A shift towards "retro" last-mile and urban logistics. How the pandemic has accelerated this trend.

26th May 2022 – I-NUF
Presenter: Prof. dr. Wouter Dewulf
Co-author: Prof. dr. Roel GEVAERS
Announcements

• **Urban Logistics Summerschool, University of Antwerp**
  - Antwerp, Belgium
  - 15 to 26th August 2022

• **Pharma Logistics Masterclass, by University of Antwerp, California State University, Khalifa University and Pharma.aero**
  - Abu Dhabi, UAE
  - 5 to 9th September 2022
Shoppen, mobiliteit en logistiek gaan back to the fifties

WOUTER DEWULF, ROEL GEVAERS

27 mei 2021 00:10

Voor winkelen, mobiliteit en logistiek maken niet de roaring twenties maar de jaren 50 hun opwachting. Verwacht u aan retro, eventueel met een modern IT-sausje.

Trendwatchers voorspellen een terugkeer van de roaring twenties na corona. Na een donkere crisisperiode volgt vaak een actieve periode waarin de bevolking volop profiteert van het licht na de duisternis. Voorbeelden zijn de jaren 1920 na de Eerste Wereldoorlog en de golden sixties na de moeilijke naoorlogse periode.

Zeker vanaf het einde van de jaren 50 en in de jaren 60...
Agenda

1. Research questions
2. Methodology
3. Cities during the ‘50ies
5. Cities nowadays
6. Conclusions and impact on policy
Research question

“Is urban logistics heading towards logistical principles of the ‘50ies? What are the similarities and the differences?”
Methodology

• Quantitative data
  • Data from last-mile companies, retailers and urban consolidation centres
  • Benelux (Belgium, Netherlands, Luxembourg)

• Qualitative data
  • Interviews with last-mile experts
Cities during the ‘50ies
How did cities look like during the 50’ies?

1. Limited number of cars and trucks
2. Main transport means: public transport, on foot, bicycles
3. Many small shops
4. Deliveries to the doorstep:
   - Soup
   - Milk
   - Drinks
   - Bread...
5. Small grocery stores on every corner of the street
6. Deliveries by tricycles
7. Every village: bakery and butcher
8. Postal catalogue deliveries with waiting time
How did cities look like during the 50’s?
How did cities look like during the 50’ies?

Last mile

SOURCE: https://www.transportfiets.net/2011/04/18/de-melkboer-1950/
How did cities look like during the 50’ies?

SOURCE: Delhaize & Otto Group, 2022
How did cities evolve
1960 - 2000
How did cities evolve?

1. More car use and truck use
2. Many public parkings
3. Number of small stores dropped and multinational large players came into cities
4. Traditional deliveries to the doorstep were reduced or even stopped
5. Small grocery stores were replaced by (mega-)supermarkets
6. Deliveries with tricycles were stopped
How did cities evolve?

Transport

SOURCE: City of Antwerp & Pinterest, 2022
How did cities evolve?

1960-2000

Last mile
How did cities evolve?

Commerce

SOURCE: Delhaize & Ikea, 2022
How did cities evolve?

Source: Department of Transport UK and London Transport, 2022
How did cities evolve?

SOURCE: Statbel, 2022
How did cities evolve?

Transport + Flow

Push

Pull

SOURCE: Volvo & Leansixsigma Groep, 2022
How did cities evolve?

First steps towards eCom
How did cities evolve?

First steps towards eCom

SOURCE: Peapod, 2022
Urban areas nowadays
2000 - 2020
Cities nowadays

Online share of retail expenditure in the United Kingdom (UK) from 2000 to 2013

Source: Verdict Retail © Statista 2019

Additional Information: United Kingdom: Verdict Retail, 2000 to 2011

eCom after DotCom Bubble
Cities nowadays

eCom after DotCom Bubble

Source: Euromonitor International, 2017; Note: Regions are North America, Latin America, Europe, Asia-Pacific and Australasia/New Zealand. Latin America includes Brazil and Mexico.
Cities nowadays

Sustainability

Share of journeys by car in London 1950-2050

SOURCE: David Metz, 2015
Cities nowadays

impacts
Cities nowadays

Supply chains

HUB & SPOKE

Last Mile & Urban distribution

SOURCE: Gevaers, 2013
Cities nowadays 2000 onwards

- **In-house van transport**
- **Outsourced to parcel delivery company**
- **In-house truck or outsourced to trucking company**

**Convenience & local**

- **Volume**
- **Parcels**
- **Not at home solutions**

**SOURCE:** Gevaers, 2022
Cities nowadays 2010-...

In-house van transport
Outsourced to parcel delivery company
In-house truck or outsourced to trucking company

Convenience & local
Crowd logistics
Food/Groceries
Convenience
Automation Unmanned

SOURCE: Gevaers, 2022
How did cities evolve?

Couriers/delivery industry

Amelia Hill
@ameliabhill
Thu 20 Jan 2022 08.00 GMT

Cargo without carbon: the rise and rise of e-bike deliveries

Demand for electric cargo bike couriers has boomed since first lockdown, bringing the hope of cleaner, quieter, safer streets.

Would you like your groceries delivered without a side order of traffic congestion? Boilers, books and beauty products dropped off without a roar of diesel? Or even take a taxi ride without the carbon emissions?

E-cargo bikes can deliver 60% faster than vans and save about 90% in carbon emissions.

Photograph: Xinhua/Rex/Shutterstock

SOURCE: The Guardian, 2022
How did cities evolve?
How did cities evolve?

SOURCES: Delhaize, Deliveroo, Koopeenkoe.nl, 2022
Similarities
How did cities look like during the 50’ies?

Transport

How will the Ultra Low Emission Zone or Low Emission Zone affect you?

Sources: City of Antwerp, TfL & the Guardian, 2022
How did cities look like during the 50’s?

Sources: De melkboer.nl & City of Antwerp, Deliveroo & Delhaize, 2022
How did cities look like during the 50’ies?

Sources: De melkboer.nl, Deliveroo, Otto Group, 2022
Conclusions and policy impact
Conclusions

- After years of unlimited growth and focus on hub-and-spoke efficiency gains, a new environment is created
- Since eCommerce growth and focus on sustainability
  - Restriction of ‘classic’ transport in cities
  - Increased investments in public transport
  - From reduced at-home deliveries to an explosion of at-home deliveries
  - Focus on the smaller shops and more local ‘authentic’ shopping
- Many trends are RETRO-LOGISTICS
- Cities focus increasingly on urban planning and ‘liveability’ of the cities while in the ‘50ies they were caring to facilitate the commerce
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