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Ridesharing: Its potential, challenges, and future in France

Dianzhuo Zhu

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Summary

Abstract

In recent years ridesharing, for both local and inter-city trips, has been a fast-growing sector in France. Nonprofessional drivers and passengers share the same ride under the cost-sharing principle. The practice is encouraged by the 2019 *Loi d'Orientation de la Mobilité* (hereafter called LOM), or mobility orientation law, which gives it more policy clout. In this note, we will review the historical development of ridesharing and show how it is connected to the main business models in today's French market. We then highlight some common trends in organizing ridesharing services. Business models diverge according to distance and geography and converge inside each market. We also review the debates on the environmental and societal impacts of ridesharing. We conclude by giving insights on promoting ridesharing in the long term. On the basis of research findings, we argue that although tangible benefits are indispensable for behavioural change, non-monetary incentives should be given more attention to sustain the behaviour in the long run. Practitioners, policy makers and academics should collaborate to achieve this goal.

Introduction

In recent years, ridesharing has become a word heard more and more often in France. Three main reasons have contributed to the popularization of the concept. First, thanks to the success of the French unicorn BlaBlaCar, many French people have tried long-distance ridesharing as drivers or passengers. Second, increasing environmental awareness has led more and more people to try alternative transportation modes so that they are less dependent on single occupancy vehicles. Third, the overall trend gave birth to more ridesharing services and pushed the government to enact ridesharing-friendly policies, most markedly though the LOM, passed in December 2019. Despite the virtuous circle created by service providers and policy makers, ridesharing remains a marginal practice today. The ongoing Covid crisis changed our travelling habits in many ways. Whether or not the perception of ridesharing will change after the crisis is still unknown at the current stage.

In this note, we follow the definition of ridesharing in the French Transportation Law.[1] Under this definition, ride hailing platforms with professional drivers, such as Uber, are not considered as ridesharing service providers. We will first review the history of ridesharing and point out its potential to solve environmental and societal challenges. In the second part, we will present different ridesharing business models in the French context, as well as the strategic moves of other ridesharing-related mobility operators. In the last part, we will discuss how to promote ridesharing. Encouraging ridesharing requires knowledge of participant behaviour and of its costs and benefits. While the potential for reducing congestion and pollution is clear, empirical evidence on the environmental impact of ridesharing is still weak. A key critique is that people may adapt their behaviour to "compensate" the environmental gain of ridesharing—the so-called "rebound effect." They may travel longer distances or behave less responsibly in other activities. On the other hand, environmental concern is a clear motivator of ridesharing users and potential users but not, according to several studies, decisive for modal switch. People need tangible benefits (cost, time, etc.) to change their behaviour in the long term. Promoting ridesharing thus calls for collaboration among industry partners, policy makers and academics to understand users, consolidate business models and frame the right policies.

[1] According to article L. 3132-1, passed on August 17, 2015, ridesharing is "the joint use of a land motor vehicle by a driver and one or more passengers, on a non-market basis in which payments are limited to cost sharing, within the framework of a journey that the driver makes for his/her personal requirements." *(L'utilisation en commun d'un véhicule terrestre à moteur par un conducteur et un ou plusieurs passagers, effectuée à titre non onéreux, excepté le partage des frais, dans le cadre d'un déplacement que le conducteur effectue pour son propre compte.)*

Part I Putting ridesharing into context

A brief history of ridesharing

Ridesharing is not a new concept. It is quite common to offer a ride to family members and friends. However, organized ridesharing outside one's close circle is a much later phenomenon. Chan and Shaheen (2012) review the history of ridesharing in the United States. During World War II, since cars are precious resources during wartime, the U.S. government required ridesharing arrangements to be made for work commutes for people living in the same neighbourhood. The first generation of ridesharing was economy driven.

