

EXAMPLE SLIDES

ADAS Satisfaction Study 2025

Assistance Systems from the Users' Perspective

Objective

Initial Situation:

- Modern driver assistance systems represent a cornerstone for the advancement of autonomous driving.
- While technical evaluations of these systems are available to manufacturers, there is a notable lack of objective customer validation. In order to incorporate the needs and expectations of end users into the further development of Advanced Driver Assistance Systems (ADAS), comprehensive and detailed customer feedback is essential.

Research Questions:

- How often do drivers utilize driver assistance systems?
- How satisfied are users with the functions provided, and to what extent do they trust these systems?
- What differences can be identified among distinct target groups, such as various vehicle segments?
- What actionable recommendations can be drawn from user feedback?



Target Group

Survey:

- Target Group: Drivers of BEVs and ICE cars (Registration Year 2022-2025)
- Survey: Online-Survey (CAWI)
- Market: Germany
- Recruiting: Access Panel, USCALE Social Media BEV Panel
- Length of Interview: 16 min (median)
- Field Phase: April-June 2025

Sample size:

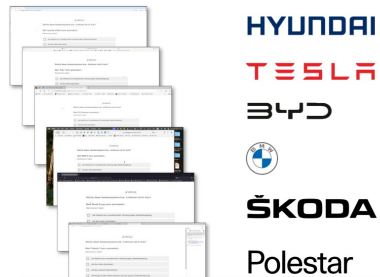
- total: N = 4,025
thereof:
 - Access Panel: N = 2,001
 - Social Media Panel: N = 2,024
- Brands with sufficient sample: Audi, BMW, Cupra, Ford, Hyundai, Kia, Mercedes, Renault, Skoda, Tesla, VW, Volvo



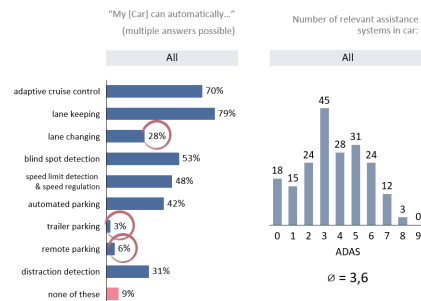
ADAS Systems Surveyed

Based on a pilot study, 10 relevant ADAS functions were identified and examined in the main study.

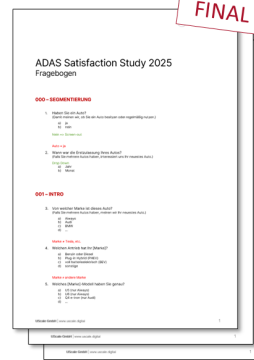
Thinking-Aloud-Testing



CAWI Pilot Study



FINAL



ADAS features were examined in the study with manufacturer-independent descriptive terminology:

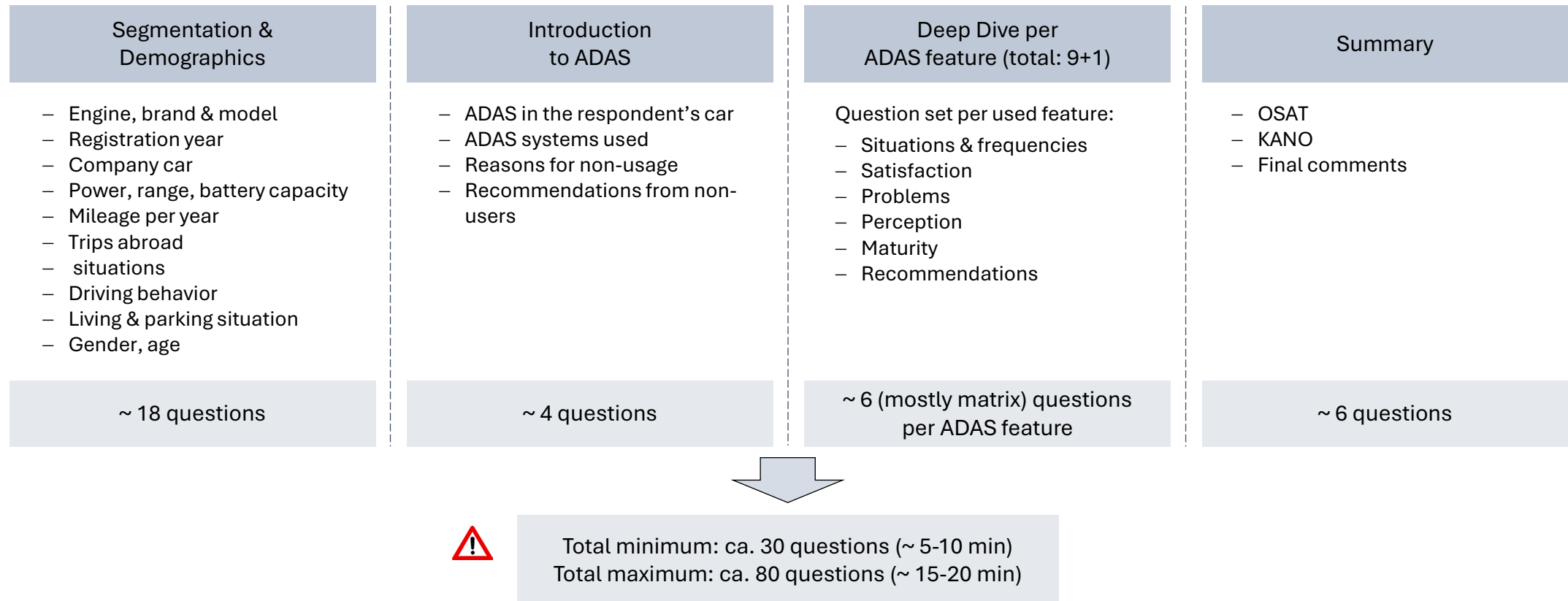
"My vehicle can automatically..."

1. ...regulate the distance to the vehicle in front (distance control)
2. ...stay in lane (lane keeping)
3. ...follow the lane (lane following)
4. ...change lanes (lane changing)
5. ...detect vehicles in the blind spot and warn me (blind spot warning)
6. ...recognize speed limit signs and adjust my speed accordingly
7. ...parallel and end-on parking
8. ...park with a trailer
9. ...remote parking via the key fob/smartphone
10. ...detecting when the driver is distracted from the road

Survey Structure

All respondents were asked 18 segmentation questions and 4 questions about ADAS usage before delving into up to a maximum of 6 ADAS systems per respondent in depth.

