

SHARING AND TOURISM: THE RISE OF NEW MARKETS IN TRANSPORT

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Sharing and Tourism: The Rise of New Markets in Transport

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Abstract. This paper analyses the implications of sharing on tourists and tourism focusing on the transportation sector. The shifts from ownership to access, from products to services have induced dramatic changes triggered by the emergence of innovative marketplaces. The services offered by Knowledge Innovative Service Suppliers, start-ups at the origin of innovative marketplaces run through platforms allow the tourists to find solutions to run themselves their activities, bypassing the traditional tourism industry. The paper builds a taxonomy to apprehend the diversity attached to this growing platform economy, and uses this analytical framework to depict significant cases drawn from ridesharing or carsharing.

Keywords. Sharing, platform economy, travel, transport, tourism industry.

JEL. L91, L83, L86, O33, O35

1. Introduction

This paper analyses the implications of “sharing” on the tourism industry. Through house, car or ride sharing, the development of new services and applications, travels are becoming cheaper and easier. Nevertheless the main argument for “sharing” is not restricted to competitive prices. Airbnb, one of the leading actors reshaping the tourism sector for instance refers to its business model as based on the desire of “another way of travel”. Indeed, tourism services have been traditionally provided by service firms, hotels, restaurants, transport companies, taxis, travel guides. Nowadays more and more people share with tourists not only their travel experiences but also their houses, cars, boat, meals..., unlocking the value of underused assets and bypassing the established industry (Bostman & Rogers, 2011).

Sharing is not limited to tourism. It crosses the whole society – banking, publishing, photos, music

recording, movie making... –, but tourism has been one of the more impacted sector, as it has been the case since the emergence of Internet and Information and Communication Technologies (ICT). As emphasized by Buhalis & Law (2008: 610), “*technological progress and tourism have been going hand in hand for years*”: most of the main innovative behaviours and activities have emerged in the tourism industry. The Internet has induced deep changes in the knowledge bases and demand in the tourism industry, as well as the entry of new actors and the definition of new rules. Tourism as such is obviously not the locus of radical technological innovation. Nevertheless, innovative technologies and knowledge bases have always been used to benefit from market opportunities (Aldebert *et al.*, 2011).

The Internet has also induced an in depth renewal of the industry (Buhalis & Zoge, 2007), not only limited to the working of existing markets, but to the revolution of the organisation of the industry (Mariani *et al.*, 2014). Sharing is among others a last stage of this revolution. Indeed, sharing is as old as mankind, but the recent developments of Internet and web 2.0, the creation of online platforms have extended it from the private sphere to a global scale. So a new organisation of the economic activities in which uses prevail on ownership has emerged.

Sharing has deeply impacted accommodation, transportation, leisure, visits, food... In the paper the focus will be on transportation in which sharing has taken numerous forms. The issue is no more ownership, but accessibility, access to shared cars (carsharing), to shared trips (ridesharing), to other transportation means and resources (bikesharing), which impacts directly or indirectly many sectors of the economies.

Transport is also very important as far as geo-localization, real-time applications, location-based services are core elements of the innovative processes at work. With the Internet, the upsurge of smartphones and dedicated applications is underlying changes in the tourism industry. Waves of disruptive innovations borne by the entry of new actors have changed dramatically the composition

and organisation of the tourism industry (Buhalis, 1998; Wade & Raffour, 2000, Buhalis & Law, 2008) and namely the transportation sector.

The numerous forms sharing takes in transport are reflected by the diversity of terms that can be found in the literature, sharing economy, but also collaborative economy, collaborative consumption, peer to peer economy, on demand economy, circular economy, the mesh ... to quote the main used. Are these terms different ways to address the same thing or very different things?

