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On-demand instant deliveries and impacts on urban planning

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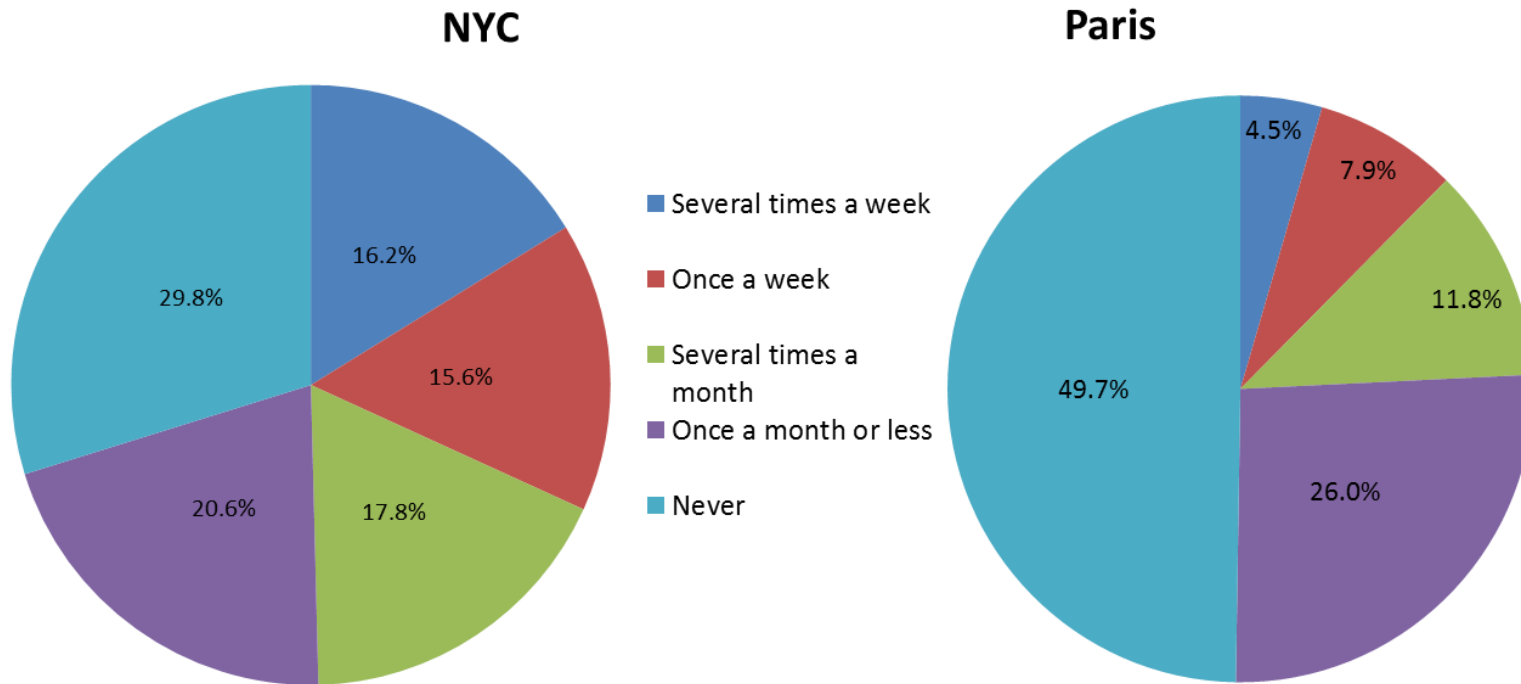
'Instant deliveries'

- “Instant delivery services provide on-demand delivery within **two hours** by connecting shippers, couriers and consumers via a **digital platform**” (Dablanc, Morganti, Arvidsson, Browne, Woxenius, Saidi, 2017)