ADAS SATISFACTION STUDY

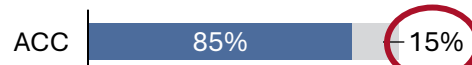


Maximum Value Through the Use of Different Panels

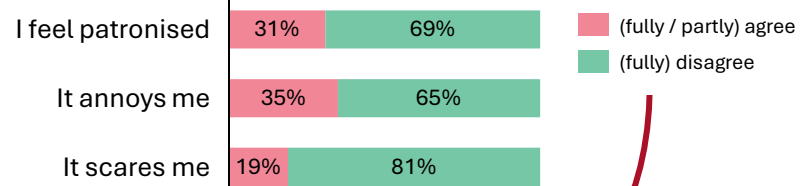
Results of the access panel represent the brands with high validity. For deep analyses, the social media panelists provide detailed insights.

1. Access panelists: first sight, valid, relevant

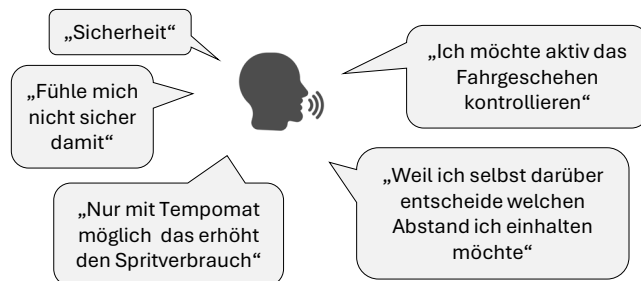
Usage:



Assessment:



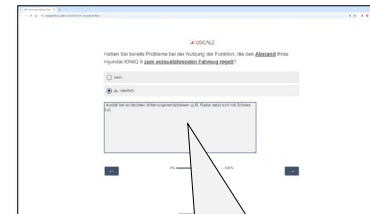
Reasons for non-:



2. Social media panelists: deep dive for analysis

Problems:

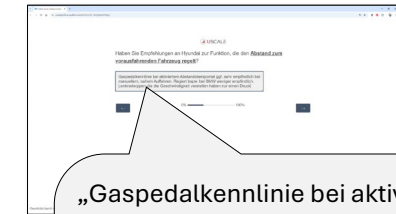
“Have you already had **problems** when using...?”



„Ausfall bei schlechten Witterungsverhältnissen (z.B. Radar setzt sich mit Schnee zu)“

Recommendations:

“Do you have any **recommendations** for [Brand] as to...?”



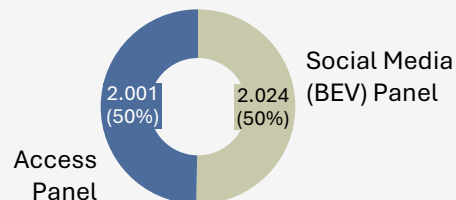
„Gaspedalkennlinie bei aktiviertem Abstandstempomat ggf. sehr empfindlich bei manuellem, nahem Auffahren. Regiert bspw. bei BMW weniger empfindlich. Lenkradwippen, die die Geschwindigkeit verstellen, haben nur einen Druckpunkt.“

ADAS Satisfaction Study 2025

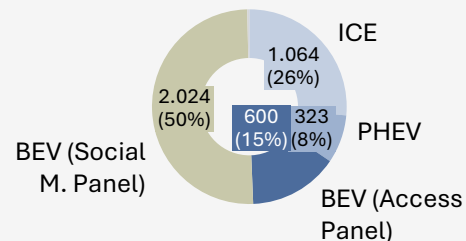
Sample Overview

ADAS SATISFACTION STUDY

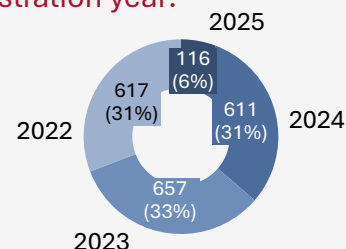
Panel distribution:



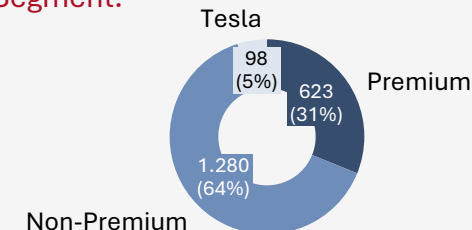
Engine:



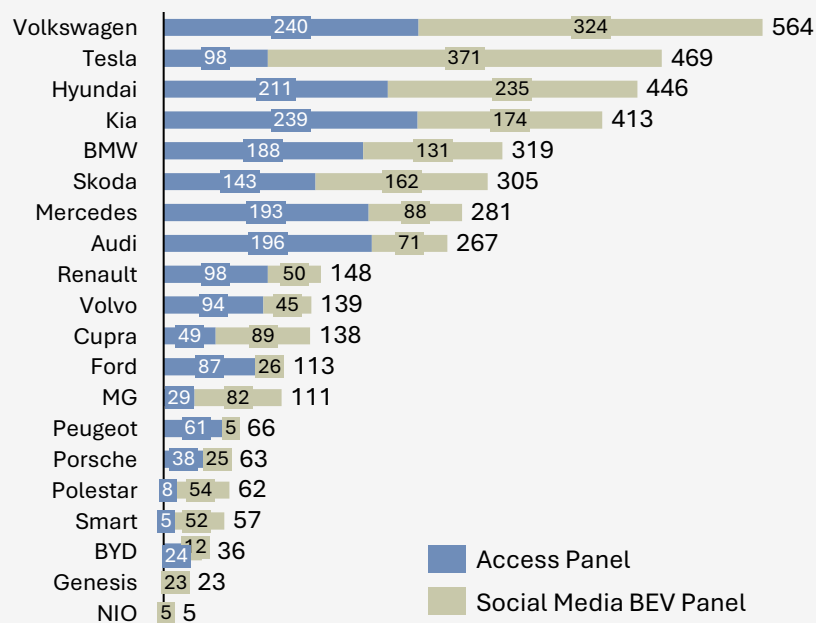
Registration year:



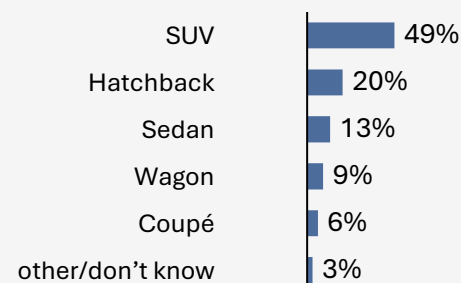
Segment:



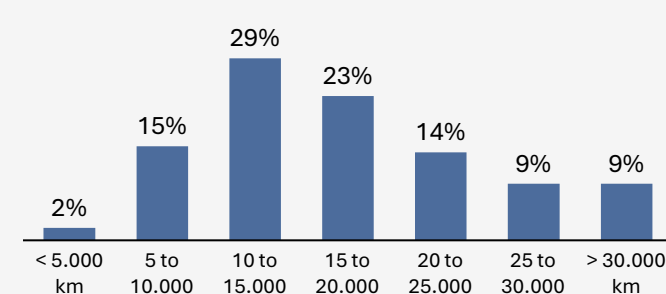
Brands:



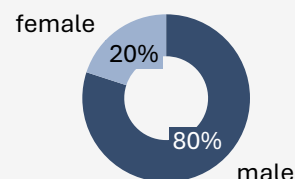
Body type:



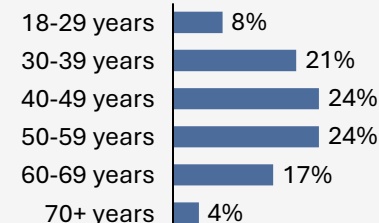
Annual mileage:



Gender:



Age:



Total sample size:

N = 4.025

Dashboard for Individual Analyses

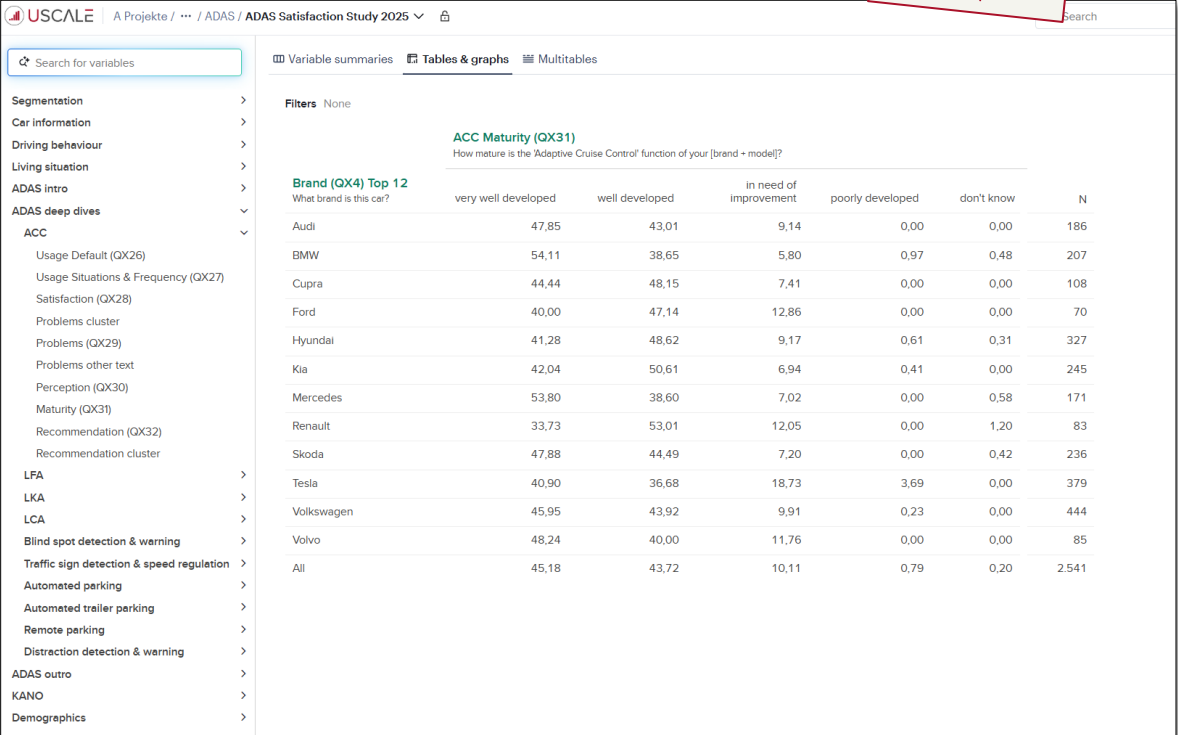
The study deliverables include a dashboard and an analysis tool with access to all data and verbatims.

The study results are very extensive, so not all charts can be included in the study report.

In the analysis tool, the study results can be split according to all variables and used for correlations.

To register, please contact your USCALE study manager.

Example

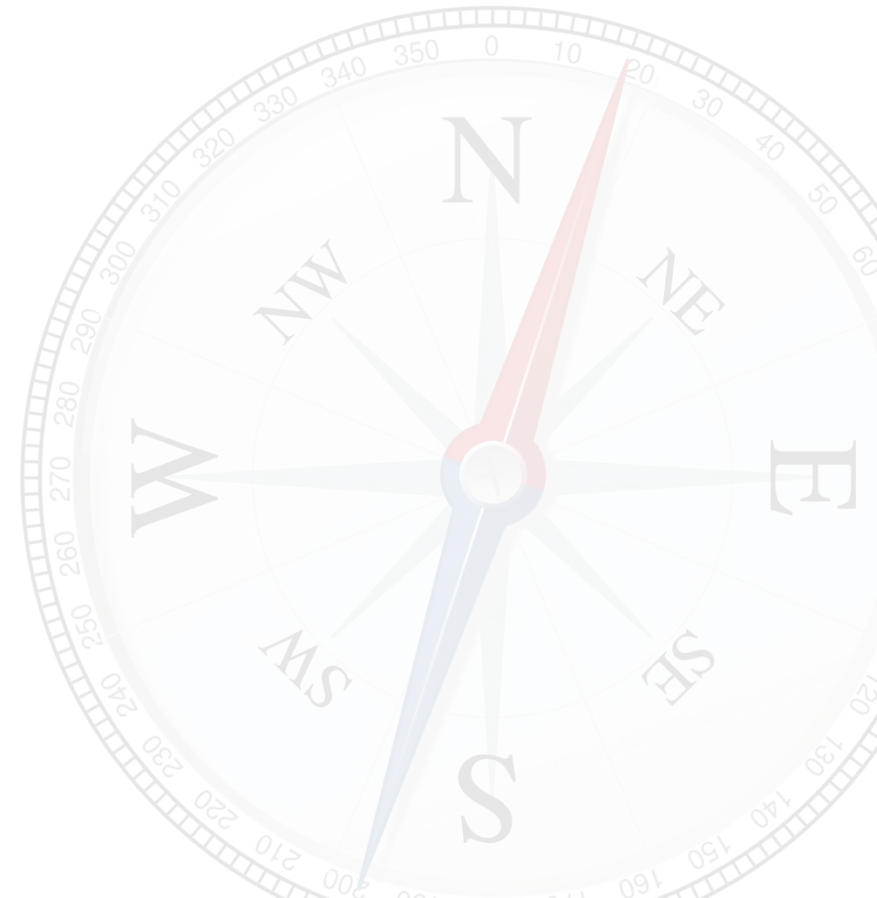


The screenshot shows the USCALE dashboard interface. On the left is a navigation menu with categories like Segmentation, Car information, Driving behaviour, Living situation, ADAS intro, and ADAS deep dives. The main area displays a table titled 'ACC Maturity (QX31)' with the subtitle 'How mature is the Adaptive Cruise Control function of your [brand + model]?'. The table has columns for car brands, five maturity levels (very well developed, well developed, in need of improvement, poorly developed, don't know), and a final column for the number of respondents (N). The table lists the top 12 brands: Audi, BMW, Cupra, Ford, Hyundai, Kia, Mercedes, Renault, Skoda, Tesla, Volkswagen, and Volvo, followed by an 'All' row.

