

ABSTRACT

Zagreb is expected to be one of the first cities worldwide to have robotaxis roaming the streets, as Rimac Automobili plans to introduce a fleet of robotaxis in 2024. Robotaxis have the potential to improve transportation significantly and can lead to significant benefits for the society, the economy, and the environment if implemented and regulated correctly. Otherwise, robotaxis could result in negative consequences. However, to gain all the benefits of robotaxis introduced in this study, it is important to reach a large-scale adoption. As the most significant barrier to large-scale adoption of robotaxis can be psychological rather than technological or regulatory, it is crucial to understand consumers' intention to use robotaxis.

Thus, this research aims at identifying the perception of the residents of Zagreb on the possible impacts of robotaxis on the economy, society, and environment and if the residents are acceptive of such a project. Moreover, it will try to identify any positive and negative relationships between the different impacts and factors with the behavioral intention to use robotaxis. The findings of the primary and secondary data will allow to provide recommendations to government officials, policymakers, and robotaxi developers on what should be done to ease the introduction and achieve large-scale adoption of robotaxis Zagreb. This study also includes a section briefly explaining robotaxis and autonomous vehicles and their functioning and thus contributes to raising the knowledge level of the residents on robotaxis and autonomous vehicles.

The research implemented a non-experimental fixed or quantitative strategy, and the data was collected using an online questionnaire. The analysis of the collected data was completed using Microsoft Excel, Microsoft Powerpoint, Miro, and PSPP. In total, 158 responses from residents of Zagreb were collected.

The findings indicated an extensive agreement from the residents with most of the statements and showed that *perceived usefulness* and *perceived ease of use* have a significant impact on the *behavioral intention* to use robotaxis. Furthermore, the findings showed that the higher the knowledge level, the likelier one is to use robotaxis. Therefore, some of the most relevant recommendations are: creating technological development skills and education programs to educate all stakeholders on autonomous vehicles and robotaxis and encourage their cooperation, raising knowledge and awareness of autonomous vehicles and robotaxis via formal and informal education, and promoting the benefits and usefulness of robotaxis and autonomous vehicles.

Key Words: Robotaxi, Autonomous Vehicle, Residents' perceptions