The paper provides an analytical framework to organize this diversity. As already emphasized, the Web 2.0 and the online platforms underlie all these developments, but these platforms are not mere web sites or mobile applications. They are in fact business models, new modes of organisations of the markets, competing sometimes with the traditional actors of the tourism industry. An increased demand for a destination does no more necessarily benefit to the traditional supply provided by the industry. These business models are implemented by entrants we define as Knowledge Intensive Service Suppliers, start-ups of the Web 2.0 era that have given birth to this new economic system based on sharing of underused assets or services, for free or for a fee, directly from individuals. The first part of the paper defines the platform economy, product of the innovative marketplaces implemented by Knowledge Intensive Service Suppliers. Despite common basic features, diversity is shown to be a main characteristic of the platforms. The second part of the paper builds a taxonomy to apprehend the contrasted marketplaces running on transportation, and uses this analytical framework to explore significant cases drawn from ridesharing or carsharing. The last part concludes.

2. Sharing: definitions and issues at stake

2.1. Sharing in and sharing out

The emergence of sharing is often associated with travel experiences, one could say “by tourists, for tourists!”. For instance, in 1999 Casey Fenton planned to visit Iceland from Boston; after finding an inexpensive flight, he sent randomly an email to a group of students of the University of Iceland, asking for a free stay, to meet people and share experience. The number of invitations gave “birth to the idea that people anywhere would want to share their homes with strangers (or, as we like to call them, *friends you haven't met yet*)”¹. Back to Boston, he began to develop the CouchSurfing project to “surf” on couches by staying as a guest at a host's home, certainly the first success story of sharing in the tourism domain. Most of the creators of this new economy are in fact often depicted as individuals attempting to solve every day problems or wastes they have themselves experienced, often in relation with tourism. In 2008 Garrett Camp, Travis Kalanick and Oscar Salazar visited Paris from San Francisco to attend LeWeb conference. They tried endlessly to find taxis and failed to find one, a problem they equally experienced regularly in San Francisco. Back in the Silicon Valley they created UberCab, a private driver service. Uber was launched in San Francisco in 2009 to change the way transport is organized, and diffused rapidly in the whole world, a world now qualified of ‘uberized’ in more and more activities. Another experience relates to Brian Chesky, an unemployed graduate designer who moved to San Francisco in 2007. He thought with its mate Joe Gebbia they could make some cash by housing attendees at an industrial design conference in their apartment because of the well-known shortage of hotel during such events going on in the city (Geron, 2013). The success of their initiative convinced them that a potential market existed: “We were just trying to solve our own problem. After we solved our own problem, we realized many other people want this.” (Brian Chesky, quoted in Geron, 2013). They associated to Nathan Blecharczyk and created Airbnb to connect users with “airbed equipped rooms to rent” with users looking to rent a space. Many other interesting experiences could be

¹ The CouchSurfing story, <http://about.couchsurfing.com/>

related. In this way the leaders of the rising platform economy were born and, together with them new marketplaces were shaped.

These leaders were not ordinary tourists. They were embedded in knowledge-based economies, endowed with enough knowledge to take advantage of their intuitions. Indeed the sharing economy can be thought as one of the last consequences of development of the Internet and the ICT, an achievement of the emergence of the Web 2.0. In this economy a necessary condition to develop innovative activities is no more only availability of financial capital but of knowledge.

However, according Price (1975), sharing is not a form of reciprocity like the one we notice in market exchange: *“sharing is usually an unequal exchange, because some people are consistently in a better position to give. Sharing is characterized by the attitude that each person will do what is appropriate, not by an expectation of equivalent return as in reciprocity”* (Price, 1975, 6).

Linked with others in this collective action, people are able to develop bonding and even solidarity. Belk (2010) refers to *“sharing in”* when people share on an inclusive mode that is when they include all those with they share in their aggregate extended self. Thus, *“sharing in”* allows to create a sense of community through strong ties and bonding capital (Putnam, 2000). In the *“sharing out”*, there is no sense of community or mutuality. It is likely that what is shared could be replicate and divided. Weak ties and bridging capital are then characteristic of the sharing out. *“Sharing in and the expanded sense of self that it encompasses are characteristic of the sharing prototype. A “time share” condo is sharing out and creates no bonds. Sharing a car within a couple or family is generally a case of sharing in, while sharing a car within a large-scale commercial car-sharing organization is more a case of sharing out”* (Belk, 2010, 726). *“Sharing out”* goes with the creation of innovative marketplaces assembling according different business models multitudes of dispersed users. The economy underlying these activities will be called a platform economy.

