



**IRF WORLD ROAD
MEETING 2017**
/ 14-17 NOVEMBER / DELHI / INDIA /

**UCL ENERGY
INSTITUTE**



**MaaS
Lab**

Transition from Ownership to Usership: MaaS Products and Customers' Perspectives

Melinda Matyas
MaaS Lab @ UCL Energy Institute
November 14, 2017

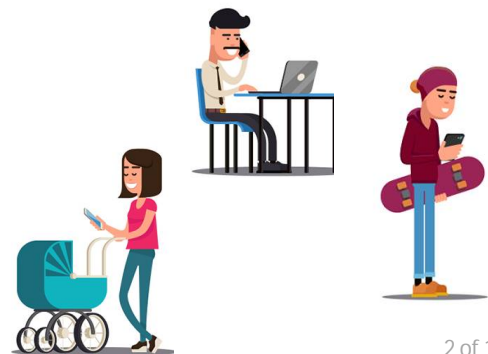
Background



MaaS is now becoming a reality

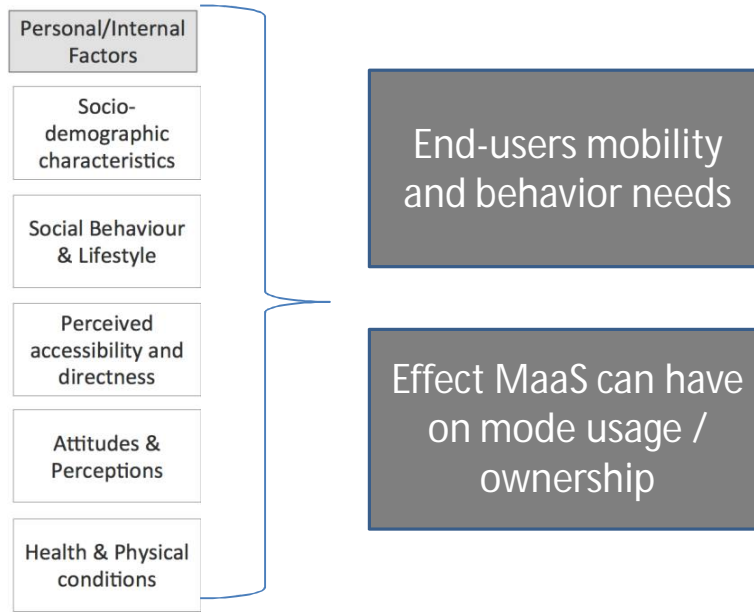
Users at the heart of MaaS → for the success of the concept we need to understand:

- Preferences for MaaS products
- Individuals attitudes towards MaaS
- Potential impact MaaS can have on users' travel choices



2 of 17

Need data to know user needs



3 of 17

Data collection

Case study: London

- 1,458 participants



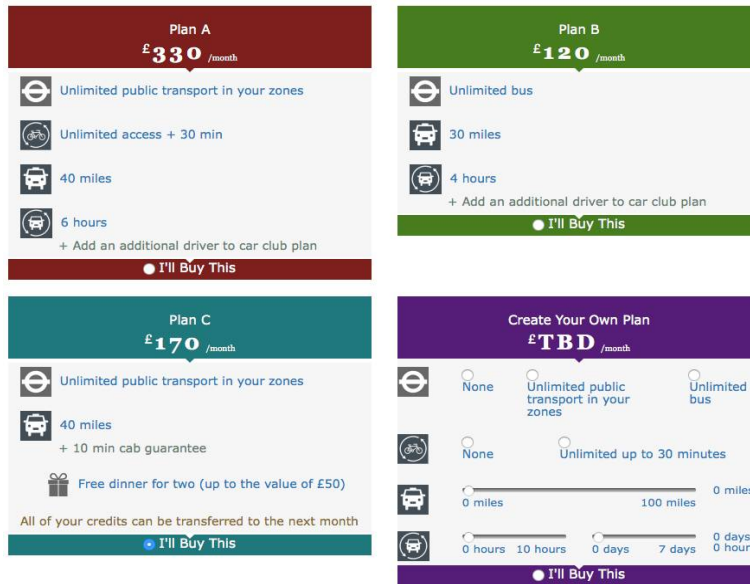
London
Mobility Survey

Survey design

- Individual questionnaire:
 - Socio-demographics
 - Current mobility patterns
- MaaS specific questionnaire
 - Preferences for MaaS plans (stated preference experiment)
 - Attitudes and perceptions towards MaaS