After the war, ridesharing in the United States witnessed another boom during the 1970s when the energy crisis and the OPEC oil embargo hit the country. Before the crisis, some employers had already started managing ridesharing with the purpose of reducing congestion and coping with limited parking facilities. The government was inspired by the initiative and launched the employer-sponsored rideshare program as a strategic response to the energy crisis. The second generation of ridesharing was energy driven…but not exclusively. During the same period, other ridesharing initiatives were tested, including the first HOV (High Occupancy Vehicle) lane near Washington, D.C. and three slug lanes in D.C., Houston, and the Bay Area. A HOV lane is reserved for cars with at least two people to offer a faster, less-congested service to those who rideshare. This initiative was then implemented in various American states and has been adopted in many other countries. On September 30, 2020, France launched its first HOV lane on highway No. 48 between Lyon and Grenoble.

In parallel with HOV lanes, which are financed by the government, carpooling "slug lanes" are conventional routes where people rideshare spontaneously. They emerged in areas where many people share a similar work commute trajectory. Pick-up and drop-off locations are informally decided by the community, often at the entrances and exits of highways. Money is exchanged hand-to-hand after each ride, without the need for a centralized platform to manage transactions.

In the 1980s and onwards, ridesharing lost its popularity due to the decrease of oil prices. At the same time, the organization of ridesharing evolved along a more technological path, with the emergence of the first telephone- and Internet-based ridesharing platforms. Meanwhile, in Europe, ridesharing only began to develop in the 1990s, facilitated by increased information exchanges and infrastructure access. For example, Belgium built a national database for companies to organize work commute rideshares. In France, organized, nationwide ridesharing started during the 1995 public transportation strike (Ballet & Clavel, 2007).

At the beginning of the 2000s, amateur ridesharing websites became more widespread as the Internet became more and more accessible. In France, as of 2007, 43 per cent of ridesharing services were run by associations, and only 8 per cent by businesses (Ballet & Clavel, 2007). The loose management of these websites fragmented the market and endangered their own viability. Most of them have not survived. Nonetheless, the "low tech" solutions that appeared in previous decades have not been completely replaced by online matching. The third and current generation of ridesharing is driven by both technology and ecology. In Part II, we will present the various ridesharing business models of today.

Solving environmental and societal challenges

One of the most important attractions of ridesharing is its environmental benefits. In the European Union, transportation is the biggest contributor to greenhouse gas emissions, at 27 per cent (1205 MT CO_2 equivalent in 2016). Individual vehicles are major sources of pollution in cities. In France, 56 per cent of CO_2 emissions are from personal vehicles. Ridesharing may result in fewer cars on the road as the vehicle occupancy rate increases, lowering the greenhouse gas emission rate and reducing the frequency of traffic jams. The current method for estimating the potential environmental gains of ridesharing is to compare the difference in fuel consumption or in greenhouse gas emissions of the same population between the current transportation scenario and the ridesharing-adopted scenario. According to estimates by Biotteau (2019), due to matching difficulties, the environmental benefits attributed to increased ridesharing in work commutes in France do not seem to be significant. Even in the case of four people per vehicle, CO_2 emissions would only fall by 6.6 per cent. The rate may reach 16 per cent in urban areas, where the probability of successful matching is higher.

Besides potential environmental benefits, ridesharing is also a more economical way for drivers and passengers to travel. In France, drivers who use organized ridesharing services are paid after each shared ride. The price is often proportional to the distance and the number of passengers, and it is regulated not to exceed the trip cost. As for passengers, after the LOM was passed, they could be eligible for an annual subsidy of up to 500 euros from their employers[2]. For long-distance commutes, ridesharing often costs less than the train, especially if passengers book at the last minute.

On the other hand, there is concern that the benefits of ridesharing will cause a rebound effect. Since travelling becomes less expensive and more environmentally friendly under ridesharing, people may switch from public transportation to cars, travel longer distances, and possibly move further away from employment zones (Vivanco et al., 2015). However, this potential rebound effect does not seem to negate the overall positive impact of ridesharing (Yin et al., 2018).

