

Excerpt (full report: ca. 140 pages)

EV After-Sales Study 2024 (DACH)

EV After-Sales from the User's Perspective

USCALE GmbH www.uscale.digital



EV-After-Sales-Study 2024 **Objective**

Initial situation:

- EVs require fewer workshop services. At the same time, they require software updates, EV drivers have more hotline needs and the cars need to be integrated into a new ecosystem.
- Manufacturers and workshops must therefore not only adapt to new technology, but also to the changed expectations of users.

Research question:

- What experiences do EV drivers have with the workshop? How do their expectations and behaviour differ from those of combustion engine drivers?
- How do the after-sales workshops and processes of the various brands perform?
- Where is there a particular need for action for which after-sales organisations of the manufacturers and importers and their dealers?





EV-After-Sales-Study 2024

Target Group

Survey:

| – Target Group: | BEV drivers ICE drivers as a reference group |
|---|---|
| – Survey: | Online-Survey (CAWI) |
| – Market: | DACH |
| Recruiting: | Social Media, Access Panel * |
| Lenth of Interview: | 15 - 20 min |
| Field phase: | May - July 2024 |
| | |



- Total sample size BEV: N = 1829 thereof:
 - Social Media-Panel: N = 1283
 - Access-Panel: N = 546
- Total sample size ICE: N = 410



 The majority of participants from the social media panel are early EV adopters and more tech-savvy people.

The respondents from the **access panels** are generally less techsavvy and switched to an EV later.

See also the next page on the use of the two panels.

 \triangleleft



Recruiting of Respondents

The eMobility market is in the ramp-up phase, i.e. the majority of current EV drivers belong to the group of so-called **innovators** and **early adopters** in the early phase. Only a small proportion of EV drivers come from the **early majority group**. *

Recruitment is based on the assumption that it is mainly innovators who can be reached in specialist forums and on **social media**, whereas the early majority can be reached in **access panels**. In recent years, we have implicitly assumed this connection. We now have very strong confirmation of this assumption from the USCALE persona study: The majority of participants from the social media panel are 'eco-enthusiastic techies', while the majority of access panel participants are spread across the other segments.

In this study, the ratio of social media to access panel study participants is **70 to 30**.

In the report, the two groups represent different adopter groups (social media panel = **Innovators** and early early adopters, access panel = later early adopters and early majority = **Next Segment**). If the results differ for both groups, they indicate a trend.



 This classification is based on Rogers' diffusion model (<u>LINK</u>).



EV After-Sales Study 2024 Contents

- (1) Management Summary
 - (2) Sample
 - (3) Workshop
 - (4) Customer service / hotline
 - (5) Software updates
 - (6) Digital services
 - (7) Data protection
 - (8) Battery checks
 - (9) Loyalty for the next car purchase





EV-After-Sales-Study 2024 Management Summary

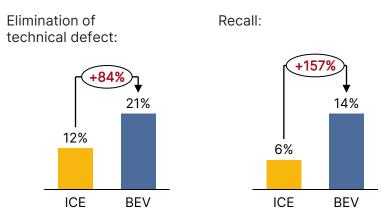


BEV drivers with significantly more problems than ICE drivers

BEV drivers have to go to the workshop unscheduled more often than drivers of combustion engines.

The frequency of recalls in particular is significantly higher than that of combustion engines.

Work at the last workshop (among BEV vs. ICE drivers):



Workshop stay at the MarkenWorkshop in the last 12 months: "What work was carried out on your [brand + model]?"



EV-After-Sales-Study 2024 Management Summary



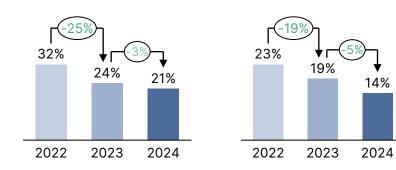
Workshops improve their performance

The proportion of vehicles just under 3 years old on average that had to undergo unscheduled repairs in the workshop fell from 32% to 24% compared to 2022. Compared to 2023, they fell by a further 3%.

The proportion of those who were called back to the workshop also fell for the second year in a row. Work at the last workshop (among BEV drivers):

Elimination of technical defect:

Recall:



Workshop stay at the MarkenWorkshop in the last 12 months: "What work was carried out on your [brand + model]?"



