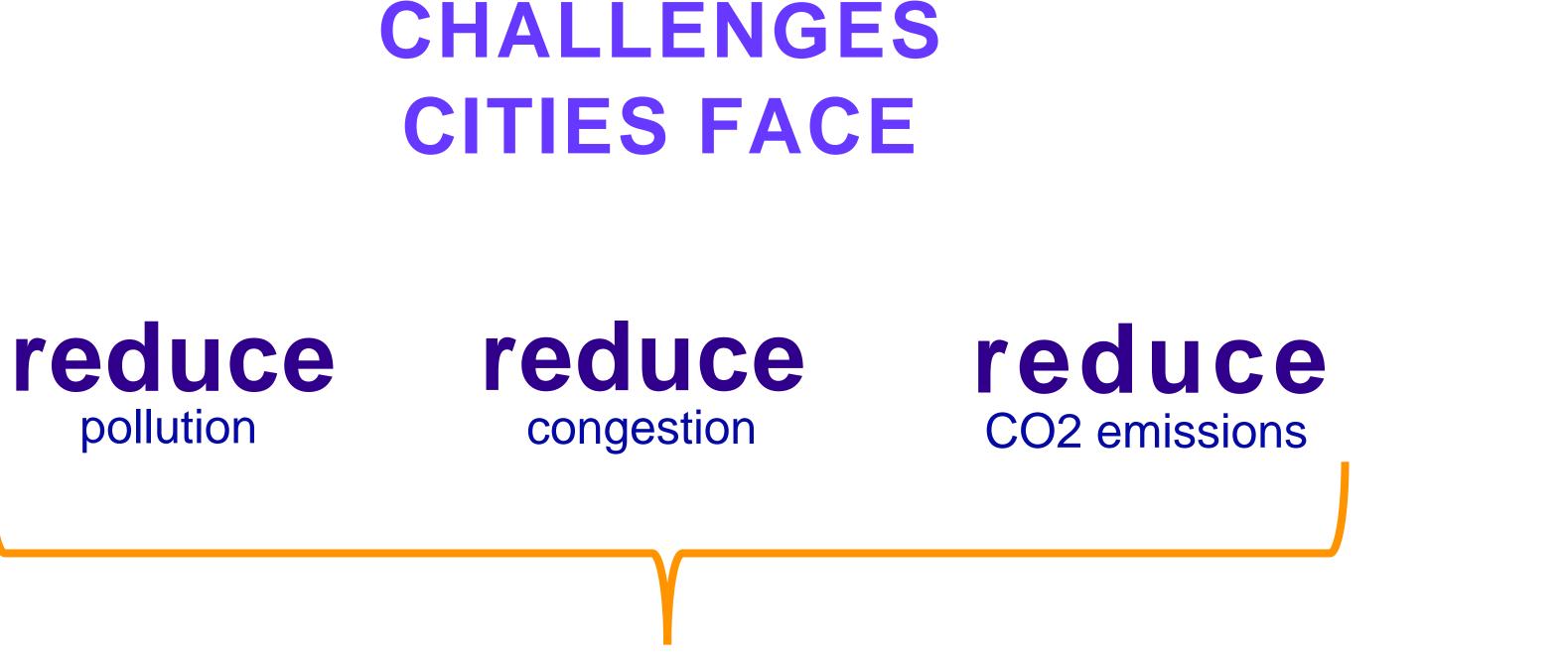


AUTONOMY & THE URBAN MOBILITY SUMMIT









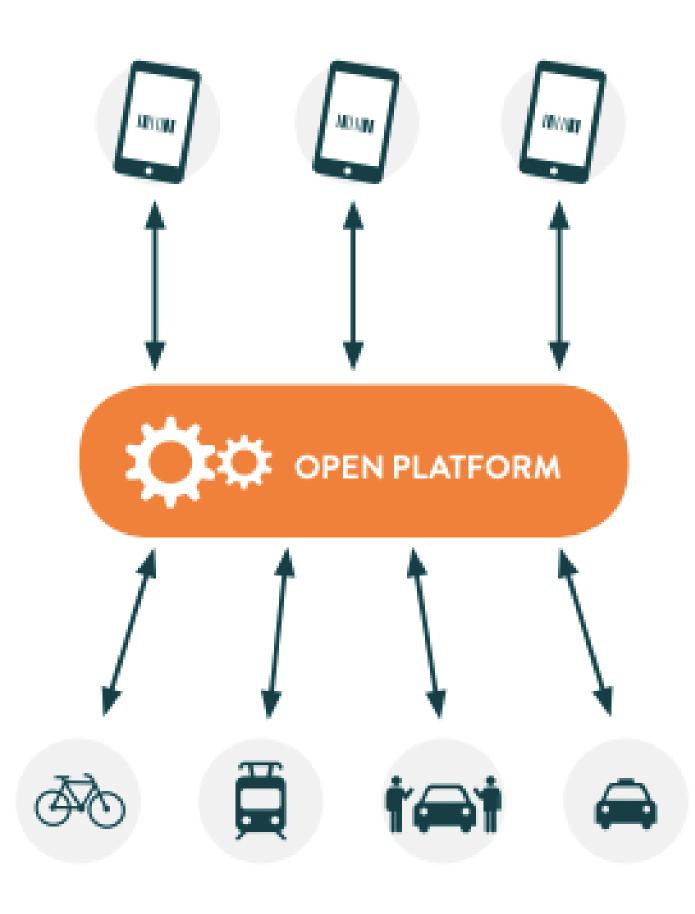
- public transport infrastructure.
- CO2 emissions.
- In many cities, the motorcar is still the preferred door to door solution.



