

PhD in Business Economics: Business Engineering

Understanding the Impacts of Automated Mobility: User experiences, stakeholder perspectives, and vehicle performance across Europe

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Abstract

Automated vehicles are an innovation that have the potential to not only revolutionize urban transport, but also transform cities. However, full commercial deployment remains far from reality in Europe. Pilot projects in Europe have multiplied over the years, with a focus on shared autonomous mobility services, but questions remain about the actual performance of these services, and how autonomous mobility is perceived by users and other stakeholders. As such, the potential implications of autonomous mobility are uncertain.

This research investigates the implications of different forms of automated mobility at different levels and from multiple perspectives, starting with privately owned automated vehicles focusing on individual expectations of time use and activity scheduling. The thesis then shifts focus to shared automated mobility, exploring spatial impacts and user acceptance, stakeholder perspectives on different impact areas, as well as current state of performance in real life pilots.

This thesis provides a multi-perspective view of not only user and stakeholder expectations of both private and shared automated mobility, but also a data-driven evaluation of the current state of performance of shared automated vehicles in Europe.