

Preference for Mobility as a Service (MaaS) using a stated choice experiment

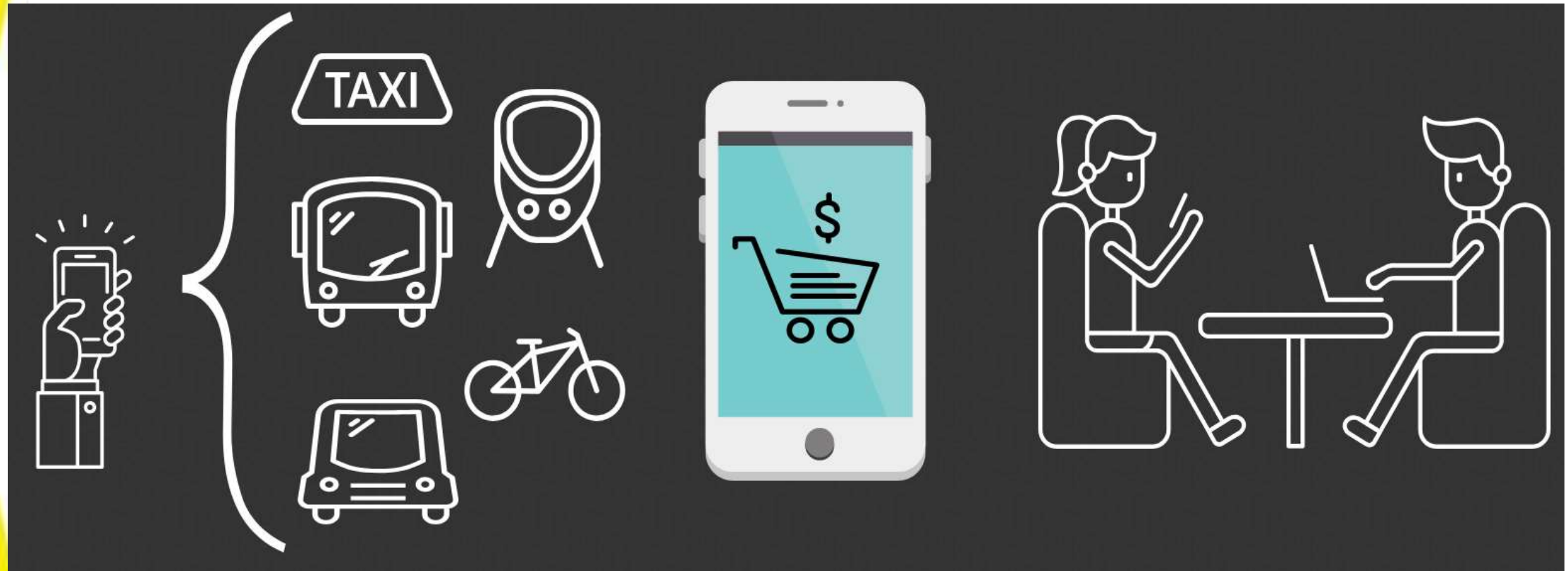


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Emma Cassar

What is Mobility as a Service (MaaS)?