- The presentation in brief:
 1. Demand for **fast deliveries** (same day and ‘instant’) increases, especially in cities
 2. New **survey results** provide some knowledge, data collection to be developed
 3. Fast deliveries have **impacts** on jobs, on the way freight services are provided
 4. They have impacts on the city environment and on **urban planning**

31.8% people living in Manhattan use a food app at least once a week



6T bureau de recherche, survey Dec 2017, to be published

NYC = mostly Manhattan

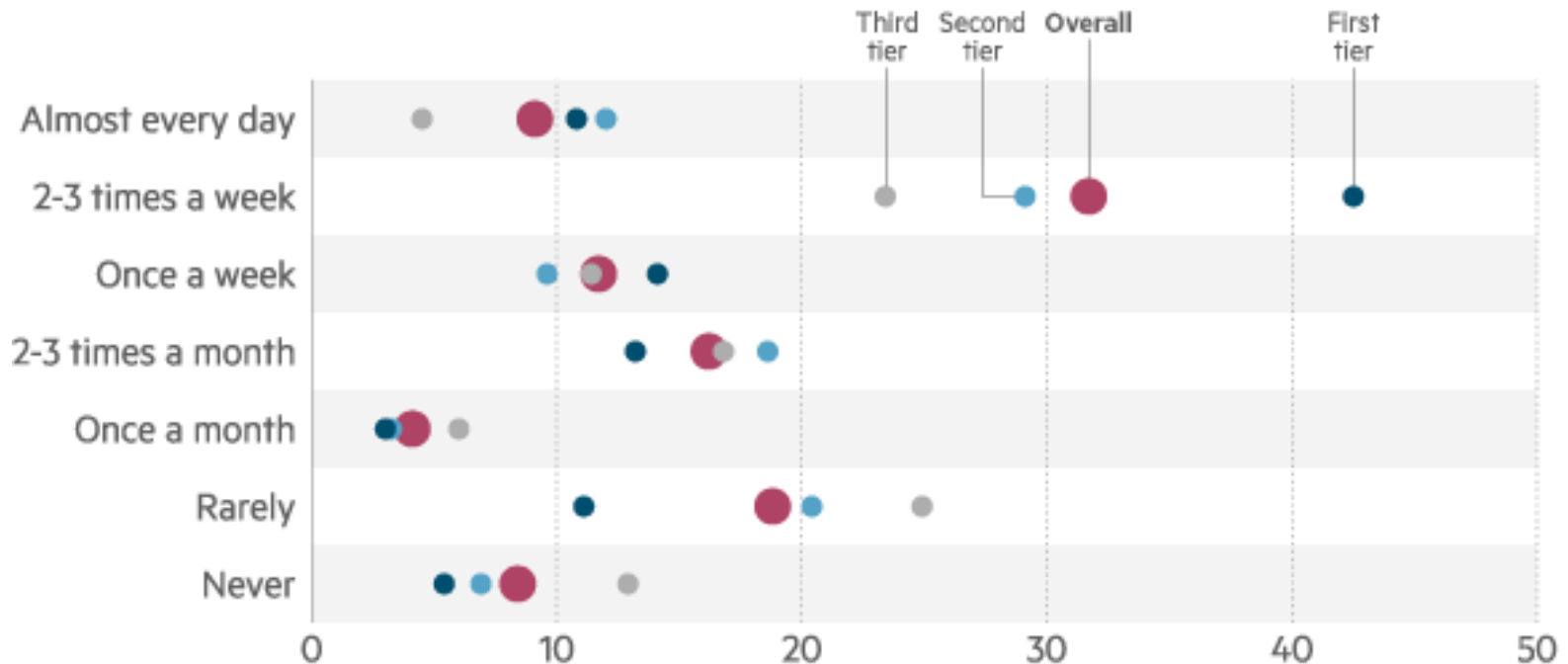
Paris = City of Paris

10% of urban Chinese use on-demand delivery apps “almost every day”

FT Research year of data 2017

Urban China orders in

How often do you use on-demand delivery services? (% of respondents, by city tier)



