

THE LITERATURE AND LINKS FOR SULPITER OPEN WEBINAR

Webinar 2 - LOGISTICS TRENDS SUPPLY CHAIN MANAGEMENT & DISTRIBUTION TECHNOLOGIES & EQUIPMENT

Version 1 05 2017







SUPPLY CHAIN MANAGEMENT & DISTRIBUTION

- 1. Supply Chain Management professionals (2016). http://cscmp.org http://cscmp.org
- 2. Supply Chain Management: https://en.wikipedia.org/wiki/Supply_chain#Supply_chain_management

3.1. LOGISTICS INDUSTRY CONSOLIDATION

1. Morales Myla, Logistics Industry Consolidation Continues Into 2016. Available at: http://www.logisticsexecutive.com/logistics-industry-consolidation-continues-into-2016/

Example

Consolidation in the 3PL industry: Why is it happening, and what does it mean?

http://www.supplychainquarterly.com/topics/Logistics/201501023-consolidation-in-the-3pl-industry-whyis-it-happening-and-what-does-it-mean/

3.2. VERTICAL AND HORIZONTAL COLLABORATION

 Keskin Burcu, 7 Supply Chain Trends to Watch (2015). Available at: <u>http://www.supplychainopz.com/2015/03/supply-chain-trends.html</u>

Example

Kimberly-Clark helped to pioneer the concept of collaborative supply chains. The benefits have been so great that the practice is now sweeping through Europe.

http://www.supplychainquarterly.com/topics/Logistics/scq201102kimberly/

3.3. GREEN SUPPLY CHAIN PRINCIPLES

Example

Top 10 green supply chains

http://www.supplychaindigital.com/top10/2522/Top-10-green-supply-chains

3.4. OMNI-CHANEL LOGISTICS

Example

A DHL perspective on implications and use cases of Omni-channel logistics for the logistics industry

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

3.5. FREIGHT QUALITY PARTNERSHIPS - FQP

1. Burns Rachel et al., A guide on how to set up and run Freight Quality Partnerships <u>http://webarchive.nationalarchives.gov.uk/+/http:/www.dft.gov.uk/pgr/freight/sustainable/coll aguideonho</u> <u>wtosetupandrunfre/pdfaguideonhowtosetupand3243.pdf</u>

Example

Several examples of successful implementation of FQP

http://www.trb.org/Main/Blurbs/172487.aspx





3.6. OF PEAK HOURS DELIVERIES

1. CoE-SUFS, Voluntary Off-Hour Deliveries Program, 2016. <u>https://coe-sufs.org/wordpress/ohd/</u>

Example

Potential for Off-Peak Freight Deliveries To Commercial Areas

https://www.dot.ny.gov/divisions/engineering/technical-services/trans-r-and-d-repository/C-02-15%20OPD%20Final%20Implementation%20Plan12-20-07.pdf

Quiet Deliveries Good Practice Guidance – Key Principles and Processes for Freight Operators

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/306851/freightoperators.pdf

The New York City Off-hour Delivery Project: Lessons for City Logistics

http://www.sciencedirect.com/science/article/pii/S187704281401492X

3.7. UNBUNDLING OF LOGISTICS SERVICES - ON DEMAND

Example

Uber Rush - on demand delivery

http://lyftubernewsletter.com/uber-rush/

3.8. DELIVERY TO THE TRUNK OF A CAR

Example

Volvo's Solution for the Package Theft Epidemic: Your Car's Trunk

http://fortune.com/2016/05/10/volvo-urb-it-delivery/

Daimler begins testing Smart car trunk delivery service with DHL

https://techcrunch.com/2016/09/02/daimler-begins-testing-smart-car-trunk-delivery-service-with-dhl/





