

Who shares and why?

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

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SILCI
Social Influence and *disruptive* Low Carbon Innovations

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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

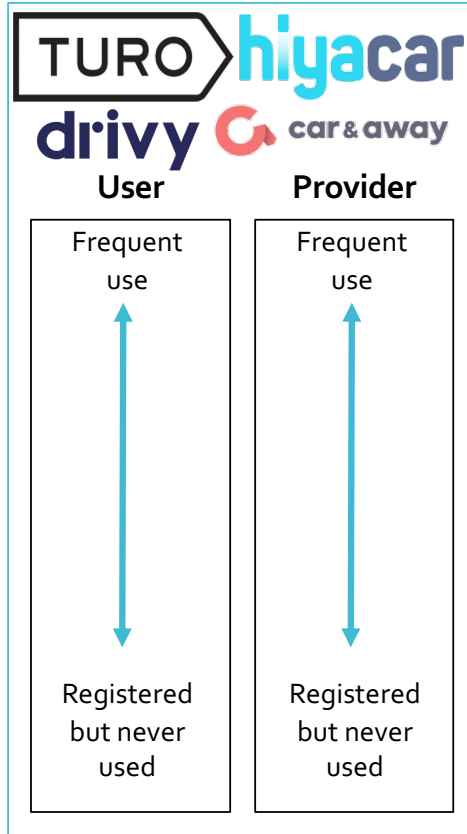
An individual granting temporary access of a seat in their vehicle, and sharing a journey, with another individual, often for payment

Research questions

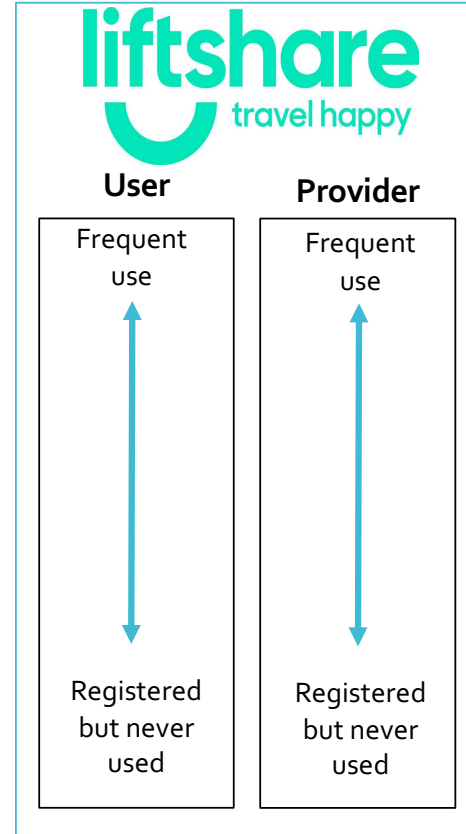
- Who are the early adopters of peer-to-peer mobility innovations?
- Why do early adopters participate in peer-to-peer mobility innovations?

Sampling strategies

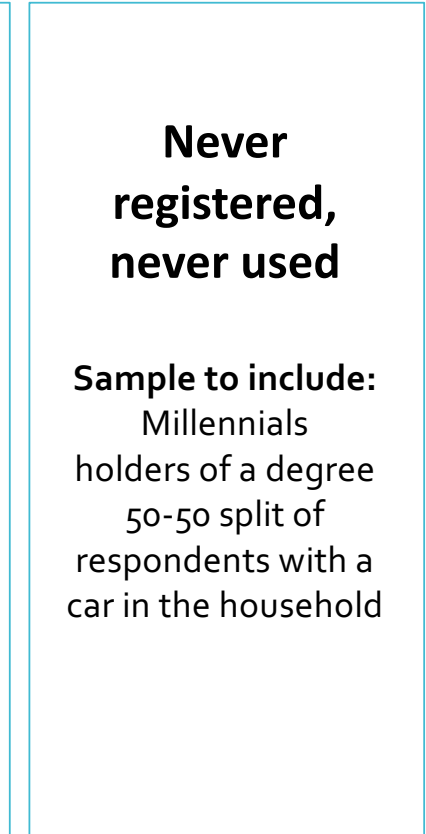
P2P car sharers
(N = XX)



P2P ride sharers
(N = 176*)



Non adopters
(N = 211*)



Preliminary survey results

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)?