Ridesharing, especially in rural areas, may also help improve social justice. The most vulnerable groups in society are often those who cannot drive and/or are obliged to live far from the centre. Ridesharing provides them an alternative to the poorly functioning public transportation system. Having easier access to essential social services offers them opportunities to exit from their vulnerable situation. Survey evidence shows that mobility is crucial in job market integration, especially for the precarious population. Fifty per cent of those surveyed who were in the early stages of joining the workforce indicated that they had declined job or training opportunities because of transportation problems. Twenty-eight per cent of those surveyed even abandoned ongoing employment or training (Auxilia, 2013).

The benefit of ridesharing to society could be multiplied if integrated with other transportation modes, which is the concept of MaaS (Mobility as a Service). MaaS could also foster the uptake of ridesharing, which will be the focus of Part III.

[2] 200 euros for public sector employees.

Part II Ridesharing in France

Since the mid-2000s dozens of ridesharing services have emerged in France. This trend has accelerated in the past five years. Ridesharing is a small but highly competitive activity, with different business models trying to attract different market segments. It is also a highly evolving market. New companies are created while incumbents fail or are bought by their competitors. It is difficult to draw a clear line between each model, but we can categorize those services by targeted trip type and by targeted geographic area. Depending on the targeted market, service providers rely more or less heavily on information technology. In terms of organization, private and government-owned companies and private-public partnerships all exist. In the end, we find that all the ways of organizing ridesharing that appeared during the 20th century still exist in France today, although there have been some adaptations to the modern market.

As of September 2021, 19 ridesharing service providers have registered with the *Registre de Preuve de Covoiturage* (Proof of Ridesharing Register) of the *Ministère de la Transition Écologique* (The Ministry of Ecological Transition). Ten more operators are waiting to be added to the Register. Appendix 1 lists the business models of these service providers, plus BlaBlaCar.[3] Note that the list on the website is constantly changing. We compare company status, trip distance, trip type, targeted geographical area, and matching mode.[4] The list is far from comprehensive. With the passing of the LOM, we expect more actors in the market in the upcoming years.

Common trends in organizing ridesharing services

From the table in the appendix, we can already identify several patterns in ridesharing services:

1. Private services tend to focus on the short or long trip distance, while public initiatives often cover short and long distances.

   The majority of the services are completely private. Market competition and profitability require them to be precise in the targeted market segment. They tend to converge to the most mature markets, such as long-distance ridesharing or the urban work commute (BlaBlaCar, BlaBlaCarDaily, Karos, Klaxit, Oxycar). Other service providers choose to be specialized in a geographical area (city, group of cities, region). They either remain private and collaborate with the local government or form a public-private partnership when it is more convenient (Ecov, Ilévia covoiturage, Ehop). Private service providers prefer creating several brands for different targeted markets to make the boundary of each brand clear. This is especially the case for BlaBlaCar group with its brands BlaBlaCar (long-distance) and BlaBlaCarDaily (short-distance), as well as for Ecov with its brands Lane (Lyon), M'Covoit - Lignes+ (Grenoble HOV Lane), and Covoit'ici (other suburban and rural areas without special partnerships).

   Some regions also took the initiative to create their own ridesharing services. The "business" model is more inclusive due to its public nature. Passengers and drivers can match either using the website or using the mobile application, sometimes even using the telephone. They often use the open-source code of Mobicoop to design their website, which makes their interfaces quite similar. These services cover the region's geographical area fully. However, there is no pressure to improve the quality of the matches. The public authority provides a platform on which drivers and passengers can meet, but no more. In theory, all types of trips can be made with these platforms. In practice, long-distance or regular trips have a greater chance of success, which explains why they often have special forums for employees of the same company and for going to events. In the table, we can find Covoiturage Grand Lyon, Mov'ici (Auvergne-Rhône-Alpes), Ouestgo (Bretagne-Pays de la Loire) and Pass Pass Covoiturage (Hauts de France).

