Who shares and why?

Assessing the potential for peer-to-peer mobility innovations to reduce CO₂ emissions

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1998: “Don’t get into a strangers car”

2008: “Don’t meet people from the internet alone”

2018: “Order yourself a stranger from the internet and get into their car alone”

Personal mobility is undergoing a technological and social change
The sharing economy as a disruptive innovation

**Disruptive innovations:**
- Offer something new and different to users, rather than incrementally improving upon what is already available
- Create new value for users
- Shake up incumbent firms, markets, and regulations

- Interested in how and why *disruptive low carbon innovations* are adopted
- Potentially disruptive, low carbon innovations in the mobility sector: alternatives to car ownership
P2P mobility innovations

P2P car sharing
An individual granting temporary access of their vehicle to another individual, often for payment

P2P ride sharing
An individual granting temporary access of a seat in their vehicle, and sharing a journey, with another individual, often for payment
Research questions

- Who are the early adopters of peer-to-peer mobility innovations?

- Why do early adopters participate in peer-to-peer mobility innovations?
**Sampling strategies**

<table>
<thead>
<tr>
<th>P2P car sharers</th>
<th>P2P ride sharers</th>
<th>Non adopters</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(N = XX)</em></td>
<td><em>(N = 176)</em></td>
<td><em>(N = 211)</em></td>
</tr>
</tbody>
</table>

**User**
- Registered but never used
- Registered but never used
- Registered but never used
- Registered but never used

**Provider**
- Frequent use
- Frequent use
- Frequent use
- Frequent use

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Never registered, never used

Sample to include: Millennials holders of a degree 50-50 split of respondents with a car in the household

* = at time of preliminary analysis
Who are the early adopters of P2P mobility innovations?

- What are the socio-demographic characteristics of early adopters (vs each other and vs non-early adopters)?
- What are the household characteristics of early adopters, do these differ from each other, and from non-early adopters?
- What are the personality traits of early adopters (vs each other and vs non-early adopters)?
- What are the technological preferences of early adopters (vs each other and vs non-early adopters)?
- What are the communication behaviours of early adopters (vs each other and vs non-early adopters)?
- What are the travel behaviours of early adopters (vs each other and vs non-early adopters)?
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What are the **personality traits** of early adopters (vs each other and vs non-early adopters)?

**Percentage of early adopters who view themselves as outgoing**

- Current P2P rideshare users
- Past P2P rideshare users
- Non – adopters familiar with P2P ride sharing
- Non – adopters unfamiliar with P2P ride sharing

**"I see myself as someone who is outgoing"**

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree
Why do early adopters participate in P2P mobility innovations?

- In what ways do early adopters perceive the relative advantages (vs. each other and vs non-adopter’s)?
- In what ways do early adopters perceive the complexity (vs. each other and vs. non-early adopters)?
- In what ways do early adopters perceive the compatibility (vs. each other and vs. non-early adopters)?
- In what ways do early adopters perceive the observability (vs. each other and vs. non-early adopters)?
- In what ways do early adopters perceive the trialability (vs. each other and vs. non-early adopters)?
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Preliminary survey results

• In what ways do early adopters perceive the relative advantages (vs. each other and vs non-adopter’s)?

Percentage of early adopters who believe the others users of P2P ridesharing are truthful with each other

Current P2P rideshare users

Past P2P rideshare users

The other users of P2P ride sharing are truthful in dealing with each other

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
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Percentage of peer service users and peer service providers who believe the others users of P2P ridesharing are truthful with each other

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Preliminary survey results

- In what ways do early adopters perceive the **relative advantages** (vs. each other and vs non-adopter’s)?

**Percentage of peer service users and peer service providers who believe the others users of P2P ridesharing are truthful with each other**

<table>
<thead>
<tr>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer service provider</td>
<td>1134.000</td>
<td>1512.000</td>
<td>-2.134</td>
</tr>
<tr>
<td>Peer service user</td>
<td>1148.500</td>
<td>1448.500</td>
<td>1.376</td>
</tr>
</tbody>
</table>

The other users of P2P ride sharing are truthful in dealing with each other.
1. Who are the early adopters of P2P mobility innovations?
2. Why do early adopters participate in P2P mobility innovations?

Next steps:
- Interviews with early adopters of P2P car sharing and P2P ride sharing
- Use the ‘Means-End Chain’ analysis, method for investigating individuals’ motivational patterns of consumption
Aim: To assess the potential for P2P mobility innovations to reduce CO2 emissions, through an exploration of two case studies: P2P car sharing and P2P ride sharing

1. Who are the early adopters of P2P mobility innovations?

2. Why do early adopters participate in P2P mobility innovations?

3. What impact does participation in P2P mobility innovations have on CO2 emissions?
Thank you for listening!

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