



What About New Mobility Services?



DISCOVER YOUR WORLD

Don Guikink MSc guikink.d@buas.nl, don@guick.eu

Content

- New Mobility
- New Mobility Services
- Inclusive Mobility
- Governance and cooperation
- Conclusions





Breda
The Netherlands

From Breda to Rome



Heenreis 10 mei 2026
→ Roma Termini

1 reiziger € 382,80

← eerder

zondag 10 mei 2026

15:58 → 13:49
⌚ 21u 51m ↻ 3 Niet online beschikbaar
📞 telefonisch boeken

Eurostar > 人 > TGV > EC > Frecciarossa

20:15 → 14:43 € 352,80
⌚ 18u 28m ↻ 3

IC > 🌙 Nightjet > EC > Frecciarossa

Heenreis

zondag 10 mei 2026

20:15 Rotterdam Centraal Spoor 4

⌚ 18u 28m 3 x overstappen IC > 🌙 Nightjet > EC > Frecciarossa [Toon route](#)

14:43 Roma Termini

1. Kies uw accommodatie

ITA Airways

08:30 Luchthaven Roma-... (FCO) Rome

02u 30m Direct

11:00 Amsterdam Airport... (AMS) Amsterdam

Nu € 17,00 korting
alleen via CheapTickets.nl

€ 74,49*
per persoon

[Boek vlucht](#)

[Delen](#)

🔒 1 🧳 1 🧳 0

NL – Rome
1500 km

Train:

- 19 hours
- 350 euros

Flight:

- 2 ½ hours
- 75 euros



○ Rome, Italy



○ Rio de Janeiro, Brazil

3 ways to travel from Rome to Rio de Janeiro

Fly Fiumicino International Airport to Santos Dumont Airport BEST

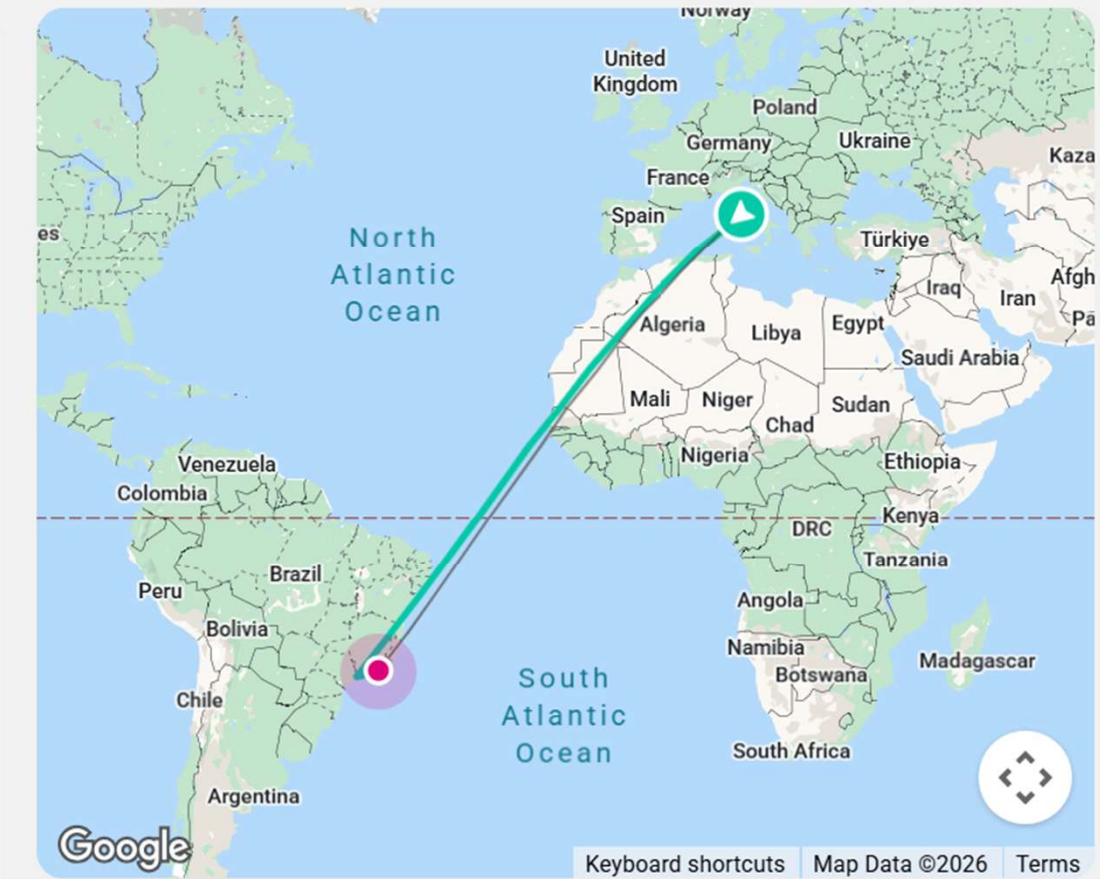
✈️ 17h 17min €404–907 >

Fly Fiumicino International Airport to Rio De Janeiro–Galeão International Airport CHEAPEST