Brand (QX4) Top 12	very well developed	well developed	in need of improvement	poorly developed	don't know	N
Audi	47,85	43,01	9,14	0,00	0,00	186
BMW	54,11	38,65	5,80	0,97	0,48	207
Cupra	44,44	48,15	7,41	0,00	0,00	108
Ford	40,00	47,14	12,86	0,00	0,00	70
Hyundai	41,28	48,62	9,17	0,61	0,31	327
Kia	42,04	50,61	6,94	0,41	0,00	245
Mercedes	53,80	38,60	7,02	0,00	0,58	171
Renault	33,73	53,01	12,05	0,00	1,20	83
Skoda	47,88	44,49	7,20	0,00	0,42	236
Tesla	40,90	36,68	18,73	3,69	0,00	379
Volkswagen	45,95	43,92	9,91	0,23	0,00	444
Volvo	48,24	40,00	11,76	0,00	0,00	85
All	45,18	43,72	10,11	0,79	0,20	2.541

Content

1. Target Group & Sample Overview
- ▶ 2. ADAS Usage & General Satisfaction
3. Deep Dives Assistant Systems
 - Adaptive Cruise Control
 - Lane Keeping
 - Lane Following
 - Blind Spot Detection & Warning
 - Traffic Sign Detection & Speed Regulation
 - Distraction Detection & Warning



ADAS & General Satisfaction

Assistance Systems Installed vs. Used

Usage rates are consistently well below installation rates.

“My [BRAND] can automatically...”

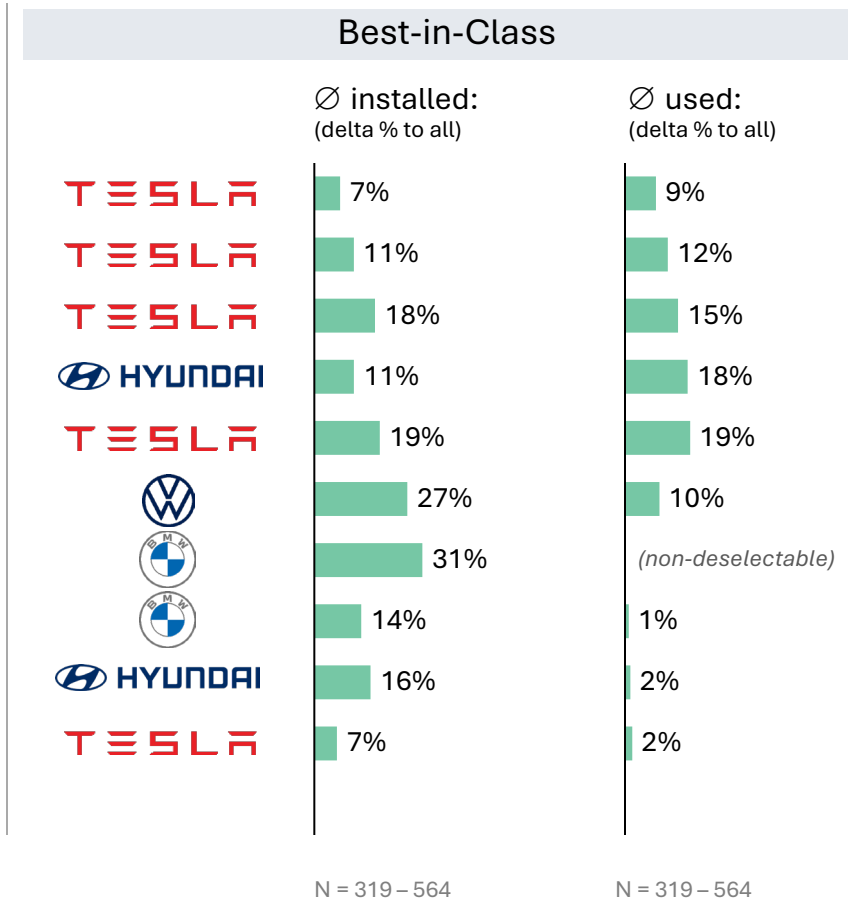
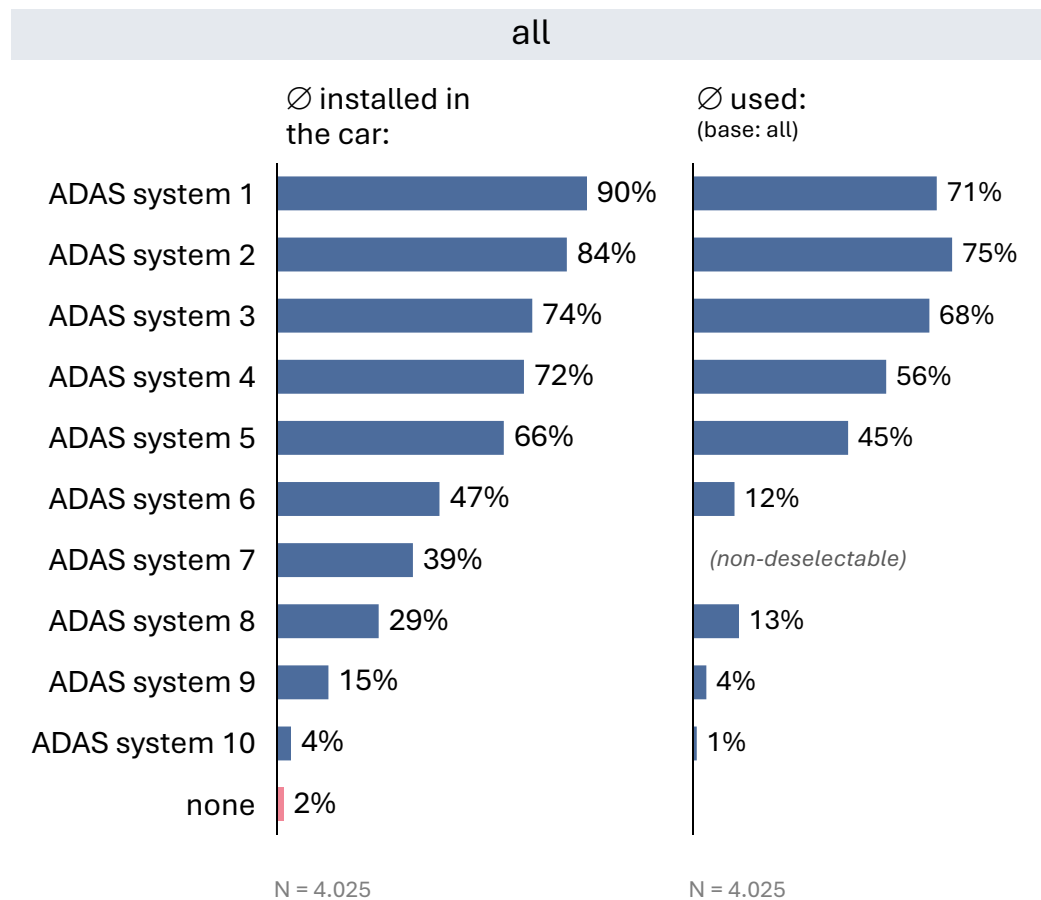
(multiple answers possible)

