

*Excerpt*

# eMobility eMSP Loyalty Study 2022

Data instead of opinions: eMSPs from the customer's point of view

## Initial situation



Charging services offer service providers not only a source of revenue, but also an important instrument for **customer loyalty**. The prerequisite is that EV drivers use the services *actively* and - more importantly - *preferentially*.

Around 1,000 eMSP offerings in Germany alone are leading to fierce competition in a rapidly growing market.

eMSP providers are not sufficiently aware of their own competitive position. The study shows the performance of the most important provider groups and potentials for improvement for each provider group.

## eMobility eMSP Loyalty Study 2022

# Working with the study

The study is specifically aimed at eMSPs who want to measure and improve their competitive position:

### **eMSP Product Owner**

The study shows how product owners can determine the performance of their own eMSP offering and how the offering of their own provider group is developing in comparison to the competition. The details show the need for action for eMSP providers. The opinions on tariff models provide input for the development of own tariff systems.

### **eMSP Marketing**

The study results show the USPs or reasons for use and the reasons for migration for the own provider group.

### **eMSP Development**

The data shows which features attract users and which (missing) features cause users to leave. This supports the backlog and the prioritisation of own development projects.



## Added value of the study

### Time

Comprehensive, quantitative and qualitative customer input saves time in developing and revising the specifications for the relevant use cases.

### Costs

Customer-driven prioritisation of feature requests in the backlog directs budgets and resources to issues with the greatest value proposition.

### Market share

In the current market with many new services and apps, providers can score points and gain market share with the right offers.

### Diffusion

Manufacturers who meet or exceed customer expectations for e-vehicles and services support the successful ramp-up of e-mobility.



## eMobility eMSP Loyalty Study 2022

# Target group

### Sample:

- Owners and drivers of EVs
- Total sample: N = 1,793

### Survey:

- Survey: online
- Countries: German-speaking countries (DACH)
- Recruitment: Social Media, UScale Panel
- Interview duration: 15 min
- Implementation: July - August 2022



# Content

(1) Management summary

(2) Sample

(3) Survey results



1. Driving and charging behaviour

2. Use of eMSP charging services

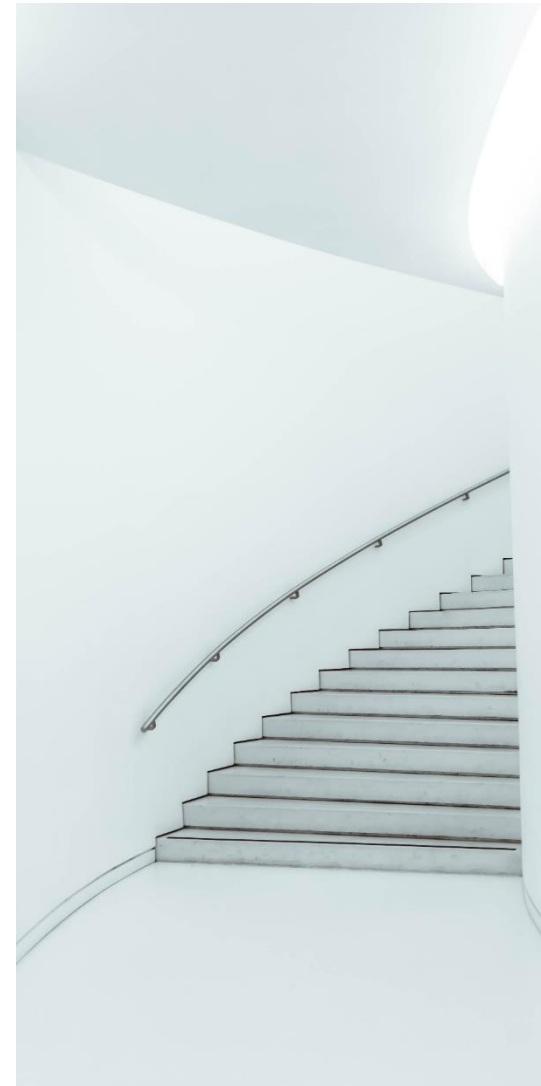
- Market shares eMSP services
- Preference drivers
- Preference barriers
- Change of provider

3. Feature usage

4. Payment and payment options

5. Charging rates

- Tariff models
- Variable tariffs
- Bonus programmes
- Parking / blocking fees



Market shares eMSP services

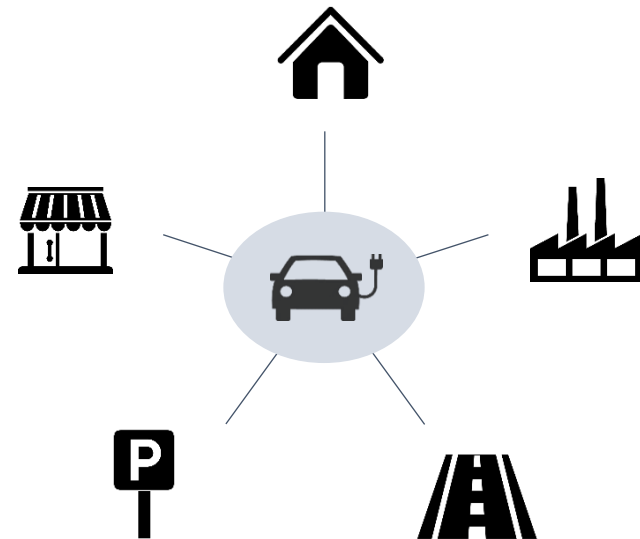
## Preliminary remark

### Why is knowledge about charging behaviour important?

The relevance of eMSP services depends on the importance of public charging in the charging mix of EV drivers.

Questions for eMSP:

- Where do which EV drivers charge?  
Where do your own customers charge?
- What is the significance of public charging when 75% of EV drivers can charge at home?



# Driving and charging behaviour

## Charging locations\*

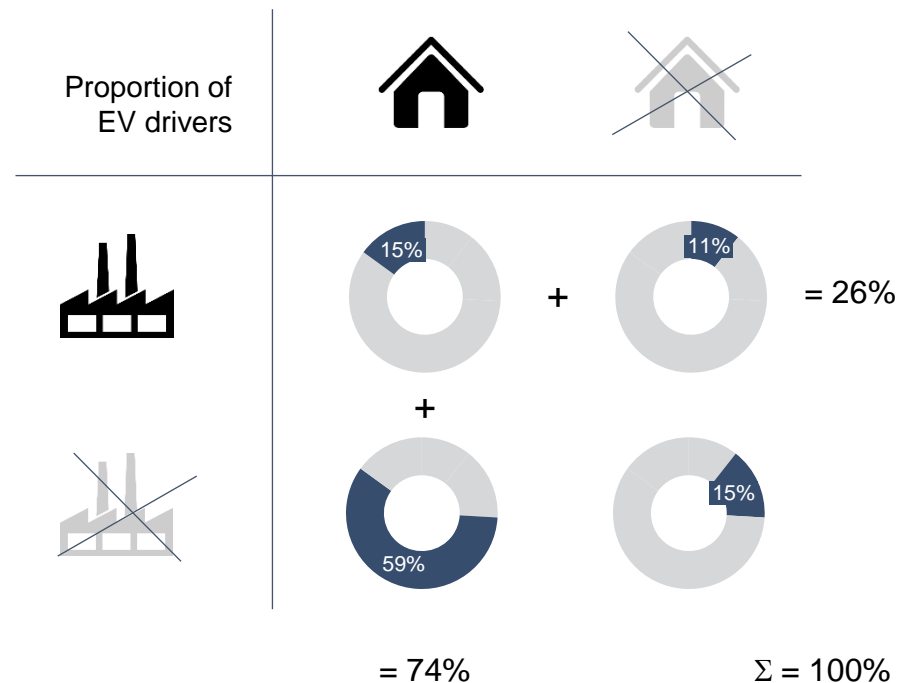
*74% with a charging option at home.*

Almost three quarters of the respondents have a charging option at home. Of these, 15% also have charging facilities at their employer's premises.