[3] The Register is designed to incentivize short-distance ridesharing. As a third party, it centralizes and validates all the effective shared trips of the registered service providers. Based on the validations, service providers can obtain subsidies and local authorities can better visualize ridesharing activities in their territory. The registered services may provide short-distance and long-distance trips at the same time. BlaBlaCar is not included in the register since it focuses on long distance trips. BlaBlaCarDaily (previous BlaBlaLines), the short-distance brand of the same group, is included in the register.

[4] Information is extracted from service providers' websites and other online sources. Inaccuracies, missing information and errors are due to the author.

Another challenge is to coordinate the public and the other private services operating in the region. Should these platforms continue to compete with the private services, or offer a platform for centralizing ridesharing offers in the region?

2. Targeted trip types are highly correlated with trip distance

As mentioned above, service providers usually clearly target the trip distance that they offer, except for publicly organized services. The underlying rationale is that trip distance is highly correlated with trip type (motive). Daily commutes tend to be short—for example, commuting to work and irregular travel such as doctor's appointments and leisure. When people travel longer distances, it is usually for inter-city occasional purposes such as holidays or work-related travel. Here, "short" and "long" distances are not strictly in terms of kilometres but are more about the regularity of the trip. People have different expectations regarding matching efficiency, detour, and price. For short and regular trips, passengers and drivers are more sensitive to matching efficiency and avoiding detours. For long and occasional trips, passengers and drivers are more accommodating.

3. The matching technology is chosen according to the geographical coverage

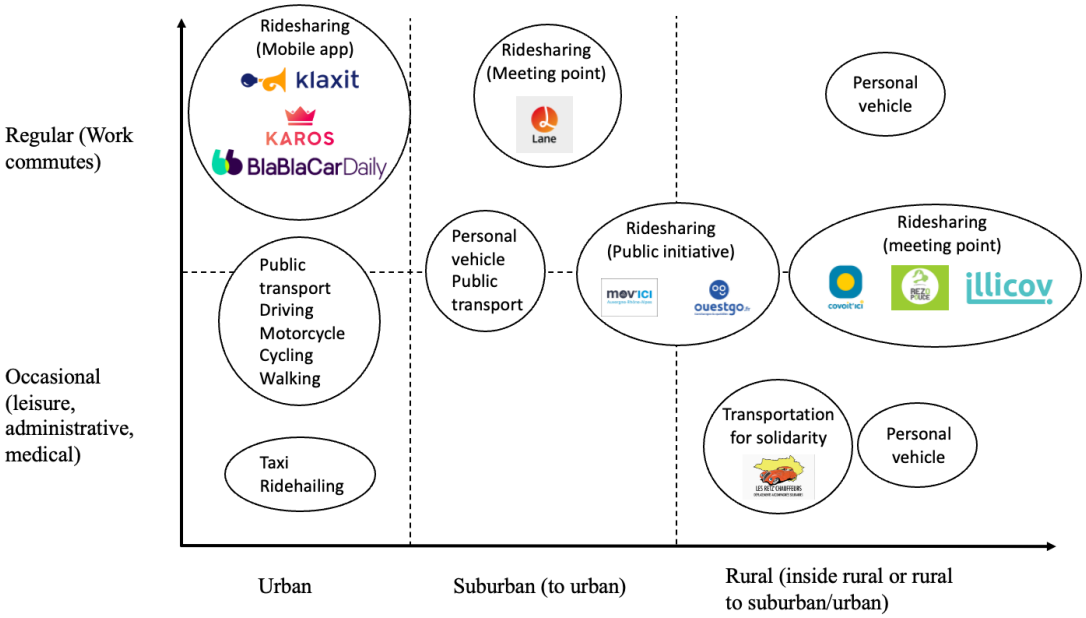
Both urban and rural areas have short and long travel needs. Service providers choose different matching technologies to respond to each situation. For occasional inter-city long-distance travel, no matter the geographical coverage, service providers converge to the same model as we shop online. Passengers and drivers publish their requests and offers on the platform, the algorithm figures out the potential matched trips, then passengers and drivers contact each other. Reservations are made before the trip. The meeting point is either decided by the driver when she publishes the offer or negotiated between the driver and the passenger. In either case, passengers and drivers take into account the potential time lost waiting and detouring.

