTICS: **SEASONAL LOGISTICS** E-commerce has increasingly penetrated globally celebrated holidays such as DIWALI Christmas, regional holidays such as NEW YEAR Chinese New Year and Diwali, and CYBER commercial holidays, such as Black Friday, MONDAY Singles Day, and Cyber Monday, resulting COMMERCIAL HOLIDAYS in significant spikes in sales during these periods. Biggest challenge: Determining in how much additional resource is required for a specific shopping period. CHRISTMAS



TREND RADAR - LAST MILE LOGISTICS

THE FUTURE OF LAST MILE LOGISTICS:

EVOLVING TECHNOLOGIES

Localization, flexi-delivery solutions, and seasonal logistics solutions have all been facilitated by innovative technologies. Logistics players are increasingly adopting AI and the use of big data analytics to work towards more flexible models.

Biggest challenge:

Identifying and targeting your investment at the right technologies.







COVID-19 IMPACTS



IMPACTS OF COVID-19 ON THE BROADER LOGISTICS INDUSTRY:

- Online purchases continue to grow: Stay at home has meant more people online as traditional retailers closed - e-commerce up 77% in May
- *Emerging 'New economy' for Personal Protective Equipment:* Increased and urgent demand for essential products, demand volatility across portfolios and channels, and competition between countries, states, and regions for limited supplies.
- *Air:* The collapse in cargo capacity on passenger aircraft triggered a scramble for charter flights and freight capacity on already tight cargo aviation networks. This resulted in higher rates, reduced connections, prioritization of essential goods, and more time required for booking non-essential shipments.
- Road: Increased transit times due to new regulations, driver shortage resulting in higher rates and lack of standardization in border control.
- Sea: Higher rates due to increased demurrage, detention & surcharges.



COVID-19 RESPONSE



LOGISTICS SERVICE TO HELP GOVERNMENTS AND COMPANIES RESPOND:

- "Delivery Services" deemed essential by the Department of Homeland Security, recognized by local authorities
- FEMA Coordination DHL part of FEMA's National Business Emergency Operations Center (NBEOC) coordinating COVID-19 response
- Airbridge worked through air carriers to assist with PPE movements into the US
- Charter services for medical supplies, testing kits, thermometers, etc.
- Planning for next wave/event conversations with local authorities about supporting hospitals, senior centers, and vulnerable communities





ONWARD TRENDS POST COVID-19

- E-Commerce boom is accelerating with pandemic: Even as some brick and mortar retail returns, e-Commerce as a percent of total commerce is not likely to recede to pre-Covid-19 levels.
- Customer expectations evolving rapidly: Demands for type of products, timelines, and delivery
 preferences will need to be more flexible.
- Delivery becoming increasingly localized: As demands for faster deliveries continue, there is increased need for localized warehousing and delivery, and single cars trips are being replaced by smaller truck deliveries for multiple end users
- Industry disruption:
 - traditional players are innovating to the new environment
 - start-ups are
 - grocery/meal delivery ramped up new normal



WHAT THIS MEANS FOR MUNICIPALITIES

As congestion increases, infrastructure and systems will be key:

- 1) Electric Vehicles (EVs): EV tax credits and charging infrastructure are critical tools to incentivize and facilitate operators with large fleets
- 2) Autonomous Vehicles (AVs): Used extensively within warehouses, a larger point-to-point usage will require Federal and local regulations.
- 3) Infrastructure for Freight: Specific freight considerations benefit both B2C deliveries and urban based small sellers, which need to be resupplied more regularly.
- **4)** Smaller Curbside Accommodations: cargo bikes and e-bikes allowed to park on sidewalk and smaller "Pack station" lockers for people needing flexible delivery options.
- 5) Zoning: Local fulfillment and warehousing will need to be closer to population centers for faster delivery