26% have an option to charge at the employer. This percentage has risen slightly in recent years.

15% of EV drivers are completely dependent on the public charging infrastructure.

Proportion of respondents with charging facilities at home and / or at the employer:



\* This question is asked in several UScale surveys. For the sake of a representative sample, responses from several surveys were combined for this analysis.



# Driving and charging behaviour

## Charging locations\*

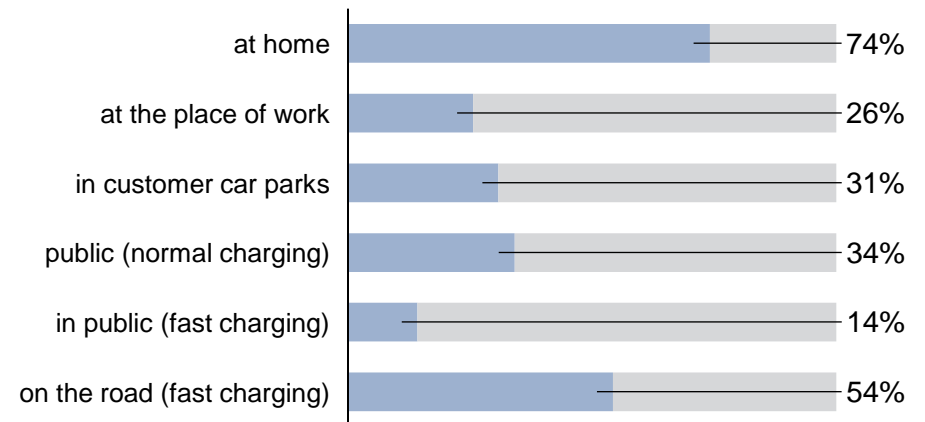
*(Semi-)Public charging services are an important part of the charging ecosystem.*

Three quarters of the respondents can charge at home and around a quarter have a charging option at their employer.

Many different charging locations are used in the (semi-)public space.

- Charge exclusively at home 20%.
- Exclusively public charging 15%
- Charge only to the employer 2%.
- Exclusively public charging at fast chargers 1%.
- Never charge publicly 27%.

*"Where do you charge your [brand]?"*

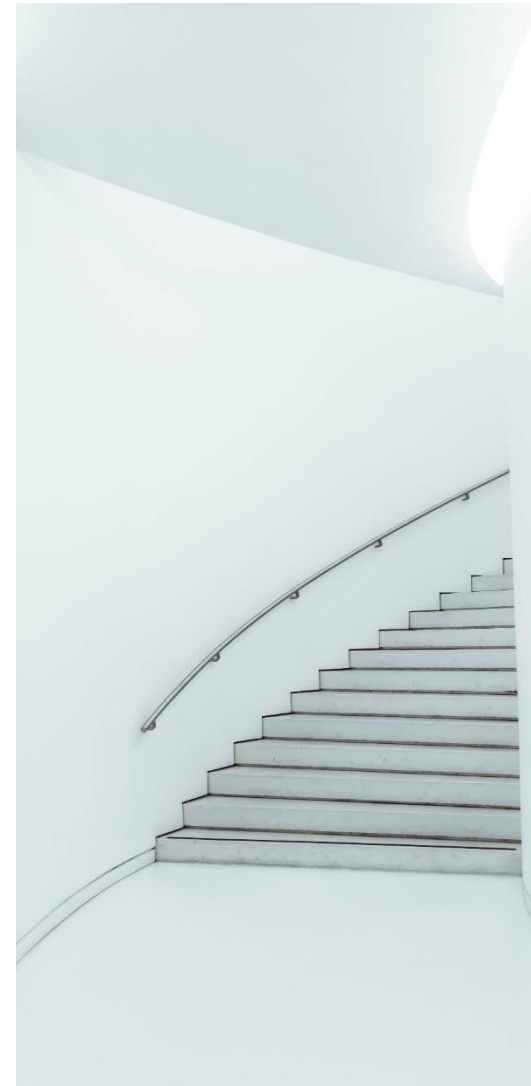


Reading example:  
26% of all respondents (also) charge at their place of work.

\* This question is asked in several UScale surveys. For the sake of a representative sample, responses from several surveys were combined for this analysis.

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## Market shares eMSP services

# Preliminary remark

## Why are two KPIs important for "market share"?

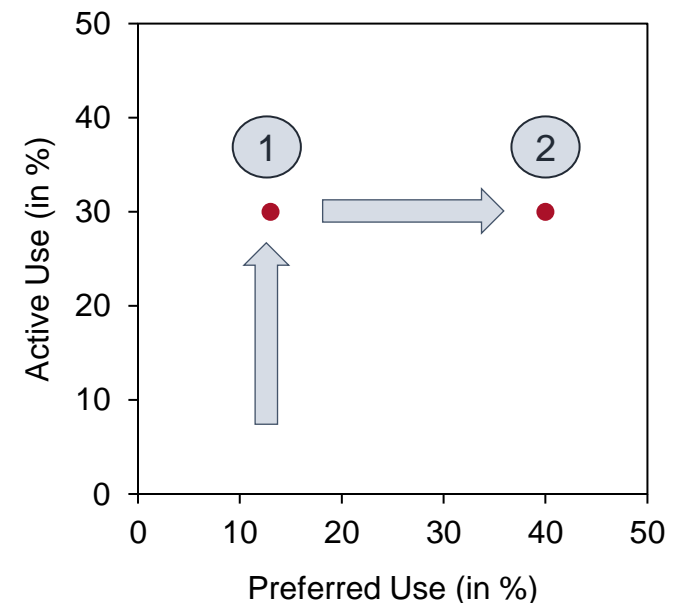
- 1 KPI: Active Use**

Beyond ad-hoc charging, EV drivers can only use services with which they are registered.
- 2 KPI: Preferred Use**

Most business models are based on usage-based remuneration models.

For successful commercialisation, the actual and preferred use of the services is therefore crucial.

In addition to the sales potential, there are opportunities for own cross-selling.



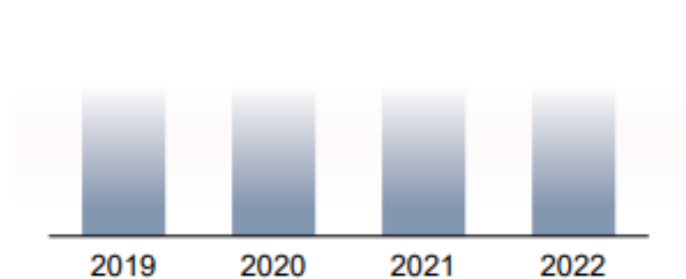
Market shares eMSP services

# Number of charging services used

*On average, EV drivers use 4 charging services in parallel.*

The number of actively used eMSP services declined for several years and now seems to be levelling off at 3 to 4 services.

*"Which charging services or apps do you actively use?"  
(multiple selection possible)*



## Market shares eMSP services

# Market shares (according to preferred use)

*Different strategies lead to high market shares.*

When splitting the market share into Active and Preferred Use, there are clear differences in the usage by the customer.