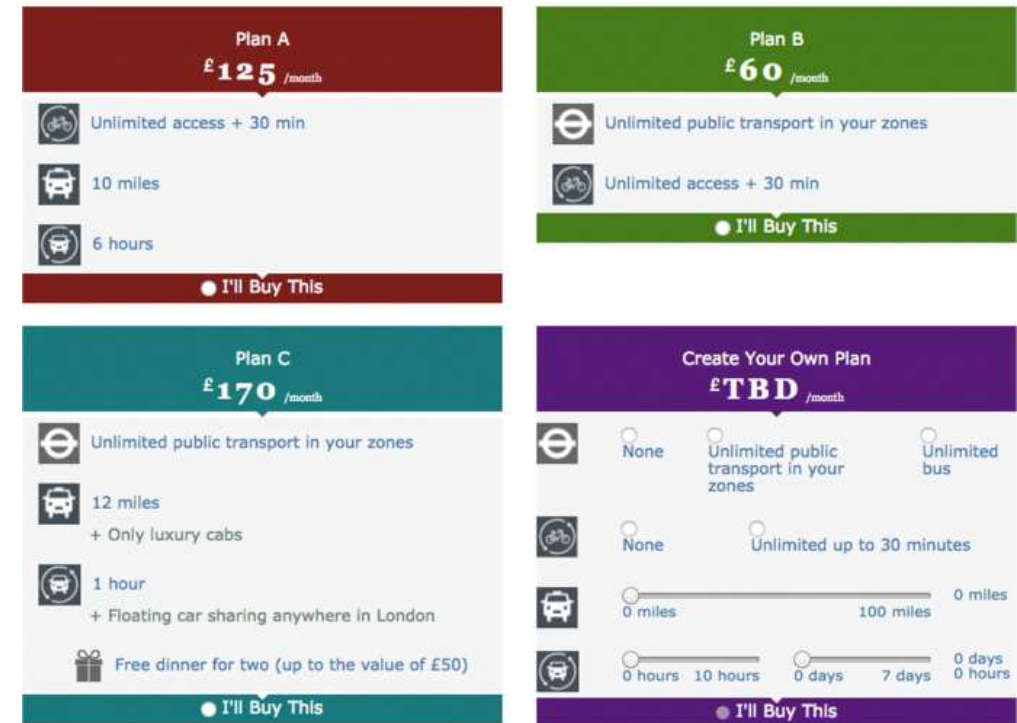
1. Integration

2. Subscription
Payment

3. User-centric

What do we know about MaaS?

- Studies are limited to qualitative stakeholders' perspectives and expectations of early adopters, and quantitative reviews on the preferred MaaS subscription.
- Potential early adopters are young public transport users or flexible travellers who make commuting and business trips.
- Potential users preference for a MaaS plan: Subscription fee, transportation modes, travel allowances, additional features



Source: Matyas, M and Kamargianni, K. 2017. Stated Preference Design for Exploring Demand for “Mobility as a Service” Plans. Presented at 5th International Choice Modelling Conference, Cape Town, April 3-5.

What is the role of MaaS in the current market?

- Research questions
 - Which mode of transport do commuters prefer when given the choice of MaaS?
 - Which attributes are found to influence the choice of transport mode?
 - Which sociodemographic and travel characteristics may define the transportation mode choice intentions and decisions of commuters?
- The general hypothesis is for MaaS to have the potential to shift commuters out of single occupancy cars and into sustainable modes of transport.

The Study

- West Midlands, United Kingdom
- Served by public transport (bus, rail, metro)
- Participants – Commuters with a driving license (students, in employment)
- Choice experiment
 - Hypothetical Scenario: Commute 7 miles
 - Alternatives: Private Car, Bus, Train, MaaS (bus, train, metro, taxi and car rental)
 - Attributes: in-vehicle time, waiting time, walking time and monthly cost



Car, Bus, Train or MaaS?

	People in employment N = 568	Students N = 209
Current Mode: Private Car	381 (67.1%)	58 (27.8%)
Stated Preference Mode choice: Private Car		
Current Mode: Bus	136 (23.9%)	122 (58.4%)
Stated Preference Mode choice: Bus		
Current Mode: Train	74 (13.0%)	54 (25.8%)
Stated Preference Mode choice: Train		
Current Mode: MaaS	NA	NA
Stated Preference Mode choice: MaaS		

Car, Bus, Train or MaaS?

	People in employment N = 568 number of choice tasks = 4,544	Students N = 209 number of choice tasks = 1,672
Current Mode: Private Car	381 (67.1%)	58 (27.8%)
Stated Preference Mode choice: Private Car	1,353 (29.8%)	317 (18.9%)
Current Mode: Bus	136 (23.9%)	122 (58.4%)
Stated Preference Mode choice: Bus	1,093 (24.0%)	588 (35.2%)
Current Mode: Train	74 (13.0%)	54 (25.8%)
Stated Preference Mode choice: Train	971 (21.4%)	416 (24.9%)
Current Mode: MaaS	NA	NA
Stated Preference Mode choice: MaaS	1,127 (24.8%)	351 (21.0%)

Key results – what influences mode choice?

- People in employment and students prefer cheaper modes of transport which gets them to their destination faster with minimal travelling and walking time.
- People in employment are more sensitive to time than students.

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People in employment

- Living in high income households
- Experience in booking and paying for transport services using their smartphone

Students

- Monthly/Annual public transport subscription
- Car Owners

Thank you for listening!
Any Questions?



Emma Cassar
PhD Researcher
e.cassar@uea.ac.uk