Methodology



- Data collection on companies (Europe, US & Asia) from specialized press, literature, websites and some interviews with managers
- 2016 and 2018 surveys among couriers in Paris
 - Face to face and online questionnaire interviews
 - Chance encounters in Paris streets, about one hour with each courier
 - 100 usable questionnaires for each survey
 - Authors: Saidi, Dablanc, Aguilera, Bekka, Louvet, Rouhier, Lazarevic, Rallet

Main instant delivery platforms



- World brands: Amazon Prime Now, UberEATS
- Chinese brands: Meituan-Dianping (linked to Tencent), Ele.me (Alibaba)
- European brands: Delivery Hero (Foodora), Deliveroo
- US brands: GrubHub, Postmates, Instacart, DoorDash
- Many domestic brands, many start-ups in all regions

In emerging countries



Glovo, Rappi in Lima, Bogota, Buenos Aires, Panama

Jakarta: **GO-SEND** delivery



GO SEND
KINI **KIRIM BARANG**
TANPA **BATAS JARAK***
UPDATE APLIKASI GO-JEK ANDA UNTUK
MENGUNAKAN LAYANAN GO-SEND TERBARU

*Untuk pengiriman dalam satu area



© 14/06/2018 - 21:26 | Clarin.com | Sociedad

Tendencia

El nuevo delivery: con cadetes "uberizados", llegó a todos los negocios y tarda menos

PedidosYa en Buenos Aires



Delivery Hero (2017)

- Based in Berlin
- 40 countries (35 where it leads)
- 2 to 5,000 registered couriers per city
- 100,000 restaurants
- One million deliveries per day
- Specialized on on-demand deliveries
- 2017 revenue: \$400 M
- IPO in 2017

Meituan (2017)



- Based in Beijing
- One country (China)
- Unknown number of registered couriers
- 4.4 million restaurants
- 17 million deliveries per day
- Diversifying on all types of online services
- 2017 revenue: \$5.2 billion
- Filed for IPO in Hong Kong June 2018

Partnerships

- Walmart and Postmates (2018)
- Nestlé USA and Freshly (2017)
- McDonald's and UberEATS



Several work contracts

- **“Pure” crowd-sourcing:** use of available transport capacity on the way to work or elsewhere (DHL MyWays, Shopopop)
- **‘Regular’ crowd-sourcing:** use of free lance private individuals dedicated to the delivery activity (Amazon Flex)
- Use of **free lance contractors**, self-employed couriers (Deliveroo)
- Use of **employees** (MeshKorea)



8% of total daily deliveries in the city of Paris

- 300,000 B2B deliveries
- 100,000 B2C deliveries (est.)
- 35,000 instant deliveries (est.)



Three categories of couriers

	Student + delivery job	Only delivery job (full time)	Main job + delivery job
2016	35%	25%	40%
2018	36%	48%	16%

Students:

Bicycle/sport lovers
Part time job
Live in Paris
More activists

Full time:

No high school education
Full time job
Often first job
Live in poor or minority suburbs

Modes of delivery

2016

87% bicycle

8% moped or motorbike

5% other (rollers,
private car)

2018

65% bicycle

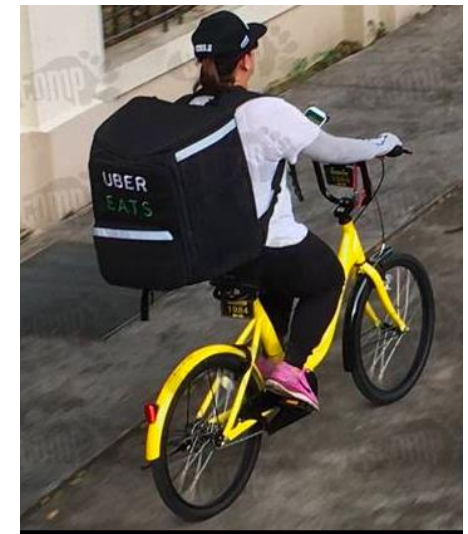
19% moped or
motorbike

16% both or other

=> Much higher use of motor vehicles
(not allowed)

