

THE LITERATURE AND LINKS FOR SULPITER OPEN WEBINAR

Webinar 1 - LOGISTICS TRENDS
PRODUCTION AND CONSUMPTION
SPATIAL ORGANIZATION

Version 1 05 2017







CONSUMPTION AND PRODUCTION

- 1. What is Consumption in Economics. Available at: http://study.com/academy/lesson/what-is-consumption-in-economics-definition-theory.html
- 2. Population and Consumption. Available at: http://www.econation.co.nz/population-and-consumption/
- 3. Production (economics). Available at: https://en.wikipedia.org/wiki/Production (economics)
- 4. Patier, David, Chalon, Deslandres (2014): A New Concept for Urban Logistics Delivery Area Booking, http://www.sciencedirect.com/science/article/pii/S1877042814014979

1.1 PRODUCTION IS BEING BROUGHT CLOSER TO THE END USER

- 1. Adidas Expands Production Capabilities With Speedfactory In Germany. Available at: http://www.adidas-group.com/en/media/news-archive/press-releases/2016/adidas-expands-production-capabilities-speedfactory-germany/
- 2. 8 global logistics trends. Available at: http://blog.greencarrier.com/8-global-logistics-trends/

Example

Lenovo announces to move manufacture enterprise and data center products in Europe

http://news.lenovo.com/news-releases/lenovo-announces-move-to-manufacture-enterprise-and-data-center-products-in-europe.htm

1.2 REGIONAL FOOD SUPPLY

1. New Markets, New Opportunities: Strengthening Local Food Systems and Organic Agriculture. Available at: https://medium.com/usda-results/new-markets-new-opportunities-strengthening-local-food-systems-and-organic-agriculture-17b529c5ea90#.a3z0g9duj

Example

Gruppi di acquisto solidale (GAS) Italian networks initiated by consumers that link up to farmers to organize alternative food provision.

https://it.wikipedia.org/wiki/Gruppo di acquisto solidale

AMAP (French Associations pour le maintien d'une agriculture paysanne) support peasant and organic agriculture through direct links between farmers and consumers

http://www.reseau-amap.org/Les

1.3 3D PRINTING-> DIGITALIZATION OF LOGISTICS

1. DHL – logistics trend radar 2016. Available at:

http://www.dhl.com/content/dam/downloads/g0/about_us/logistics_insights/dhl_logistics_trend_radar_2016.pdf

Example

A restaurant in Spain is using a 3D printer to design intricate structures made completely out of food from mashed potatoes to chocolate.

http://www.bbc.com/news/business-35631265

Dutch students at the Delft University of Technology have created a 3D printed steel bike, which can be produced on demand.

http://www.treehugger.com/bikes/3d-printed-steel-bike-university-delft-mx3d.html





1.4 BATCH SIZE ONE PRODUCTION

1. DHL – logistics trend radar 2016. Available at:

http://www.dhl.com/content/dam/downloads/g0/about_us/logistics_insights/dhl_logistics_trend_radar_2016.pdf

Example

Adidas is developing a worldwide network of high-tech low-distance manufacturing facilities or 'speed factories'.

http://www.recode.net/2016/9/27/13065822/adidas-shoe-robots-manufacturing-factory-jobs

1.5 E-COMMERCE GROWTH

1. SCL Report series, City logistics, Georgia supply chain and lech logistics institute, February 2016. Available at: https://www.scl.gatech.edu/sites/default/files/downloads/scl-16-01.pdf

Example

Walmart (World's Largest Retailer) Is Reigniting Its E-Commerce Growth

http://fortune.com/2016/08/18/walmart-ecommerce-2/

1.6 THE SHARING ECONOMY

1. DHL. Logistics Trend Radar, 2014. Available at:

http://www.dpdhl.com/en/media relations/press releases/2014/dhl logistics trend radar 2014. html

1.7 CIRCULAR ECONOMY

 UPS. The Growth of the Circular Economy. Available at: https://sustainability.ups.com/media/UPS_GreenBiz%20Whitepaper.pdf

Example

Cirkle found opportunities in the reverse cycle

https://www.ellenmacarthurfoundation.org/case-studies/finding-opportunities-in-the-reverse-cycle

1.8 DEMOGRAPHIC TRENDS -> GREY POWER LOGISTICS

- 1. Eurostat. People in the EU population projections. Data extracted in June 2015.
- DHL. Logistics Trend Radar.2016. Available at: http://www.dhl.com/content/dam/downloads/g0/about_us/logistics_insights/dhl_logistics_trend_radar_2016.pdf

