

Stimulating the shared mobility economy

This response to the Committee on Travel Demand was written by Beate Kubitz, an independent researcher and writer on innovative mobility. She is the author of the Annual Survey of Mobility as a Service (2017 and 2018) published by Landor LINKS, as well as numerous articles about changing transport provision, technology and innovation including bike share, car sharing, demand responsive transport, mobile ticketing and payments and open data.

Her background is in shared transport – working on the Public Bike Share Users Survey and the Annual Survey of Car Clubs (CoMoUK). She has contributed to TravelSpirit Foundation publications on autonomy and open models of Mobility as a Service and open data and transport published by the Open Data Institute.

Insights are drawn from previous research into the success of the Cardiff City Bikeshare scheme, work on the Developing Car Clubs England Programme at CoMoUK and other independent research conducted for car clubs and public bodies in the UK.

It looks at some of the interesting features of the development of shared mobility and focuses on two successful schemes.

Transport and VC funding make uneasy bedfellows

Few people change their transport behaviour instantly just because a new service exists. People are generally creatures of habit who establish transport patterns, modes and routes for specific purposes, often for several years at a time, only changing them in response to life events, changes in circumstances and sometimes in response to severe disruption.

This basic pattern of transport behaviour change means that the adoption of new modes and patterns can be slow. The world of innovation in shared mobility is often dependent on venture capital – and the demands of investors. Anyone who has tried to raise capital for a new business will be familiar with the demands for a business plan that shows investors tripling their money in three years with a clear and simple exit path.

Whilst this might (just) work for widgets, it's much harder to demonstrate for transport modes.

'But Uber'

Despite this, Uber has attracted billions of dollars in investment. It is often pointed out as a poster child for new mode adoption. Whilst Uber is very interesting and indeed demonstrates an appetite for various aspects of the Uber model (cheaper travel, digital interfaces etc) it must be remembered that Uber is ten years old and has not, as yet, turned a profit.

Other mobility 'unicorns' – Ofo and Mobike – have retreated as investors got cold feet that the businesses were not performing as promised. It's rumoured that lift sharing giant Blablacar is moving into profit – a mere twelve years since it was founded.

With this in mind, whilst investment capital has permitted shared mobility some (quite large scale) experiments, this business model has yet to be proven.

Interestingly, that does not mean that there isn't a role for innovative start-ups in transport provision.

It does mean that they are not necessarily best equipped to work in a vacuum taking on the full whole proposition from fleet, back office to customer interface - changing transport behaviour and improving the environment whilst they are at it.

Liftshare, the UK based ride sharing business has developed a different business model from that of the consumer-facing Blablacar. By targeting businesses who need to save on parking space costs or stop creating a traffic nuisance caused by people converging on their site in cars, it has developed a business to business approach. This persuades members of staff to share vehicles using workplace communication channels. It provides travel planning information, a ride sharing platform, incentives and indeed disincentives for one-person-one-car driving behaviours, all in a defined, workplace, environment.

Similarly, whilst US ride-sharing app Via started out providing consumer ride sharing in the US it has expanded in to the UK by providing the core of several different services from ArrivaClick on-demand buses to the ViaVan shared taxis in London and Milton Keynes (in partnership with Daimler AG).

Providing part of the value chain in a business-to-business context is useful and working in partnership develops more stable business model. But it's not the only route to market. Where public authorities have developed policies to manage and better utilise street space and enhance air quality, shared transport can be instrumental in enabling city wide behaviour change. Working in partnership with local authorities – often sharing capital investment requirements out between a number of bodies – has some demonstrable successes.

The two examples below have created successful vehicle sharing operations – bike share in Cardiff and car club in Norwich. They both rely on considerable policy support from their local authorities including the allocation of street space to their operations and auxiliary policies which enhance take up, both have accessed additional external funding through grants and sponsorship, both have asset-locked vehicles and have multiple partners involved in finance and operations.

Cardiff bike share

Cardiff bike share is a docked bike share scheme operated by nextbike as the result of a tendering process run by Cardiff City Council. The scheme covers a 22km² central area of the city (which has a total population of 361,000 people). It has a diverse funding base including partnership, sponsorship and income from use, and an agreed initial period of operation.