4 of 17

Data collection



Plan A
£330 /month

- Unlimited public transport in your zones
- Unlimited access + 30 min
- 40 miles
- 6 hours
- + Add an additional driver to car club plan
- I'll Buy This

Plan B
£120 /month

- Unlimited bus
- 30 miles
- 4 hours
- + Add an additional driver to car club plan
- I'll Buy This

Plan C
£170 /month

- Unlimited public transport in your zones
- 40 miles
- + 10 min cab guarantee
- Free dinner for two (up to the value of £50)
- All of your credits can be transferred to the next month
- I'll Buy This

Create Your Own Plan
£TBD /month

- None Unlimited public transport in your zones Unlimited bus
- None Unlimited up to 30 minutes
- 0 miles 100 miles 0 miles
- 0 hours 10 hours 0 days 7 days 0 days 0 hours
- I'll Buy This

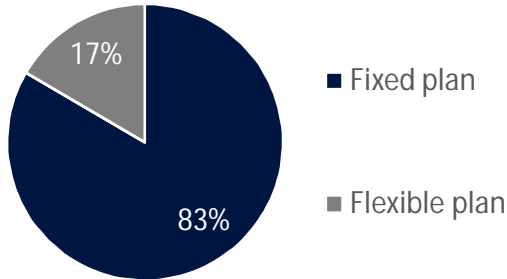
- Present 4 hypothetical MaaS plans and ask respondents to choose
- 3 fixed plans and one "create your own" menu
- Then ask question about their attitude towards MaaS

5 of 17

Results

6 of 17

Preferences towards MaaS products



→ Most people prefer fixed plans

Strongest preference for fixed plans:

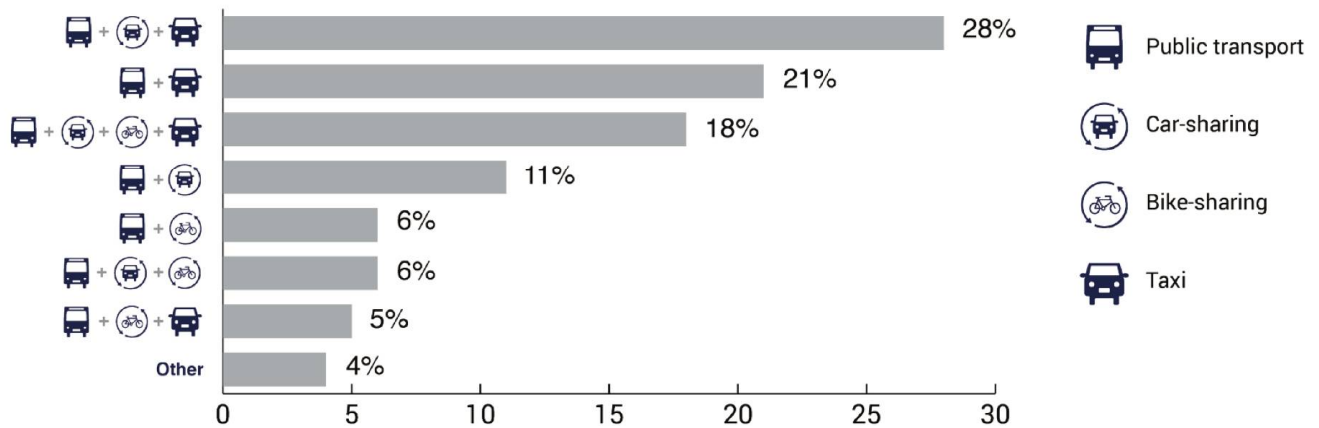
- Young (under 30)
- Full employment



7 of 17

Preferences towards MaaS products

Most often chosen transport mode combinations



8 of 17

Preferences towards MaaS products



Habit persistence

- Those who are currently a user of a transport mode → look for it in their MaaS plans
 - E.g. frequent taxi users prefer plans with taxi in them