Billions invested in solutions: EV companies, charging infrastructure, mobility startups, last mile solutions &

• The results aren't in line with investment. Cities are still polluted, congested and 2018 was a record year for

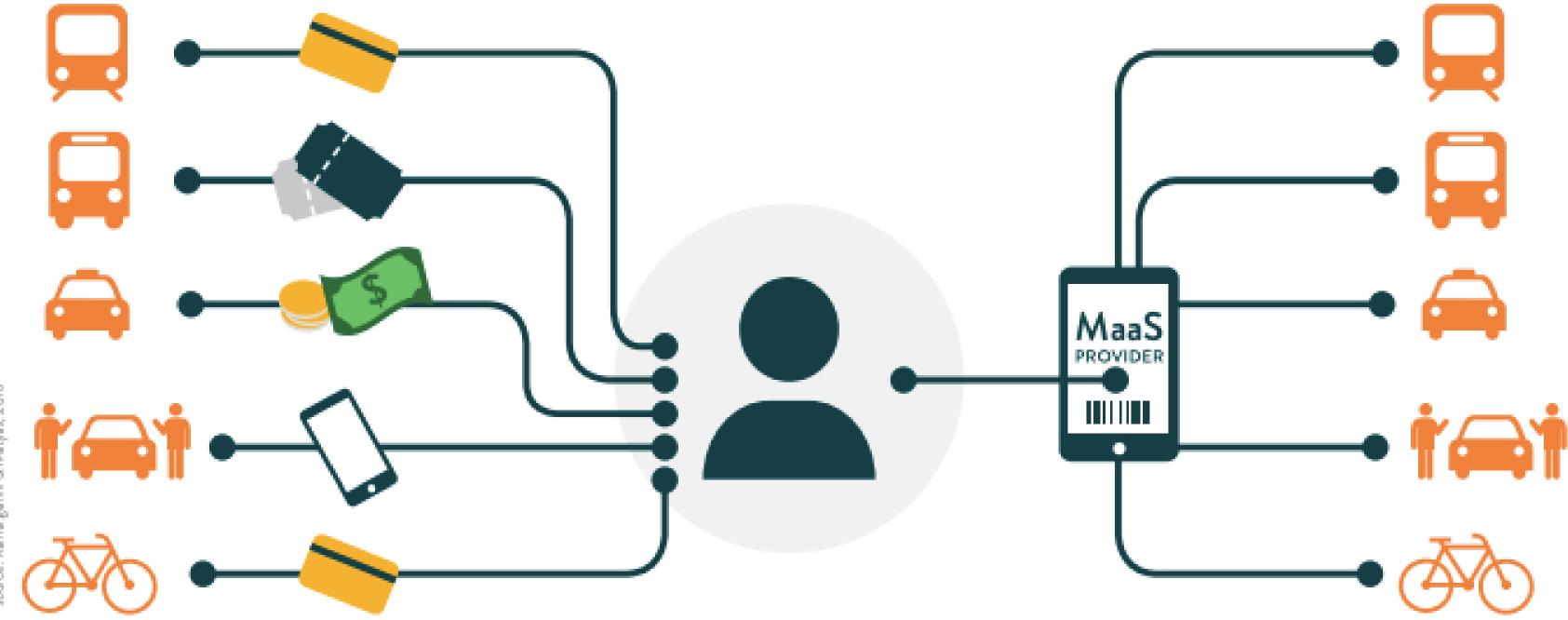
MaaS can reduce car ownership, but what is MaaS?