Cardiff bike share scheme was formally launched in May 2018, after an extended process of tendering, consultation and a soft launch. The scheme was an almost instant success with more than double the UK average number of trips per bike per day.

Bikes in the Cardiff scheme were used 4.27 times per day – just over twice as often as the UK average of 2.10 in the first three months after the launch.

Key success factors

The high usage of the nextbike Cardiff bike share is unlikely to be due to one element alone.

It is apparent that there is a virtuous circle between the people, place and partners which has built a fantastic narrative around the bike share scheme as well as a collaboratively designed network.

The partners are deeply committed to the scheme and have created a broad sense of ownership which has facilitated excellent use of the scheme.

The success factors can be distilled into:

- Cardiff City Council has a strategy of keeping cars out of the central area as much as possible. The bike share scheme and other cycling infrastructure measures are part of this and are prioritised by officers.
- A strong partnership was built between the Council, the principle sponsor (and one of the key users) Cardiff University and the operator, Nextbike. Other civic partners were involved from before the launch including cycling groups and the police.
 - The maintenance and redistribution team and the police have supported the sense that this is a scheme that is looked after and cared for.
 - Partnership between nextbike, Cardiff City Council and Cardiff University has attracted a loyal membership with excellent usage of the bike share scheme.
 - Funding was obtained from the Welsh Assembly which purchased the assets (bikes) and means that there was minimal capital requirement from the operator or city.
 - Ongoing costs are largely met by sponsorship (the University in effect pays for membership for all students and staff through an annual contribution) and bike hire income. The operator is able to concentrate on maintaining the quality of the scheme not just on revenue.
- Nextbike has provided a comprehensive bike share system with booking and back office infrastructure which enables the reporting, customer service and health of the scheme to be monitored and maintained. The scheme is a docked scheme, and whilst this is neither a guarantee of success or an absolute prerequisite for it, it does allow a certain amount of communication (i.e. signage) around the bikes to help people understand the scheme, and it also helps people identify out of place bikes (and for the scheme operator to retrieve them) helping ensure the feeling of community ownership around them.
- The network works - docking stations are sited in high profile and visible locations which combines with the city cycling culture and infrastructure (which has been

developed over the past ten years by the Council) to enable a broad cross section of the population, including visitors to Cardiff, to use the scheme.

- Communication has been particularly strong and consistent over a long period. From the initial announcement of the tendering of the scheme through to launch (over a year). All partners were concerned about countering scepticism after the previous scheme was withdrawn in 2010 and have worked hard to remain on message.

Impacts

The direct impacts of the scheme on congestion, air quality and travel behaviour have not yet been studied.

However, the Annual Survey of Bike Share suggests several ways in which bike share reduces car use. Whilst 14% of users reported that they previously used a car or taxi to make their last trip made by bike share, additional questions on general car use elicited responses that of the bike share users responding 33% were using their car less (21%) or much less (12%) and the remainder were large the same. Over 50% of users also use bike share in conjunction with public transport – bus, train, tram and underground and 24% use bike share in conjunction with a car.

Another interesting feature of bike share users is their overall interest in other shared mobility services – 28% were likely to use car clubs, 22% ride share services, 32% shared taxis and 41% a MaaS account.

Norfolk car club

The Norfolk Car Club is a Community Interest Company which operates around 60 cars in Norwich, a city of 141,000. This is an exceptional sized car club outside London. For instance, Derby is served by a mere 5 car club vehicles.

Key success factors

Investment for expansion

- Norfolk Car Club was awarded £100,000 by the Developing Car Clubs England Programme administered by CoMoUK in 2014 to cover the cost of new car club infrastructure including the designation and marking up of existing and additional parking bays, the acquisition of telematics equipment and an extensive marketing and promotion campaign to develop the car clubs in Norfolk. Along with funding from Norwich City Council, including contributions from Section 106 agreements, the total invested in the Norfolk project was forecast in excess of £300,000. Funding provided this not-for-profit entity with a capital injection enabled it to expand at a faster rate than would have been possible without funding. Ongoing costs are met through membership and hire income. The vehicles are asset-locked. Car club vehicles are booked online and have an easy access telematics system (supplied by Co-wheels).