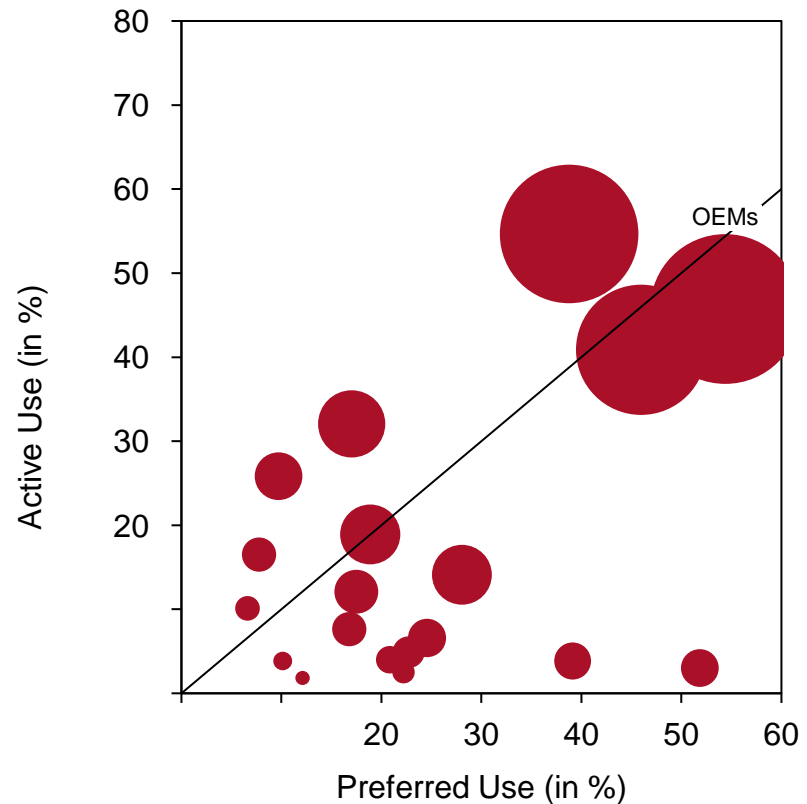
Example:

EinfachStromLaden and Stadtwerke have roughly equal market shares, but reach them through different channels: EinfachStromLaden shows a high Active Use, but lower Preferred Use values. The opposite is true for the public utilities.

*"Which charging services or apps do you actively use?"*

vs.

*"...most often?"*



## Market shares eMSP services

# Market shares eMSP provider groups

*Different strategies of the provider groups.*

The distribution of the provider groups shows the (intended?) market strategies.

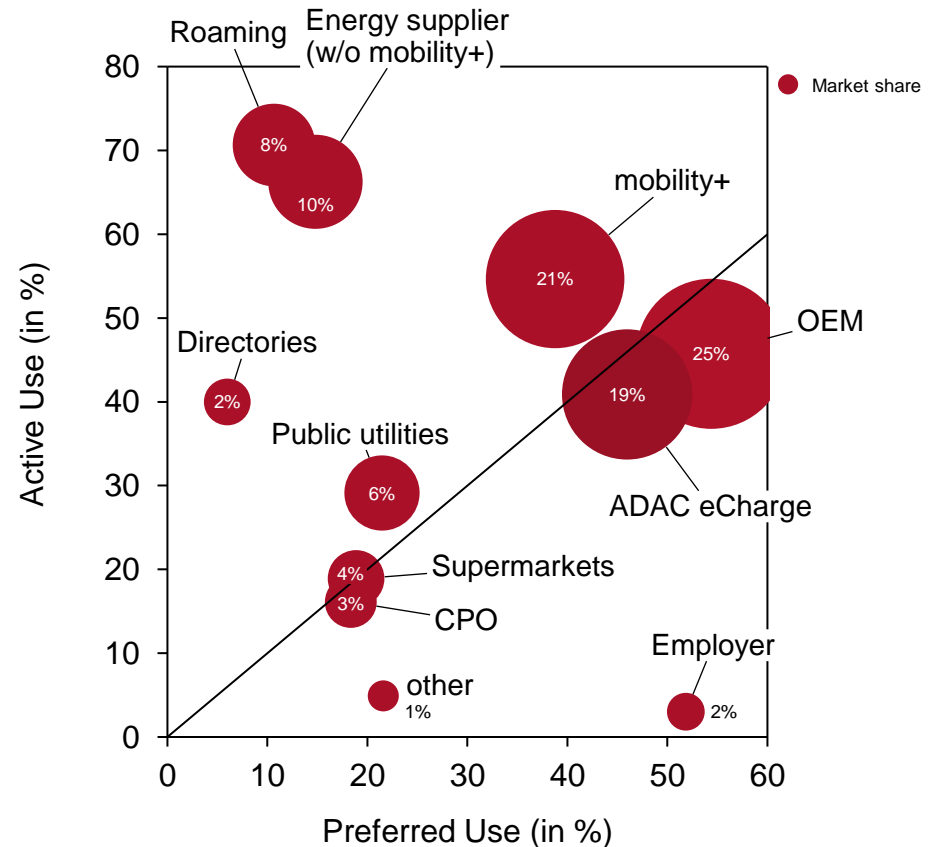
Thus, despite limited popularity, energy providers (excluding mobility+) and roaming providers come to 10% market share by being among the actively used by the majority of respondents.

Reading example:  
 71% of all EV drivers **actively** use one of the roaming charging services, but only 11% of them **prefer it**.  
 This results in a market share of  $(71\% \times 11\%) = 8\%$ , i.e. 8% of all EV drivers prefer to use a roaming charging service.

*"Which charging services or apps do you actively use?"*

vs.

*"...most often?"*



## Market shares eMSP services

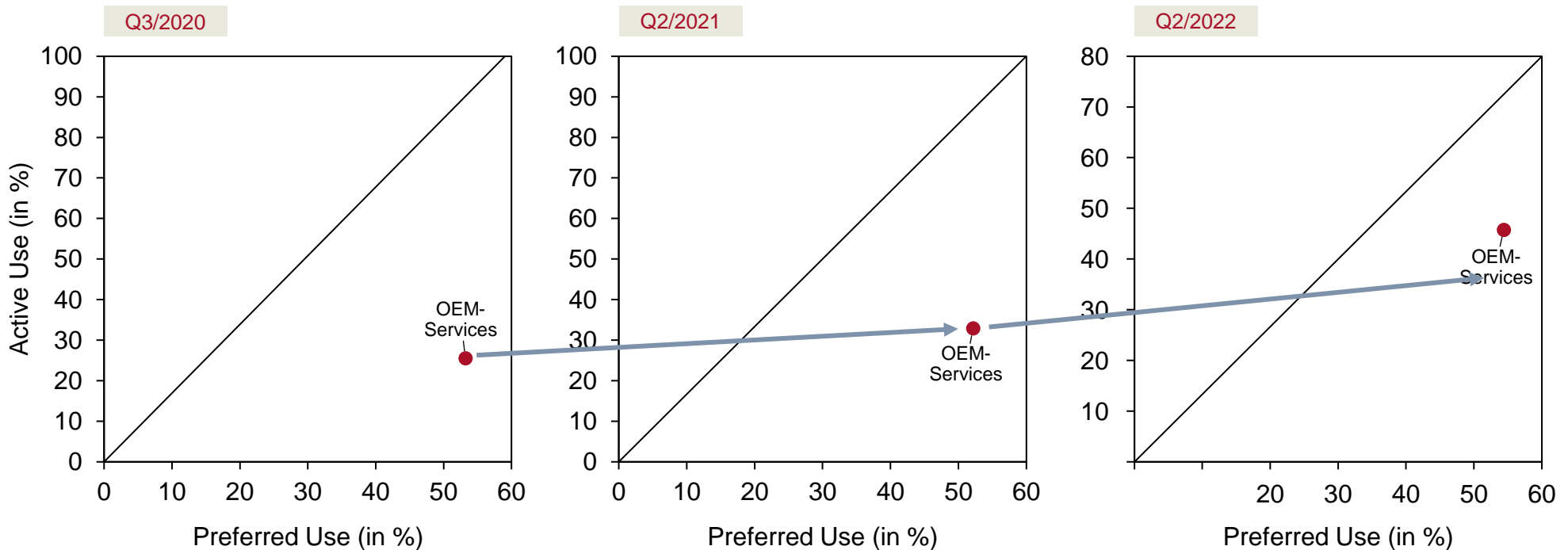
# Use of eMSP charging services (selected services)

*mobility+ wins significantly with the connected ADAC offer.  
 OEM services increase in active use, but stagnate in preferred use.*