if ADAS = installed:

“Which of the following assistance systems do you regularly use with your [BRAND]?”

(multiple answers possible)

ADAS SATISFACTION STUDY



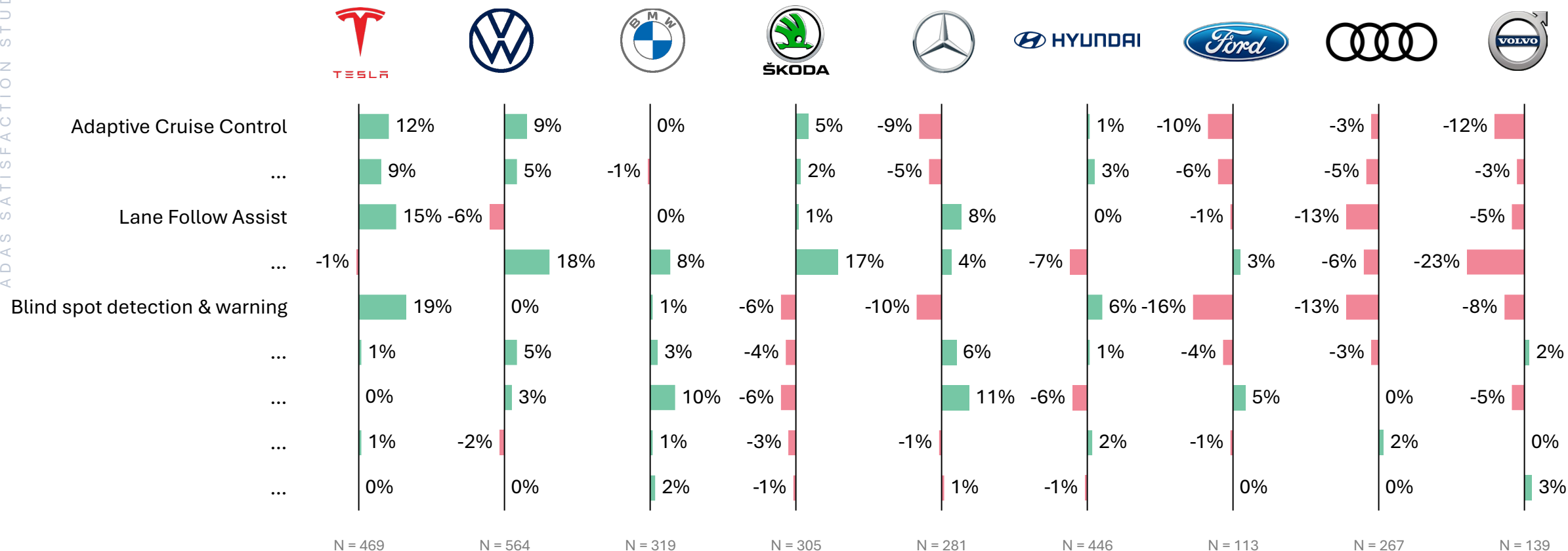
Assistance Systems Usage (by Brand)

The actual use of the systems varies strongly depending on the brand. Usage is a strong indicator of the different performance of the systems.

if ADAS = installed:

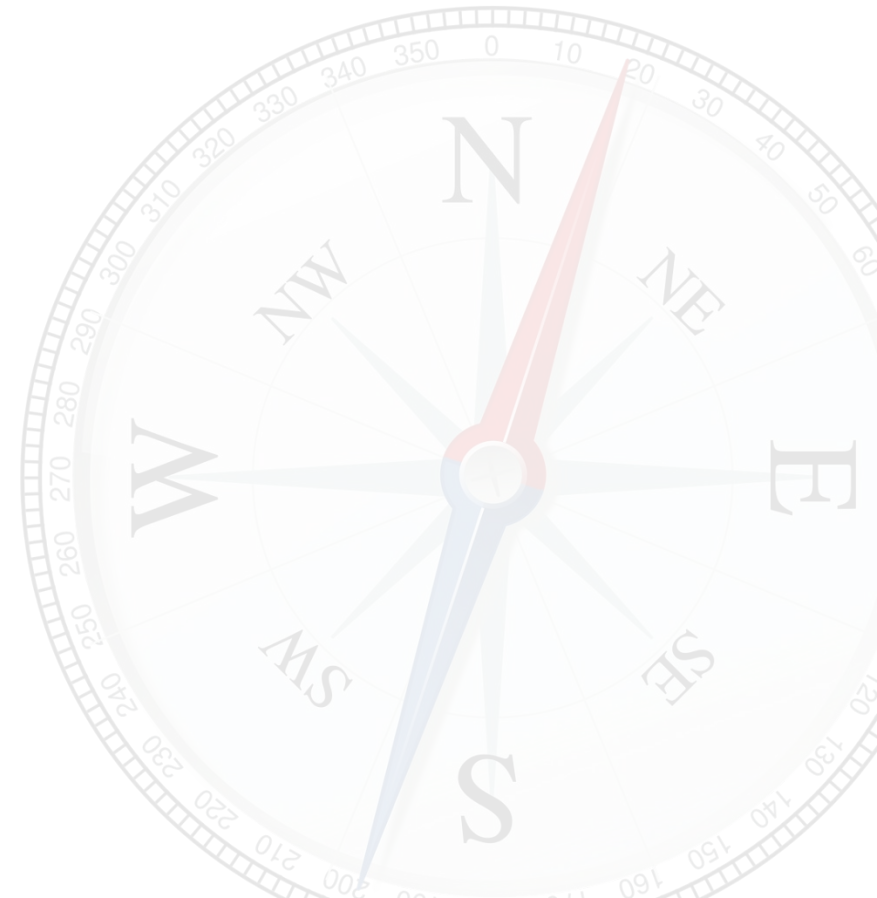
“Which of the following assistance systems do you regularly use with your [BRAND]?”

