Let’s all go together: investigations on willingness to share rides in dynamic ridepooling contexts and its significance for future autonomous public transport, using multivariate, hypothesis-driven model

Research indicates that the potential of autonomous vehicles (AVs) can only be fully realised through AVs being deployed as shared, pooled rides, in a format known as dynamic ridepooling. Therefore, to develop strategies for increasing acceptance and adoption of a new mobility behaviour, it is critical to understand what makes consumers more likely to share their rides with strangers. The current study investigates the willingness to share (WTS) in four different countries. The results of a first survey, currently in development, will be used in our multivariate, hypothesis-driven model that includes both latent structures and discrete choice modelling, designed to capture the notion of WTS. As other research has shown social discomfort and value of time as meaningful for WTS, beside considering the normally-used variables of privacy and time-sensitivity, we include the following four latent variables. "Vehicle factor", to test whether the prestige of owning a car or the comfort and luxury of the car affect the WTS, and "Imitating others", "Subjective norm" and "Trust" to account for the effect herd behaviour has on WTS. We also examine the possible impact of country-specific variables (e.g. GDP per capita, regional density, and average age of first car purchase). In addition, we identify the existing research gaps in the services currently available and the research that has already been completed, laying out our roadmap for future work in creating prescriptive measures to address any crucial findings towards WTS.

Key Characteristics
Dynamic ridepooling • Willingness to share (WTS)