✈️ 15h 53min €385–860 >

Train to Naples Airport, fly to Rio De Janeiro–Galeão International Airport

🚆 ✈️ 19h 41min €629–962 >



New Mobility

Positioning Mobility Services

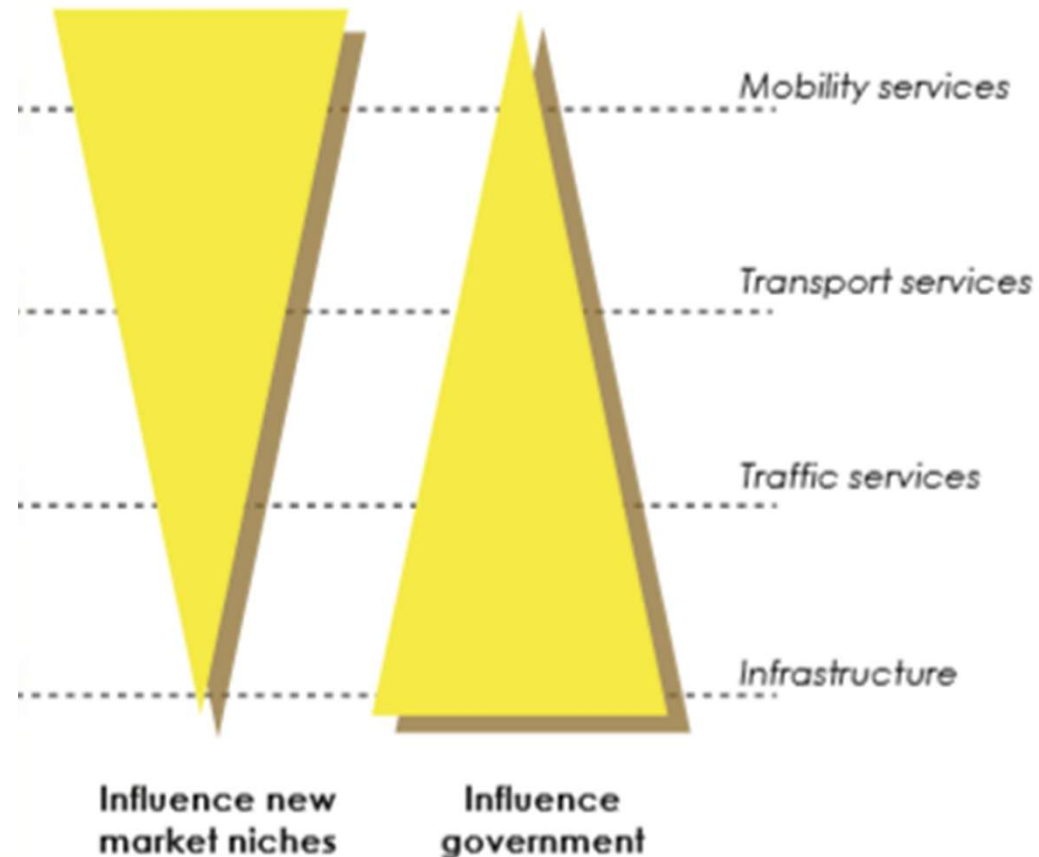
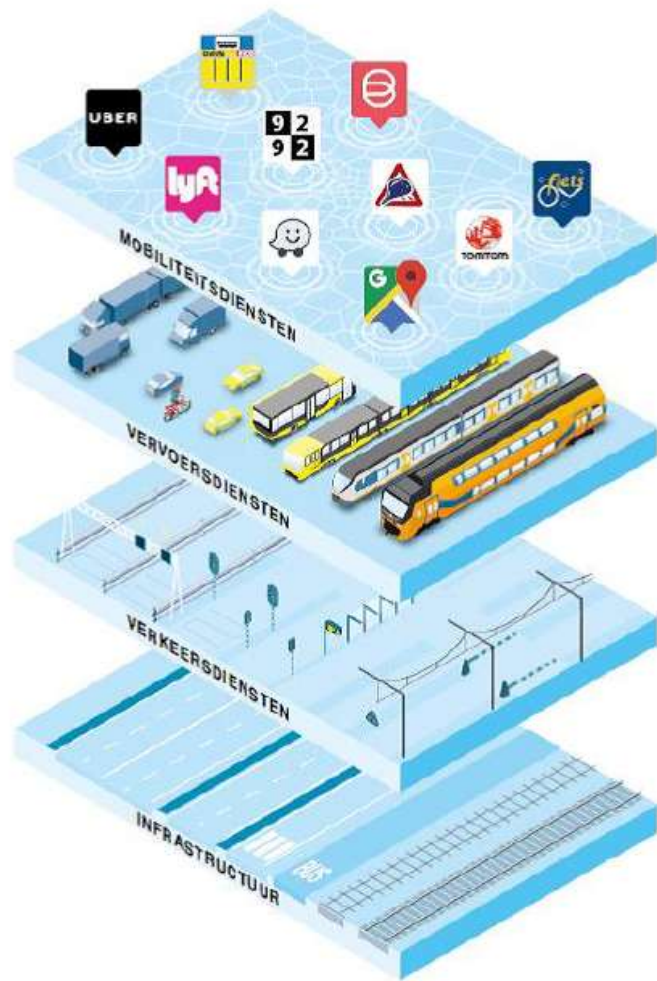
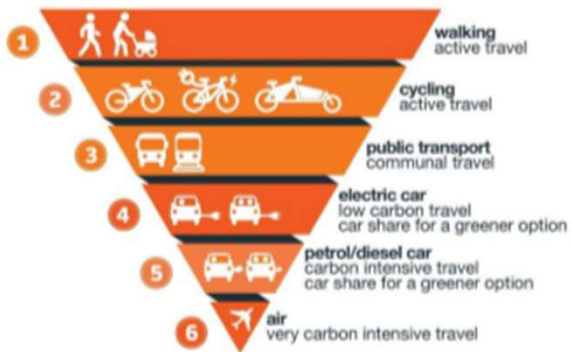


Figure 2.4, visualization of the four interdependent layers that make up a mobility system (adaption on Rli, 2018).

Transport Service, or Modality

LOW CARBON TRANSPORT HIERARCHY ENCOURAGING SUSTAINABLE TRAVEL TO REDUCE EMISSIONS



Source: UK Energy Savings Trust

GetON



a plane



a boat



a train



a bus



a bike

GetIN



a car



a taxi



a truck



The traditional options



Shared Mobility / Mobility as a Service



Old → New



Old ↔ New



Old \leftrightarrow New

This is a new car, not
a new mobility service





New Modalities











New Mobility Services

Positioning Mobility Services

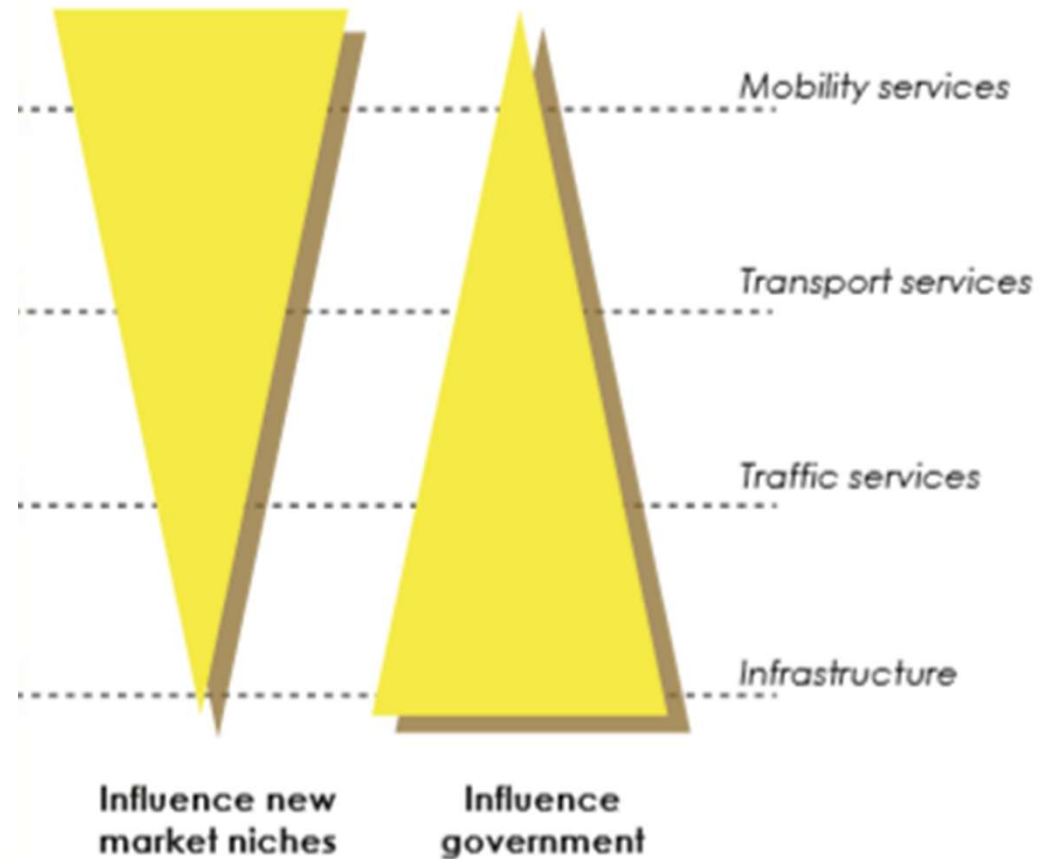
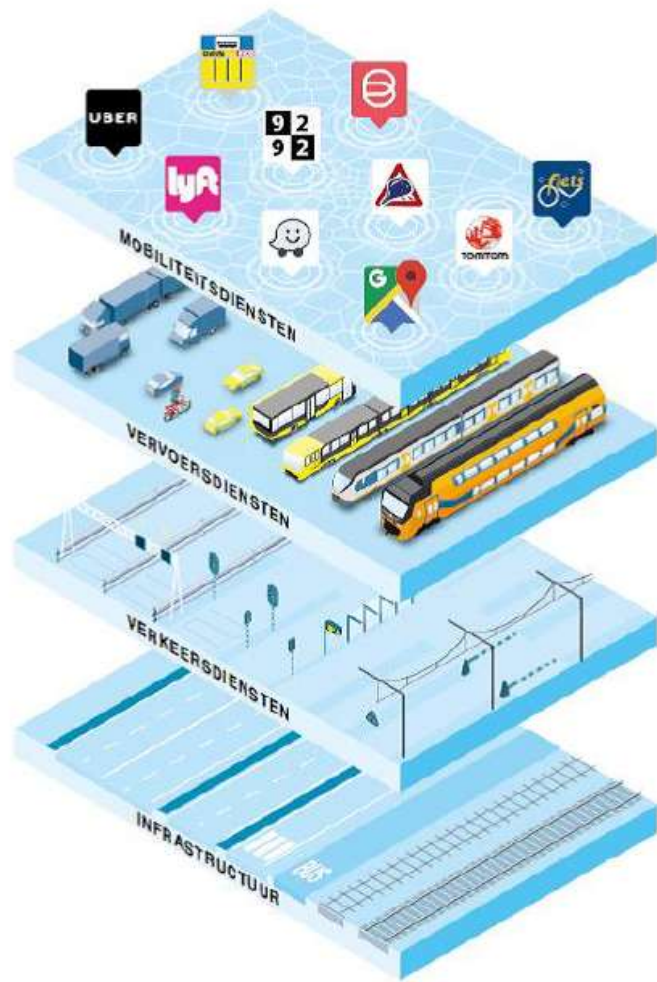