MaaS & Open Data: How Will Cities and Operators Move Forward?

This is the current situation:

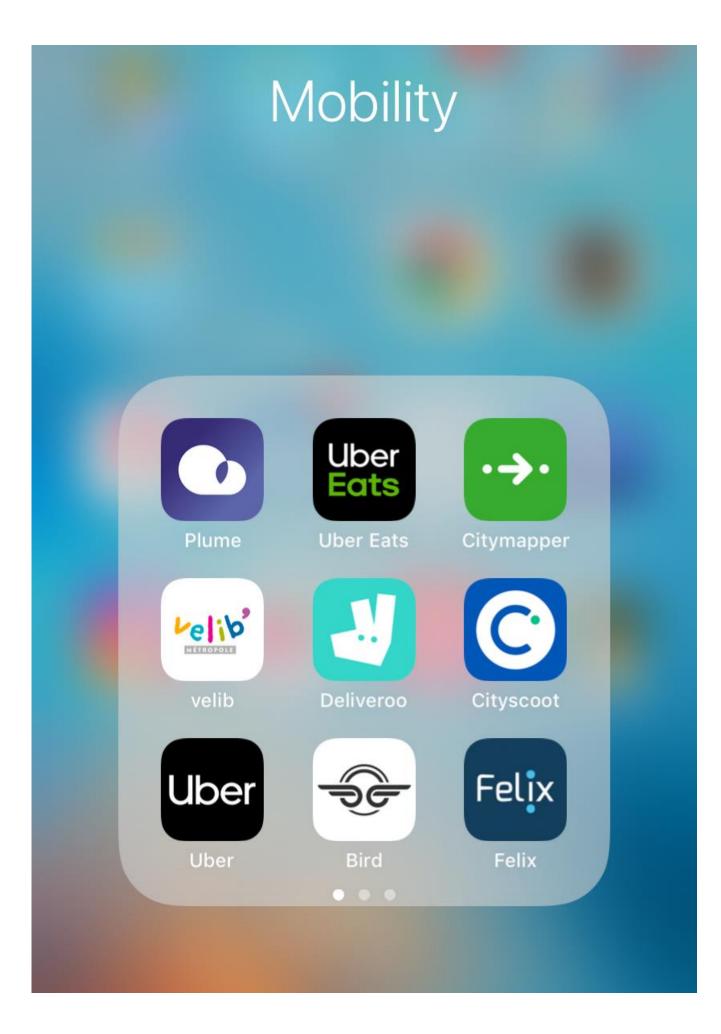






MaaS & Open Data: How Will Cities and Operators Move Forward?