2.2. *Towards KISS and the platform economy*

A basic explanation of the rise of the platform economy in tourism is the deeper and deeper involvement of tourists – and more generally consumers – in the tourism industry. The industry traditionally linked vertically the different actors, from suppliers and services providers to tourists, according a strict top-down logic. The tourism goods are experience goods whose both utility and quality are uncertain and only known *ex post*. With the development of the Internet the tourists have built online communities to share experiences (Kozinets, 1999; Kim *et al*, 2004, Wang *et al.*, 2002), have assembled themselves their own bundles, becoming consum'actors, (Longhi, 2009), have fed User Generated Contents sites (Longhi & Rochhia, 2015), creating value for large firms such as Trip Advisor for instance.

Finally, the consumers moved into 'prosumers', invading the two sides of the tourism markets. Tourism services have traditionally been provided by firms when more and more individuals are proposing to share temporarily with tourists either what they own (homes or cars for instance) or what they do (meals or visits for instance). This behaviour has resulted in an economic and social system based on the sharing of underused assets or services, for free or for a fee, apparently directly between individuals. The motives underlying the emergence of sharing are numerous. On the one hand, the focus has been brought on the deep changes in the behaviour of consumers or citizens, from individualistic towards more collaborative behaviours. The values shared in the Internet communities – net neutrality, open source developments, crowdsourcing – have invaded the society and are certainly under the re-emergence of 'commons' (Ostrom & Hess, 2007).

On the other hand, sharing, bartering, renting can be source of some additional revenue, the crisis, the ecological awareness have outgrown the movements launched by some few internet communities (Botsman & Rogers, 2011). These ideas of sharing have been hugely diffused in the society, uses prevail henceforth on ownership, access to the goods depend on genuine needs, for

what it is sometimes referred as "*disownership*" (Wang, 2013). The economic changes have been massive, and have disrupted a lot of industries. So, sharing has moved from a community practice into the distinctive business model of the 21st century, the "sharing out" implemented by the platform economy.

The focus has often been the emergence of a collaborative consumption society (Felson & Spaeth, 1978; Botsman & Rogers, 2011), as if the firms, the markets were somewhat disappearing. In fact this mesh of shared things (Gansky, 2012) affects not only the way one consumes but also the way successful companies are built. Collaborative consumption refers indeed to innovative market designs set up by start-ups which challenge the prevailing leaders of the industries, the dominant organization of the markets. The incumbent firms will have to adapt their economic models to meet the changes, to overcome rigidities that threaten their viability

The main features of the Web 2.0 explain its potential disruptive effects on the incumbent markets and industries, and even on the whole society. Its characteristics and main principles have been precisely defined by O'Reilly (2006). "*Web 2.0 is the business revolution in the computer industry caused by the move to the internet as platform*". Different lessons and principles have afterwards been coined by O'Reilly (2006), for instance:

- leverage customer-self-service and algorithmic data management to reach out to the entire web, to the edges and not just the centre, to the long tail and not just the head;
- network effects from user contributions are the key to market dominance in the Web 2.0 era;
- the service automatically gets better the more people use it;
- when commodity components are abundant, you can create value simply by assembling them in novel or effective ways.

Web 2.0 has induced the entry of innovative start-ups that we define as Knowledge Intensive

Service Suppliers (KISS), providing platforms which allow members of distinct groups to share experiences, advices or resources, to aggregate microscopic elements at a global scale (Longhi, Rochhia, 2015). The platforms, characterised by price discrimination between groups and intermediation services, “*serve as matchmakers to facilitate exchange by making it easier for members of each group to find each other*” (Evans, 2011a: 138). The platform economy is the consequence of a radical innovation, not technological but in this organisation of the markets and the industry. Web 2.0 allows building applications that involve a maximum of network effects and impact directly or indirectly on competition. The platform economy is indeed redesigning most of the industry, not only tourism, shifting from products to (eco) systems.