Figure 2.4, visualization of the four interdependent layers that make up a mobility system (adaption on Rli, 2018).

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)				
Information Solution				
Payment Solution				

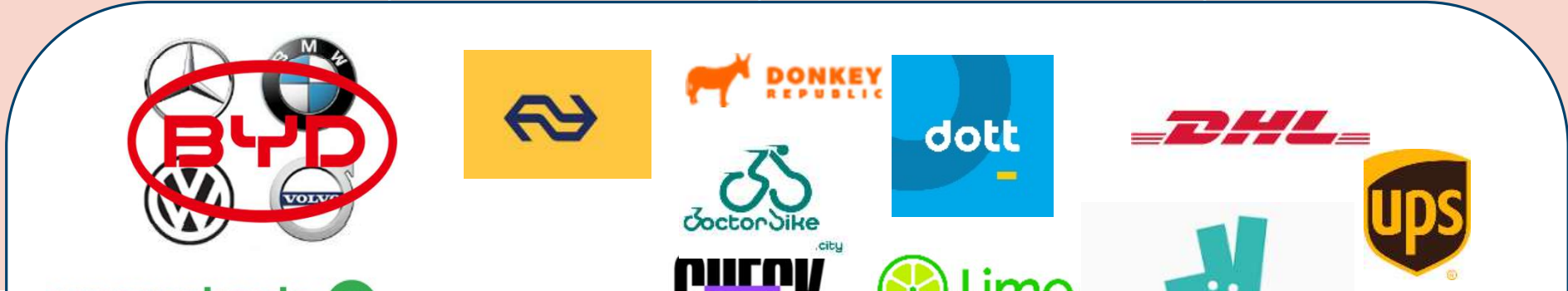
	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)	Ownership → Ridership Self driving → Be driven	Unimodal → Multimodal Single → Multi supplier	Short → Longer distances Low → Increased value (No) Ownership → Ridership Explosion of variety of "last-mile modes"	At shops → at home (Diesel) Truck → (Electric) Van Single → Multi supplier Supply side → Demand side
Information Solution				
Payment Solution				

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)	Ownership → Ridership Self driving → Be driven	Unimodal → Multimodal Single → Multi supplier	Short → Longer distances Low → Increased value (No) Ownership → Ridership Explosion of variety of "last-mile modes"	At shops → at home (Diesel) Truck → (Electric) Van Single → Multi supplier Supply side → Demand side
Information Solution	Static (road) maps → radio bulletins → internet → TomToms → VMS → Apps apps apps → in vehicle solutions	Time tables → phone nrs → internet → apps apps apps	No information → cycling/walking maps → nodes → gps → apps	Opening times → Live tracking systems
Payment Solution				

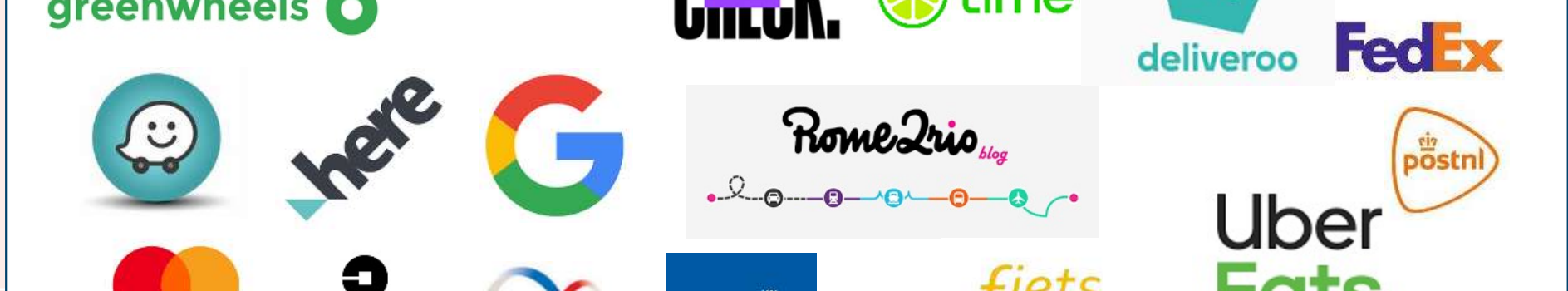
	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)	Ownership → Ridership Self driving → Be driven	Unimodal → Multimodal Single → Multi supplier	Short → Longer distances Low → Increased value (No) Ownership → Ridership Explosion of variety of "last-mile modes"	At shops → at home (Diesel) Truck → (Electric) Van Single → Multi supplier Supply side → Demand side
Information Solution	Static (road) maps → radio bulletins → internet → TomToms → VMS → Apps apps apps → in vehicle solutions	Time tables → phone nrs → internet → apps apps apps	No information → cycling/walking maps → nodes → gps → apps	Opening times → Live tracking systems
Payment Solution	Tax & Fuels → Tolls, tags, stickers, etc. Uniform → Differentiated (area, emission and/or time specific)	Separated paper tickets → integrated (smart) cards Uniform → differentiated Simple → Complex	Buying → Leasing	Non visible → Specified (e.g. fast delivery)