Overall people don't prefer shared modes in their plans

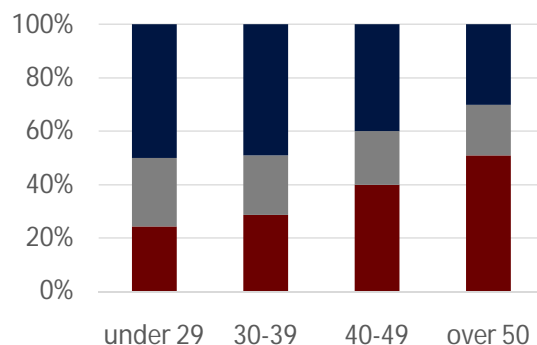
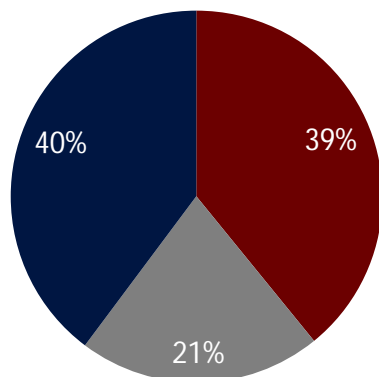
- Many of them haven't used them before

9 of 17

MaaS impact on mode choice



"I would be willing to try new transport modes I previously didn't use if my MaaS plan included them"



■ Disagree ■ Neutral ■ Agree

10 of 17

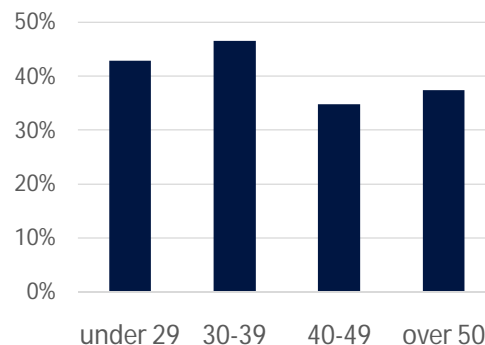
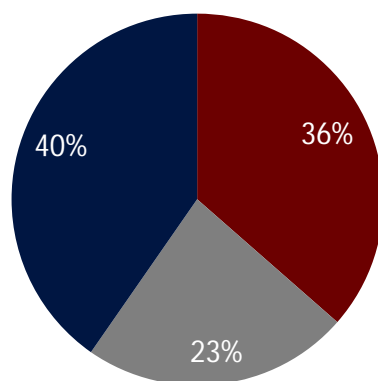
MaaS as a demand management tool

- Even though respondents do not prefer shared modes in their MaaS plan--> a number of them are willing to subscribe to plans that include these modes
- Once they have subscribed, 40% of them indicated that they would be willing to try transportation modes that they previously did not use (e.g. bike sharing, car sharing) if their MaaS plans included them
- Benefits: VMT, Emissions, Congestion ↓
Health, Wellbeing ↑

11 of 17

MaaS impact on car ownership: non-car owners

"If MaaS were available I would not need to buy a car at all"

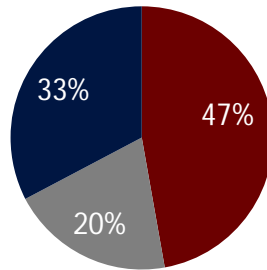


■ Disagree ■ Neutral ■ Agree

12 of 17

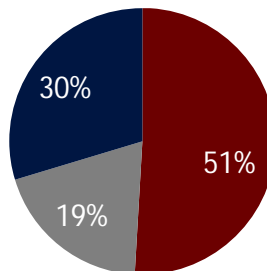
MaaS impact on car ownership: car owners

