





RECOMMENDATIONS

-  Users need **clear and easily accessible information** to trust the service
-  Users want an **easy and customisable** service
-  Users are most concerned about **technical safety and reliability**
-  Users require **data privacy and security**

OPPORTUNITIES

IoT can enable

the use of automated driving services through easier trip planning by providing real-time traffic information

IoT can accelerate




the adoption of automated driving services as trust in the system is increased by providing information about the vehicle operation

IoT can enhance

the user experience by providing real-time information about points of interest and enabling customisation options



The mission of AUTOPILOT is to develop and test use cases of automated driving progressed by the Internet of Things. Understanding user requirements and concerns in early stages supports user-centred development and uptake of new services and features.

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AUTOPILOT

USER EXPECTATIONS, REQUIREMENTS
AND CONCERNS RELATED TO IOT-ENHANCED
AUTOMATED DRIVING SERVICES



STUDY DESIGN

Objectives

The survey aimed at identifying how the Internet of Things (IoT) can improve automated driving services based on user feedback.

Method

The online survey introduced **three different use cases** of automated driving progressed by IoT which were developed within the AUTOPILOT project. Information about expectations, requirements and concerns of potential users in different usage phases were collected. The study was conducted across 8 countries.



The sample consisted of over 4,000 participants and was selected to be representative by age and gender for the countries' population (18-69 years old).

USER FEEDBACK ON USE CASES

Scenario A – Tourist Service



The AUTOPILOT app provides a carsharing service for tourists. In the gardens of Versailles, the vehicle drives autonomously and the service provides tourist information when passing sights.



Users evaluate the service overall positively



Users require

- information on planning the tour
- Information on the booking process
- real-time tourist information



Users are concerned about

- secure payment
- potential malfunction during self-driving mode



Scenario B – Platooning Matching

Users evaluate the service overall positively



Users require

- Traffic information
- Information on the car's operations in self-driving mode



Users are concerned about

- The reliability of the system
- The reliability of the platoon leader



In the platooning matching function of the AUTOPILOT app, users arrange to meet and join together in a platoon on the motorway – one user is the platoon leader, the others are following. The following cars drive autonomously.



Scenario C – Automated Valet Parking



With the automated valet parking function of the AUTOPILOT app, the user drives to a drop-off point and sends the car to park autonomously. The system provides information about free parking spots and navigates the car to it.



Users evaluate the service overall positively



Users require

- Service-related real-time information
- Options for monitoring the vehicle



Users are concerned about

- Cyber security
- Reliability of the vehicle's technology