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)



Information Solution



Payment Solution



	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)

Information Solution

Payment Solution

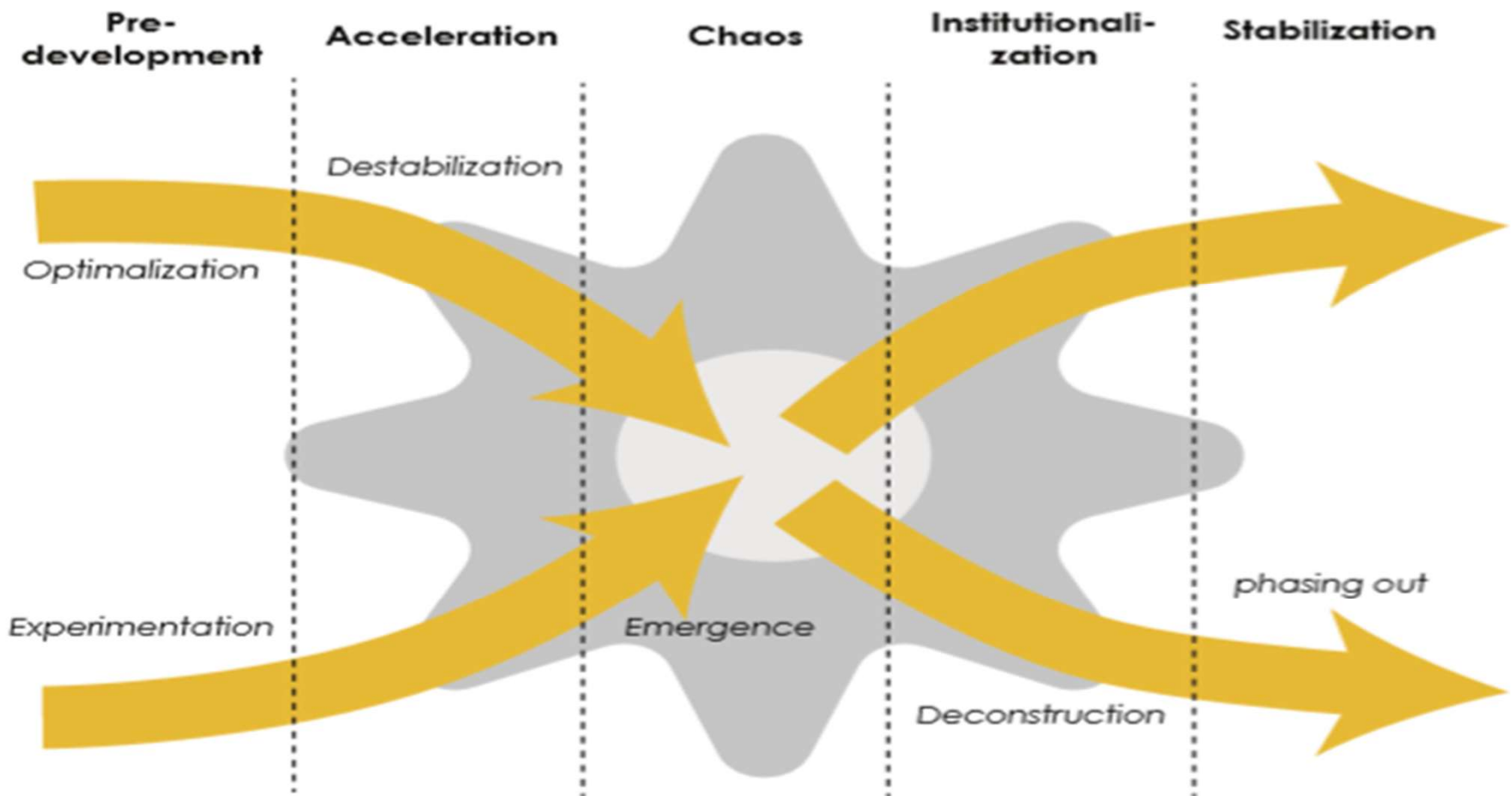





Figure 2.1, schematic visualization of the different phases of a sustainable transition (adaption of Lodder, Roorda, Loorbach, & Spork, 2017 & Goddard & Farrelly, 2018 & Rotmans, Kemp, & Asselt, 2001 & Van der Brugge & J., 2007 & Voß, Smith, & Grin, 2009).

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)				
Information Solution				
Payment Solution				

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)				
Information Solution				
Payment Solution				

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)				
Information Solution				
Payment Solution				

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
Mobility Solution (Modalities)				
Information Solution				
Payment Solution				



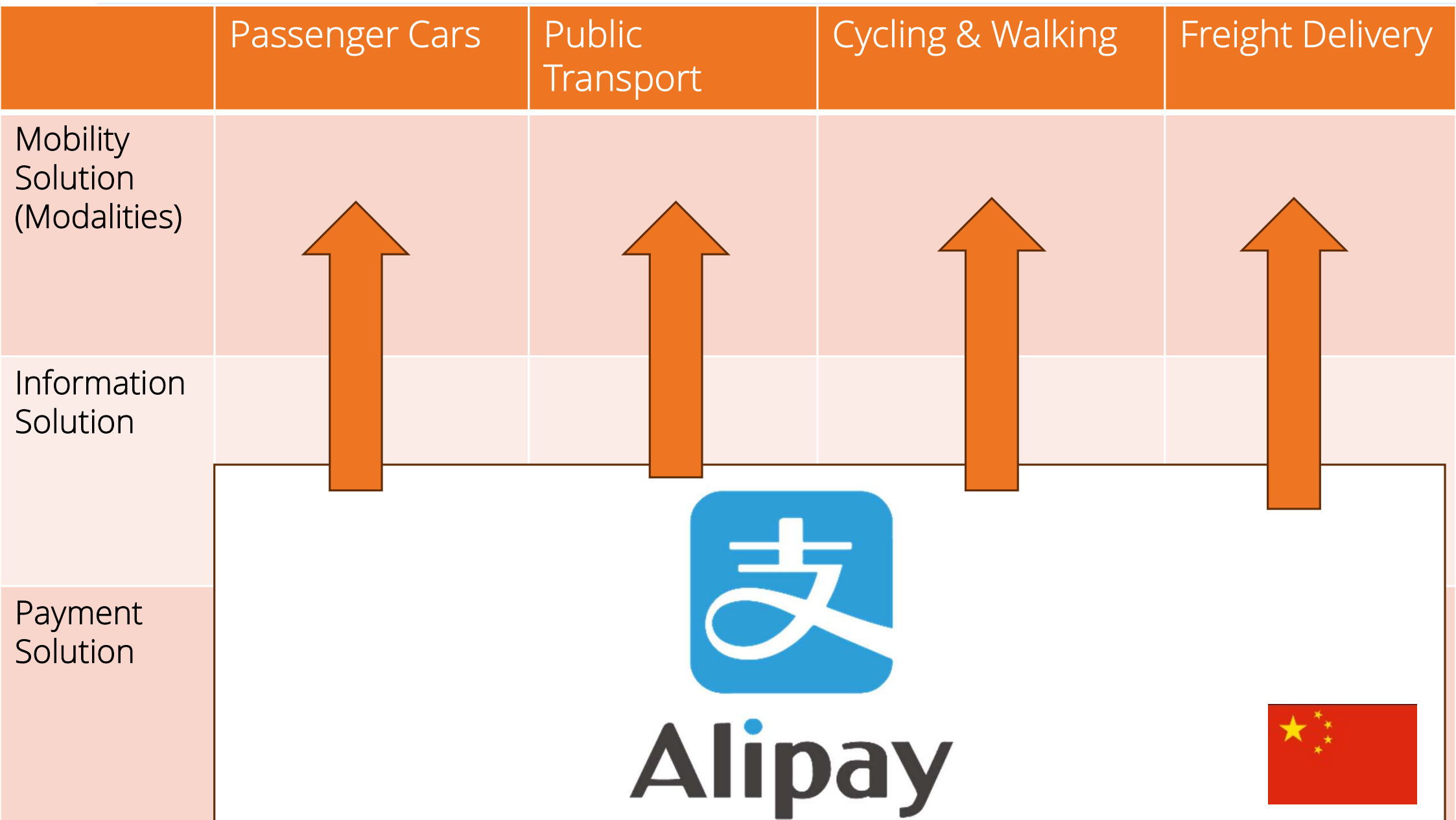
	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)