4. TECHNOLOGIES & EQUIPMENT

- 1. Robinson Adam, Logistics Technology Trends, 2016. <u>http://cerasis.com/2016/01/14/logistics-technology-2016/</u>
- von Rosenstiel, D. P., Heuermann, D. F., & Hüsig, S. (2015). Why has the introduction of natural gas vehicles failed in Germany?—Lessons on the role of market failure in markets for alternative fuel vehicles. Energy Policy, 78, 91–101. <u>http://doi.org/10.1016/j.enpol.2014.12.022</u>
- 3. EC. 2015. Smart and sustainable logistics for a competitive Europe. Bulgaria
- 4. Parent, M.2007. Advanced Urban Transport: Automation is on the way. IEEE Computer Society. http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4136851
- 5. Winston, C..2014. Improving Urban Mobility Through Technological Advance of Motor Vehicles. Available at: http://www.newcitiesfoundation.org/improving-urban-mobility-technological-advance-motor-vehicles/

4.1. CLEAN VEHICLES

- 1. Juan et al., Electric Vehicles in Logistics and Transportation: A Survey on Emerging Environmental, Strategic, and Operational Challenge (2016). <u>http://www.mdpi.com/1996-1073/9/2/86/pdf</u>
- 2. Yamada, T., Thompson, R. G., & Yamada, T. (2016). New Opportunities and Challenges for City Logistics. Transportation Research Procedia, 12, 5–13. <u>http://doi.org/10.1016/j.trpro.2016.02.004</u>.

Example

Electric Fleets in Urban Logistics - Improving urban freight efficiency in small and medium-sized historic towns

https://www.bmvit.gv.at/verkehr/elektromobilitaet/downloads/emobil_urbanlogistics_broshure.pdf

Cyclelogistics electric cargo bikes

http://www.civitas.eu/sites/default/files/1212 epomm enews cyclelogistics.pdf

4.2. ICT AND ITS SYSTEMS

1. Essay UK - <u>http://www.essay.uk.com/free-essays/management/challenges-faced-the-city-logistics-globally.php</u>

Example

Recently on-demand brokerage platforms which easily match demand and supply of logistics services in cities were developed (eg. Uber Rush, Shyp, Shutl, BringBee ect..) (DHL, 2016).

http://www.dhl.com/content/dam/downloads/g0/about_us/logistics_insights/dhl_logistics_trend_radar_201 6.pdf

4.3. INTERNET OF THINGS

- 1. EC 2016 <u>https://ec.europa.eu/digital-single-market/en/internet-things</u>
- 2. CISCO. 2013. "Embracing the Internet of Everything to Capture Your Share of \$14.4 Trillion," Cisco white paper, February 2013. <u>http://www.cisco.com/web/about/ac79/docs/innov/IoE_Economy.pdf</u>
- 3. Yamada, T., Thompson, R. G., & Yamada, T. (2016). New Opportunities and Challenges for City Logistics. Transportation Research Procedia, 12, 5–13. <u>http://doi.org/10.1016/j.trpro.2016.02.004</u>

Example

TomTom, a well-known GPS manufacturer, started a Congestion Index in 2007 where they captured anonymous travel time information, particularly in urban areas. In the last few years, connected cars or smart cars have surged in popularity thanks to the IoT.

https://miovision.com/blog/the-internet-of-things-and-transportation/



4.4. BIG DATA AND DATA MINING TECHNIQUES

- 1. Yamada, T., Thompson, R. G., & Yamada, T. (2016). New Opportunities and Challenges for City Logistics. Transportation Research Procedia, 12, 5–13. <u>http://doi.org/10.1016/j.trpro.2016.02.004</u>.
- Lin, C. Choy, K-L., Pang, G. and Ng, T. W. (2013). A data mining and optimization –based real-time mobile intelligent routing system for city logistics. IEEE 8th International Conference on Industrial and Information Systems, 18-20. Available at: <u>http://ieeexplore.ieee.org/document/6731973/</u>
- 3. Teo, J.S.E., Taniguchi, E., Qureshi, A.G., Mai, V.P. and Uchiyama, N. (2015). Towards a safer and healthier urbanization by improving land use footprint of last-mile freight delivery, 93rd Annual Meeting of Transportation Research Board.
- 4. Xu, F. Q., Ding, N., Lu, H.F. and Liu, J.G. (2014). The data study and analysing of city logistics system based on cloud platform, Journal of Chemical and Pharmaceutical research, 6(8), 449-455.