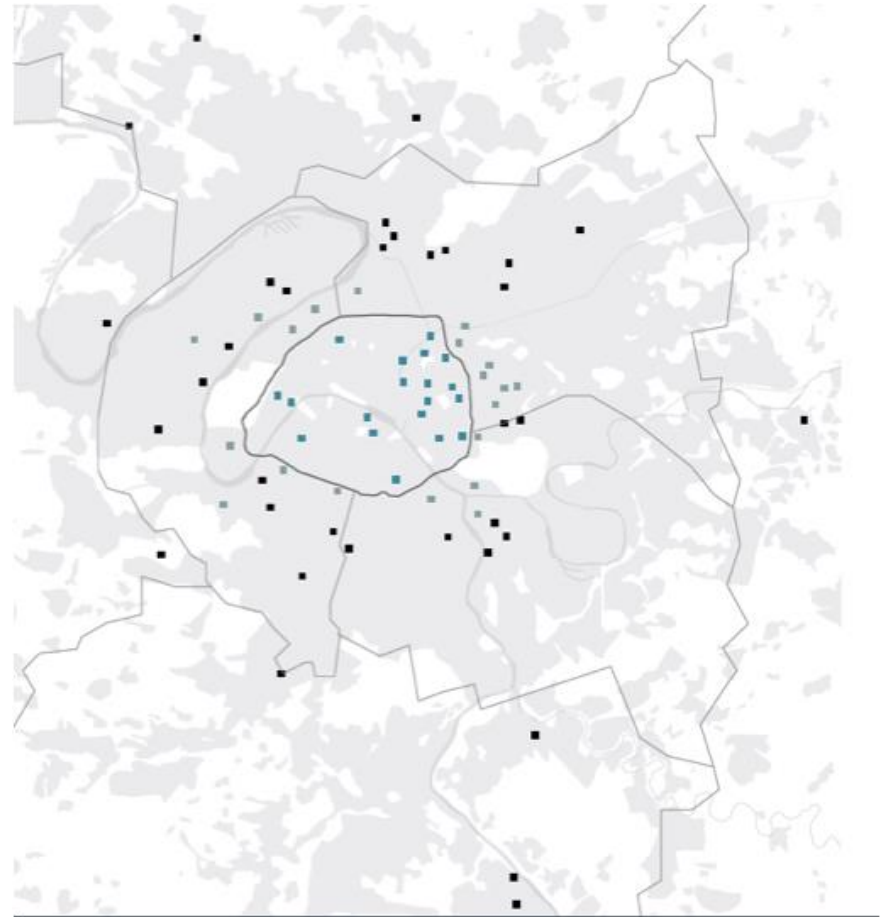
=> Increased 'flexibility'

=> New modes emerging: e-bikes, use
of dockless bike share



Commuting to the work place (2018)

- 76% do not live in Paris
- Commute to work:
 - 45% by bike
 - 23% in motorbike/moped
 - 8% with bike in public transit
 - 8% in public transit
 - 16% other



Main challenges of the job

2016

1. Weather conditions (21%)
2. App, GPS or smartphone battery issues (20%)
3. Congestion, pollution and traffic (19%)
4. Bicycle theft, bike problems (13%)
5. Lost time in restaurants (12%)
6. Bike lanes (absent or ill-conceived) (7%)

2018

1. Road safety
2. Weather conditions
3. Use of public transport
to reach place of work



Road safety, impact on traffic management

- A growing concern
- Invisible issue, poor data (bike accidents not distinguished between passenger trips and deliveries)
- Paris police released first data (98 hurt in 2016, 67 in 2017) but incomplete
- Companies increasingly provide insurance coverage
- (Chebance 2018)
- 51% cyclists in general do not stop at red light
- 76% delivery cyclists do not stop at red light