Information Solution

Similar in London (Oyster) or Paris (Navigo)

Payment Solution



Inclusive Mobility

Shared mobility is rising, not booming



MARKET EVOLUTION 2020-2025
EU27 + UK, Norway & Switzerland

MARKET EVOLUTION

	2020	2021	2022	2023	2024	2025
Shared vehicles ¹	455,000	653,000	877,000	913,000	867,000	848,000
Trips (millions)	231	391	538	603	611	709
End user revenue ²	€0.34bn	€0.66bn	€1.16bn	€1.24bn	€1.32bn	€1.45bn



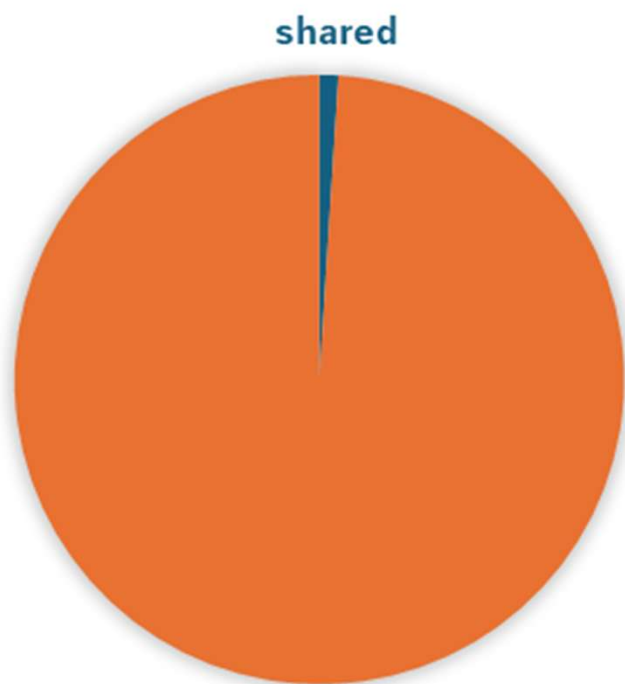
What about cars?

- +/- 130.000 shared cars in Europe
- +/- 250 million registered cars
- → 0,05%
- Taxi/Uber: 1-5%

Source 1.

Modest share in the total mobility market

URBAN SHARED MOBILITY



not shared (Author's interpretation)

- E.g. Netherlands:
 - 46.000 shared vehicles
 - 27.000 bicycles (of which 19.000 OV fiets)
 - 9.000 mopeds
 - +/- 10.000 shared cars
 - 10 million cars → 0,1%
 - 1 shared car can replace 5-16 cars

(source: 2)

Characteristics shared mobility users



Younger (18-34)
Male / Female
No children (yet)

No car (yet)



Still for a happy few....



Urban

Higher educated
Better jobs
Higher incomes



(source: 2+3)

Examples of inclusivity (1)

- The Netherlands
 - Use of buddy-systems or community-based shared mobility
 - Trial passes for shared mobility in low income areas → well-used
- Belgium
 - Hoppin / Deleo: Mobility nodes and incentives to sell private vehicles
- Sweden:
 - Municipal acquisition of shared mobility since 2019, now many cities follow

Examples of inclusivity (2)

- France:
 - Social leasing of e-vehicles for low income households
- Germany
 - Grassroot shared mobility (by the community). Idem in Amsterdam, Mobility as a Commons (MAAC)

LEVERAGE 

(source 4, 5, 6, 7, 8)