- (1) Management Summary
- (2) Sample
- (3) Workshop
- (4) Customer service / hotline
- (5) Software updates
- (6) Digital services
- (7) Data protection
- (8) Battery checks
- (9) Loyalty for the next car purchase





Workshop Workshop type of customer

EV drivers with a lower proportion of 'safety-oriented' drivers than among combustion engine drivers.

"Which statement describes you best?"

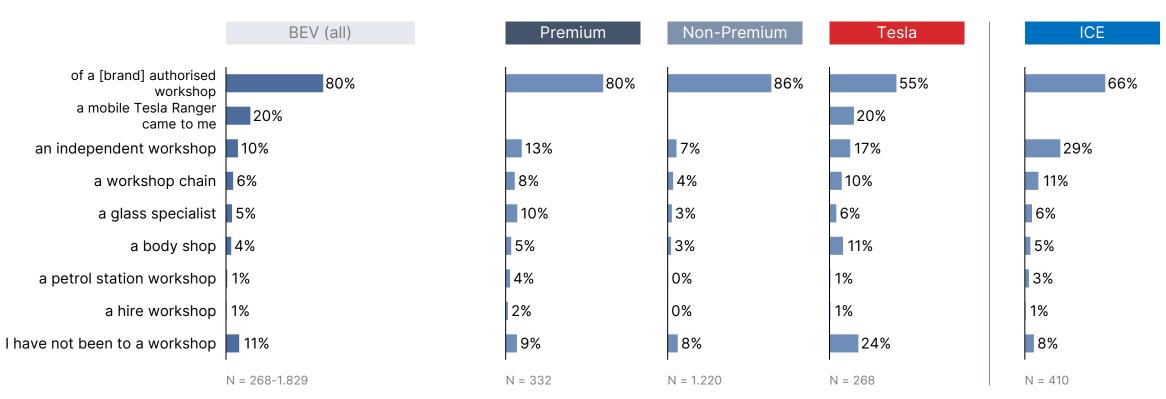




Workshop **Workshop visit**

Among the mostly still young EVs in the sample (still) high workshop brand loyalty.

"Have you taken your vehicle to one of the following workshops in the last 12 months?" (multiple answers possible)





Workshop Work carried out

Workshop requirements due to a defect are almost twice as high as for combustion engines. The recall rate is also significantly higher.

(Workshop stay = yes) "What work was carried out on your [brand + model]?" (multiple selection possible)



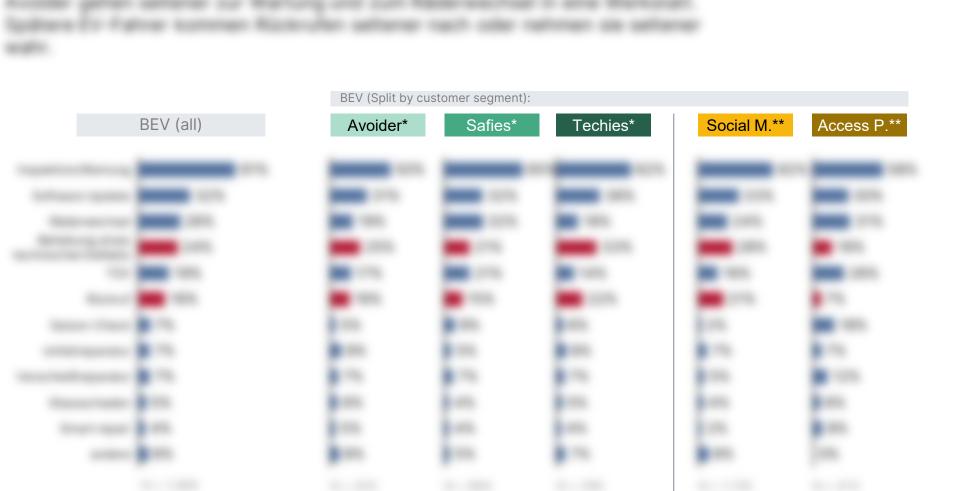


Workshop Work carried out (by customer segment)

(Workshop stay = yes) "What work was carried out on your [brand + model]?" (multiple selection possible)