This clash between products and platforms is the pivotal explanation of the present evolution of the industries, and basically of tourism. The entrants do not compete directly on products, creating features that differentiate them from others, but they compete indirectly with incumbent firms providing the consumers tools to solve themselves their consumption problems through (often free) access to dedicated platforms (Evans, 2011b; Choudary, 2014).

The successful platforms are the ones that have built the more network effects; these effects divert the consumers from the traditional markets on the one hand, and select the winners from the flourishing platform start-ups on the other hand, according to the ‘winner-takes-all’ principle working under the Internet economy. This surge of technology start-ups finds its foundation in the knowledge-based economy grown with the Internet, the so called “*innovation in assembly*” principle of Web 2.0. The issue to develop activities is no more only availability of financial capital but of knowledge. As far as many of the elements to build a platform are freely available on the web, the issue is the capability to assemble them, the hardware being more and more easily available and affordable.

Even more than sharing (Botsman & Rogers, 2011) or access-based consumption (Bardi &

Eckhardt, 2012), the platform economy seems to grasp the ongoing changes in the society, as in the end the working of the whole thing depends on it. Sharing concerns individuals for which uses, access to the goods or services prevails on ownership. Nevertheless exchanges, even for free, imply a market place. The platforms have the capacity to aggregate dispersed resources globally to reach a critical mass and benefit from the properties of the Internet, on which all the information is visible. Through a platform, the single empty seat in my car can be reached as easily as the reservation system of a national railway company or of a renting car company for a traveller making the same journey than me.

The platform enables members of distinct groups to share, to transact with each other, and to realize gains from trade by reducing the transactions costs of finding each other and inter-acting; so it is a “*market-maker*” (Evans, 2011a). Interaction between people is the key issue; the platform connects producers and consumers with each other. Producers can turn into consumers and vice versa, depending of their present needs. In the traditional economy, producers and consumers had very specific, different and sequential roles; this linear model is overthrown in the platform economy.

The Internet does not make any hierarchy; the large operators are no longer the only suppliers globally visible on the markets. The net neutrality is a necessary condition of the viability of businesses based on the exploration of the web, as far as for instance, “*google will find the little guy as easily as it finds the big guy*” (Anderson, 2004).

The emergence of KISS is related to the aggregation of microscopic and fragmented actors in huge communities or markets, each microscopic actor being equally reachable, and equally visible than any other huge actor, according to the net neutrality principle. The more people involved and using the platform, the more efficient the platform and the service provided, as described in the definition of the Web 2.0. The platform appears as the organisation matching perfectly the principles of the Internet, allowing network effects to be somewhat optimized.

3. Collaborative transport sharing: paving new ways for tourism

3.1. A taxonomy of tourism platforms

Transportation services have been traditionally provided by large firms, even public monopolies induced by the network infrastructure classical argument, or small private firms like taxis for instance. Strict institutional regulations and rules have been a characteristic of the sector. Heavy entry costs were in any case the other characteristic of the sector, lessening competition and securing rents. Taxis for instance symbolize the main features of this economy.

Transportation aggregates most of the technological and social innovations that underlie the take-off of the platform economy: the upsurge of the smartphones, moving the web from our desks to our pockets (O'Reilly & Battelle, 2009), the progress of geolocalization and real-time online exchanges allowing high interactivity and dynamic services. The resulting behaviour of tourists has been grasped as "*mobiquity*" (Miranda, 2012), going with the rise of more and more 'free independent travellers'. When mass tourism was related to monopolies or large oligopolies, massive vertically integrated firms, TUI for instance, the platform economy seems to be associated to individuals and small, agile firms. The key factor of growth becomes the investment in knowledge-based capital, that is investment in intangible assets such as digital information, innovative property and organisation-specific competencies (OECD, 2014). Firms need some technological and organisational capabilities to enable the building of absorptive capacity (Cohen & Levinthal, 1990) and the ability to manage the platform. More than physical capital, knowledge is pivotal as far as most of the pieces necessary to build the activity are freely available; assembly towards an innovative purpose is the key to produce economic value. The assembly function also depends on architectural knowledge (Henderson & Clark, 1990), which makes it possible to

combine and integrate a large variety of services, tools and data within the design of a platform. Contrary to the past, entry costs in physical capital are very low, allowing small innovative firms to compete with traditional ones; large upheavals can be easily caused to the prevailing orders and markets.

