

Routing strategy in a distribution network when the driver learning effect is considered - DTU Orbit (08/11/2017)

Routing strategy in a distribution network when the driver learning effect is considered

This paper faces one critical short term decision: the construction of routes for daily goods' deliveries in a distribution network. It investigates the possibility of applying a fixed routing strategy instead of a daily routing optimisation strategy, analysing the benefits derived from the driver's familiarity with his/her surroundings, customers' habits and set-ups. The final aim is to provide an effective and flexible decision-making tool to identify the best routing strategy, considering the level of learning invested by each driver. It is assumed that learning effect impacts on the service time, i.e., on the time spent in service operations once arrived at the customer's site. Results demonstrate that fixed routes strategy can often be better than the daily optimised strategy and strongly depends on the parameters investigated in this work. Two case applications are provided to help the reader's comprehension and demonstrate the methodology's potential and its practical implications.

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Authors: Battini, D. (Ekstern), Faccio, M. (Ekstern), Persona, A. (Ekstern), Røpke, S. (Intern), Zanin, G. (Ekstern)

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