

Investigating Demand Predictors for Microtransit Services: Insights from Public Transit Users in Berlin

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INTRODUCTION

Microtransit refers to a form of on-demand transportation service that uses vans or minibuses, to provide point-to-point rides for passengers. Unlike traditional fixed-route buses, microtransit services are more flexible in their routes and scheduling, as they can adapt to the specific needs of passengers in real-time.

What is Microtransit?



In Germany, the advancement of microtransit is driven by its potential to act as a feeder for public transportation networks in urban agglomerations. It has been in existence for several decades as a form of on-demand transport. A recent study finds out that as of September 2022, there are 60 active microtransit services in Germany. Some examples of such services include MOIA, IOKI, HeinerLiner, and BVG Muva. MOIA operates two large-scale ride-pooling services in Hamburg and Hannover. BVG Muva is the primary microtransit service operating in Berlin and is jointly managed by BVG and ViaVan.

OBJECTIVE

The objective of this study is to find the key influential factors (predictors) that affect the demand for microtransit services among public transport users in Berlin.

METHODOLOGY

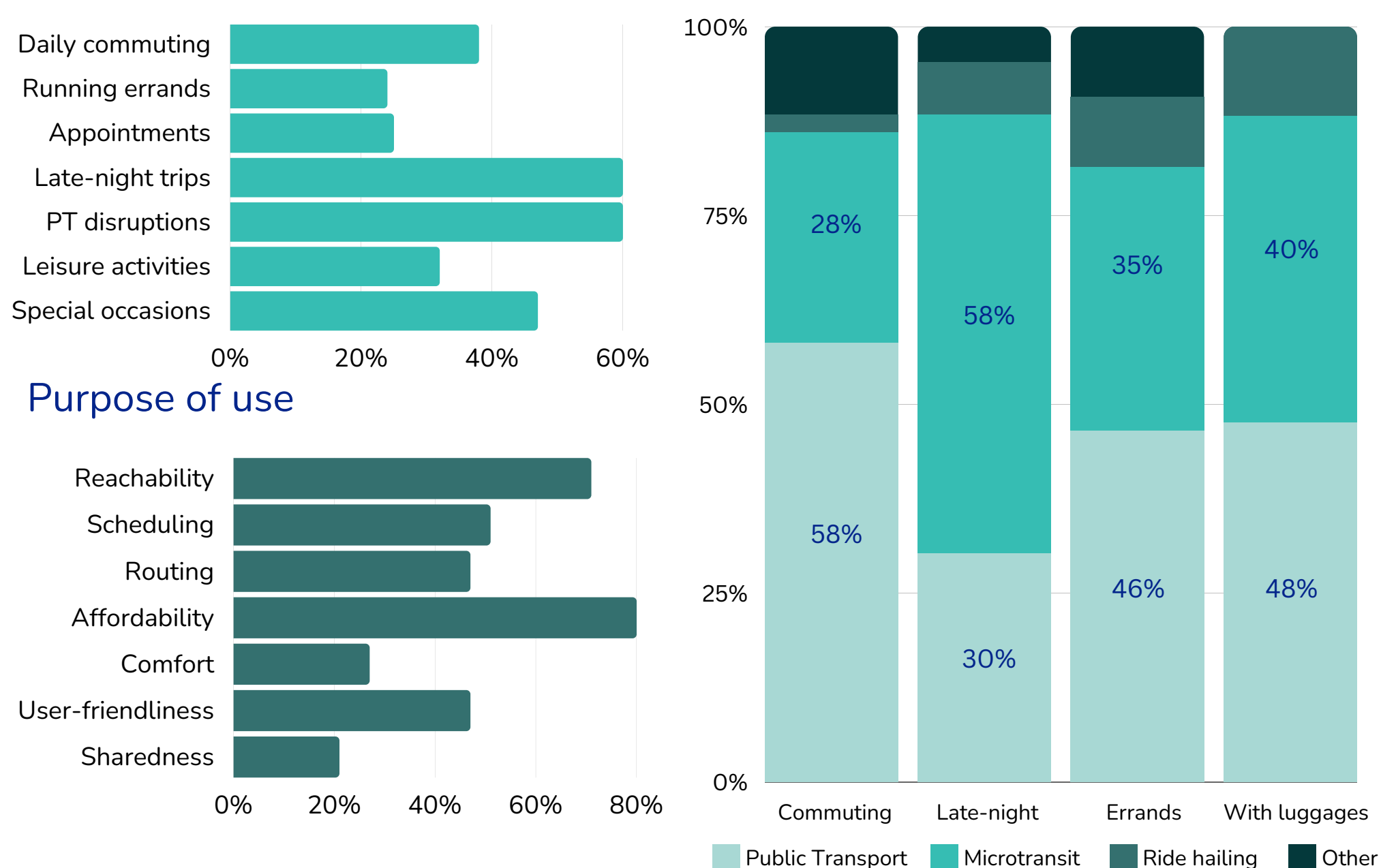
An online survey was carried out to obtain data from public transport users in Berlin. The survey questionnaire consisted of four sections:

1. Demographics and mobility behaviour
2. Awareness and prior use
3. Demand for microtransit services (dependent variables)
4. Discrete Choice Experiment for hypothetical mobility scenarios

The collected data was then analysed to make inferences and to derive meaningful insights.

RESULTS

- **Finding 1:** Number of days commuting, and first and last-mile distance emerged as key predictors
- **Finding 2:** Microtransit is preferred for late-night travel and during public transit disruptions
- **Finding 3:** Affordability and reachability (service area) stand as primary considerations for microtransit use



Primary considerations for prospective users

Mode choice by mobility scenarios

CONCLUSION

This study offers insights into the predictors of demand for microtransit services among commuters in Berlin. The findings from the discrete choice experiment (DCE) highlight the dynamic nature of demand, revealing time-sensitive preferences and varying scenarios that impact mode selection. Notably, concerns about waiting and walking times emerged as crucial considerations.



The demand for microtransit services (on-demand ridepooling) in Berlin is influenced by commuting frequency, and the proximity of trip origin / destination to the nearest transit station (first mile and last mile). Microtransit is preferred for late-night travel and during public transport disruptions.



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