

CAR-SHARING-STUDY BY SHARE NOW AND TU WIEN

Explorative study to determine the correlations between motivations and purposes for car-sharing among different types of users.

BACKGROUND OF THE STUDY

What are the motives of SHARE NOW users? What do they use car-sharing for? How does all this correlate with their frequency of use? These questions are addressed by the Institute for Spatial Planning, Research Department Transport System Planning of the TU Vienna on behalf of the free-floating car-sharing provider SHARE NOW.

For this purpose, a study was conducted with SHARE NOW users in Vienna between September 22 and October 16, 2021. 1,907 Viennese took part in the study by answering a digital questionnaire that provided information on their car-sharing usage. For this purpose, the participants were divided into four different usage types for the survey:

Non-users (using car-sharing less frequently than once a year)

Occasional users (using car-sharing one to five times a year)

Regular users (using car-sharing every one to two months)

Heavy users (using the service at least once a week)

Another central aspect of the study was the reasons for usage. These were defined in three categories: supply, vehicles and application. The first category included items such as "short walking distance to the car" or "payment per use". Items in the "vehicles" category included "choice of different models" or "new, clean vehicles" among others. The third category "application" contained the items "possibility to save time" or "quick and easy transport of things and people".

The third central aspect of the study was the motives for using car-sharing. The experts at the Vienna University of Technology defined the study categories in advance. Thus, a distinction was made between affective (e.g., "Driving a car-sharing vehicle gives me pleasure"), instrumental (e.g., "Car-sharing is cheaper than owning a car") and symbolic motives (e.g., "By using car-sharing, I can emphasize my environmentally-conscious actions.").

Facts about the survey:

Digital questionnaires in cooperation with Technical University Vienna

Field period: 22.09. – 16.10.2021

Participants: 1,907 Viennese SHARE NOW users

Evaluation by TU Vienna

STUDY RESULTS

Heavy users usually do not own a car

The study results clearly show that car-sharing increases the likelihood of a shift from private individual transport to the use of more shared mobility - and thus provides relief in the cities. 44 % of all Vienna SHARE NOW users do not own a car; 21 %

have reduced the number of their private vehicles in the last five years. Especially customers who use car-sharing at least once a week (heavy users) mostly do not own a car or have given up their car in the last five years.

44 % of SHARE NOW users do not own a car in their household.

21 % of SHARE NOW users have reduced the number of cars in their household in the last 5 years, 50 % of them due to the high cost of private cars.

The majority of heavy users are between 21 and 30 years old. The study also shows that above-average regular users make use of public transport as their main mode of transportation. Non-users, on the other hand, are particularly strongly represented in the mobility type that uses cars as their main means of transport.

As the frequency of use increases, so too does the likelihood that the number of cars in a household has been reduced in the last five years. Overall, there is a trend towards fewer vehicles per household: twice as many respondents have reduced the number of cars in their household in the last five years, compared to households that have increased the number of cars. If the number of cars decreases, this is more likely to affect people with an academic degree. In contrast, those who increased the number of cars include an above-average number of people with a high school diploma or an apprenticeship as their highest education level.

(Monetary) incentives increase motivation for the changeover

71 % of respondents would use car-sharing more often or switch completely to car-sharing if the service was offered as a benefit by their company. 72 % of respondents would use car-sharing more often or switch completely if parking in the city became more expensive, but parking remained free for car-sharing users. Increasing parking fees motivate men to a disproportionate use compared to women; regarding a complete switch, this is exactly the opposite. In general, about 95 % of the participants consider free parking to be important or extremely important when deciding to use car-sharing.

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SHARE NOW is already responding to both demands. With SHARE NOW for Business, the company is already enabling affordable and environmentally-friendly business mobility. At the same time, parking fees are included for all SHARE NOW users - as are insurance and refueling.

Financially, the switch to shared mobility pays off: statistics show that private vehicles remain unused for an average of 23 hours a day (Umweltbundesamt 2020). In addition, monthly expenses are lower for SHARE NOW users. In Vienna, the monthly costs for a SHARE NOW vehicle starts at 312 euros for an average use of 60 minutes on weekdays. In comparison, a new car in the compact class (VW Golf) costs 558 euros per month over six years according to the ADAC car cost calculator. Users are not always aware of this advantage. According to another study by the RWI-Leibnitz Institute for Economic Research, people underestimate the actual costs their private car incurs each month by more than 50 percent (Andor 2020).

In addition to monetary incentives, the sustainability of the respective car-sharing provider also plays a role among users. Almost 40 % would use car-sharing more often or switch completely if the company were more committed to environmental and social sustainability.

