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Transport reduction by crowdsourced deliveries - a library case in Finland

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Abstract:

The paper presents a case study of applying crowdsourcing to library deliveries. The trial was conducted in the city of Jyväskylä in Finland as part of the Resource Wise Communities program funded by The Finnish Innovation Fund Sitra. The city has a population of 120 000 inhabitants and is facing the shut-down of half of the public libraries in order to adapt its economy to lowered revenues and compulsory cost savings. The assumption was that the level of service for customers not able to settle for e-books would be lowered and/or customers would have to travel longer distances. However, a research pilot was carried out where –instead of lowering the level of service in the area– books and other library media were delivered to customers' homes by utilizing a novel crowdsourced delivery service called PiggyBaggy.

Crowdsourced delivery means that citizens deliver goods to each other along their way. Ideally, the deliveries would be made with minimal detour, along the way, thus maximizing the reduction in natural resource use and related environmental impacts from the transport. However, the transport fuel forms only one part of the overall footprint and in practice rebound effects such as drivers travelling longer distances motivated by monetary compensation, can reduce the targeted environmental improvement.

The objective of our study was to investigate whether an existing consumer service, in this case the library public service, can adopt crowdsourced deliveries quickly from scratch, and to whether consumers participate in the deliveries in a way that has real sustainability benefits.

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