When it comes to daily short-distance trips, since the trip takes less time to accomplish, time loss becomes less tolerable. Passengers and drivers want to be matched without walking too far or waiting too long. Here, the contexts of urban and rural areas differ. Figure 1 maps representative short-distance ridesharing business models together with alternative transportation modes. In the analysis, we ignore public ridesharing initiatives, since while they try to be compatible with all distances and all trip types, they don't have a clear business model.

In urban areas, passengers are less tolerant of time loss since they can easily find alternative transportation modes. Drivers are less willing to enter their travel information before each departure or to accommodate too much of a detour. At the same time, a higher population density and better information technology literacy makes it easier to match using mobile applications. Here, the network effect rules: The more people are registered on the platform, the better the matching quality—higher success rate, less waiting time for passengers and less detour for drivers.

Service providers competing in this market converge to specializing in work commutes using mobile applications, including work commutes from/to nearby suburbs. Representative service providers are BlaBlaCarDaily, Karos and Klaxit. Drivers can enter their regular trips once for all and passengers can reserve while retaining the option of having an alternative. Although these applications exclude neither real-time matching nor occasional trips outside of peak hours, these trips are clearly not the main target of these applications. At least for today, despite the increasing trend, the willingness to use ridesharing applications for occasional trips in urban areas remains low, both for passengers and for drivers.

Figure 1: Short-distance ridesharing business models and alternative modes by trip type and by geographical coverage



In rural areas, public transportation alternatives are much more difficult to find. Passengers are more tolerant if they need to wait longer or walk farther to catch a lift. However, for short daily trips, we would not expect them to wait too long or detour too far, either. First, they would prefer to adapt to public transportation schedules since bus departure times are more reliable. Second, they may prefer driving or simply not traveling. Mobile applications may not suit the situation due to smaller population densities, lower information technology literacy, and poorer Internet connections. The key challenge of daily ridesharing in rural areas is to provide a good enough service to complement existing public transportation, and to convert some drivers to passengers.

Service providers converge to a "low tech" version of the business model with ridesharing meeting points. Passengers go to meeting points to launch ridesharing requests. Drivers who pass by see the request in real time thanks to information boards situated to be seen just before drivers arrive at the meeting points. They can decide whether to stop if their destination is the same as the passenger's. Some services also provide mobile application pop-ups. There also exists a "lower tech" version where each meeting point only allows passenger to go to one specific destination, thus no need for information boards. This business model based on meeting points relieves drivers of the burden of entering each trip and making detours. At the same time, passengers may not need to walk longer than they would to catch a bus, especially if the meeting points are next to bus stops. Meeting points can be implemented in rural areas as well as in suburban areas. The latter case resembles the slug lanes that emerged in the 1970s. This model does not discriminate between work commutes and occasional daily travels but demands and supplies are higher during rush hours. Representative service providers are Ecov, Rezo Pouce and Illicov.

To summarize, there are two dominant business models in the short-distance ridesharing market. The first one mainly targets urban and suburban-to-urban work commutes and relies on mobile applications to match drivers and passengers. Most of the time, matching is done in advance. The more people are registered on the platform, the more efficient the matching will be. The second model targets rural and suburban-to-rural commutes with meeting points, usually close to traffic axes or bus stops. Mobile applications are an option but not necessary. Drivers can stop in real time to pick up passengers. Network effects on registration number are less obvious than the first case, since drivers can only see passengers in real time when they pass by. However, the more people briefed about the service, the more drivers willing to stop, the more passengers willing to make requests, the higher the matching efficiency will be.