Example

Ecommerce for the Elderly - The idea that elderly people aren't using the internet is now extremely outdated.

https://ecommerceguide.com/guides/older-shopper/





2 SPATIAL ORGANIZATION

2.1 LOGISTICS SPRAWL

- dr. Jean-Paul Rodrigue: The Geography Of Transport Systems Transport and Spatial Organization, https://people.hofstra.edu/geotrans/eng/ch2en/conc2en/ch2c3en.html
- 2. Aljohani, K., Thompson, R.G., Impacts of logistics sprawl on the urban environment and logistics: Taxonomy and review of literature, Journal of Transport Geography (2016), http://dx.doi.org/10.1016/j.jtrangeo.2016.08.009
- 3. EEA 2015, Load factors for freight transport. Available at: http://www.eea.europa.eu/data-and-maps/indicators/load-factors-for-freight-transport/load-factors-for-freight-transport-1
- 4. Laetitia Dablanc, Dina Rakotonarivo (2010): The impacts of logistics sprawl: How does the location of parcel
- 5. OECD delimitation of functional urban areas. Available at: http://www.formez.eu/files/Guatemala-management%20of%20metro%20areas-parte%202.pdf
- 6. Patier, David, Chalon, Deslandres (2014): A New Concept for Urban Logistics Delivery Area Booking, http://www.sciencedirect.com/science/article/pii/S1877042814014979

Example

Logistics Sprawl in the Region Zurich

www.strc.ch/conferences/2016/Todesco EtAl.pdf

Commercial Goods Transport, Paris, France - case study

http://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case .Study .Paris .France.pdf

2.2 SPATIAL CENTRALISATION OF STOCKHOLDING

- 1. Taniguchi, Thompson, Yamada (2015): New opportunities and challenges for city logistics http://www.sciencedirect.com/science/article/pii/S2352146516000053
- 2. J. Allen, M. Browne, T. Cherrett (2012): Investigating relationships between road freight transport, facility location, logistics management and urban form

 http://www.scioncodirect.com/scionco/article/pii/S0066603313001615
 - http://www.sciencedirect.com/science/article/pii/S0966692312001615
- 3. Laetitia Dablanc, Dina Rakotonarivo (2010): The impacts of logistics sprawl: How does the location of parcel transport terminals affect the energy efficiency of goods' movements in Paris and what can we do about it? http://www.sciencedirect.com/science/article/pii/S1877042810010748
- 4. Jean-Paul Rodrigue: The Geography Of Transport Systems Transport and Spatial Organization, https://people.hofstra.edu/geotrans/eng/ch2en/conc2en/ch2c3en.html

Example

Investigating relationships between road freight transport, facility location, logistics management and urban form

https://www.researchgate.net/publication/257425576 Investigating relationships between road freight transport facility_location_logistics_management_and_urban_form

Top Logistics Locations in Europe

http://www.prologis.com/docs/160215 Top%20logistics%20locations%20in%20Europe ENG.pdf





2.3 SPATIAL PLANNING COUPLED WITH COHERENT SPATIAL AND TRANSPORT POLICY

 Antoniet Smits, Ge Huismans, Joost Hagens, Joep de Roo: Functional Urban Areas and their contribution to economic growth www.sdtr.ro/upload/bancamondiala/Functional%20Urban%20Areas.pdf

Example

Logistics and spatial planning - Regional Development Outcomes, Spatial Planning Needs

http://www.th-

wildau.de/fileadmin/dokumente/interim/dokumente/WS3 Wildau/interim Wildau 13.09.07 4 FUBerlin.p df

2.4 URBAN DISTRIBUTION/CONSOLIDATION CENTRES

- Van Audenhove, De Jongh, Durance (2015): Urban Logistics How to unlock value from last mile delivery for cities, transporters and retailers www.adlittle.com/downloads/tx_adlreports/ADL_Urban_Logistics.pdf
- 2. Consolidation Centres, CSB 2016. Abailable at: http://csblogistics.com/en/services-support/supply-control/consolidation-centres/
- 3. Dablanc et al. (2016): CITYLAB Observatory of Strategic Developments Impacting Urban Logistics www.citylab-project.eu/deliverables/D2 1.pdf
- 4. Morales Myla, Logistics Industry Consolidation Continues Into 2016. Available at: http://www.logisticsexecutive.com/logistics-industry-consolidation-continues-into-2016/

Example

Beaugrenelle (Paris 15ème) Urban Logistics Centre

http://www.bestfact.net/beaugrenelle-paris-15eme-urban-logistics-centre/

Micro depo Nuremberg

https://www.dpd.com/home/news/latest_news/pilot_project_in_nuremberg_can_micro_depots_revolutionis e_the_last_mile

