

An Empirical Study of Customers' Behavioral Intention to Use Ridepooling Services – An Extension of the Technology Acceptance Model

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Abstract. Shared mobility services for passenger transportation become increasingly popular all over the world. As services like carsharing are already well-established and well-accepted, ridepooling services are at their early stage and currently within first implementations. The most critical success factor of such services is the customer acceptance. We investigate the acceptance of 115 German questionnaire respondents using and extending the Technology Acceptance Model. Results indicate that the success factors of the developed model serve as useful predictors of the behavioral intention to use ridepooling services. Perceived compatibility was identified to have the strongest impact whereas perceived ease of use and perceived safety are not relevant for accepting ridepooling services. Based on these findings, our paper provides management implications and recommendations to improve acceptance and success of ridepooling services in Germany.

Keywords: Ridepooling, Passenger Transportation, Urban Mobility, Technology Acceptance Model, Structural Equation Modeling.

1 Introduction and Motivation

Urban areas are confronted with a multitude of challenges as high emissions, poor air quality, fossil fuel dependency, traffic volume, and congestion [1]. With increasing consciousness for sustainability and environmental responsibility, the need for innovative solutions tackling these problems is emerging. As a consequence, the sharing economy has been arisen from the idea that sharing a good or a service is often more advantageous than owning it as resource inefficiencies are reduced. Regarding passenger transportation, rideservices depict a possibility for individuals to share a car or a trip in different modes. Supported by technological developments and the digitalization of processes, companies are able to offer reliable modes of dynamic on-demand rideservices; concurrently, customers can participate easily through the use of immediate communication with connected mobile devices [1-3]. In this way, the