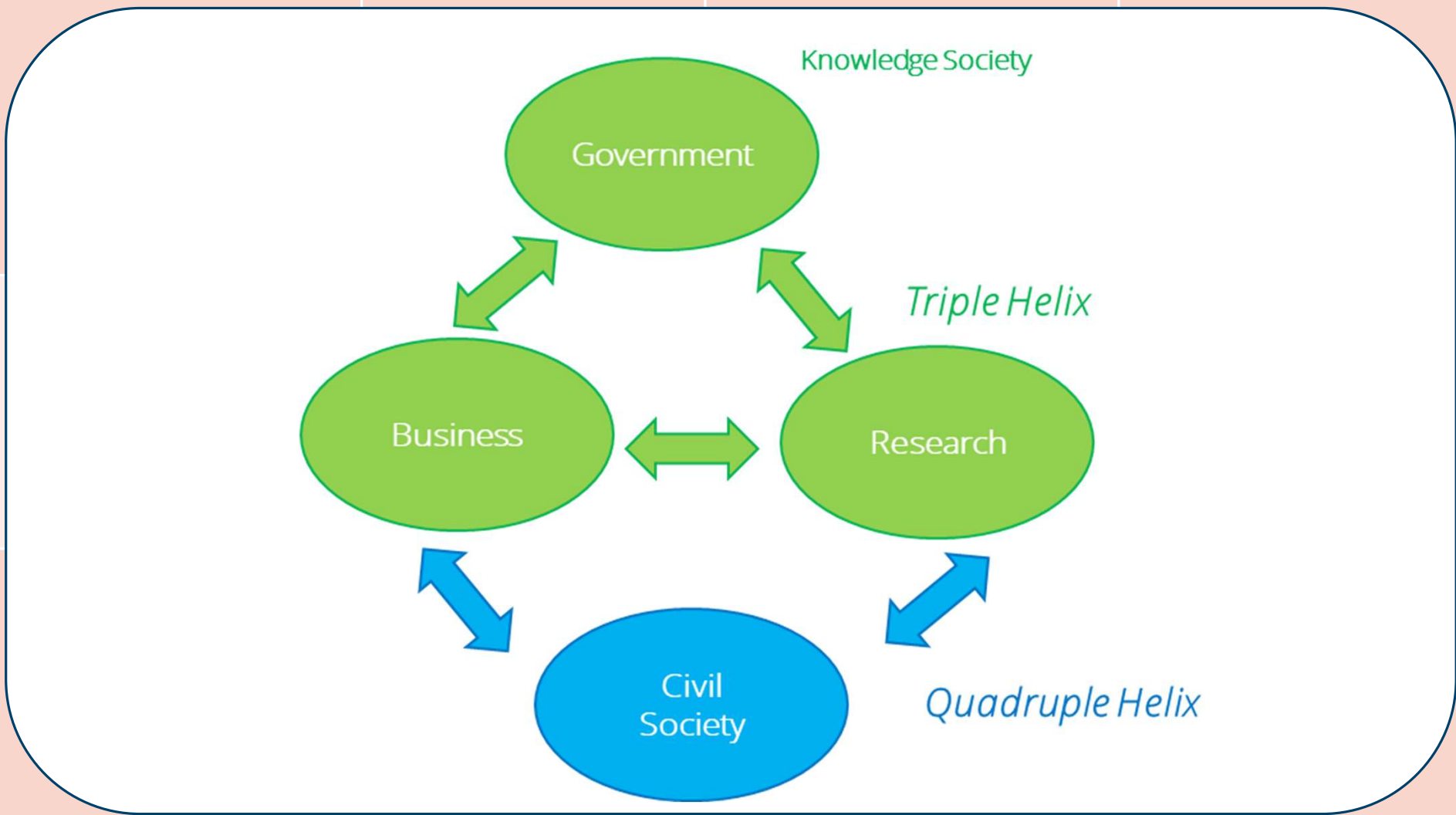
Governance and Cooperation

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)

Information Solution

Payment Solution



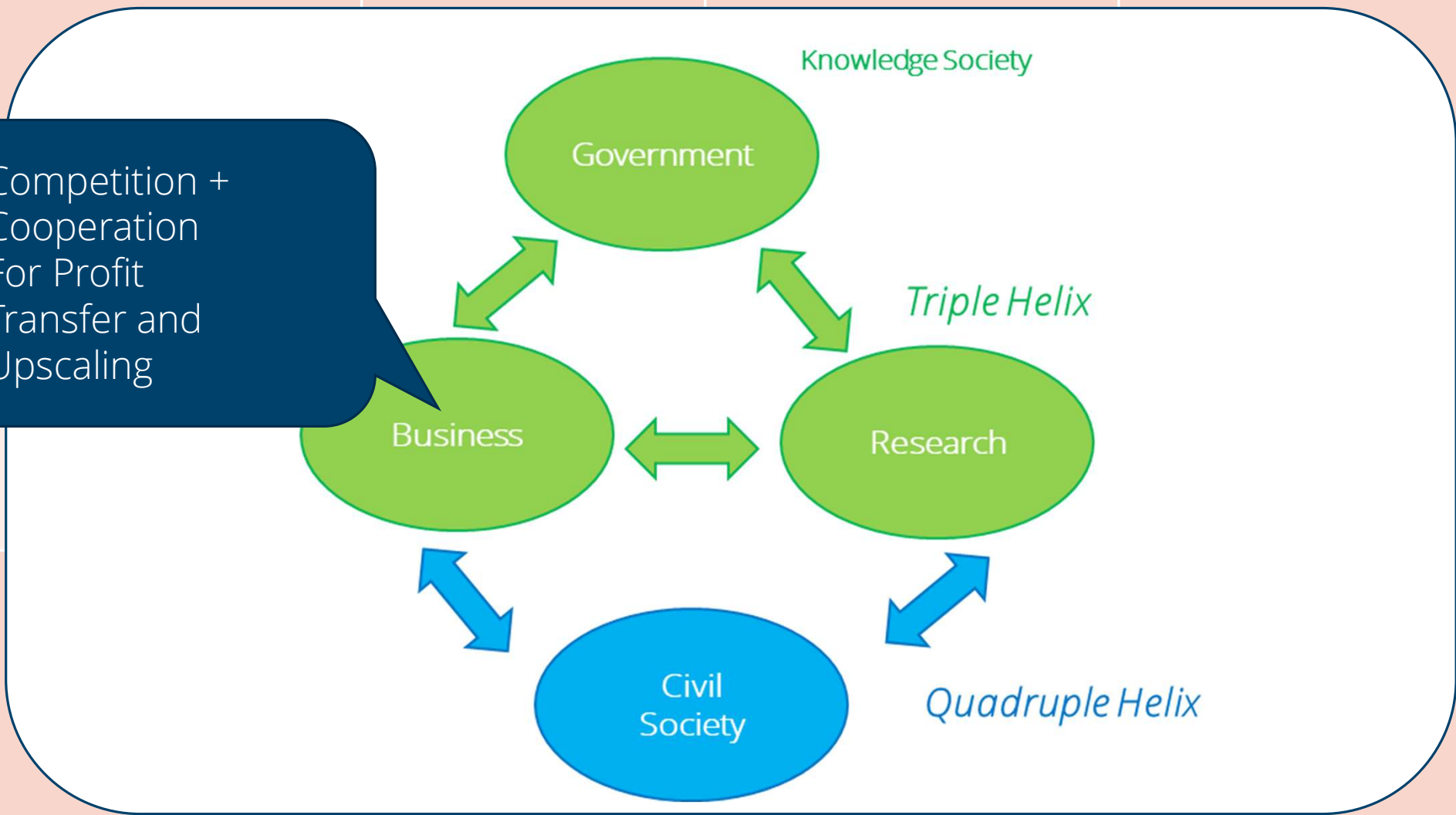
	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)