Preliminary survey results

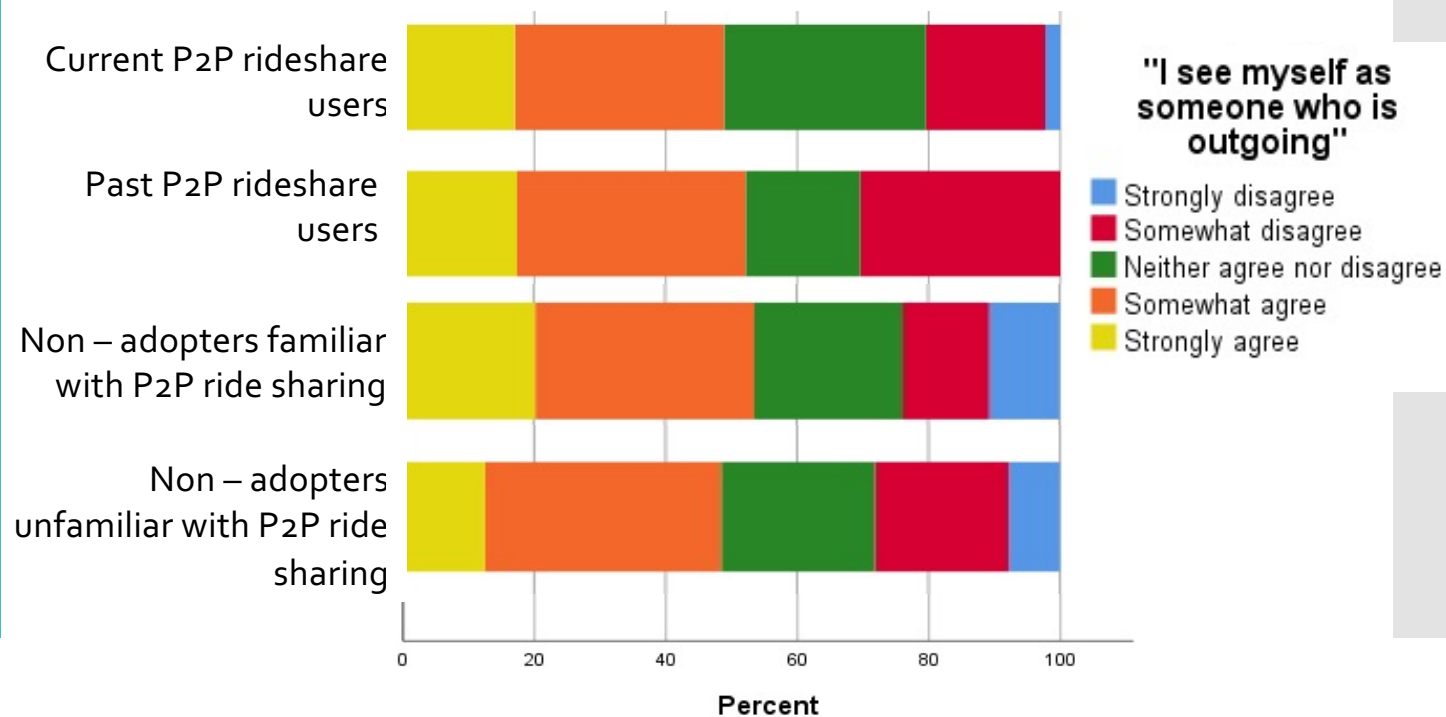
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Preliminary survey results

- 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



Preliminary survey results

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)?

Preliminary survey results

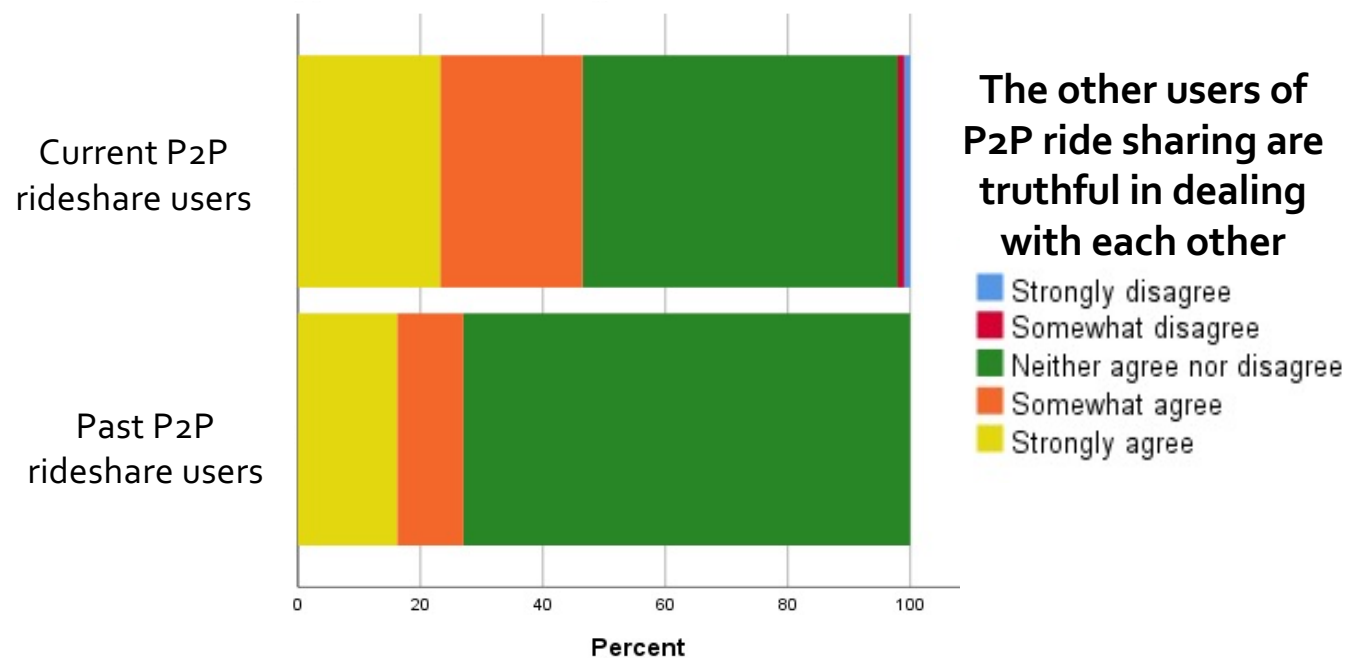
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Preliminary survey results