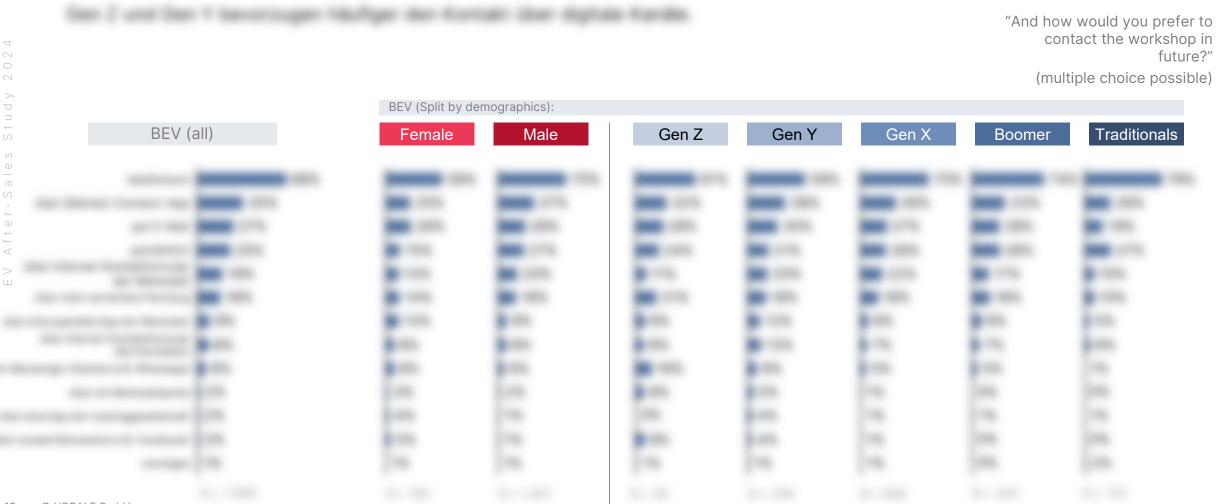
- * Segmentation by workshop type (page 25):
 - Avoider: Workshop avoiders
 - Safies: Workshop affine
 - Techies: Workshop fans
- ** The majority of participants from the **social media panel** are early EV adopters and more tech-savvy people.

The respondents from the **access panels** are generally less tech-savvy and switched to an EV later.





Workshop Contact Workshop (preferred) (by customer segment)

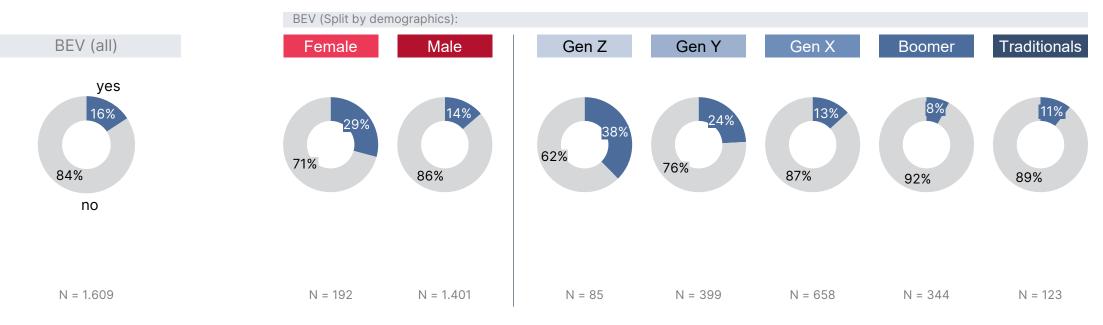




Workshop **Comparison offers** (by demographics)

Women and the younger generations are much more likely to obtain a comparative offer.

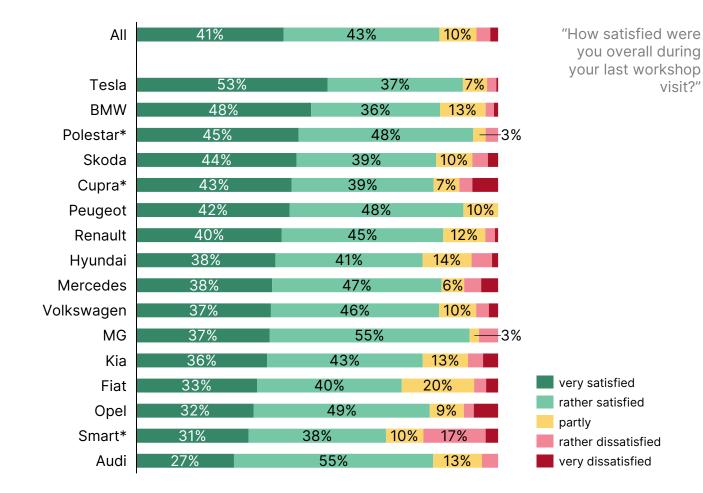
"Did you obtain comparative offers before attending the workshop?"





