Shared micromobility as a solution for first/last mile: System design and pricing schemes



Problem description

Micromobility modes come in a variety of operating systems and pricing schemes. The main systems of operation can be divided between single-trip (from A to B) or return-trip (from A back to A) and between docked (fixed pick-up and drop-off locations) or dockless/free-floating systems. On the other hand, their usage can be priced based on the travelled distance, time, a subscription or a combination of the three. The pricing approach is also related to how the service is operated.

Micromobility is often proposed as a candidate for solving the last-mile problem, offering a faster, more convenient way of reaching your destination from the public transport stop. What remains unknown is what is the best operating and pricing approach for integrating public transport and micromobility. As micromobility services are also used for standalone trips, this may influence the implementation choice, making it less attractive for PT users and thus not truly offering a solution for the last mile. With separate operators of such services, pricing is often not integrated.

Assignment

- Design and carry out a stated choice survey, capturing travellers' preferences for using shared micromobility as an egress mode for public transport trips
- Estimate a series of choice models to obtain taste parameter estimates, which you can use to determine the preferences for pricing and operational characteristics of shared micromobility services and allow you to provide policy recommendations

Candidate

• Should have taken the Statistical Analysis of Choice Behaviour (SEN1221) course or have experience with choice analysis

Information

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