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# Public perception of CCAM

## Overview of factors affecting public acceptance

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# ➤ WHY DOES PERCEPTION MATTER?



Perception =  
Process of **becoming aware**

Interpret the stimuli into  
**meaningful knowledge**



Relate to **public awareness**



Translated into  
**acceptance/acceptability**

The New York Times


## Tesla Autopilot and Other Driver-Assist Systems Linked to Hundreds of Crashes

**f** Barcelona Secreta  26 May · 



El futuro ya está aquí: los coches autónomos llegan a la ciudad 🚗

The future is here: autonomous cars are coming to town 🚗

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BARCELONASECRETA.COM  
**El primer vehículo sin conductores empieza a circular por BCN**  
El 30 de mayo el Puerto de Barcelona estrenará el primer vehículo autónomo y sin conduct...

  699 235 comments 213 shares

**BAX & COMPANY**

**Noemí León Albert**  
I'm less afraid of an autonomous vehicle than many bus and taxi drivers, I'll leave it there!  
Like Reply See original (Spanish) 4 w Edited 👍👎 23  
↳ 10 replies

**Elisabeth Sanchez Romero**  
See why they need to **reduce population**. Everything will be machines, you'll go shopping and goodbye cashiers, waitresses, everything will be done by you or a robot. There are already many countries that have a robot as a waiter. We're trash for this kind of people. **Millions of jobs will go down.**  
Like Reply See original (Spanish) 4 w Edited 👍👎 34  
↳ 6 replies

**Raquel Martínez Pulido**  
Come on, **everything automated**, let's keep removing jobs from pearls for entrepreneurs  
Like Reply See original (Spanish) 4 w 👍👎 35  
↳ 5 replies

**Christian Martínez**  
**Agenda 2030. Population reduction** and artificial intelligence at its best. Also for the cacharro to circulate 5g antennas on every corner... let's have a wonder  
Like Reply See original (Spanish) 4 w 👍👎 6  
↳ 10 replies

**Rodrigo Fernández Alonso**  
**THAT DYSTOPIC FUTURE THAT COMES STEPPING ON OUR FEET!!**  
Like Reply See original (Spanish) 4 w 👍👎 2  
↳ 4 replies

**Alberto Cruz Nieto**  
What needs to happen to the city is stability and security for all.  
Like Reply See original (Spanish) 4 w 👍👎 17  
↳ 2 replies

 **What influences people acceptance and thus behaviour?**



# ➤ PEOPLE CHOICES ARE DRIVEN BY NEEDS AND WANTS

Personal wants

Individual expectations  
Subjective

Basic needs

Reflect the general  
interest, similar for  
everyone, sine qua non  
condition of happiness



# ➤ PEOPLE NEEDS AND WANTS FOR MOBILITY

	Mobility basic needs	Mobility wants
<b>Security</b>	<b>Safety &amp; security</b> of the transport	<b>Reliability</b> (punctuality, familiarity)
<b>Information</b>	<b>Availability &amp; access</b> of information	<b>Quality</b> of information
<b>Identity</b>	-	<b>Status</b> and lifestyle expression
<b>Distance</b>	<b>Accessibility:</b> distance to first mobility system + access to the transport mean	Number of transits
<b>Convenience</b>	-	Flexibility, comfort, privacy, force deployment, temperature, fun...
<b>Costs</b>	<b>Affordability</b>	Direct & indirect costs
<b>Time</b>	-	Preparation, travel and waiting time

Based on Cornet, H. (2012). Sustainability screening tool for decision-making assistance in the field of urban mobility (Doctoral dissertation, Technische Universität München).





**Selected insights on public  
perception of CCAM**



# STUDIES ON PUBLIC PERCEPTION TOWARDS CCAM

## **2020 | Eurobarometer Survey 496 “Expectations and Concerns from a Connected and Automated Mobility” (European Commission)**

- 27,565 participants interviewed face to face at home in their mother tongue

## **2021 Engaging citizens in driverless mobility: Insights from a global dialogue for research, design and policy (Chng, et al.)**

- 945 citizens in 15 cities in North America, Europe and Asia
- Structured one-day workshop in native language

## **2022 | Exploring the acceptance of connected and automated vehicles: Focus group discussions with experts and non-experts in transport (Duboz, et al.)**

- Focus on ADAS
- 72 participants (experts & laymen), Focus Group discussions online

# ➤ INSIGHTS FROM THE CITIZENS DIALOGUES

## Optimism towards AVs differs

- Across cities depending on tech exposure
- Men more optimistic than women

## Driverless mobility model

- Greatest preference for public transport model Lowest in Washington // highest in Graz

## Role government and industry

- Participants trust their government more than the transport industry





# ➤ INSIGHTS FROM FOCUS GROUP DISCUSSIONS

Participants showed mixed feelings about AVs...

Some topics are benefit and threat

- **Traffic congestion:** Less congestion // More travel
- **Environment:** Less congestion // More travel
- **Accessibility:** + for people without a car // - in rural areas
- **Travel cost:** Less costs without driver // More costs for tech
- **Safety & security:** AV drives better // Cyberattacks
- **Urban planning:** More space in cities // More urban sprawl

# ➤ PRIOR KNOWLEDGE ABOUT AVS INFLUENCES POSITIVELY PUBLIC ACCEPTANCE

*“Direct link between technology exposure and optimism [towards AVs]” (Chng, 2021)*

## Our responsibility to inform the public on

- Expected benefits - *why* are we doing trials?
- Decisions making processes - *transparency*

## Communication efforts needed through

- Social media, etc.
- Educational campaigns
- Local engagement



# ➤ AVS ARE ASSOCIATED WITH SHARED MOBILITY

*“In general, [the picture] “the shuttle” was associated with an AV, because participants had already seen it in media or used one”*

*“[the shuttle perceived] as the ‘most ready’ type of CAV”*

**We should take advantage of that!**



 **To go further...**



# ➤ HAPPENING NOW IN SHOW



**On-going a priori survey + posteriori survey planned on the 15 pilot sites**

**Deliverables**, e.g., “D1.1: Ecosystem actors needs, wants & priorities & user experience exploration tools”

## **Podcast “Automated Mobility – The People behind the Wheel”**

- #1 Endre Angelvik – Towards more sustainable freedom of movement
- #6 Ingrid Skogsmo – Understanding better citizens’ needs
- #8 Delphine Grandsart – For a continuous citizen engagement



# ➤ REFERENCES

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# THANK YOU!

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