Summary

The development of organised car sharing in Norway: 1995-2018

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Authors: Cyriac George and Tom Erik Julsrud
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Car sharing is an emerging innovation that may contribute to a transition to a more sustainable mobility system. As it is used in this report, car sharing refers to the practice whereby registered members of an organization or platform can rent and operate vehicles on a self-access basis for short- and medium-term use. Although it does not represent a radically new technology, car sharing challenges the foundations of the current mobility system, which is, to a large extent, dominated by private ownership of vehicles. There is increased recognition that a mobility system based on privately owned fossil fuel driven cars is unsustainable. There is, furthermore, evidence showing that by providing access to cars without necessitating ownership, car sharing can reduce the number of vehicles on the road as well as the total amount of driving among users. In recent years, car sharing has undergone significant growth in Norway, both in terms of usage and number of platforms available. Although the market has matured, car sharing in Norway still needs support and/or time to become a mainstream part of the mobility system.

This report examines car sharing in terms of conceptualization, its historical development in Norway, user profile, environmental impact and research frontiers. In order to differentiate types of car sharing, scholars have used a variety of criteria, focusing mostly on business model and operational model. Business models can be differentiated based on organizational form, the three most prominent of which are for-profit, non-profit and cooperative. A more common business model typology focuses on the relationship between the service provider and customer, yielding categories such as business-to-consumer (B2C), business-to-business (B2B) and peer-to-peer (P2P) car sharing. The most common way to classify car sharing platforms is according to how it is used, or operational model; the most cited of such models are roundtrip (station-based), one-way (free floating, or point-to-point), and fractional ownership.

The history of car sharing in Norway can be broken up into four periods that characterize the business models, operational models and user profiles of the various platforms. During the first period, which lasted from 1995 to about 2004, local member-based car sharing cooperatives were established in Oslo, Bergen and Trondheim, inspired in large part, by the Swiss and German cooperatives that preceded them by at least a decade. The second period, which lasted from about 2004 to 2014, was characterized by the entry of corporate platforms both in terms of the service provider and the primary intended customer(s). The third period, which began in 2015 and is still underway, is marked by the rise of P2P platforms and the expansion of geographic coverage beyond the largest metropolitan areas.

In the most recent period, which is currently in its inception, there has been a blurring of the boundaries that distinguished the preceding periods as well as the different types of car sharing available in Norway. Most importantly, platforms have adopted hybrid business models that incorporate aspects of the P2P, B2B, B2C and cooperative models. There are also signs that car sharing may increasingly be linked with residential organizations, harkening back to the residential cooperative roots of world's first formal car sharing organizations in Switzerland and Germany. Additionally, the first free floating car sharing scheme in Norway was launched in late 2018.

Most research shows that car sharing programs have a net positive impact on the environment. The first reason is because car sharing tends to lead to a reduction in vehicle holdings, both at a household and corporate level. The second reason is that car sharing leads to a reduction in the total kilometers driven. Although many users who begin car sharing without having previously had access to a car experience an increase in driving, this is more than offset by larger reductions by other users who did have access to a private vehicle prior to using car sharing. This induced demand is also significantly smaller than the amount that the users' presumably would have driven had they owned a private vehicle.

As the popularity of electric vehicles increases, more research is needed on the non-carbon environmental impacts of car sharing, especially as it relates to particulate matter (i.e. local pollution). Further research is also needed concerning the broader impacts of car sharing with respect to land use. The rapid increase in the use of car sharing and number of platforms in Norway suggests that the market has proven itself as being viable and a worthy risk for a variety of enterprises. Furthermore, it is expected that the market is in a period of competition and flux, the results of which can be (1) growth and mainstreaming of car sharing or (2) consolidation of providers whereby some platforms exit the market.