- 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

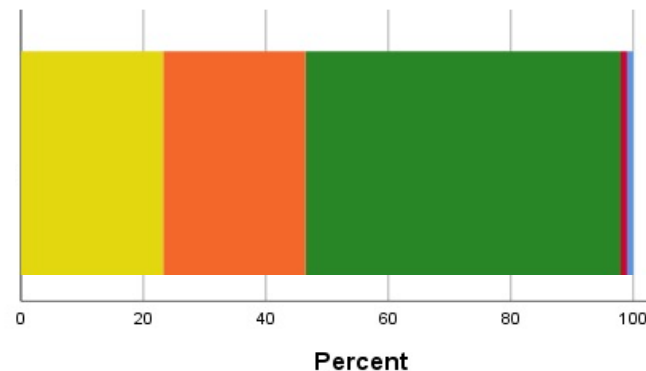


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Current P2P rideshare users



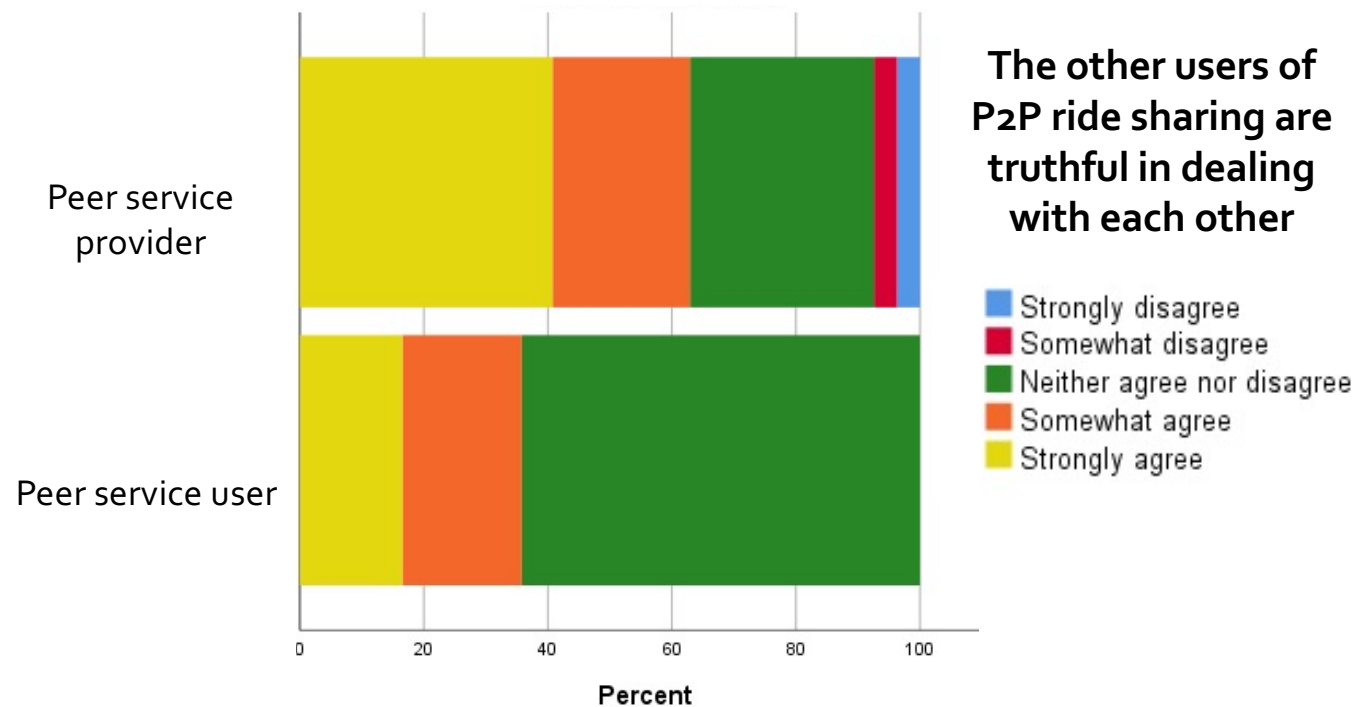
The other users of P2P ride sharing are truthful in dealing with each other