Labour issues

- ‘Gig’ economy’, dependence/independence, poor working conditions
- Protests
 - Wuxi (China): April 2018 (Didi Foodie)
 - Paris: Oct 2018 (Deliveroo), July 2018 (all), summer 2017 (Deliveroo)
 - Berlin: summer 2017 (Foodora)
 - Milan: October 2016 (Foodora)
 - UK: summer 2016 (Deliveroo)
- Difficult to organize collective groups





Disputes on workers status and recent court cases



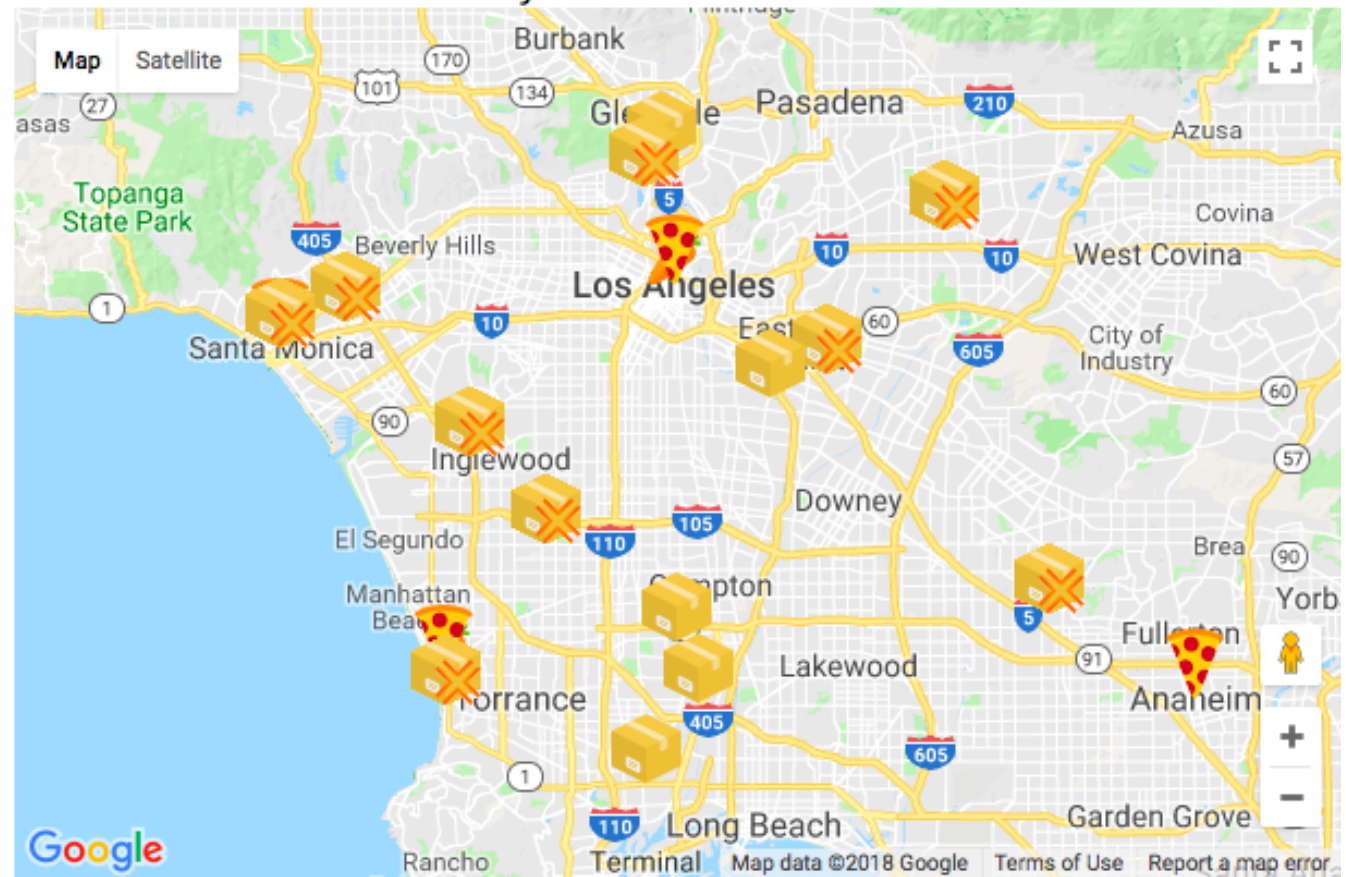
- United Kingdom
 - Central Arbitration Committee, Jan 2018: couriers are not employees, cannot claim employees' rights and benefits
 - Court recognizes Independent Workers Union of Great Britain as a representative body, March 2018
 - Judge says yes to IWGB to ask for a judicial review of CAC decision, June 2018
- France
 - Paris Appeal Court, Nov 2017: Deliveroo delivery workers cannot prove subordination nor economic dependency, are not employees
- California
 - 2015-2016 Lawsuit against Amazon and contractor Scoobeez in OC
 - Settled after Amazon request to Scoobeez
 - Cal Supreme Court ruling redefines independent workers, Apr 2018