4. The sector is responsive and evolving fast

Table 1 gives us an idea on how competitive the market is. If we look the year the company was launched (some service providers' information is not available), we can clearly see that this is a nascent market. Almost all were created after 2010; almost half (9 of the 19) after 2015. What the table doesn't show is the number of service providers that have failed or merged with currently existing ones. Under fierce competition, service providers are constantly rethinking their strategies. The quick conversion to the two dominant business models mentioned above is proof of this adaptability.

Today, service providers are competing inside each market to offer the best service. Since short-distance ridesharing is highly localized, each service provider has its geographical base and tries to reach out for more municipalities. This is especially the case for services based on meeting points. For mobile applications, the "conquest of territory" is more on the end-user side than in the relationship with local governments. Since they focus on work commutes, big companies are also their targeted end users. Although the Covid crisis may have slowed down the pace of competition, we still observe progress. In a few years, the market structure may be stabilized.

The market owes its vitality to a supportive legislative environment. The LOM approved in December 2019 contains several articles on ridesharing. The sustainable mobility reimbursement package encourages all employers to reimburse expenses incurred by their employees who commute to work using sustainable modes (including ridesharing) up to 500 euros year per. On several services, drivers can receive subsidies if they offer seats for ridesharing, even if they are not matched with passengers. Dedicated parking spaces will be allocated to ridesharing vehicles. Grenoble is experimenting the first ridesharing HOV lane in France. Local governments have more freedom to experiment in transportation policies. All French territories, including rural areas, will have a transportation authority (AOM). Transportation policies focus more and more on sustainable modes and on urban-rural harmonization, which boosts innovative solutions to be proposed and facilitates public-private collaboration.

5. Traditional transportation operators strategically participate in the market

In light of current trends, incumbent transportation operators also want a share of this market to be competitive in the future. In 2016, Transdev's subsidiary company Cityway launched Fleetme, a short-distance, app-based ridesharing platform. It also partnered with Rezo Pouce. In 2017, Keolis collaborated with Instant System to provide ridesharing solutions in several cities (Lille, Bordeaux, Rennes, etc.). In 2018, SNCF became a minor shareholder of BlaBlaCar after BlaBlaCar's acquisition of SNCF's coach service Ouibus. In 2019, Klaxit bought iDVROOM, a former SNCF subsidiary specialized in long-distance, web-based ridesharing. Automobile manufacturers such as Renault, and road infrastructure providers such as Vinci, collaborate closely with ridesharing platforms to offer discounts and subsidies to drivers.

As the concept of Mobility as a Service (MAAS) gains popularity, traditional transportation operators such as SNCF and RATP have integrated ridesharing solutions in their trip planners, together with other new mobility solutions.

Part III Conclusion: Promoting ridesharing

From the foregoing we can see that ridesharing is a transportation mode that holds great promise for our environmental and societal challenges and that the market is quite active in France. Nevertheless, ridesharing remains a marginal practice. According to the French Ministry of Ecological Transition, for commutes to work and school, ridesharing only accounts for three per cent of the trips made by personal vehicles.[5] To promote the practice of ridesharing, practitioners need to better understand the behaviour of drivers and passengers. How can incentives be structured for ridesharing uptake rate to fully meet its potential?

Understanding user behaviour and motivation

Research on motives for ridesharing is abundant. For example, Shaheen et al. (2016) interviewed drivers of the Bay Area carpool during their rideshares. Créno and Cahour (2015) conducted in-depth interviews with carpooling participants. Shaheen, Stocker, and Mundler (2017) exploited survey data in collaboration with BlaBlaCar. More recently, Farajallah, Hammond, and Pénard (2019) collected data from the BlaBlaCar website to analyze drivers' pricing behaviour.