Multimodality in Paris:





Mobility				
10	20			
Air France	mytaxi	Bolt Bolt - Txfy		
2				
THALYS	Lime	Wallet		
train	0	0		
Trainline EU	OUI.sncf	Rentalcars		

How will MaaS evolve? Every provider has their own ecosystem What are the potential outcomes?

Winner takes it all:

Private operators will be MaaS providers Open ecosystem:

Neutral operators create white-label apps



MaaS & Open Data: How Will Cities and Operators Move Forward?

Cities take control:

Public operators create their own platforms

Leading private MaaS operators





Taxi	Bikes	JustGrab	Public Transport
Car	Coach	Grab Rentals	
Hitch	GrabPet	Food	Car sharing
Share	Shuttle	Express Beta	Taxi
Scooters	Shuttle Plus	Trip Planner	Bikes
			Scooters
			Vespa



MaaS & Open Data: How Will Cities and Operators Move Forward?

- Bolt
- llber
- Taxi Taxi Ride Sharing Scooters Food delivery
 - **Ride Sharing**
 - Bike Sharing
 - Food delivery

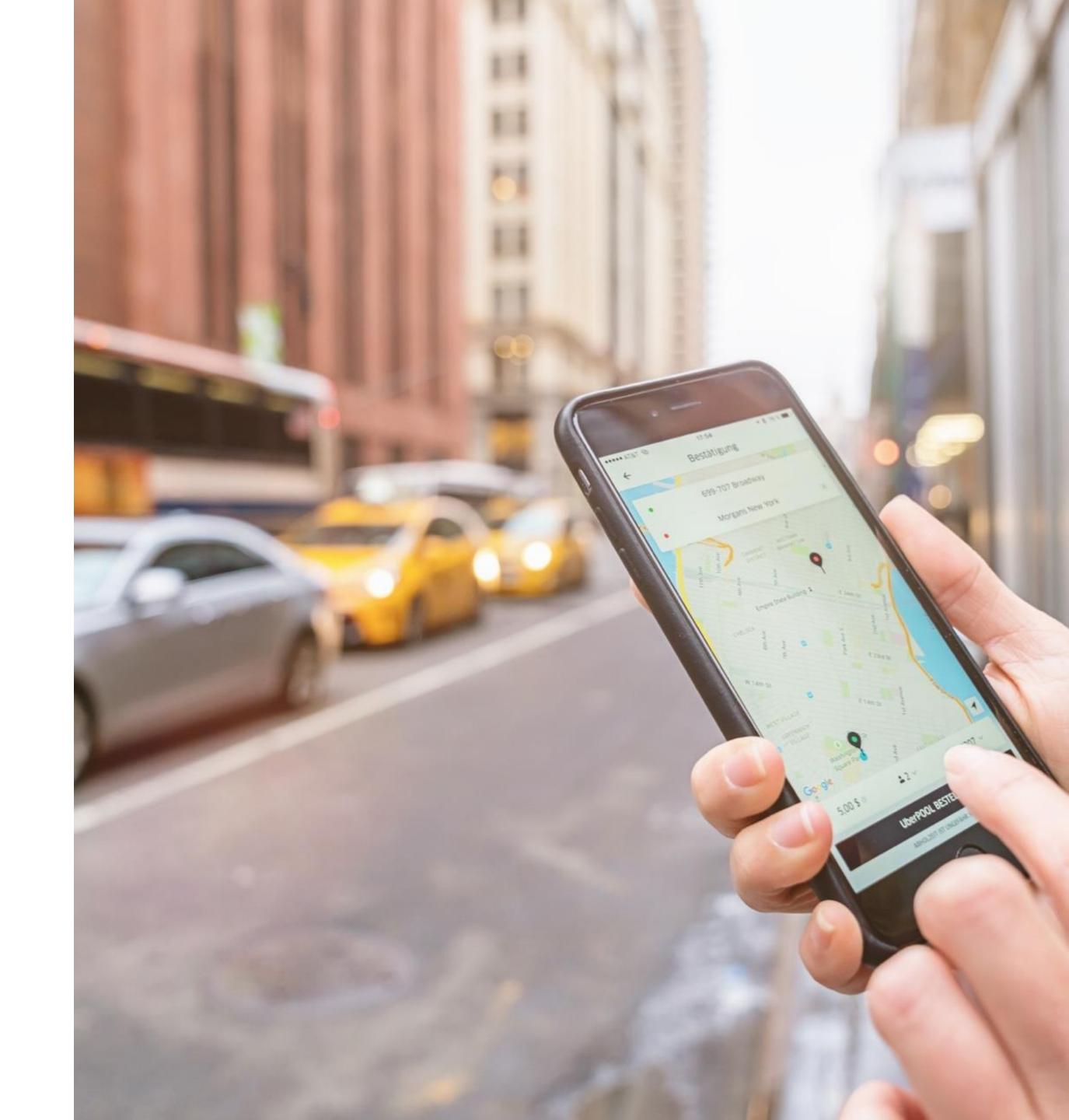
Mobility as a *private* service

Potential outcomes :

- One private operator will dominate mobility in a city with multiple offerings
- They value the size of the user base as the asset in which to invest
- The hope is to fulfill all mobility needs with their vehicle-centric offering

Challenges:

- Private operators can't get other private operators or PTOs on their platform because data is valuable
- Will promote most profitable vehicle instead of the most appropriate
- Competing companies over deploy vehicles to win market share



Neutral operators: will they take the lead? whim mígo SKEDGO **Ride share** Public Transport Public Transport Taxi City bikes **On-demand** transport Car share Taxi Shared transport Bike share **Rental car** Parking

Car share

€62/30 days; €499/month; Pay as you go



MaaS & Open Data: How Will Cities and Operators Move Forward?