*"Which charging services or apps do you actively use?"*

*vs.*

*"...most often?"*



# Market shares eMSP services OEM services in comparison

*Wide dispersion between the brands.*

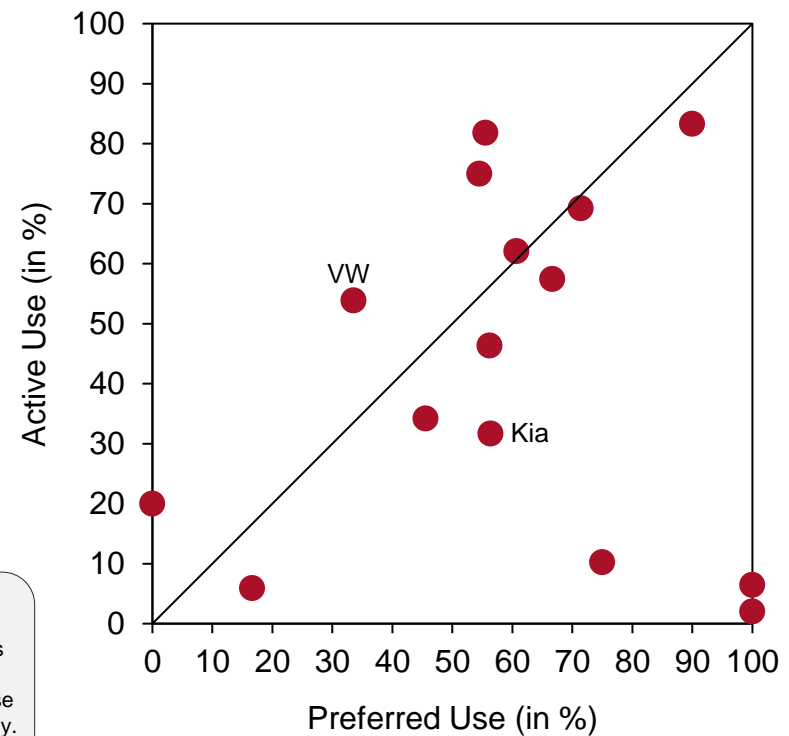
*"Which charging services or apps do you actively use?"*

vs.

*"...most often?"*

With few exceptions, Active and Preferred Use correlate. The more often a service is preferred, the more often it is set up.

This results in various needs for action: Brands like Kia should increase the share of registered users, brands like VW should check their offer for attractiveness.



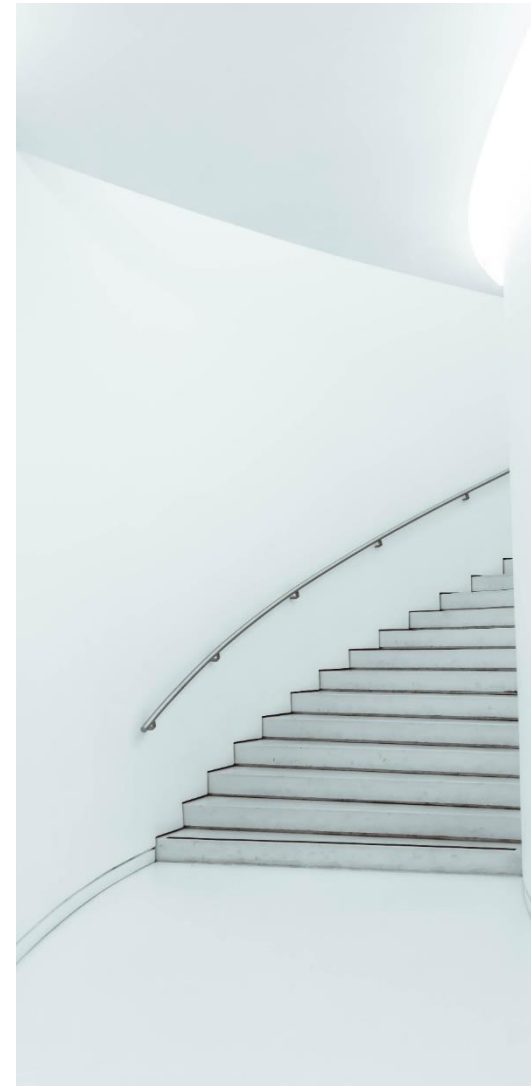
Reading example:  
Only 54% of VW drivers use the VW charging service, and 34% of these also use it most frequently.

\* very small sample (N = 10-12), all other brands sample N > 30



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## Preference drivers

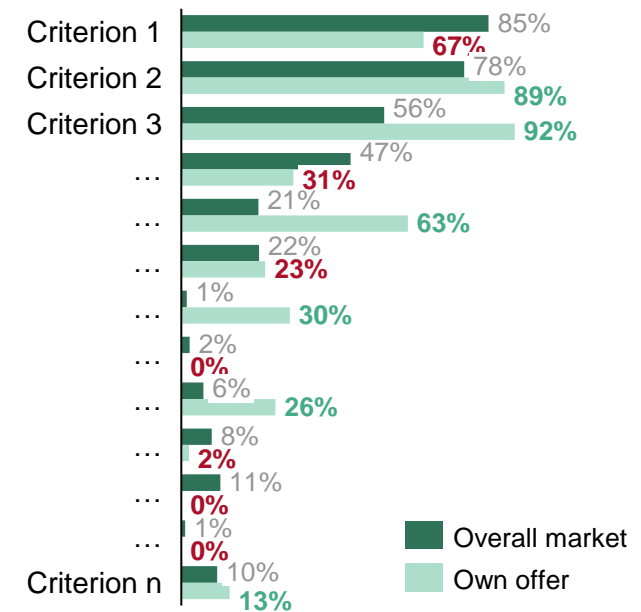
# Preliminary remark

## Why are preference drivers important for eMSPs?

The preference drivers show with which value proposition individual providers or provider groups score.

### Questions for eMSP:

- In general, what criteria are important to EV drivers when choosing their preferred eMSP?
- How does one's own offer or provider group perform in relation to the competition?
- Where are competitors better? **(xx%)**
- Where is your own service ahead? **(xx%)**
- Does your own profile fit the defined strategy?
- Where does your own service need to improve?

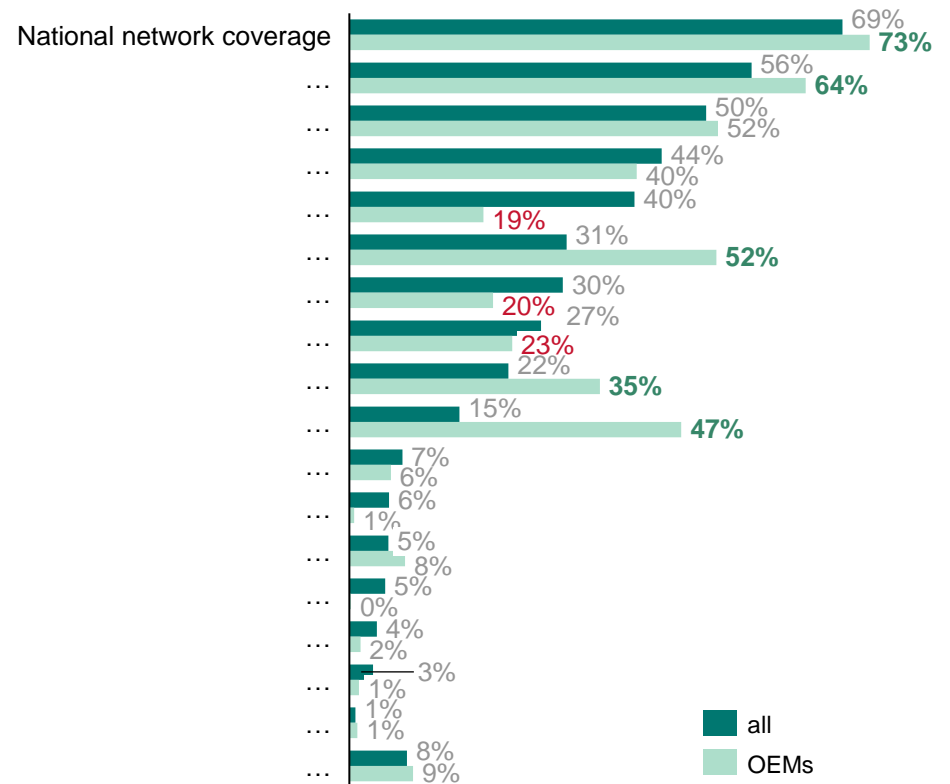


## Preference drivers

# Performance OEM (1/2)

*OEM services are valued for a variety of performance criteria.*

*"What are the main reasons you use your "number 1" most often?"  
(multiple selection possible)*