Indeed, they do not only provide innovative applications on our smartphones. The successful start-ups are the ones that manage to set ‘communities’ up, to give rise to new behaviours, to handle commons, to design new business models, to build new market designs, usually two-sided markets bypassing the established industry. They can grow as huge actors of the tourism industry, the so-called unicorns for instance, whose valuation exceeds one billion dollars, massively fed by venture capitalists.

Diversity is a key word of these innovative initiatives, which take different forms that are described in the literature as sharing economy, peer to peer economy, collaborative economy, collaborative consumption, on demand economy... But the platform economy is the basic analytical framework that underlies these different forms and grasps the whole changes. A lot of platforms aggregating microscopic actors have flourished in many different activities related to the tourism industry, some of which have grown as global KISS. These KISS can be of two kinds, non-profit and for-profit, providing different innovative market designs; nevertheless the same general features described previously drive their dynamics (Longhi & Rochhia, 2015).

The ways the KISS and their associated platforms design solutions to solve various problems and specific needs tourists face shape the ‘marketplaces’, the matching between the ‘haves’ and the ‘wants’ according the following Table 1.

Table1. A taxonomy of platforms

valuable. People tend to treat the cars as objects they have in common and thus it is better to refer to communal sharing (Price 1975, Fiske, 1992). Communal sharing is not so much widespread because it « *tends to be a communal act that links us to other people. It is not the only way in which we may connect with others, but it is potentially powerful one creates feelings of solidarity and bonding*” (Belk, 2010, 717).

The other cases of non-profit platforms are usually associated to local governments or firms³, which organize carsharing or ridesharing for their citizens or employees to solve problems of congestion, pollution, car park... These cases are interesting, but they are local and the communities of users do not include tourists. The remaining of the paper will thus be dedicated to for-profit platforms, which have radically changed the tourism industry. These for-profit platforms that can be of two kinds:

- Peer to peer, they gather a community of users, which provides the resources and can share, usually for a fee, cars (Drivy) or rides (Blablacar) for instance. But the platform is not a common, it is private and the way the matching is done depends on an algorithm unknown to the community
- Providers to peer, offering on-demand services on which the resources are directly (Zipcar) or indirectly (Uber through its drivers) belonging to the platforms. These platforms are often associated to sharing, at odds in fact with the models they implement.

These “peer-to-peer” or “business-to peer” marketplaces can also be characterized by profit motives, price coordination, monetary exchange, self-interest, expectation of reciprocity, lack of community sense. *Pseudo-Sharing* (Belk, 2014) often underlies the platform economy.

³ For instance: Seoul Korea, Grand Lyon France, Snecma, Renault IdF, Hilti in Ile de France....

3.2. Platforms at work: competition and concentration

In transportation, the platform economy is born with the creation of hundreds of start-ups across the world providing innovative solutions for long or short distance travels. The object is obviously not to provide an exhaustive picture of this economy, but to highlight its main features and principles through the consideration of some cases, start-ups and innovative market arrangements, and to unveil the new landscape of the tourism industry.

A lot of these start-ups disappear rapidly, because their solutions or business models failed, they did not gather enough users, or because they get acquired by more successful ones. The platform economy is indeed characterized by important movements of concentration, fuelled by massive network externalities.

