

Articles to be Reviewed

IE-517 – Closed-Loop Supply Chain Management

Emek Irmak	Furkan Ertürk
2444693	2740215

The following journal articles have been selected for the literature review on “Design of Logistics Networks in Closed-Loop Supply Chains”.

1. **Fleischmann, M., Bloemhof-Ruwaard, J. M., Dekker, R., Van der Laan, E., Van Nunen, J. A., & Van Wassenhove, L. N. (1997). Quantitative models for reverse logistics: A review. *European journal of operational research*, 103(1), 1-17.**

Reviews quantitative models for planning and improving reverse logistics, offering useful approaches for designing networks that handle returns and recovery activities.

2. **Srivastava, S. K. (2008). Network design for reverse logistics. *Omega*, 36(4), 535-548.**

Discusses models and strategies for designing reverse logistics networks, helping to structure systems that efficiently manage the flow of returned products.

3. **Lieckens, K., & Vandaele, N. (2007). Reverse logistics network design with stochastic lead times. *Computers & Operations Research*, 34(2), 395-416.**

Models a reverse logistics network under uncertainty, particularly focusing on stochastic lead times for returned products.

4. **Melo, M. T., Nickel, S., & Saldanha-Da-Gama, F. (2009). Facility location and supply chain management—A review. *European journal of operational research*, 196(2), 401-412.**

Surveys facility location models in supply chain management, highlighting how network design must evolve when incorporating reverse logistics.

5. **Salema, M. I. G., Barbosa-Povoa, A. P., & Novais, A. Q. (2007). An optimization model for the design of a capacitated multi-product reverse logistics network with uncertainty. *European journal of operational research*, 179(3), 1063-1077.**

The authors propose a mixed-integer linear programming model to design a reverse logistics network with multiple products and uncertain parameters.

6. **Jayaraman, V., Patterson, R. A., & Rolland, E. (2003). The design of reverse distribution networks: models and solution procedures. European journal of operational research, 150(1), 128-149.**

This paper develops models and heuristic algorithms for designing efficient reverse logistics networks, focusing on remanufacturing and disposal.

7. **Ferri, G. L., Chaves, G. D. L. D., & Ribeiro, G. M. (2015). Reverse logistics network for municipal solid waste management: The inclusion of waste pickers as a Brazilian legal requirement. Waste Management, 40, 173-191.**

A practical case study illustrating how reverse logistics networks are implemented for municipal waste collection and recycling in Brazil.

8. **Govindan, K., Soleimani, H., & Kannan, D. (2015). Reverse logistics and closed-loop supply chain: A comprehensive review to explore the future. European journal of operational research, 240(3), 603-626.**

This recent and influential paper provides a detailed review of CLSC research trends, gaps, and future research directions, especially in network design and sustainability.

9. TODO

10. TODO

Classification

The selected papers can be classified broadly into the following categories:

- **Review Papers:** TODO
- **Model Development Papers:** TODO
- **Case Study Applications:** TODO
- **Focused Topic Studies (Reverse Logistics Network Design):** TODO