Emerging mobility solutions and their impact on practices

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Understanding emerging mobility services

- WHO USES THEM ?
- HOW ?
- HOW DO THEY IMPACT TRADITIONAL MODES ?
- HOW DO THEY FIT WITHIN THE ECOSYSTEM OF ALTERNATIVE TRANSPORT OFFERS ?

The case of France : user surveys conducted by 6t between 2015 and 2019

Dockless bikes (2018 user survey, Paris)

Use patterns

+ **Occasional uses** : 63% 1-3 times in total, 31% 1-3 times per week, 6% almost everyday
+ **Mostly leisure** : only 17% of home-work trips (38% of regular bike trips)
+ **Intermodal practices** : 27% of intermodal trips (9% of regular bike trips)
+ **5,25 km per trip** on average
+ **4,8 trips** per month/user

Users profiles

+ **Young users** (59% below 35 ; 38% of the Parisian population), mostly **men** (68%) working as **executives and in higher intellectual professions** (68%)
+ **Not former bikeshare users** : 52% had never used Vélib', 2/3 had never used a bike

Impacts

+ Change in **public transport** use: 45%. 9% decrease in frequency, 34% marginal impact.
+ **Walking** : 32% changed. 6% decrease, 22% marginal impact
+ **Vélib'** : 28% changed. 17% decrease, 9% marginal impact.
+ **No impact** on car equipment
+ Without the service, 42% would have used public transport, 25% walked, **1% only would not have been able to travel**.

An occasional practice with a non-inclusive user base, but a service that allows for experimentation

Dockless scooters (2019 user survey, Paris)

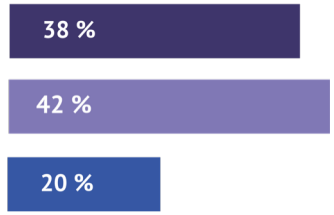
Use patterns

+ **Mostly used for leisurly trips** (strolls or going out),
+ **23%** of trips are intermodal
+ On average, **4,7 kms per trip.** 59% of trips between 1 and 4 kms). 11% of trips above 10 kms (long strolls)
+ **4,10 trips** per month per user

38% of collective trips

26 % each on a different scooter

10 % on the same scooter



Dockless scooters (2019 user survey, Paris, Lyon, Marseille)

Users profiles

+ **58% local users**, 9% foreign tourists, 33% French tourists
+ **Young** (36 on average), **men** (66%), **executives and higher intellectual professions** (53%)

Impacts

+ Without shared e-scooters, **44% of local users would have walked**, 33% would have used public transport.
+ Only **3%** would not have been able to travel.
+ **12% say that shared e-scooters changed their use of the private car**; only 4% would have used a car without an e-scooter.
+ Shared e-scooters would represent a **modal share of 0,8% to 1,9% in Paris**, after only 1 year in service.

Shared e-scooters : a bit of fun makes public transport more acceptable ? A new demand for cycling infrastructure ?

Motorscooters (2019 user survey, Cityscoot, Paris)

Use patterns

+ 22% of trips are home-work trips (highest among the services considered)
+ Without Cityscoot, **48% would have used public transport**. Only 0,5% would not have been able to take that trip.
+ On average, **5,4 km per trip.**
+ **6,5 trips** per month per user: intensive use. 51% of users use Cityscoot at least once a week.
+ **20% intermodal** trips (63% linked with public transport)

Users profiles

+ **9 users out of 10 are men**
+ **Young users**: only 24% are above 45 (45% of Parisians)
+ **55% in higher professional and intellectual professions** (29% in Paris)

Impacts

+ **4% of users let go of a private motorscooters**
+ **13 private motorscooters** (mostly combustion engines) are **replaced by 10 e-motorscooters.**
+ **Other modes impacted :** public transport (53%), ridehailing (36%) and walking (21%)
+ **14% say that they changed their use of the private car** since they started using the service ; **only 3% would have used a private car** without Cityscoot.

A specific client-based displaying an intensive use that remains stable overtime. A fast and pleasant alternative to public transport.