## Preference drivers

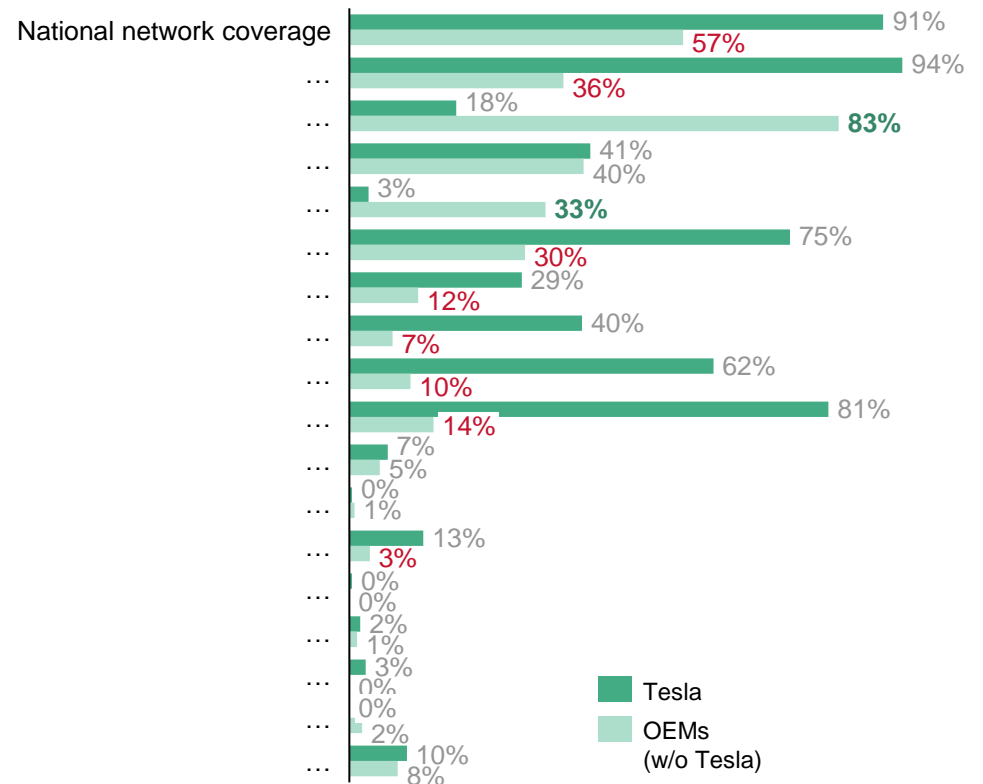
# Performance OEM (2/2)

*Big differences between Tesla and the other OEMs.*

When Tesla and the other OEMs are separated, clear differences become apparent:

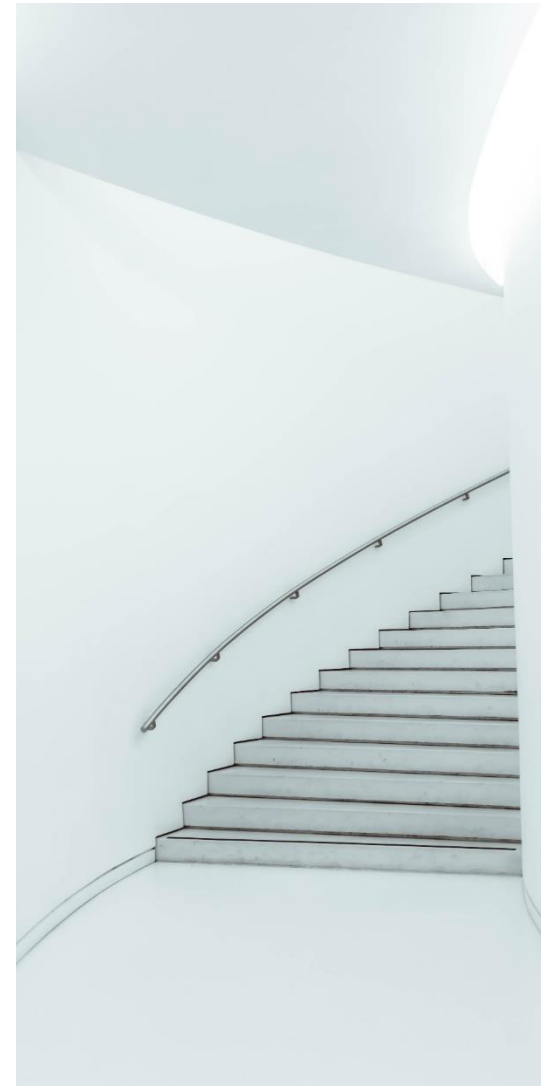
While Tesla is well ahead of the other OEMs in almost all aspects, the other OEMs score well on the important usage reasons of AC and DC tariffs.

*"What are the main reasons you use your "number 1" most often?"  
(multiple selection possible)*



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## Preference barriers

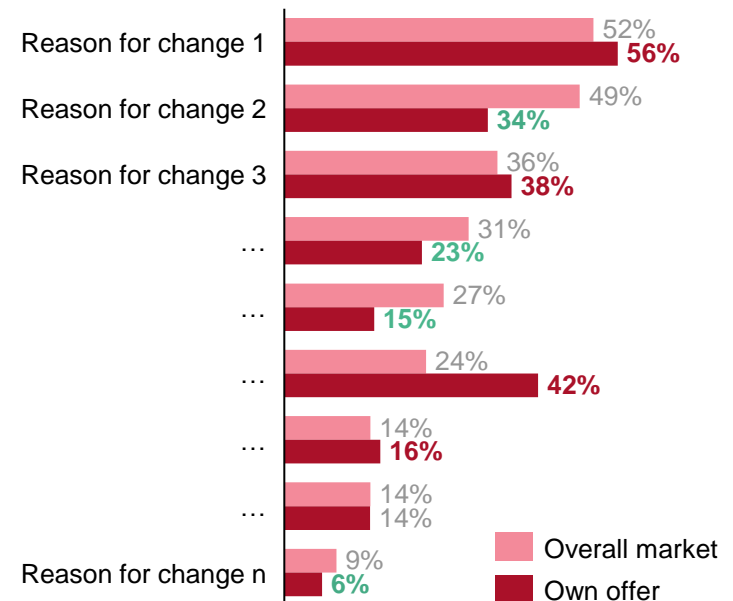
# Preliminary remark

## Why are preference barriers important?

The preference barriers show for which service promises individual providers or provider groups lose users.