The resulting ‘winner takes all’ principle is emphasized by the role of venture capitalists, which have massively invested in these start-ups and somewhat driven the process of selection of the winners. The movement emerged in the Silicon Valley but has rapidly spread across the world, to Europe or China. Some start-ups succeed to raise important funds to improve their network the services they provide, to enlarge the scope of their markets, often through acquisitions.

i. *Ridesharing or carpooling* is a market that has rapidly grown to become a serious alternative to usual railways or transport companies. By increasing the occupancy rate of cars, it should also be a real substitute to individual use of car for traveling (ADEME, 2015). Given the multiplicity of initiatives the entry of actors with self-defined rules in regulated markets, it has even be legally defined in France as “*a common use of terrestrial motor vehicle by a non-professional driver and one or several passengers, made for no fee but the division of costs, as part of a journey that the driver makes for himself*” (article L. 3132-1 of The Energy Transition Law).

Long-distance ridesharing is dominated in Europe by Blablacar, a start-up that has grown as the world largest carpooling platform, gathering a community – not customers! – of more than 20 million of users across nineteen countries⁴ arranging more than two million rides per month with an average car occupancy of 2.8 people (vs. 1.6 in average)⁵.

From 2004 the start-up began under the name covoiturage.fr to sell software platform solutions to firms (e.g. MAIF, Ikea, Carrefour...) or local governments (e.g. Montrouge, France) intending to encourage ridesharing amongst employees and citizens. It fed ‘providers to peers’ platform arrangements subsidized by the providers and usually free for users. The limits of this market appeared rapidly. The start-up developed a for-profit peer to peer platform, which became Blablacar in 2013 to harmonize the brand all over the countries operated.

The business model adopted by Blablacar is the same of the one inaugurated by Airbnb. The inscription of the users on the platform is free, as the value of the platform depends directly on the number of users on the two sides of the market. Nevertheless, one side of the market - the most important one regarding its viability or profitability - benefits from better conditions, which can be free use. In ridesharing the platforms compete for drivers, which provide the resources, the unused seats to share. The platform itself does not own or provide any resources, it organizes a marketplace where drivers can find passengers and share the cost of the travel, and riders can find a seat to travel for cheap compared to the traditional market. The seats have to be booked in advance, users get or pay money every time they drive or ride, prices are posted by the drivers, and Blablacar charges 11% more on average to the riders. The more the ride is booked in advance, the less it is charged.

Even if hitchhiking has been a popular mode of travel, it was not common for most of the travelers

⁴ France, Spain, UK, Italia, Poland, Germany, Portugal, Benelux, Russia, Ukraine, Turkey, India, Mexico, Serbia, Romania, Croatia, Hungary

⁵ web-site Blablacar

to share – for a fee – a travel with a stranger. Blablacar has created and generalized a new behavior and changed the nature of a traditional trip in Europe, just as Airbnb for accommodation. Trust is a necessary condition pivotal to the take-off of a platform implementing interactions between individuals; besides; Blablacar presents itself as a “trusted community marketplace”⁶. Trust between unknown users has to be gained by systems of reputation, the belonging to a community and the adoption of its rules, the “ridesharer’s agreements”. The curation system is pivotal to the success of peer to peer services. Blablacar has developed tools to create trust in its online community, and created a framework names D.R.E.A.M.S. *D.* for Declared, declared information is the foundation of a trusted online profile, users can declare a name, age, their preferences or even give a quick description of themselves in their own words. *R.* for Rated, ratings have long been used online because users trust content that has been created by a third party. *E.* for Engaged, it is to believe that the other party will respect their engagement, the passengers have to financially commit to their transaction via a pre-payment service (Blablacar advertises that the quality of its service has increased since the adoption of this principle). *A.* for Activity-based, a successful sharing service must be activity-based and enables a reactive exchange between users. *M.* for Moderated, all information transferred by users of a sharing service must be third-party verified. *S.* for Social, social networks allow users to connect their online identity with their real world identity, be it socially, via Facebook, or professionally, via LinkedIn. Blablacar upgrades the active and well rated members of its community as Ambassadors, secure, well organized, willing to chat during a trip – the Blabla measurement – drivers that will thus attract more ride shares.