“MaaS would help me depend less on my car”



→ Potential to decrease private vehicle ownership

“I would be willing to rent my car to other MaaS users for a fee”



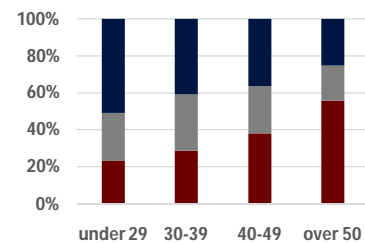
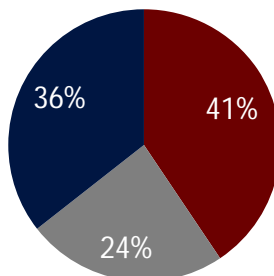
→ Peer to peer sharing opportunity

■ Disagree ■ Neutral ■ Agree

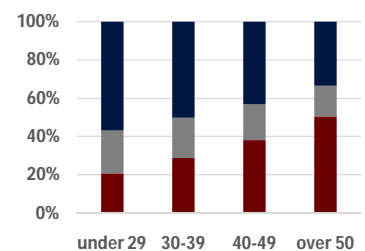
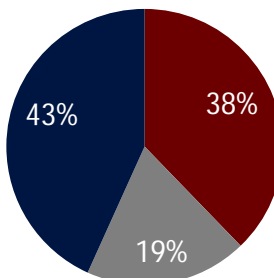
13 of 17

Attitudes towards MaaS

“MaaS special offers would motivate me to subscribe to MaaS”



“I would be willing to subscribe to MaaS if it gave me discounts”

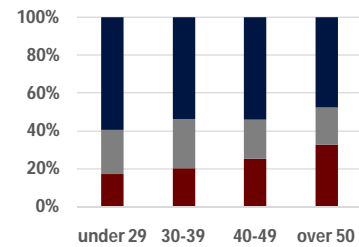
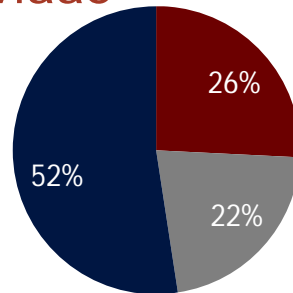


■ Disagree ■ Neutral ■ Agree

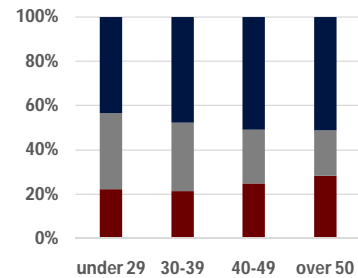
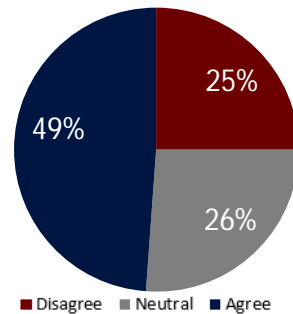
14 of 17

Attitudes towards MaaS

"I would worry about running out of my subscribed amounts of travel"



"I would feel trapped by subscribing to MaaS"



■ Disagree ■ Neutral ■ Agree

15 of 17

Conclusions

Why is all of this important?

- Product design
 - User preferences and attitudes towards MaaS need to be understood for successful MaaS design
- Mobility management
 - MaaS could be a vessel for sustainable transport solutions
- Transport system adjustments
 - If user travel choices change as a result of MaaS, it could add/decrease pressures on area's transport networks

16 of 17

Thank you!



MaaS Lab @ UCL Energy Institute

Melinda Matyas: Melinda.matyas.13@ucl.ac.uk

www.maaslab.org

17 of 17