Example

Big data universe beginning to explode

http://www.csc.com/insights/flxwd/78931-big data universe beginning to explode

4.5. PHYSICAL INTERNET

1. Crainic, T. G., & Montreuil, B. (2016). Physical Internet Enabled Hyperconnected City Logistics. Transportation Research Procedia, 12, 383–398. <u>http://doi.org/10.1016/j.trpro.2016.02.074</u>

Example

ITS for City Logistics and the Physical Internet

https://www.itscanada.ca/files/Reports/4%20MPF%20CVO%20CityLogistics-PhInternet-ITS_Canada2012.pdf

EU projects MODULUSCHA

http://www.modulushca.eu/

4.6. AUTOMATED SYSTEMS & AUTONOMUS VEHICLES

1. ERTRAC.2015a. Automated driving roadmap. 3rd draft for public consultation. Available at: http://erticonetwork.com/new-roadmaps-published-on-automated-driving-and-urban-freight/

Example

Drone Delivery is About to Disrupt the Trucking Industry

https://www.trucks.com/2016/06/21/drone-delivery-reshape-trucking/

Transport Drones & Autonomous Vehicles: The Transportation Mode Dance Card is Getting Full

http://cerasis.com/2016/04/07/transport-drones/

4.7. TRANSPORT/LOGISTICS OPTIMIZATION (TOOLS)

1. CoE-SUFS, Dynamic Routing, 2016. Available at: <u>https://coe-sufs.org/wordpress/dr/</u>

Example

5 Benefits of TMS (Transportation Management System)

http://cerasis.com/2013/06/13/benefits-of-tms/





4.8. TUBE UNDERGROUND AND LONG DISTANCE SYSTEMS

Example

Mole solution

http://www.molesolutions.co.uk/

4.9. OTHERS

- 1. Andrea Meyer and Dana Meyer, City Logistics Research: A Transatlantic Perspective, Conference Proceedings, Summary of the First EU-U.S. Transportation Research Symposium, Washington, D.C., May 2013;
- 2. European Commission, COM (2016) 501 final, A European Strategy for Low-Emission Mobility, Brussels, 20/7/2016;
- 3. EPSC Strategic Notes, Issue 17, Towards Low-Emission Mobility, Driving the Modernisation of the EU Economy, 20/07/2016;
- 4. Fraunhofer-Institut für Materialfluss und Logistik, Daimler Ag, Db Mobility Logistics Ag, Visions of the Future: Transportation and Logistics 2030, February 2014;
- 5. Martin Savelsbergh and Tom Van Woensel, City Logistics: Challenges and Opportunities, SCL Report Series, February 2016;
- 6. DHL Trend Research, Logistics Trend Radar Delivering insight today. Creating value tomorrow!, 2016;
- 7. Deutsche Post AG, Delivering Tomorrow Logistics 2050, A Scenario Study, February 2012
- 8. MDS Transmodal Limited, Centro di Ricerca per il Trasporto e la Logistica, Study on Urban Freight Transport, European Commission, DG MOVE, April 2012
- 9. Cambridge Systematics Inc., Comsis Corporation, University Of Wisconsin-Milwaukee, Quick Response Freight Manual, Federal Highway Administration, September 1996
- 10. Regional Plan Association (RPA), Volvo Research and Educational Foundations (VREF), Why Goods Movement Matters, Strategies for Moving Goods in Metropolitan Areas, June 2016;
- 11. Teodor Gabriel Crainic, Measuring Efficiency & Inefficiency in Urban Freight Transport, City Logistics Research: A Trans-Atlantic Perspective, Washington, D.C., 2013