ADAS SATISFACTION STUDY



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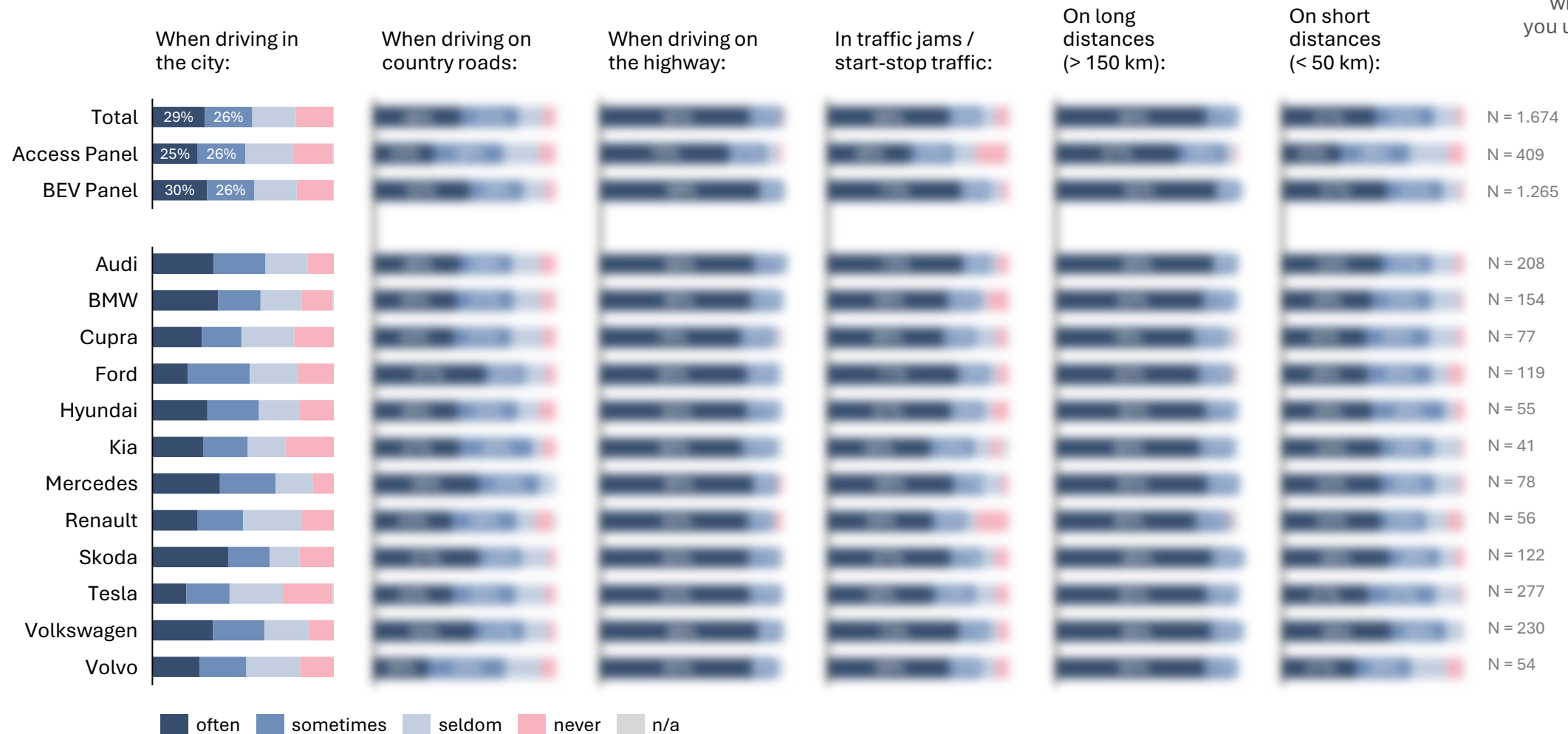


Adaptive Cruise Control

Usage Situation (1/2)

Activation ≠ activated permanently:

“How often and in what situations do you use the 'Adaptive Cruise Control' function in your [BRAND]...?”



Adaptive Cruise Control Satisfaction

“How satisfied are you with the 'Adaptive Cruise Control' function in your [BRAND]...?”