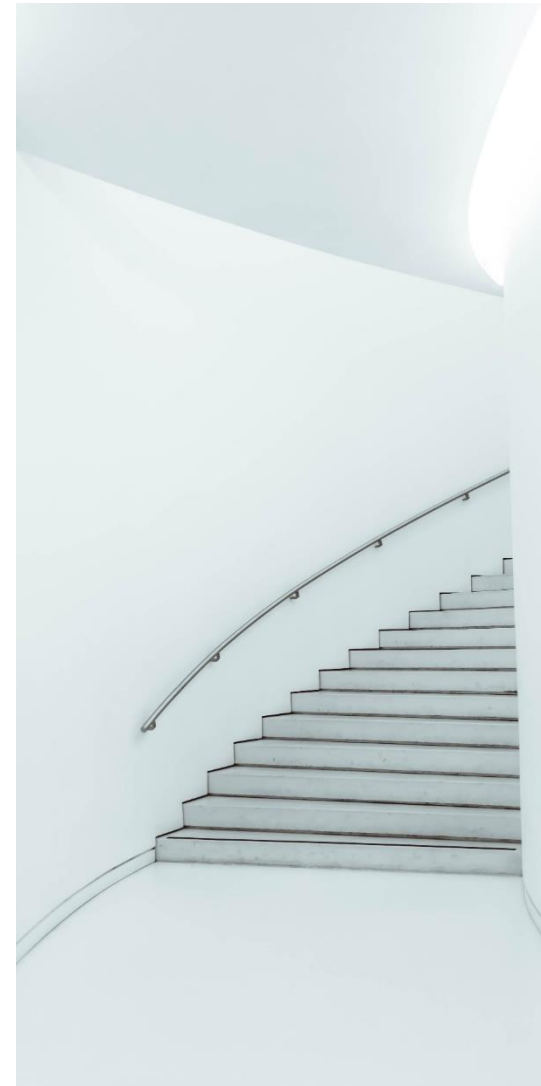
### Questions for eMSP:

- In general: What are the reasons that drive EV drivers to the competitors?
- How does one's own offer or provider group perform in relation to the competition?
- Where does your own service lose users? **(xx%)**
- Where is your own service ahead? **(xx%)**
- Where does your own service need to improve?



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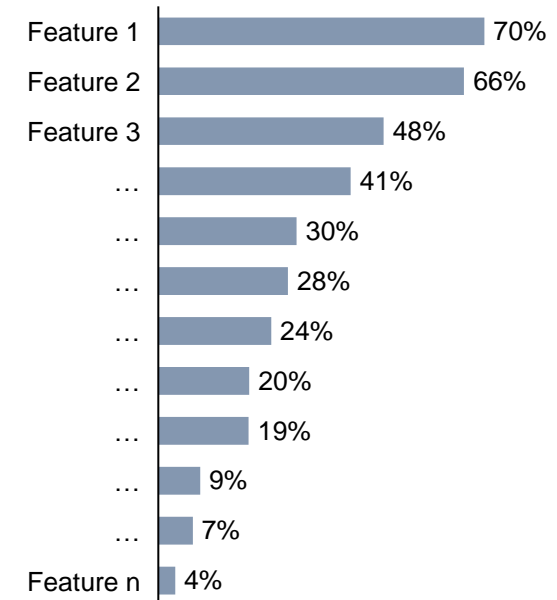
## Feature usage

**Preliminary remark****Why are the features used important?**

eMSP services offer many important functions. Customer loyalty is achieved when an offer performs better than the competition in the functions relevant to the target group.

## Questions for eMSP:

- In general: What features are important to EV drivers?
- Which relevant functions are particularly frequently used or appreciated in your own offer?
- What features does the target group miss in their own offer?
- Which features are more convincing for competitors?





## Feature usage

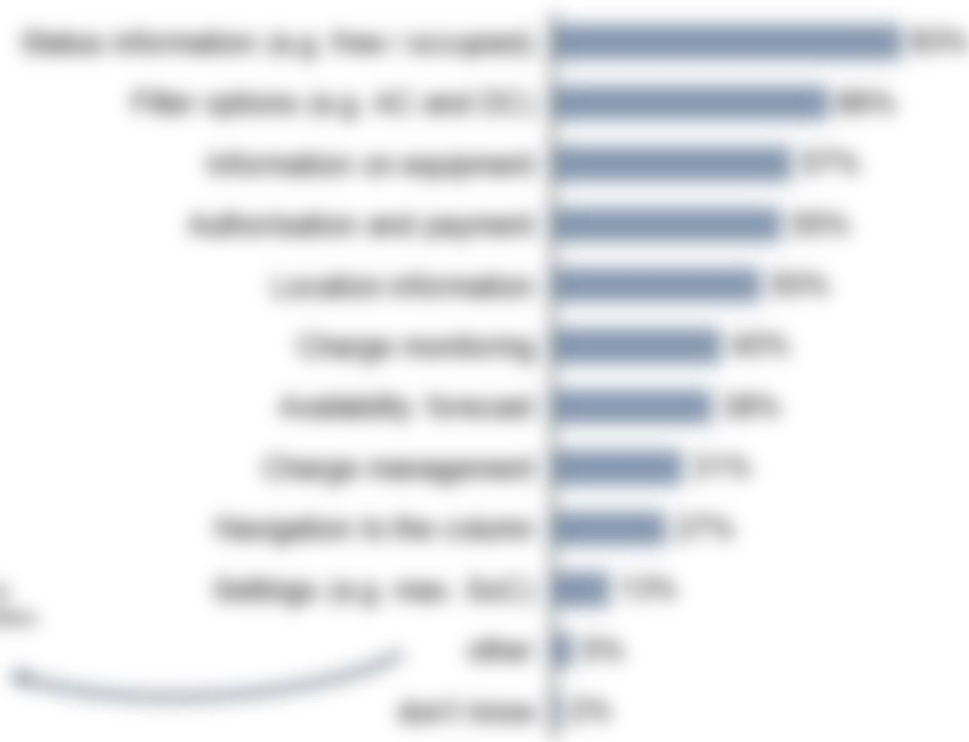
# Charging apps: Features used

*Status information is the most important feature.*

*"Generally:  
What functions are particularly  
important to you in a charging app?"  
(multiple selection possible)*

*Information on the status and location of the charging station is particularly important for users of charging apps for the use of public charging stations.*

*Functions related to charging management in the app, such as reservation and start/stop charging, are also particularly important for users of public charging stations.*



## Feature usage

# Charging apps: Functions

Authorisation and payment, location information and charging status on road side

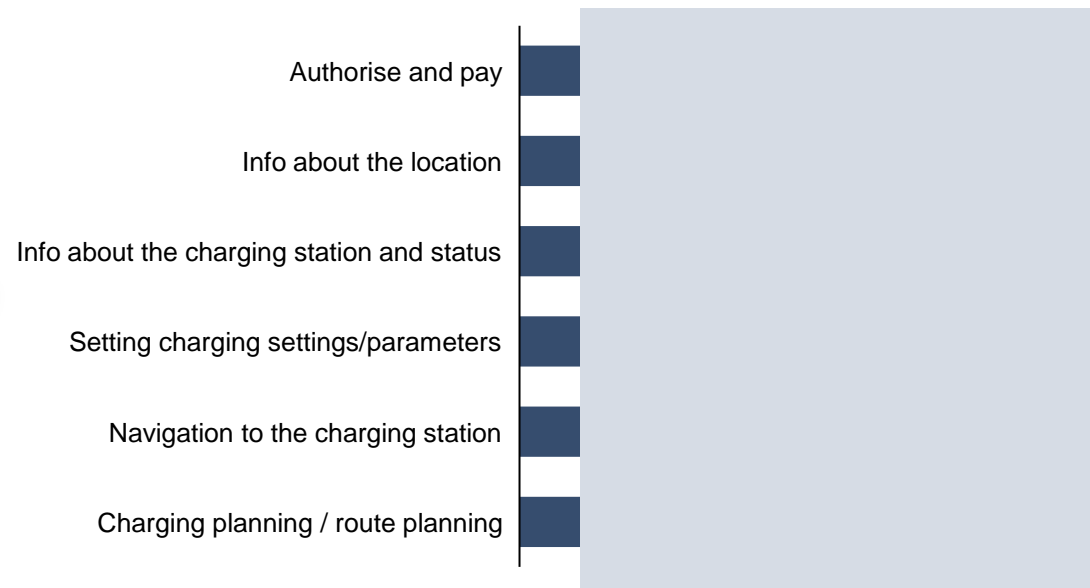
The user expects of responsibility related to charging app to have features for authorisation and payment as well as information on the location of the charging site and the charging status

In the case of the responsibility, the setting of charging parameters and navigation will belong to the vehicle or the vehicle app

*"What functions do you think belong in every charging app?"*

*Which ones belong more in the hands of a special app that specialises in this function?"*

