
Digital market places for urban freight: is digital city logistics a disruption to the urban freight routine?

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Résumé

This paper contributes to a new body of research that investigates the potential of digital market places to disrupt transport and mobility services. We are specifically looking at the urban freight sector, where new app-based services have been rapidly emerging in the recent years.

The urban mobility environment has been transformed by digital app based peer-to-peer transport services like Uber and Blablacar, which now represent reliable and cheap alternatives to traditional passenger transport services. Disruptive innovations of this type are expected to reshape the urban freight transport sector as well, potentially improving the rather under optimized segment of last mile deliveries. These new services mix large companies (UberRush, Amazon Prime Now) and local start-ups (in France, Cocolis for example). Many of these new services are also identified as "instant deliveries," as they correspond to a growing market segment where consumers or companies buying on line are expected to be delivered within less than one or two hours. By increasing the supply of options for deliveries of parcels and other products, and providing matching services, digital market places can contribute to define new products and services. They are also expected to generate an array of impacts, some of them negative, while doing so.

Based on a collection of data from the literature and companies' websites, company interviews as well as expert interviews in order to clarify definitions and terminology, the paper makes the following three key contributions.

1) We provide an up to date typology of digital apps for deliveries, covering European cities as well as some examples from the US and Asia. This typology includes: business models; legal and social features; spatial and demographic data related to the target clients.

2) We explore in more details the following issues, raising questions for the future of these services:

- Economic: what is the current volume and share in total delivery market (as a % of the total number of deliveries)? What is the potential of these services to grow?

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- Legal and social: who are the new delivery providers? How do they compare to regular urban freight operators? Are they in line with current European freight transport laws?

- Spatial/demographic: what is the market range of these services? What are the socio-economic characteristics of the target clients? In which type of cities?

3) Finally we identify transversal issues related to the typology, such as perception of these new services from the society; lack of awareness; and uncompleted regulations as major challenges for the emerging new trends. We suggest future research, to harness the potential of digital market places for a more sustainable urban freight transport.

The findings of the paper are of interest to policy makers and regulators, traffic engineers and urban planners, urban logistic operators, research institutions and citizens as potential customers.

Mots-Clés: urban freight, digital transport and mobility services, parcel deliveries, city logistics, instant deliveries