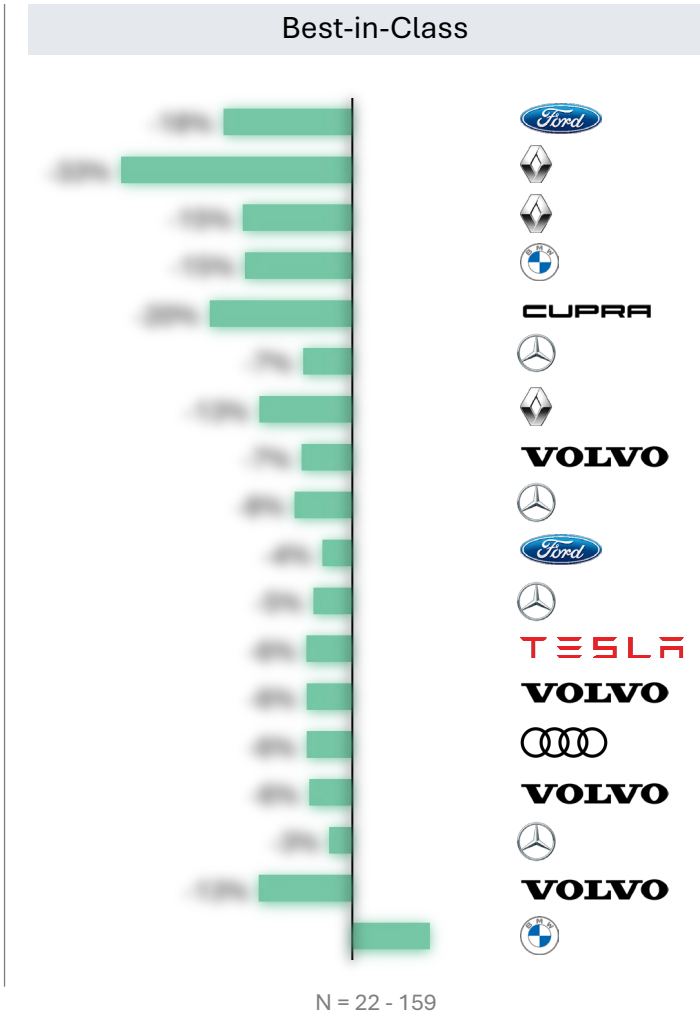
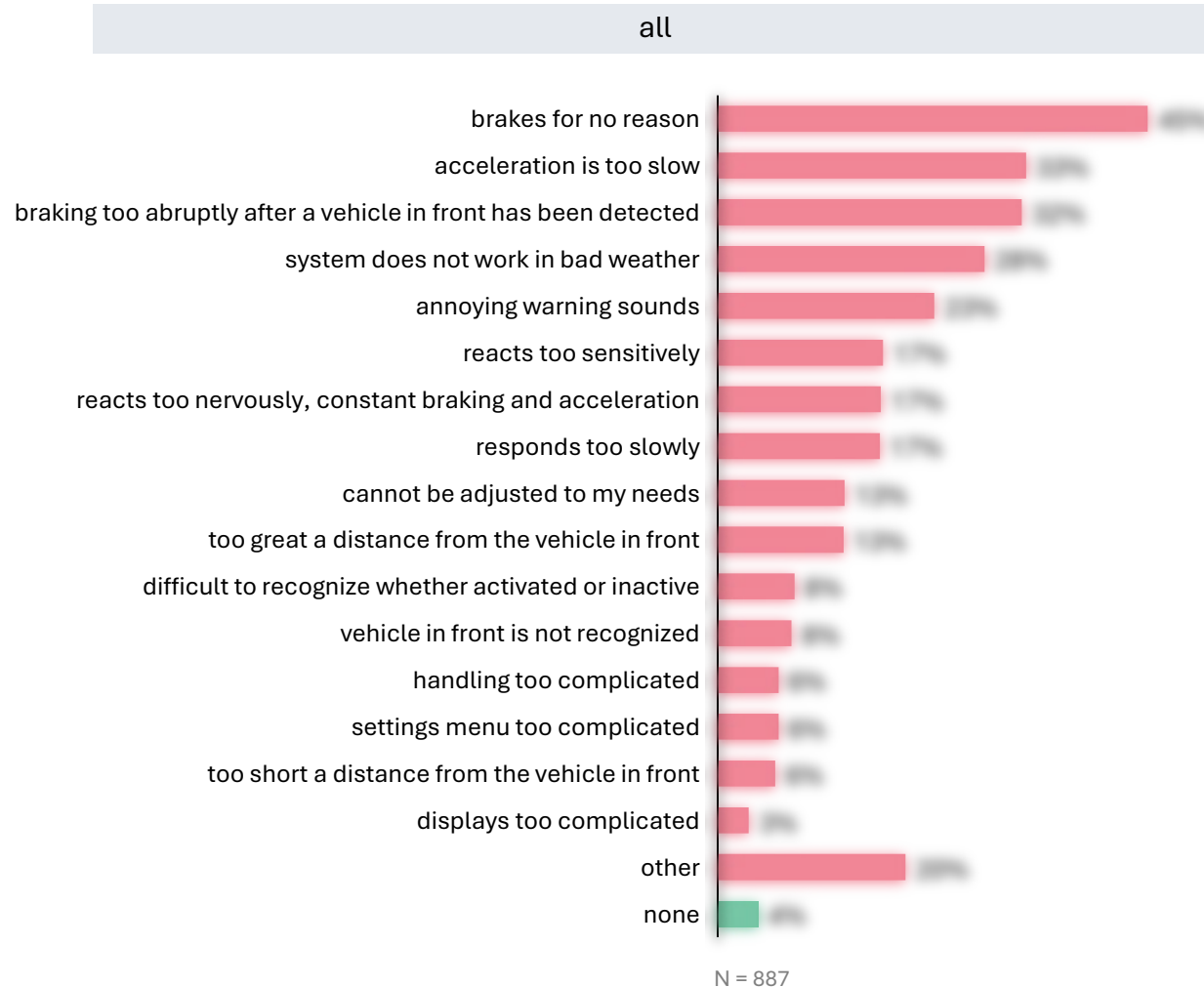
ADAS SATISFACTION STUDY



Adaptive Cruise Control

Problems

ADAS SATISFACTION STUDY



Satisfaction = partly satisfied, unsatisfied or very unsatisfied:

“Because you are (partially) unsatisfied with the 'Adaptive Cruise Control' function:

Have you already had problems with it?”

