

#### Half a decade in a year: household freight after COVID-19

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### **E-commerce the receiver as decision maker**

Transport operator

### New roles in theiletail supply chair

Consumer

#### **Transport decisions**

- From # parcels to trips
- Allocation of receivers to vehicle
- Vehicle mode



#### **Logistics decisions**

- From #orders to #parcels
- Fulfillment center
- Delivery consolidation



### **E-commerce: fragmented landscape**





# **3 drivers of household freight**

- Consumer as freight actor
- Shifting responsibilities from the retailer to the transport operators
- Lack of density in the last mile



## **Structure**

#### Scan of the literature 2019-2022

TITLE-ABS-KEY (	(1)
(covid OR corona) AND	(2)
(e-commerce OR ecommerce OR "electronic commerce") AND	(3)
( ( delivery OR "last mile" ) OR ( "consumer behavior" OR "shopping behavior" OR "consumer behaviour" OR "shopping behaviour" ) OR "retailer" ) )	(4)

### • 4 key fields of research:

- Changing consumer behavior
- Retail adaptation strategies
- SCM evolutions
- Technological innovations







## **Retail adaptation strategies**





# **SCM evolutions**





# **Technological innovations**





# **Open questions: the consumer**

#### Accurate demand predictions are key

- How will destinations evolve?
- What motivates shoppers to go online?
- How does an order convert in a parcel?
- Is there a WTP for tailored services?

#### Regional economics is lagging behind

- Which retailers moved online, and why?
- What role for short (online) chains?

#### New and diversified consumer's expectations

- What consumer-related KPIs should LSPs consider?
- How to connect LSP and consumers?
- What technologies to increase delivery service?



# **Open questions: shifiting responsibilities**

### The Logistics-Retail company

- How do delivery services affect consumer satisfaction?
- Is there such a thing as a logistics brand?
- What are the effects of continous outsourcing?
- How to optimize retail and logistics data for the last mile?

### Safeguarding space for logistics

- How to provide space for e-commerce in the city?
- What is the future of physical touchpoints?



# **Open questions: lack of density**

### Geographical inequalities

- Is there still a bias towards urban areas?
- How to cope with inequalities in last mile services?
- What is the business case for parcel lockers?
- Impact of personalization
  - How does the emancipation of the consumer impact fragmentation?
  - How to accomdate automated services?
- Future retail trends
  - How to link local supply with efficient delivery?
  - Are retail platforms an opportunity or threat to the retail system?





#### cfr. BIPT 2018; CRB 2019, 2021

Source: The sustainability of the urban layer of e-commerce deliveries: the Belgian collection and delivery point networks Data: postaalpunt.be





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