Information Solution

Payment Solution

- Competition + Cooperation
- For Profit
- Transfer and Upscaling



	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

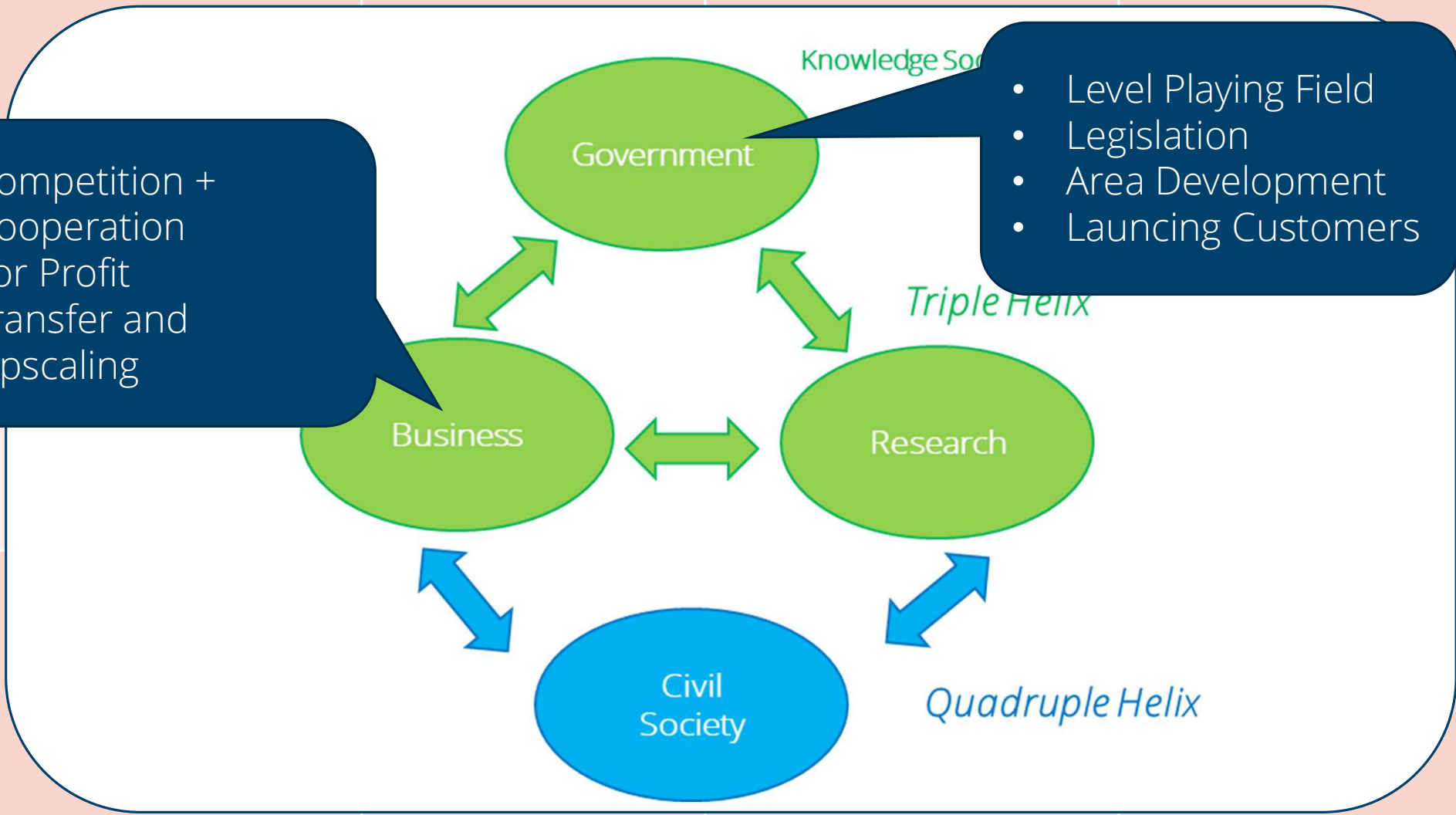
Mobility Solution (Modalities)

- Competition + Cooperation
- For Profit
- Transfer and Upscaling

Information Solution

- Level Playing Field
- Legislation
- Area Development
- Launching Customers

Payment Solution



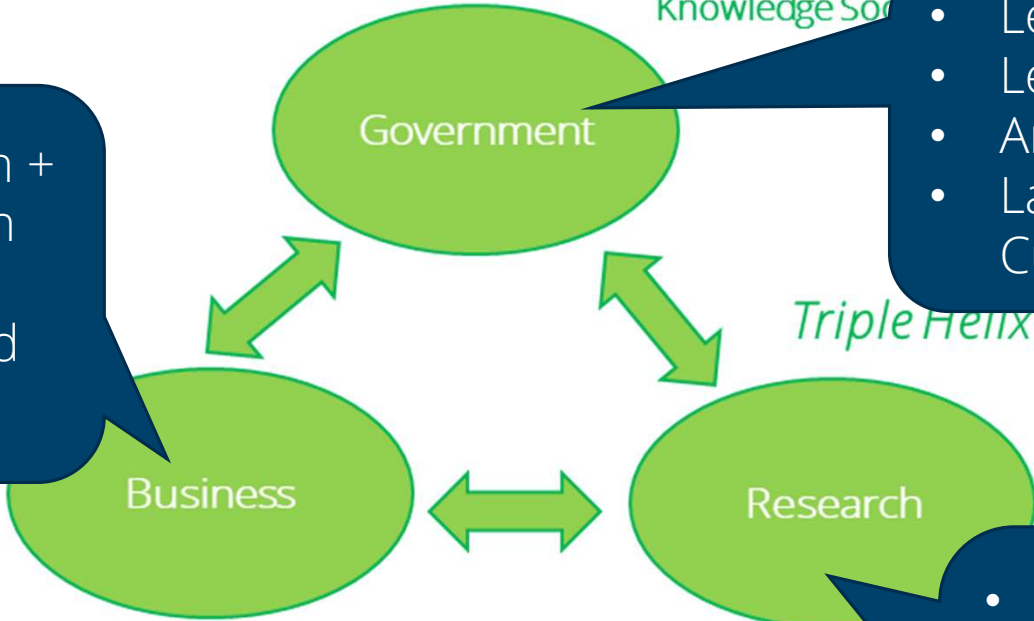
	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)