Carsharing (User survey, France, 2016)

Use patterns

+ 2,15 rentals per month per user
+ Mostly used for **shopping (29%), visiting** friends or relatives **(24%) leisure activities (23%)**
+ **One-way** carsharing is used more during the week and for work-related trips
+ **1,87 passengers per trip:** 1,88 for round-trip, 1,66 for one-way. (1,4 on average for private cars in France)
+ Average distance : **38 kms** for one-way (median : 19), **83 km** for round-trip (median : 35).

Users profiles

+ **Moving away from the « early adopter » profile :** older than other services (45 years old on average), 54% men, 63% executives
+ **70%** live in the **central city** of their metropolis → complementarity with other modes

Impacts

+ Without carsharing, **1 in 3 users would not have been able to travel** (22% one-way, 32% round-trip)
+ **31%** of households were **carfree** before-> **77%** after starting to use carsharing
+ **48%** of abandoned cars due to carsharing
+ **Public transport use increases** (+0,2 times/month/person)

Carsharing helps users go car-free and only works when other alternatives transport modes are available

Ridehailing (Uber user survey, 2015 & 2018)

Use patterns

+ **On average 2,9 trips per user per month.**
+ On average, **8 kms** per trip (11km for taxis). 50% below 6 kilometers.
+ **1,8 passengers** per car per trip (1,7 for taxis)
+ Uber users use **public transit, bikesharing** and **carsharing** more than average

Users profiles

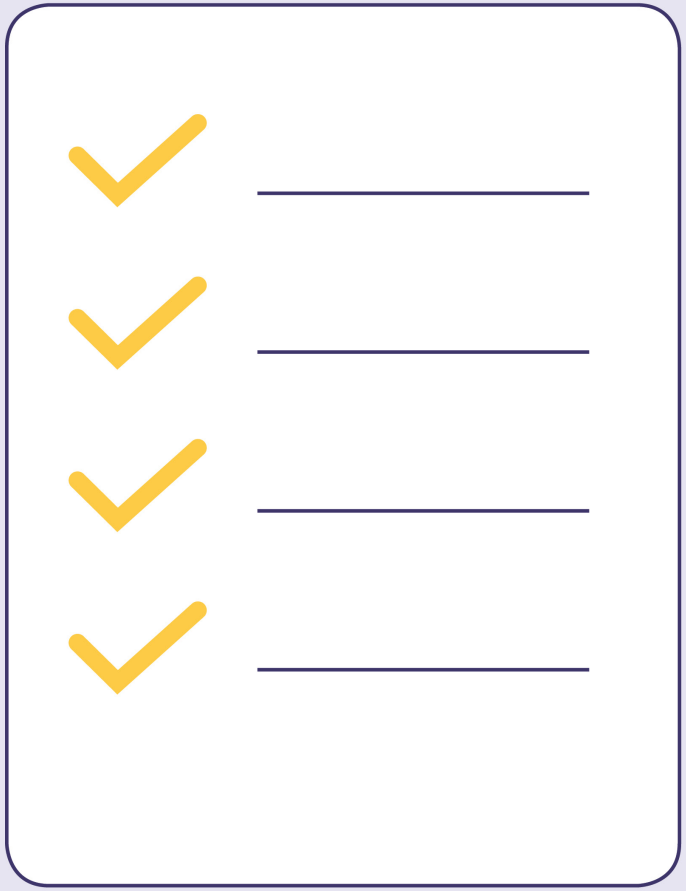
+ **Young** (37 on average), but getting older (29 in 2015). **55% executives** (66% in 2015)
+ Only emerging service displaying an overrepresentation of **women : 62%** (48% in 2015)
+ From 38% (2015) to **61% of users living in the suburbs**
+ **66% of Uber users have a public transport subscription**, while it is the case of only 38% of Ile-de-France residents.

Impacts

+ Impact on car equipment : **-3,6 to -4,9 cars for 100 households** because of Uber
+ **40%** are making new trips thanks to Uber (53% among users without a driver's license)

A diversifying user-base, a service that complements public transport and accompanies demotorisation

All in all



- ✓ **Shared e-scooters** are a fun new option, and are used in an intermodal way. They are an addition, users do not rely on them.
- ✓ **Shared e-motorscooters** are an alternative to public transport for relatively well-off male users ; users rely on them intensively.
- ✓ **Dockless bikes** allow users to experiment cycling and make intermodality easier.
- ✓ **Carsharing and ridehailing** contribute to demotorisation within an efficient public transport offer.

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