Spatial footprint and impact on planning

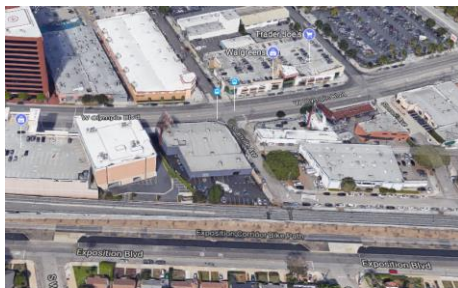
Legend:

-  Warehouse
-  Warehouse with Amazon Flex
-  Amazon Fresh
-  Amazon Restaurant Delivery

Amazon urban
warehouses in Los
Angeles
Source:
azflexinfo.com



Santa Monica



Amazon in Barcelona



In a former
printing
facility



'Dark kitchens'

- Meal preparation only, no restaurant
- Can be more or less organized
- A large restaurant reconverted into a preparation kitchen in San Francisco exclusively with Caviar deliveries
- 'Deliveroo Editions': Deliveroo builds the space ("Roobox"), restaurants provide cooking staff, share space – deployed in the UK, Australia, France



Conclusion



- Mass recruitment of delivery couriers, huge turnovers
- Business models adapt constantly, consumers reluctant to pay for deliveries, partnerships with large shippers, retailers
- Access to investors is key to survival
- Emerging issues
 - Mass recruitment, less educated workforce, higher turnover, decreasing working conditions
 - Very little interest in collective action, unions
 - Increased illegal work through the use of motorbikes, sharing of licenses, registrations, and phones
 - Use of e-bikes (and DBS - dockless bike sharing)
 - More upscale socially responsible services emerging

Challenges and opportunities for municipalities



- Demand for on-demand deliveries in cities keeps growing
- Threat or opportunity to local retail?
- Need for indicators: data collection requirement
- Traffic disruption, road safety, traffic regulation
- Zoning and planning, urban warehouses
- **Opportunities:** low-skilled jobs in city centres, potential for training, opportunity for use of electric mopeds

Resources

- CITYLAB Observatory of Strategic Developments impacting urban logistics
(http://www.citylab-project.eu/deliverables/D2_1.pdf)
- [MetroFreight/METRANS: www.metrofreight](http://www.metrofreight.org)
- Dablanc, L., Morganti, E., Arvidsson, N., Browne, M., Woxenius, J., Saidi, N. (2017) The rise of instant delivery services in European cities. *Supply Chain Forum, an International Journal*
- Aguiléra, A., Dablanc, L., Rallet, A. (to be published) L'envers et l'endroit des plateformes de livraison instantanée ('the different faces of instant delivery platforms' – in French), *Réseaux*