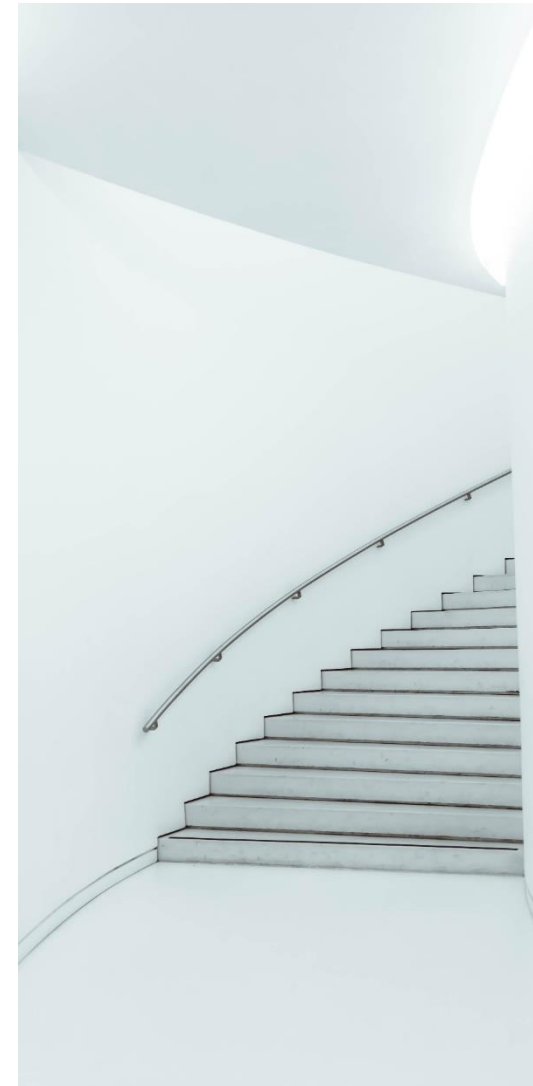
*Which ones actually belong in the vehicle, i.e. the [brand] Connect app, rather than in the charging app?"*



- belongs in every charging app
- belongs in special app
- belongs in the vehicle (navi)

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## Payment and payment options

# Preliminary remark

## Why are payment methods important for user retention?

In addition to the tariff structure, coverage and functionality of individual eMSP services, EV drivers have specific preferences for payment methods. The choice of the preferred eMSP service is therefore also influenced by the payment methods associated with the service.

### Questions for eMSP:

- Which payment methods are preferred by the target group?
- Do payment methods and modalities need to be optimised to increase customer loyalty?



## Payment and payment options

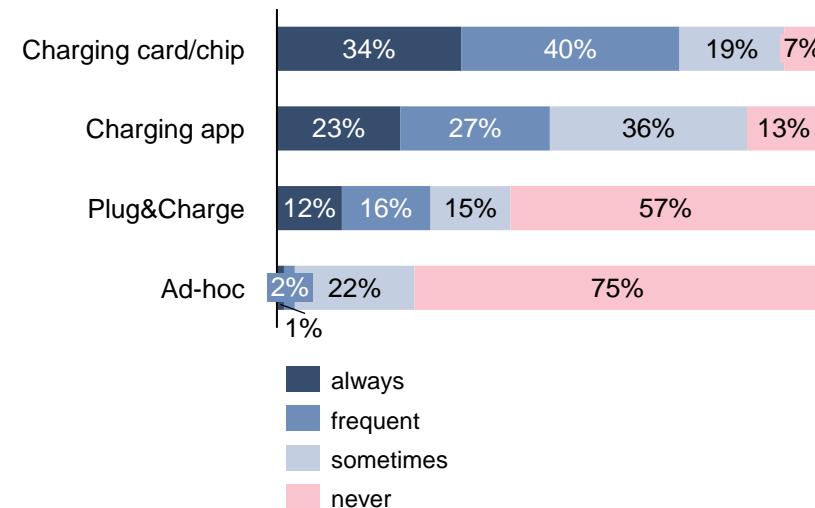
# eMSP payment options

*Charging card and chip still the most frequently used payment media.*

The participants in the study pay most frequently with the charging card or chip, followed by the charging app. Plug&Charge and Ad-hoc follow in third and fourth place.

Compared to 2021, there have only been minor changes: The charging app, card and chip are declining slightly, while Plug&Charge is increasing noticeably and Ad-hoc is increasing slightly.

*"How do you usually pay at publicly accessible charging stations?"*



## Payment and payment options

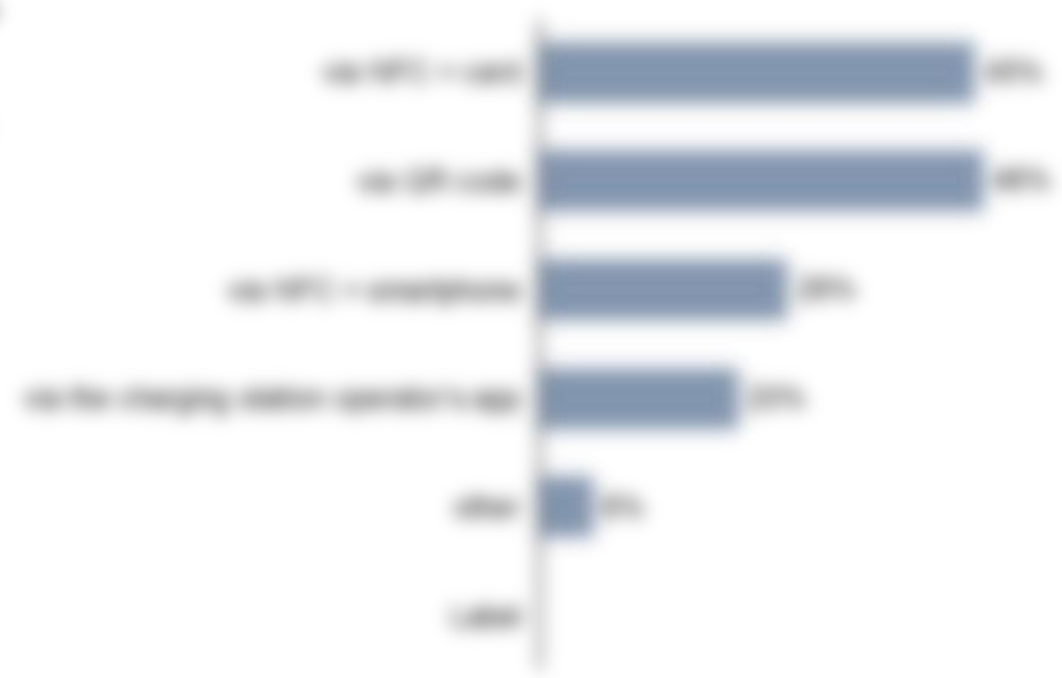
# Ad-hoc

*Many ways to ad hoc charging relevant.*

*"How do you use ad-hoc charging?"  
(multiple selection possible)*

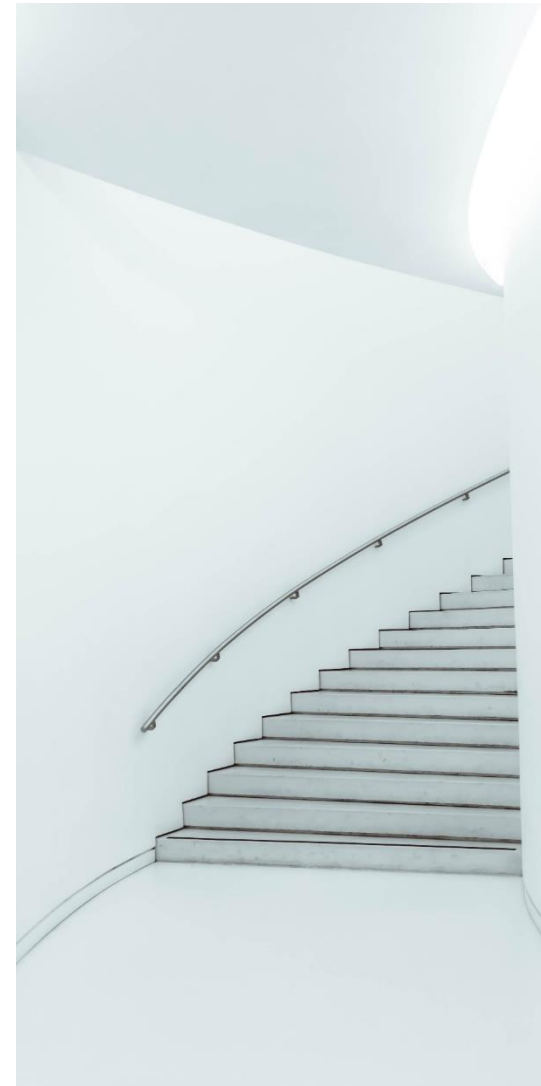
The most common payment method is within the app (95%) or via card (95%).