Local authority policy support

- Norwich has central parking restrictions because historically parking demand has been high and has created pressure on the streets for both residents and businesses.

However, the car club has been allocated on street car parking for its vehicles as it has grown, with space allocated whenever it has met certain metrics.

- S106 agreements have been used to ensure development supports the car club (and is less favourable to car ownership).

Marketing

- The car club marketing has been very consistent, long term and well-targeted, recognising that people rarely make a snap decision to join the car club. It has used both traditional and social media. It has also targeted streets surrounding cars as the fleet grows using targeted leaflet drops.
- Key messages have been around saving money, easy parking and 24/7 availability.
- Intensive marketing is successful. Norfolk Car Club grew by 36% over the first eight months after its Developing Car Clubs investment, with nearing 250 new members joining the car club (2015 membership was in excess of 650 people). The car club also experienced a 25% increase in the number of bookings of vehicles.

There are benefits to achieving a critical mass

- The car club has been proactive in creating a network of cars so that they are perceived as a realistic alternative to car ownership - without the stress of finding parking spaces. As the network has grown, the car club noted a greater enthusiasm for member-to-member marketing. Whilst the cars were perceived as a restricted resource (i.e. just one in a neighbourhood) there was little take up of member-get-member marketing. Once a network was established that reinforced the perception that if one car was unavailable there would be alternatives (even if slightly further away) member-to-member recruitment increased.

Impacts

The 2015 expansion of Norfolk Car Club was studied as part of the Developing Car Clubs in England evaluation which was able to look at specific impacts over the programme period. The number of members increased from 399 in December 2014 to 645 in December 2015, an increase of 246 members.

Frequency of private car use

By comparing 2015/16 Annual Survey of Car Clubs results on the frequency of using private cars before and after joining the car club, it is estimated that these new members in Norfolk have made an estimated 274 fewer private car trips each week. Overall there was a net decrease in mileage driven of 530 miles per survey respondent.

Private cars were removed from the roads

The evaluation of the Developing Car Clubs in England programme estimated that for each new car club car, approximately 2 private cars were removed from the road. About 11% of car club members stated that they had sold or disposed of a car in the 12 months before completing the annual surveys implying that 30 vehicles sold or disposed of. In addition, based on car club members surveyed stated that they would have bought a private car if they had not joined the car club, CoMoUK estimate that 74 car purchases were deferred due to the increased membership levels between 2015 and 2016.

Better travel behaviour – using cleaner transport – for more people

This is in addition to repeated findings in the Annual Survey of Car Clubs (CoMoUK) which show that car club use 'locks in' other travel behaviours as car club members tend to use public transport, walking and cycling more than the national average. It is interesting to note also that new car club members tend to use the car club most during the initial period of their membership and less so as it goes on and they find other ways to travel.

One further point to note is that car clubs enable members to drive newer low emission and electric vehicles – embedding better technology as well as better behaviour in the core of cities.

The Scottish Government has long recognised this and provided grants to car clubs to include electric vehicles in their schemes. This has led to initiatives such as the St Andrews car club – run by E-Car Club – where all ten vehicles provided for members are electric cars. Vehicle to member ratios vary across the UK but even in areas with relatively modest ratios (5-10 members per car) this means far more people will get to use these vehicles than do with privately owned cars – in London with upwards of 60 members per vehicle this effect is greatly magnified.

As car clubs replace and update their fleets more regularly than individual consumers, car club members take advantage of higher standard vehicles with lower emissions much more quickly than private car owners. The average age of the UK fleet is 8 years old whilst accredited car club fleets replace their vehicles within three years (for ICE vehicles – electric vehicles are replaced more slowly).

A final note

This evidence would not have been possible without the independent shared mobility charity CoMoUK surveying car club users annually for several years. Funding has not been forthcoming for this research recently, making it much harder to compare annual figures on the health and impact of the sector and give an up to date evaluation across the sector.

Whilst previous research demonstrates that shared mobility has an impact – and studies of individual schemes have been carried out - it is important that research into car clubs, bike share and ride sharing is funded to enable the shared mobility ecosystem to be monitored over time.

Beate Kubitz
April 2019
www.beatekubitz.com