The twenty millions of users spread all over Europe creates a virtual network infrastructure allowing reaching even not well served places from the Blablacar platform. This position of leader has been fuelled by the venture capital funds, which helped the platform to lock and launch markets

⁶ <https://www.blablacar.co.uk/blog/blablacar-about>

to create a global long distance ride-sharing network. Blablacar has successively raised 1.25 million euros from ISAI in 2011, 10 million dollars from Accel Partners in 2012, 100 million dollars from Index ventures in 2014, and 100 million dollars from blue-chip venture-capital firms including ISAI, Index and Accel in 2015. These different rounds allowed the platform to grow internationally, in India, Mexico through the development of its own platforms or through the acquisition of local actors. In Europe they have allowed Blablacar to acquire PostoinAuto.it in Italy, Podorozhniki in Russia, Rides in Mexico, AutoHop for the Eastern Europe, and also Carpooling.com, the number two of the market and main competitor in Europe, cementing likely its position there. The platform has finally made agreements with insurance firms, but also with the travel assistance services ViaMichelin or Mappy for instance, where announcements in the Blablacar platform are now proposed after each search for a trip, or even Vinci Autoroute, which offers special tariffs to the Blablacar drivers.

Blablacar has grown as more than an alternative to traditional transport carriers for tourists. It offers flexible and affordable services, which beside the regular tourists give access to travel to people which could not afford before. It also allows joining places the servicing has been closed by transport companies, especially railways. Its large international dimension creates a standard the users are familiar with, and can indifferently be used across countries or in their domestic markets. The community of users shares rides, and provides resources, when Blablacar is a for profit private firm, a third party which allows transactions through an algorithm the community cannot access. Along with the extent of its community, this algorithm is the core of the value of the firm, which is more than 1.5 billion dollars end 2015.

Following the success of Blablacar and the long distance mobile applications in general, a lot of start-ups offering short distance ridesharing have emerged⁷. Nevertheless, the short distance goes

⁷ For instance: Sharette, Karos, Wedrive, Instant System, Wayz-up, La Roue Verte....

with low fares, a sustainable business model does not seem to emerge. These start-ups reproduce the model Blablacar implemented at its birth, providing platform solutions to local governments or large firms. The model that took-off in short distance travels do not refers to ridesharing solutions, but more to on demand services, for-profit providers to peers in our framework. The leaders of this market, Uber or Lyft are often described as the engines of sharing, but that is not exactly what they are. When hailing a ride with the applications of those platforms, “*drivers like you and me*” (Uber) or “*your friend with a car*” (Lyft) “*spontaneously give you a lift*” (Wundercar); in fact the users are picked up by semi-professional drivers providing a taxi service (Pick & Dreher, 2015). Lyft presents indeed itself as a “taxi and bus app alternative”, assuming frontal competition. The ride is not “*part of a journey that the driver makes for himself*” as stated previously in the Law, it is a journey the driver makes for yourself! Functioning like a taxi-service without the same accreditation raises a lot of problems for these firms. They are born as start-ups in San Francisco to become the heavy weights of the on-demand applications competing in the US market, fuelled by funds raised by venture capital. Uber has grown has a global firm very rapidly, its growth being largely based on evading regulations and breaking the laws, shifting the risk on to employees under the guise of sharing (Schor, 2014). From its creation in 2009, the 50 billion dollars start-up has expanded to more than 300 cities in 50 countries, facing very diverse rules, some of its services being banned in Korea, France, Spain, Germany...

Uber drivers are independent contractors, there is “a rigorous screening process to verify that every driver is insured and legally qualified to drive”⁸; this means that roughly anybody with a vehicle license and a proper car can become an Uber driver. The on-demand platform have in fact entered the market with self-defined new rules, when regular taxi drivers have to hold a vocational training certificate, and also a license the cost is some 400 000 euros in Nice (France) for instance, little

⁸ www.uber.com

more expensive than the car and smartphone necessary for the Uber drivers to start a business.