Transit

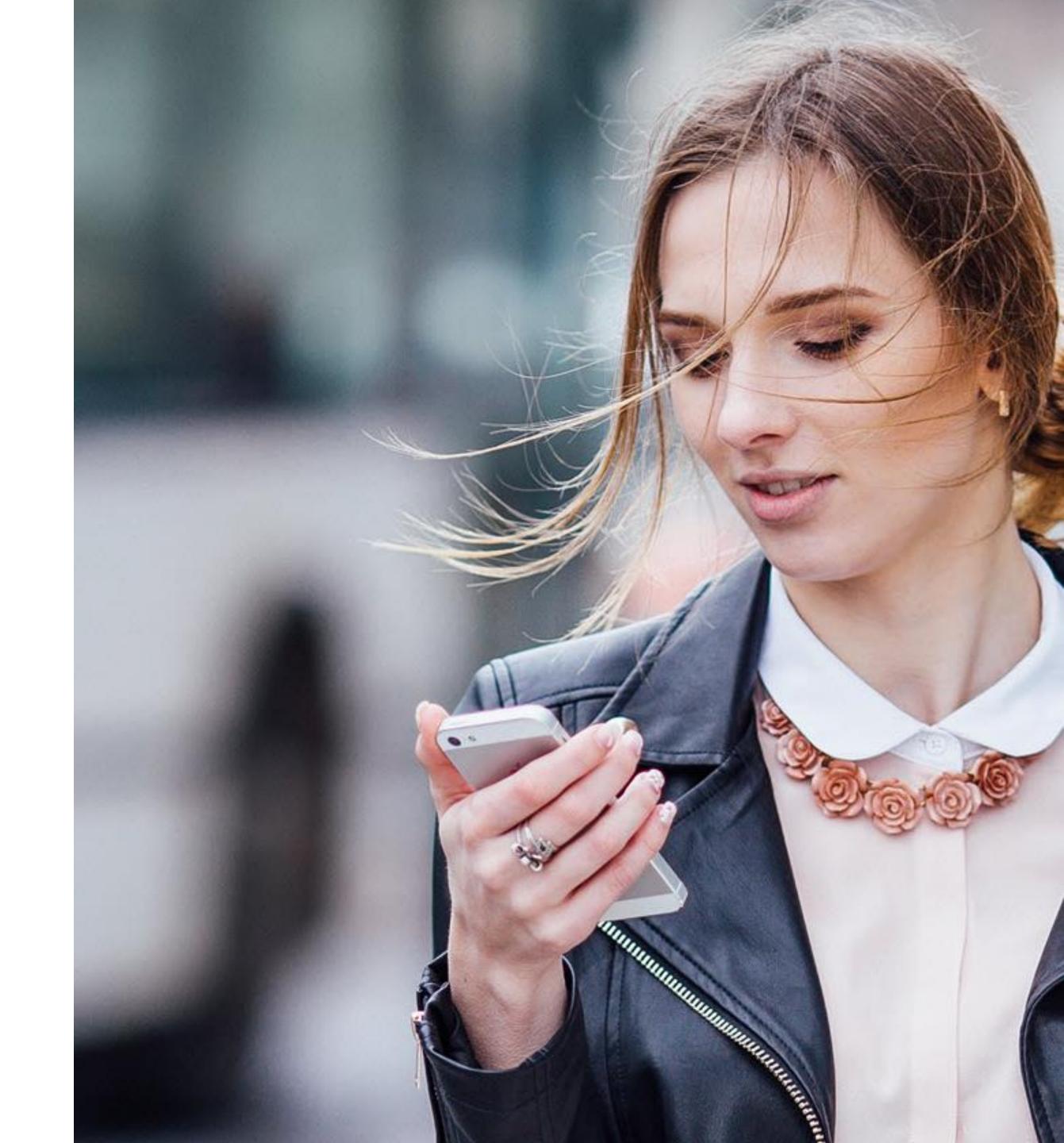
Mobility as a *neutral* service

Potential outcome :

• The neutral service would aggregate private and public transport operators on the same platform

Challenges:

- Independent platform could work but efforts to date haven't convinced *both* public and private operators to use this platform.
- Whoever has visuals on a city's mobility data has the power.



Public operators:				
K	isio	Contraction does a contract of the second se		
Metro	Reduced mobility transport	Public transit		
Tram	Α	Ride pooling		
Train	Autonomous shuttles			
Bus and coad	ch River and sea shuttles			
Parking	Self-service vehicles			
Bicycles	and car-sharing schemes			



: what about cities?