Research results converge to a few salient motivations and barriers across different ridesharing platforms. Both drivers and passengers want to save money and time by ridesharing. Some drivers also highlighted the pleasure of helping people in need and appreciate having company on the trip. Some drivers and passengers are persuaded by the environmental benefits of ridesharing in reducing congestion and improving air quality. Barriers to participation include both practical and psychological ones. Practical barriers mainly relate to matching difficulties: too few participants, too many arrangements to make, or unsynchronized schedules. Psychological barriers could be safety concerns and aversion to waiting time uncertainty.

Service providers' strategies

Looking at current ridesharing business models, we see that service providers are aware of the motivations and barriers and are trying to design appropriate models to overcome barriers. They may offer subsidies to attract passenger and driver registration, since the more people are active, the higher the matching quality. They focus on predictable trips such as work commutes to reduce uncertainty and arrangement efforts. In rural areas, they rely on real time traffic flow to further decrease arrangement efforts and increase matching quality.

Besides business model design, service providers also often use communications and marketing techniques to encourage participation. Communication campaigns usually strengthen the motivating factors of ridesharing, and help overcome barriers, especially psychological ones. Marketing campaigns often rely on monetary incentives. Drivers are remunerated for shared trips and under certain conditions, even for proposed but unmatched trips. For many short-distance ridesharing services, passengers benefit from free ridesharing, subsidized either by a fund raised by the company, or by the local government. Like many other sectors that use freemium techniques, the purpose is to create the habit of ridesharing before charging the passengers.

The unique place of non-monetary incentives

Adapted business models and a favourable policy environment are necessary but insufficient for guaranteeing the uptake of ridesharing. Two main challenges confront practitioners: First, creating a habit of choosing ridesharing as one transportation mode among others. Second, designing appropriate tariffs to sustain the habit. We argue that current strategies of service providers are too concentrated on monetary incentives while they neglect the motivation of helping others. There is evidence that monetary incentives may steal the joy of supporting good causes. This phenomenon is documented as the "crowding-out" effect in the academic literature (Frey and Jegen, 2001).

We conducted two experiments to measure whether these effects exist in the ridesharing sector. and to what extent. The results show that non-monetary incentives are quite effective in encouraging very short distance real-time ridesharing in rural areas. We also find that monetary incentives have their limits, as increasing the level of driver

[5] https://www.ecologie.gouv.fr/covoiturage-en-france-avantages-et-reglementationen-vigueur (French only).

subsidization may not improve performance.[6] Service providers would have an interest in testing non-monetary incentives in other contexts and on a larger scale to check whether their practical efficiency remains. If it does, it would be a win-win situation: Platforms reduce operational costs, and drivers' motivation to help is satisfied.

Mobilizing non-monetary incentives does not, however, eliminate the importance of monetary incentives. In the long run, when ridesharing has become a regular transportation mode, there will still be a need for an appropriate tariff. Today, ridesharing payments to drivers are regulated by the Ministry of Ecological Transition based on the material cost-sharing principle.[7] For short-distance trips, service providers have more flexibility to offer a higher per-trip remuneration to drivers. In the long term, it would be interesting to know the willingness to pay of passengers and the willingness to accept of drivers. When considering tariffs, time costs and externalities (pollution, noise, etc.) are also important factors to take into account. Cost-benefit analysis is a common technique in the economic analysis of transportation, which is gradually opening to emerging transportation modes such as ridesharing. Monchambert (2020) made a first attempt to measure the time and discomfort costs of long-distance ridesharing using survey data in which he presented hypothetical situations to respondents. The average value of travel time for a carpool trip as passenger is approximately 26 euros per hour, 60 per cent higher than for a train trip and 20 per cent higher than for a bus trip. Individuals travelling as carpool passengers incur a "discomfort" cost of on average 4.5 euros per extra passenger in the same vehicle.

To tackle both challenges, a collaboration between academia and industry is important. The rich but unexploited data that service providers keep may offer researchers and policy makers precious information to better understand and design the ridesharing system. In return, service providers benefit from this knowledge to promote ridesharing more efficiently to make it a habit in the long run.

