

Connected Automated Vehicles (CAV)

Predicting Acceptability

Aim

We want to find out what drives the acceptability and acceptance of CAV, and what we can do to increase acceptability and acceptance for both potential users, as well as for other road users.



What are CAVs?

Completely **self-driving cars** that are equipped with tools to communicate and share data with other devices both inside and outside the car, such as other cars, and public transport systems.

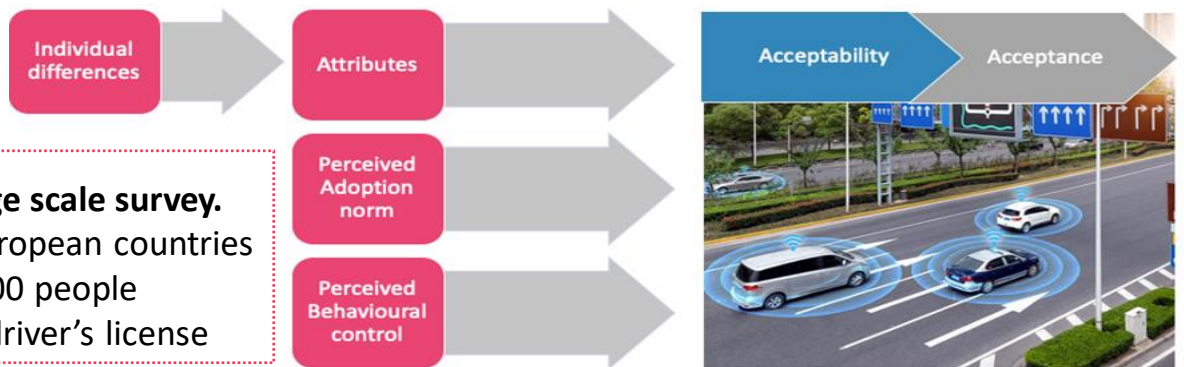
Acceptability vs Acceptance

Acceptability = how do people feel about CAV before they have experienced it?

Acceptance = do people want to use or buy CAV after experiencing it?



Psychological model that predicts the acceptability of CAV.



Studied with a **large scale survey.**

- ✓ Online in 6 European countries
- ✓ Sample of 3800 people
- ✓ 92.6% had a driver's license

Measures

- ✓ **Individual differences** such as interest in technology and personal values
- ✓ **Attributes: Safety** (is CAV safe?), **Convenience** (is CAV useful?), **Control** (can I control CAV's behavior?), **Perceived pleasure** (is driving CAV enjoyable?), **Trust in CAV technology** (is CAV's computer system trustworthy?), **Environmental sustainability** (is CAV environmentally friendly?), **Status-enhancement** (is CAV a status product?).
- ✓ **Adoption norm:** Do you believe close others (friends, family) will adopt CAV in the future?
- ✓ **Perceived behavioral control:** Do you believe you will be capable of using CAV?

Some findings

- On average, people are slightly positive towards CAV
- Perceived safety, perceived convenience, and perceived environmental sustainability had the strongest positive effects on acceptability of CAV
- Current drivers and non-drivers differ on what they find important for CAV

