Willingness to pay for high-speed transportation

Short Description

Emissions from the transport sector accounted for over 24% of global CO2 emissions in 2016 and continue to rise rapidly, primarily due to the rapid growth of air travel. For this reason, there is an urgent need for more sustainable transport infrastructures to reduce emissions and meet global climate targets. Vacuum transport (VT) can serve as a sustainable transportation alternative. Vacuum transport systems move passengers and/or cargo above or below ground through low-pressure tubes, achieving greater efficiency through reduced friction and aerodynamic drag (also known as Hyperloop). This opens up the potential for VT to provide high-speed transportation with reduced energy consumption.

The objective of this thesis is to examine individuals' willingness to pay for environmentally friendly high-speed transportation and analyze the factors that influence their preferences. These factors include age, gender, income, location, risk tolerance, and social conformity. Through a comprehensive analysis, the study aims to identify which factors and to what extent they impact people's willingness to pay for vacuum transportation technology. The findings of this research endeavor seek to establish either the upper limit or a price range for utilizing vacuum transportation, which may exhibit regional variations.

Type	Master or bachelor thesis
Partner	Home university and EuroTube Foundation
Start date	TBD
End date (planned)	TBD
Internal supervisor	TBD
External supervisor	Damla Karapinar, damla.karapinar@eurotube.org

Work packages

- Literature Review
- Data Collection
  - Develop and distribute surveys or questionnaires to gather data about people's willingness to pay for vacuum transportation technology
  - Collect data related to potential influencing factors (age, gender, income, living place, risk tolerance, and desire to fit in with others)
- Data Analysis
  - Analyze the collected data to understand how various factors affect people's willingness to pay
  - Analyze how willingness to pay varies across different regions
- Pricing Recommendations
  - Based on the analysis, determine the maximum price or price range people are willing to pay for vacuum transportation
  - Discuss how these prices might differ across regions
- Conclusion and Recommendations

Requirements

- High motivation and interest in the topic
- Able to work independently and be creative
- Methodological and goal-oriented working behavior
- Knowledge about vacuum transport technologies is beneficial

Application: Please email your CV and transcript to damla.karapinar@eurotube.org