SHARE NOW IN VIENNA:

SHARE NOW (formerly car2go and DriveNow) has been operating in Vienna since 2011

Fleet: 800 vehicles across 98 km²

In 2021, the Viennese used a SHARE NOW for an average of 60 minutes and covered an average of 12.7 kilometers.

The design of the offer is crucial for all types of users
In the decision for car-sharing, the offer for occasional to heavy users types plays a central role. Attributes include "short walking distances" (important or extremely important for 84 %), "station-independent systems" (important or extremely important for 88 %) or "no additional fuel or insurance costs" (important or extremely important for 91 %). With 800 vehicles on 98 square kilometers, SHARE NOW is by far the largest provider of free-floating car-sharing in the Austrian capital. Prices start at 0.26 euros per minute including fuel and insurance charges.

Another important role for users is the simple and fast operation of the car-sharing app. 93 % feel this is important or extremely important. With the SHARE NOW app, the reserved vehicle can be opened within a few seconds after two taps.

In general, the importance of all three motive categories (affective, instrumental and symbolic) increases the higher the car-sharing use, with the affective motive increasing the most of all three. The symbolic motives for use are assigned the lowest importance across all categories, while the instrumental motives for use are assigned the highest.

Difference in car-sharing use between men and women

The results of the study provide an overview of the types of users created. For example, it was found that there are consistently more men than women among all consistent users, and more women also appear in the group of non-users. In addition, the age of the group of non-users is mostly over 50 or under 21 years. However, it is the women who perceive the potential of car-sharing for environmental protection and resource conservation much more strongly than the men.

"Car-sharing currently does not reach everyone, but mainly well-educated young men. The results of the study complete the picture from other research. But to bring car-sharing to the masses, we need to attract new, additional target groups. Therefore, from a research perspective, we are interested in what has so far prevented different segments of the population - women, for example - from using car-sharing and where barriers can be removed," says Prof. Dr. Martin Berger from the Institute of Transportation System Planning at the Vienna University of Technology.

OUTLOOK

The study showed that the Viennese are willing to give up their own cars and switch to shared mobility. Especially people who use SHARE NOW once a week are convinced of the advantages of mobility and tend to use the mobility mix of public transport, a bicycle or car-sharing more often. However, to further promote this motivation, especially among people who previously used a car-sharing vehicle less than once a week, incentives are needed. According to the study, mobility benefits from employers or an increase in parking fees for private cars would have a positive effect on the use of sustainable mobility in terms of increased use of car-sharing.

In 2021, the Viennese used a vehicle for an average of 61 minutes, an increase of 11 %, and covered significantly longer distances. "We have been active in Vienna for over 10 years and our data shows that the Viennese highly appreciate sustainable mobility" said Olivier Reppert, CEO of SHARE NOW. "However, like many other cities, the Austrian capital also has a problem with too many cars, which leads to increased parking pressure, emissions and congestion. If even more people switched to car-sharing, Vienna would have more space for green areas in the city in the long term and could use them, for instance, for popular leisure activities."

ABOUT SHARE NOW

As the European market leader and pioneer of free-floating car-sharing, SHARE NOW is represented in 16 major European cities with around 11,000 vehicles, including around 3,000 electric vehicles. This corresponds to a share of more than 25 percent of the total fleet. About 3.4 million customers already use the service. SHARE NOW offers a sustainable solution for urban mobility and, as part of the mobility offer, contributes significantly to relieving traffic congestion in cities. Each car-sharing car replaces up to 20 private vehicles in urban traffic. With vehicles from BMW, Citroën, Fiat, MINI, Mercedes-Benz, Peugeot and smart, SHARE NOW continues to expand its European market leadership in free-floating car-sharing. The mobility provider was founded in 2019 as a joint venture between BMW Group and Mercedes-Benz Mobility AG. It has its headquarters in Berlin.

ABOUT TU WIEN

The research area Transport System Planning (MOVE) at TU Wien is active in teaching and research in the field of transport and mobility. The following main topics are addressed: transport planning issues in the context of urban and spatial development, transport planning and concepts, mobility management, empirical mobility research, transport modeling and assessment methods, Living Lab methods in the field of transport research. Another focus is the linking of technical, ecological and economic aspects in issues related to mobility.

Sources

Andor, Mark A. et. al "Supplementary information to: Running a car costs much more than people think — stalling the uptake of green travel" (2020), in: <https://media.nature.com/original/magazine-assets/d41586-020-01118-w/17904042>, accessed on 11.02.2022.

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