Workshop Satisfaction Workshop (by brand)

Tesla with the highest workshop satisfaction, followed by BMW. Audi in last place.



N = 28 – 313



Workshop Satisfaction Workshop

Satisfaction among EV drivers lower. Great need for action in the technical execution of the work. Tesla with above-average performance.



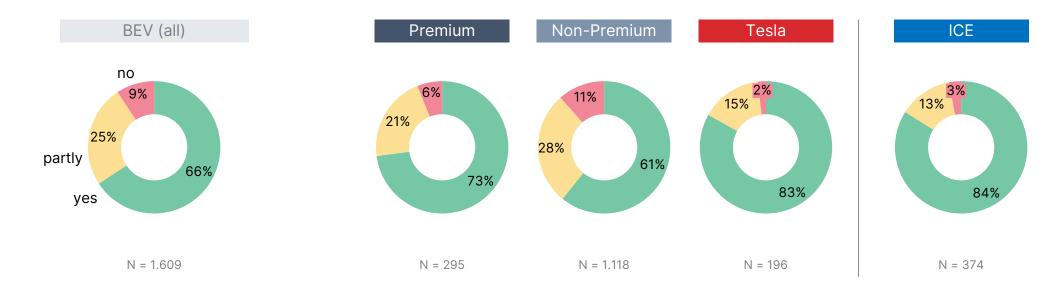
"How satisfied were you with ... during your last workshop visit?"



Workshop Brand loyalty through workshop visits

High brand loyalty through workshop attendance among premium drivers and Tesla, but a clear gap to ICE drivers.

(Dealer visited = yes) "Have your workshop visits to [brand] convinced you and confirmed that you have chosen the right brand?"





Workshop Reasons for non-recommendation



EV After-Sales Study 202



Workshop Recommendations to workshop



19 © USCALE GmbH



Workshop Personalised workshop mailings

55% of EV drivers regularly receive information from their workshops. Among combustion engine drivers, the figure is significantly higher at 67%.

"Does your dealer or workshop occasionally send you personalised information, e.g. about offers or work due on your car, etc.?"





Workshop **Perception of workshop mailings**





- (1) Management Summary
- (2) Sample
- (3) Workshop
- (4) Customer service / hotline
- (5) Software updates
- (6) Digital services
- (7) Data protection
- (8) Battery checks
- (9) Loyalty for the next car purchase

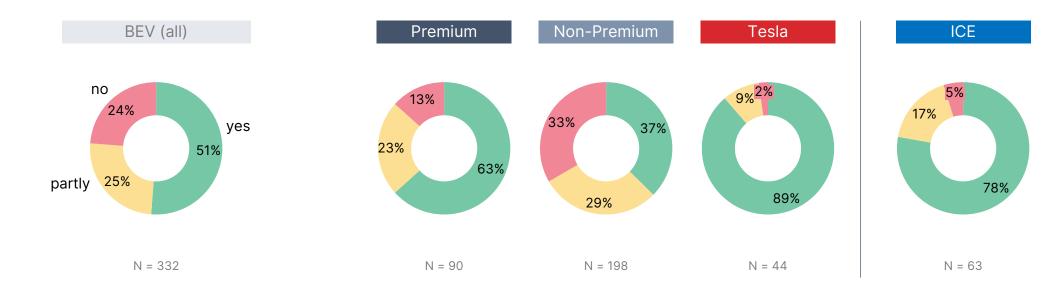




Customer service / hotline Brand loyalty

High satisfaction with the customer service / hotline with the exception of non-premium drivers.

(Customer hotline = yes) "Have you convinced your contacts with [brand]'s customer service and confirmed that you have chosen the right brand?"





Focus Studies on all Touchpoints





Our Clients



...and many more.

SCALE YOUR USER SCALE YOUR BUSINESS



Dr. Axel Sprenger

Managing Director USCALE GmbH

| mail | axel.sprenger@uscale.digital |
|------|------------------------------|
| fon | +49 172 - 1551 820 |
| web | www.uscale.digital |
| post | Silberburgstraße 112 |
| | 70176 Stuttgart |

 \triangleleft