[6] For more information, the Governance and Regulation Chair has published a brief that explains the two pieces of research to general public: https://chairgovreg.fondation-dauphine.fr/sites/chairgovreg.fondation-dauphine.fr/files/attachments/GovReg%20_BRIEF%20Understanding%20ridesharing%20drivers%E2%80%99%20motivations%20with%20field%20experiments.pdf

[7] See https://www.ecologie.gouv.fr/covoiturage-en-france-avantages-et-reglementationen-vigueur#scroll-nav__5 (French only).

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Appendix 1 Main ridesharing service providers in France

Service name	Founded in	Belongs to	Status	Trip distance	Main trip type	Geographical coverage	Technology	Real-time matching
Atchoum	Unknown	Atchoum	Private	Short	Daily purposes	Rural, Entire France	Website	No
BlaBlaCarDaily	2017	BlaBlaCar	Private	Short	Work commute	Urban, Suburb, Entire France	App	Mostly no, but possible
BlaBlaCar	2006	BlaBlaCar	Private	Long[8]	Occasional	Entire France	Web + App	No
Ciligo	Unknown	Group Ciliopée	Association	Long	Occasional, Events	Nouvelle-Aquitaine	Website	No
Covoit'ici	2014	Ecov	Private / PPP[9]	Short	Daily purposes, mainly work commute	Rural, Several French communes	MP[10] + App	Yes
M' Covoit - Lignes+	2020	Ecov	PPP[11]	Short	Daily purposes, mainly work commute	HOV lane in Grenoble	MP + App	Yes
Covoiturage Grand Lyon	2012	Lyon metropolitan	Public	Short	All types	Lyon metropolitan	Web + App	No
Ilévia Covoiturage	2019	Ilévia	Private	Short	Daily purposes	Lille metropolitan	App	No
Karos	2014	Karos	Private	Short	Work commute	Urban, Suburb, Entire France	App	Mostly no, but possible
Klaxit	2012	Klaxit	Private	Short	Work commute	Urban, Suburb, Entire France	App	Mostly no, but possible
Lane	2018	Ecov	PPP[12]	Short	Daily purposes, mainly work commute	Suburb of Lyon metropolitan	App	Yes

[8] Long distance stands for inter-city trips
[9] PPP stands for Public-Private Partnership
[10] MP stands for physical meeting points
[11] Between SMMAG (Syndicat Mixte des Mobilités de l'Aire Grenobloise) and Ecov
[12] Between Lyon metropolitan, CAPI (Communauté d'Agglomération Porte de l'Isère), Ecov and Instant System

Mobicoop	2011	Mobicoop	Cooperative	Long	Occasional, Events	Entire France	Website	No
Mov'ici	2016	Auvernge-Rhône-Alpes region	Public	Both	All types	Auvergne-Rhône-Alpes	Web + App	No
Ouestgo	2016	Ehop	PPP[13]	Both	All types	Bretagne-Pays de la Loire	Web + App	No
Oxycar	2017	Oxycar	Private	Short	Work commute	Alsace	App	No
Pass Pass Covoiturage	2015	Hauts de France region	Public	Both	All types	Hauts de France	Web + App	No
Rezo Pouce	2010	Mobicoop	Private	Short	Daily purposes, mainly work commute	Rural, Several French communes	MP + App	Yes
Ridygo	2015	Scity.coop	Cooperative	Short	Daily purposes	Unknown	App	Yes
Roulez Malin	2009	Roulez Malin	Private	Long	Occasional	Entire France	Web + App	No

[13] Between Bretagne-Pays de la Loire region and Ehop

Chaire Gouvernance et Régulation
Fondation Paris-Dauphine
Place du Maréchal de Lattre de Tassigny - 75016 Paris (France)
http://chairgovreg.fondation-dauphine.fr