ALSTOM Mastria moovit

Public transit

Shared mobility

On demand services

Electric vehicles

Public Transit

Hailing services

Taxi

Dockless systems

Cycling

On-demand transport

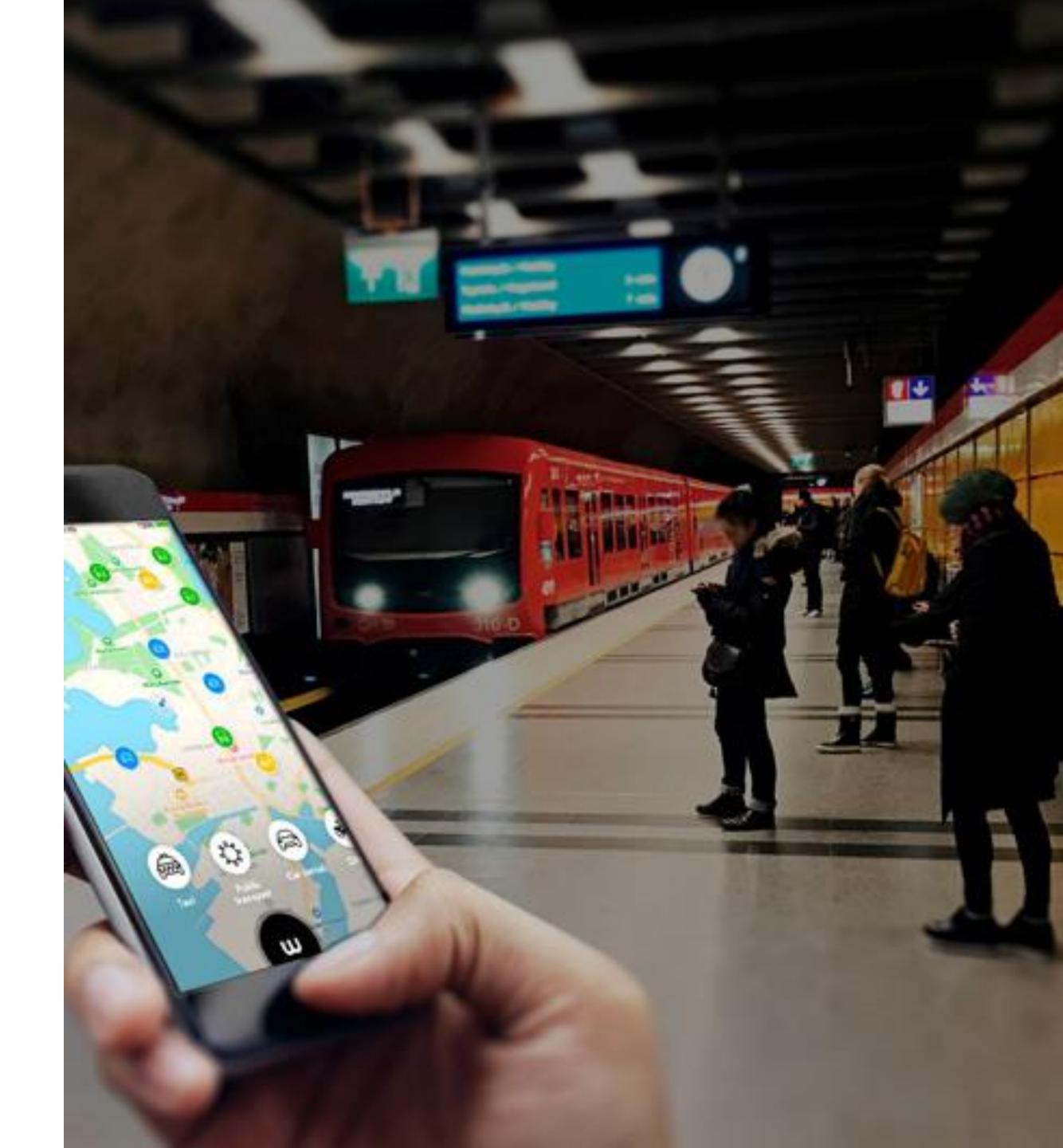
Mobility as a *public* service

Potential outcomes :

- Public transport operators use white label software platform to aggregate public and private operators onto a single platform
- PTO controls platform and invites private operators to fulfill certain services (e.g. scooter rentals)

Challenges:

- Public operators don't have the human resources to manage data offices
- There's a huge, diverse amount of information to understand opportunities in cities
- Data security is a challenge



Why go public?

- Sole power to insist on a single platform in exchange for the license to operate
- Can appoint private operator solutions as per demand for a specific service as opposed to "letting the market decide"
- Use data to make decisions to reduce pollution and congestion
- Nudge commuters in the right mobility direction (shared shuttles over car)
- Charge private operators a commission and get revenue from private operators
- Keep voters happy, democracy at work





ALL OF THIS ACTIVITY ON ONE DASHBOARD





Private operators can't get others to share data, and profitable solutions cause waste

Neutral platforms are having trouble convincing cities to work with them

Public transport authorities need to take ownership of MaaS platforms



CONCLUSION

THANK HOU

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Please feel free to contact me at ross@autonomy.paris

or connect with me on LinkedIn