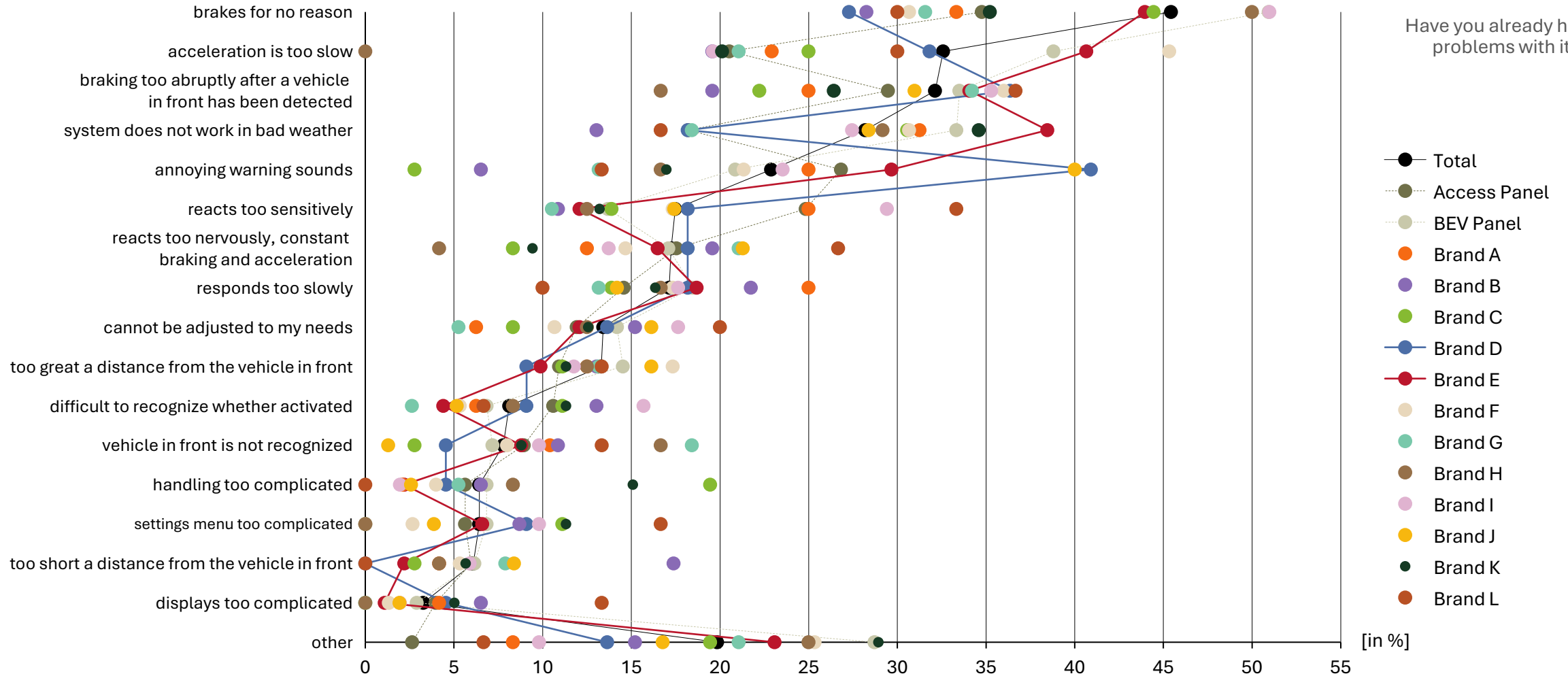
Adaptive Cruise Control

Problems (by brand)

Satisfaction = partly satisfied,
unsatisfied or very unsatisfied:

“Because you are (partially)
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Cruise Control' function:

Have you already had
problems with it?”



Adaptive Cruise Control

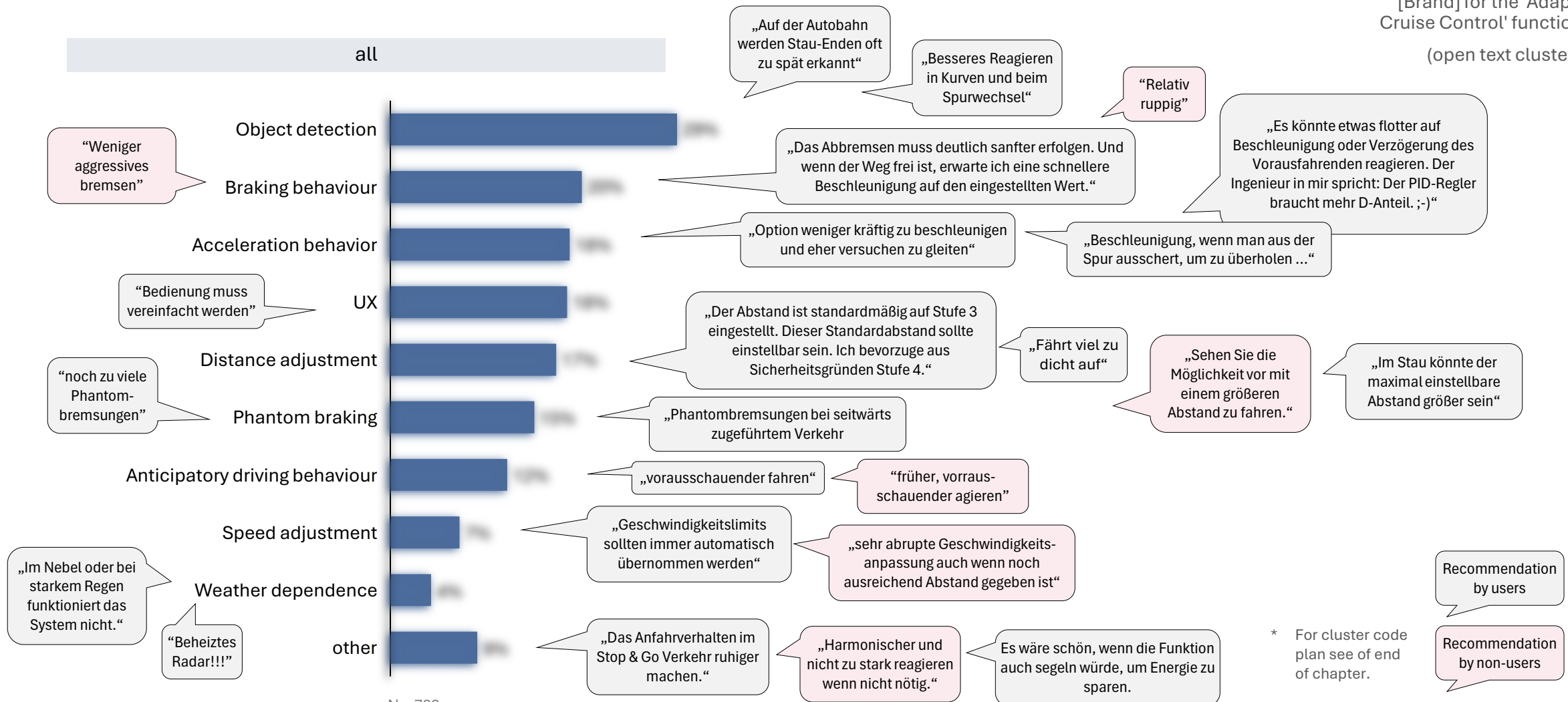
>700 Recommendations on ADAS

“Do you have any recommendations to [Brand] for the 'Adaptive Cruise Control' function?”

(open text clustered)

ADAS SATISFACTION STUDY

all



N = 722

Code Plan for Verbatim Clustering (Adaptive Cruise Control)

- **Object detection:** Statements that call for improved sensor technology or detection of vehicles, obstacles, lane changes, cornering or intersection situations; Weather aspects excluded.
- **Braking behaviour:** Statements that call for smoother, earlier or otherwise better coordinated braking in the face of real obstacles; explicitly excludes phantom braking.
- **Acceleration behavior:** Statements that require faster, slower or overall smoother acceleration after stopping, changing lanes or catching up; pure wishful acceleration, not forward-looking overall logic.
- **UX:** Statements relating to steering wheel buttons, touch/haptics, menu navigation, displays, warning sounds, or general user settings.
- **Distance adjustment:** Statements that require a different or more flexible distance to the vehicle in front (e.g. smaller, larger, more steps, depending on speed).
- **Phantom braking:** Statements that criticize unnecessary, unprovoked or incorrect braking ('phantom/pseudo braking') or demand their removal.
- **Anticipatory driving behaviour:** Statements that call for earlier, softer or energy-saving reactions (gliding, sailing, column mode, less rubber band effect); no specific individual acceleration or braking requests.
- **Speed adjustment:** Statements that address the coupling to cruise control or traffic signs, automatic adoption of limits, independent cruise control operation or the like.
- **Weather dependence:** Statements that address failures or restrictions in rain, snow, dirt, etc. or require heating / better placement of the sensors.



SCALE YOUR USER
SCALE YOUR BUSINESS

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