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Preliminary survey results

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

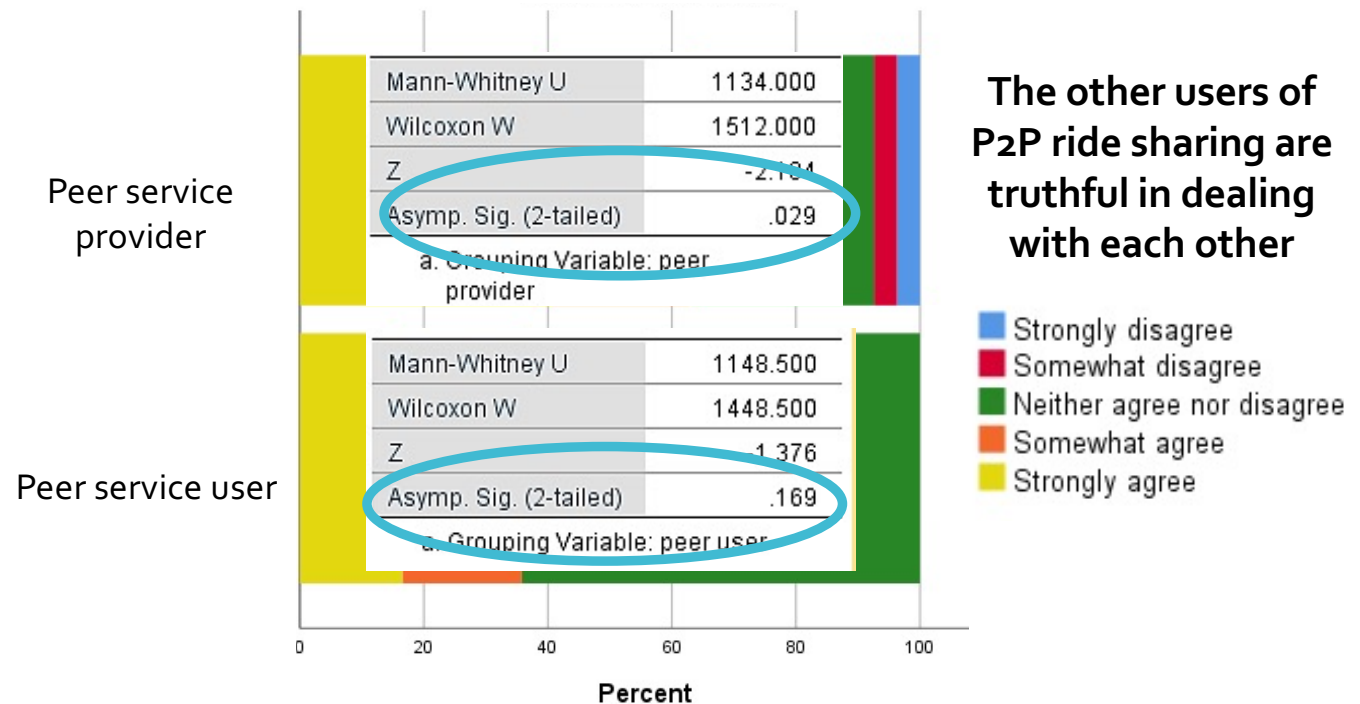
Percentage of peer service users and peer service providers who believe the others users of P2P ridesharing are truthful with each other



Preliminary survey results

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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

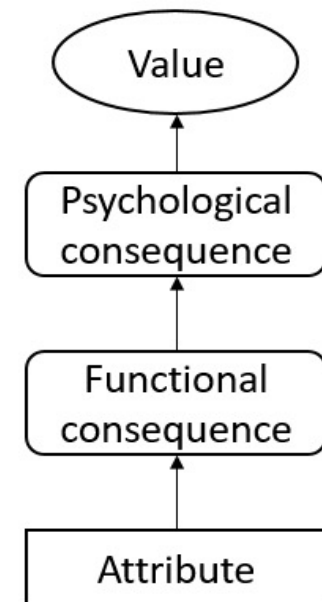


Future and further work

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



Future and further work

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?

CO₂ emissions?

Online survey
Secondary literature

CO₂ emission reduction profiles for each innovation

Thank you for listening!

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