- Competition + Cooperation
- For Profit
- Transfer and Upscaling

- Level Playing Field
- Legislation
- Area Development
- Launching Customers

Information Solution

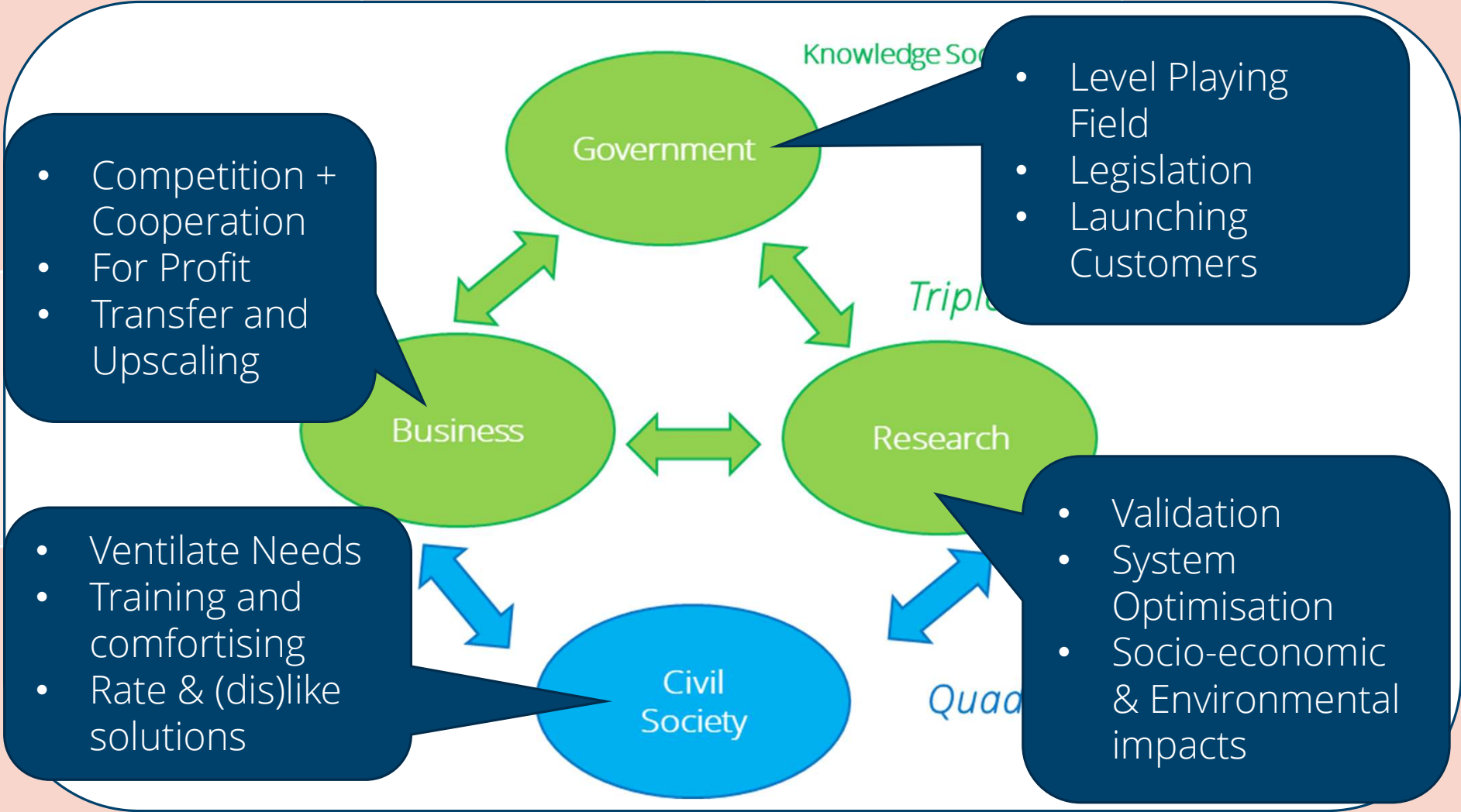


- Validation
- System Optimisation
- Socio-economic & Environmental impacts

Payment Solution

	Passenger Cars	Public Transport	Cycling & Walking	Freight Delivery
--	----------------	------------------	-------------------	------------------

Mobility Solution (Modalities)



- Competition + Cooperation
- For Profit
- Transfer and Upscaling

- Level Playing Field
- Legislation
- Launching Customers

Information Solution

- Ventilate Needs
- Training and comfortising
- Rate & (dis)like solutions

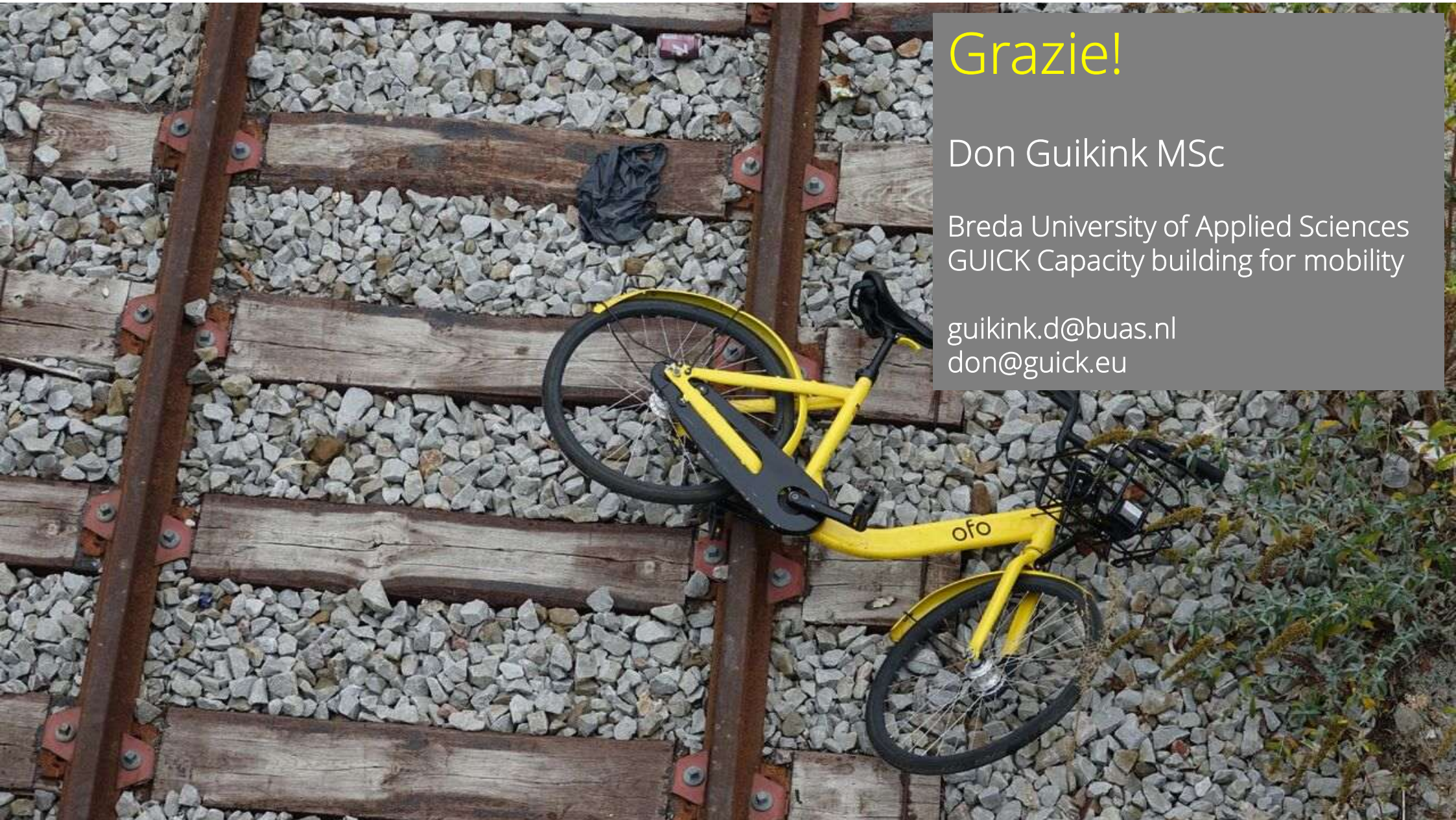
- Validation
- System Optimisation
- Socio-economic & Environmental impacts

Payment Solution

Conclusions

Conclusions & Mindset

- Using new mobility services is still too much of a treasure hunt in the urban jungle
- Shared mobility and new mobility services are rising, but the potential is (by far) not met. We need a significant upscaling to achieve wider impacts (x10...)
- Shared mobility is not (yet) inclusive: it focuses on the younger, higher educated urban society without a (2nd...) car. We need shared mobility4all
- Shared mobility is a shared responsibility of industry, government, research and civil society. Organisation of new mobility services is a public responsibility.
- Aiming for new mobility services MUST include policies to reduce single car use in cities („the elephant in the room“), whether electric, automatic or not. No carrot without the stick...
 - Parking regulation is key (availability and €).
 - Using vehicles must become easier and cheaper than owning them.
- We do not necessarily lack data, knowledge or money. What we need are more courageous politicians.



Grazie!

Don Guikink MSc

Breda University of Applied Sciences
GUICK Capacity building for mobility

guikink.d@buas.nl
don@guick.eu

Sources

1. [Fluctuo | Mobility Enablement](#)
2. <https://natuurlijkdeelmobiliteit.nl/>
3. <https://www.ipsos-publiek.nl/actueel/nieuwsbericht-viwdelenland/> &
4. <https://zoek.officielebekendmakingen.nl/stcrt-2018-8053.html>
5. <https://www.interregeurope.eu/find-policy-solutions/stories/shared-mobility-for-low-carbon-inclusive-transport>
6. <https://urban-mobility-observatory.transport.ec.europa.eu/resources/case-studies/shared-mobility-hubs-lessons-learnt-sharedimobihub-project>
7. <https://www.transportenvironment.org/articles/social-leasing-how-low-price-evs-can-help-transport-vulnerable-drivers>
8. [Living Labs - Gemini](#)