Micro distribution platform Valencia

http://www.smile-urbanlogistics.eu/projects/smile-pilots/valencia-pilot-electric-mobilty-and-urban-consolidation-centers-desciption

2.5 CONSTRUCTION CONSOLIDATION CENTRES

1. Consolidation Centres, CSB 2016. Abailable at: http://csblogistics.com/en/services-support/supply-control/consolidation-centres/

Example

London Construction Consolidation Centres

 $\underline{https://tfl.gov.uk/info-for/deliveries-in-london/delivering-efficiently/consolidating-deliveries\#on-this-page-\underline{2}}$





2.6 MULTI-STORY LOGISTICS FACILITIES IN DENSE AREAS

1. Dablanc et al. (2016): CITYLAB Observatory of Strategic Developments Impacting Urban Logistics www.citylab-project.eu/deliverables/D2_1.pdf

Example

Prologis multi-story logistics facility in Tokyo:

http://www.prologis.com/en/prologis-grows-in-tokyo.html

Chapelle International in Paris:

http://www.chapelleinternational.sncf.com/

Amazon distribution centre in Manhattan, New York:

https://www.cnet.com/pictures/amazon-prime-now-a-peek-inside-the-manhattan-warehouse/

2.7 PICK-UP POINT NETWORKS

1. Savelsbergh, Van Woensel (2016): City Logistics: Challenges and Opportunities https://www.scl.gatech.edu/sites/default/files/downloads/scl-16-01.pdf

Example

InPost

https://inpost.co.uk/en/about-us

Amazon Lockers

https://www.amazon.co.uk/Click-and-Collect-with-Amazon-Lockers/b?ie=UTF8&node=2594544031

DHL Packstation

http://www.eltis.org/discover/case-studies/street-package-collection-and-delivery-stations-germany
https://www.dhl.de/en/paket/pakete-empfangen/packstation.html

2.8 INTEGRATION OF PUBLIC AND FREIGHT TRANSPORTATION NETWORKS

Example

Cleaner cargo distribution in Dresden:

 $\underline{http://www.eltis.org/discover/case-studies/cleaner-cargo-distribution-dresden-germany}$

Delivering goods by cargo tram in Amsterdam - CityCargo pilot:

http://www.eltis.org/discover/case-studies/delivering-goods-cargo-tram-amsterdam-netherlands





2.9 MANAGEMENT OF LOGISTICS TRANSHIPMENT FACILITIES

 McLeod, Cherrett: Loading Bay Booking and Control for Urban Freight http://www.greenlogistics.org/SiteResources/15thLRN/McLeod%20and%20Cherrett%20Loading%2 0bay%20paper.pdf

Example

Traffic lane/drop-off space reservation.

Creation of dedicated loading/unloading areas and traffic lanes for freight transport. Case example of Barcelona: multi-use lanes used as parking spaces (night time), unloading spaces (between peak hours) and as priority bus lane (in peak hours).

http://civitas.eu/content/multi-use-lanes-and-night-time-delivery

Loading/Unloading area Management (McLeod&Cherrett)

Implementation of managed, bookable loading bay systems, whereby advance bookings can be made by the users of the system and enforcement and control measures are used to ensure effective operation. Such systems offer guaranteed loading and unloading places, and discourage undesirable driver behaviour associated with unloading such as double parking, parking on the pavement and causing obstructions to pedestrians and other road users.

Several examples of loading/unloading area management:

https://coe-sufs.org/wordpress/ncfrp33/psi/parking area management/

Urban Transhipment Areas

Designated areas within urban centres where freight is transhipped from one vehicle/mode to another (usually from larger vehicles to smaller vehicles) for delivery without consolidation in between.

More measure can be found at VREF Centre of Excellence for Sustainable Urban Freight Systems

https://coe-sufs.org/wordpress/ncfrp33/psi/parking_area_management/

2.10 DIRECT INJECTION

 Van Audenhove, De Jongh, Durance (2015): Urban Logistics - How to unlock value from last mile delivery for cities, transporters and retailers www.adlittle.com/downloads/tx_adlreports/ADL_Urban_Logistics.pdf

Example

Paris case studies:

- delivering via rail through central injection point Monoprix case
 http://www.eltis.org/discover/case-studies/sustainable-deliveries-goods-paris-france
- delivering via waterway through river container terminal Franprix case <u>https://www.theguardian.com/cities/2016/mar/01/paris-french-retailer-franpix-delivers-goods-by-boat-river-seine-transport-water-future-urban-logistics</u>