50% use both their smartphone and QR code via the QR code app.



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## Charging rates

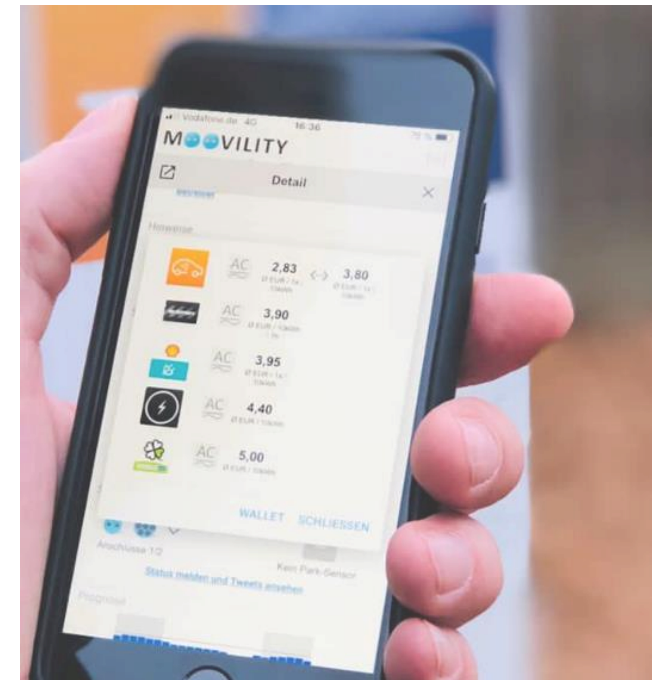
# Preliminary remark

### What role does pricing play in user retention?

The tariffs of the eMSP offers still differ greatly and change regularly.

Due to the low barriers to switching between eMSP offers, price elasticity is also high. New tariffs are therefore quickly reflected in the migration of users.

The study cannot give any price recommendations, but it does show the users' opinions on various tariff models.





## Charging rates

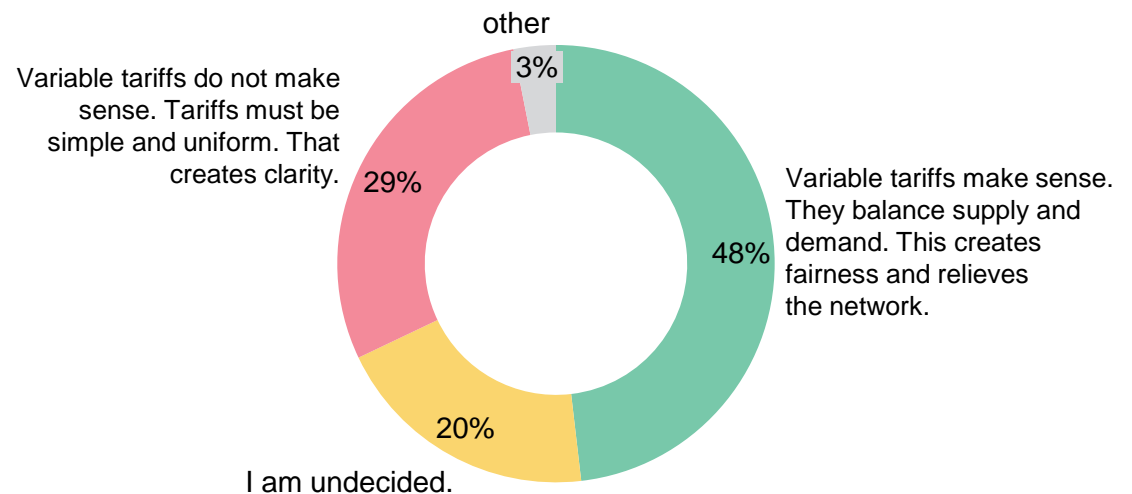
# Variable tariffs

*Variable tariffs perceived by half as fundamentally sensible.*

Almost half of the respondents agree with the positive contribution of variable tariffs.

29% are against variable tariffs and want a uniform tariff structure.

*"Which statement about variable tariffs would you most likely agree with?"*



# Charging rates

## Variable tariffs

Over 70% open to concrete proposals of variable tariffs that provide for discounts under certain conditions.

"With the rising cost of electricity generation, many suppliers are considering how to make charging cheaper.

One possibility is to offer discounts under certain conditions.

What do you think of the following options?"



## Charging rates

# Variable tariffs

*[Blurred text, likely a survey question or introductory text]*

*"Can you think of any special services that would also be worth a small extra charge to you?"*  
 (N = 379)



# About UScale

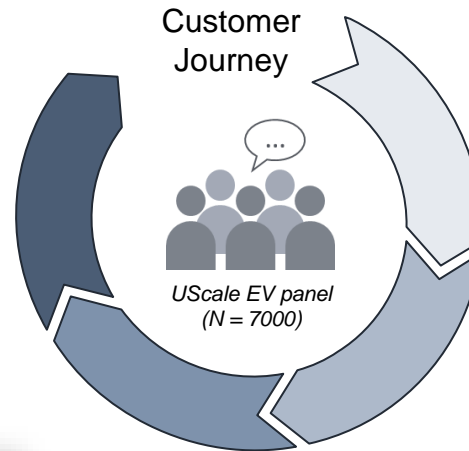
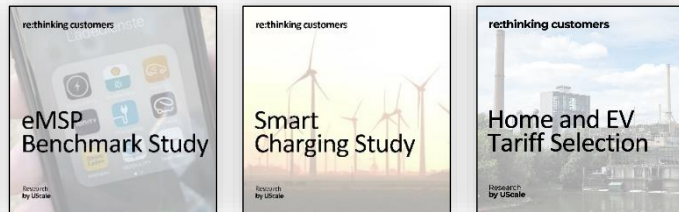
- UScale advises manufacturers of vehicles and charging technology, energy suppliers and service providers on the customer-oriented design of offers and the development of KPI systems for customer perception.
- UScale's work is based on customer insights studies on all touchpoints of the e-mobile customer journey and a development framework for product market fit for digital and innovative products.



- UScale is the only provider of a panel specialised in eMobility with over 7,000 panellists in German-speaking countries.
- UScale makes the customer perspective tangible for managers, engineers and IT'ers.
- UScale has extensive industry knowledge of the eMobility ecosystem.
- UScale combines extensive experience with the challenges of corporates with the agility of a start-up.

# UScale focus studies

## Business models



## Orientation phase



## Purchase phase



## Shop



## Vehicle use phase



\* All studies in the three DACH markets



plus other countries if applicable



SCALE YOUR USER  
SCALE YOUR BUSINESS



Dr. Axel Sprenger

Geschäftsführer  
UScale GmbH

mail [axel.sprenger@uscale.digital](mailto:axel.sprenger@uscale.digital)  
fon +49 172 - 1551 820  
web [www.uscale.digital](http://www.uscale.digital)  
post Impact Hub  
Quellenstraße 7a  
70376 Stuttgart