Uber does not own any physical resources like cars but controls one side of the market: the Uber drivers are not sharing a ride, they are semi-professional workers, self-entrepreneurs who have invested in their own car to meet the standard required by Uber, have to pay for the maintenance and gas..., when the rates and terms of the travels are fixed by the platform, which takes a cut on the transactions. The market design implemented by Uber is a scheme to shift risks to the drivers and to benefit from low fixed costs, and looks like a centralized market place. Uber pricing is similar exclusively by Uber applications and never by the drivers directly. The platform uses an automated algorithm to modify the price levels in case of surge, to attract more drivers and match the demand. It can also decrease the prices to cope with competition. The price variations are not under the control of the drivers, which have to adapt. The economic value is not in owning resources but in managing the marketplace. As a knowledge-based supplier, Uber organizes exchanges between owners of resources, seeking personal interest, and consumers of these resource units. This two-sided market (Rochet & Tirole, 2006) plays an important role throughout the economy by developing indirect network externalities and by minimizing transaction costs between groups.

Uber is confronted indeed to different fronts regarding competition:

- The one of lower-costs start-ups like Lyft, Sidecar, Didi Kuadi for instance, he faced creating some low cost services, UberPop for instance, which have been banned in different countries. Its scope is global, Uber plans to operate more trips in China and India than in the US by the end of 2015.
- The one of the taxi companies, which organized to decrease drastically the prices. In Paris (France) for instance, the platform decided to cut tariffs of 20 % from one day to the other to remain

competitive, without any dialogue with its drivers. The result has been demonstrations and strikes from these drivers because of decreasing earnings...

Passengers widely report a higher level of courtesy from Uber drivers than from taxicabs (Edelman & Geradin, 2015). The on-demand applications implement indeed the reputation systems characteristic of the platform economy to foster trust in the system. Users of the application can rate drivers; in turn, drivers can rate users; the aim is to increase trust in the service, as well as its quality. The passengers evaluate driver courtesy, vehicle condition..., can be asked about their experience by the platform, which can deter opportunistic driver behavior, target for remediation or even eliminate low-quality service providers. The same can apply to customers. The reputation systems are thus serving the intended purpose, improving the service. Price is thus not the only issue at stake; Uber has imposed a global standard for the quality of service the tourists expect on a global scale. It is often difficult for local taxi companies to compete because they are not built on the same models. Wherever it set up Uber has disturbed incumbent firms and questioned economic models in the urban transport.

Uber is present in 300 cities, the economic core of the world economy. The sharing economy has been associated to the leisure side of travels nevertheless the huge segment of business travel is more and more targeted by Uber and other platforms. According to a report of CWT (2015), it seems that the status quo between traditional carriers and platforms is bound to change, as “business travelers vote with their feet and shift their travel patterns” (Velikova, 2014). Uber is indeed very active in this market, and concludes agreements and partnerships with different firms and travel management companies. The most important has been with Concur, which has more than 20 000 clients gathering 25 million travelers over 100 countries. With the integration between Concur and Uber, business travelers will be able to request, ride, pay and expense each ride to the company without additional work, travel managers will get more control and insight into ground

transportation spend, will benefit from automated expense management, as well as have a better way of tracking travelers location (Velikova, 2014). The business travel market is over 1 trillion dollars a year, the past competition between Uber and taxis looks like a warm up, the changes of the tourism travel industry are to come.

ii. *Carsharing* is another platform service more and more dedicated to tourists; it allows a community to share cars rather than to own its own car. Cars are expensive underutilized commodities; the average car is unused 90 % of the time, a waste value that can create a lot of market opportunities, the forecasts relative to the market of sharing amount to billion dollars.

Zipcar has been some fifteen years ago among the first to develop a platform gathering a community of users and allowing to shun car ownership and prefer flexible and affordable solutions for access. The platform is a for-profit provider to peer solution, Zipcar owning and giving access to the cars. Nevertheless, the model was very different from traditional rent-a-car services. Indeed users are members approved to be involved in the service, reservation, pick-up and return is self-service, time window is 24 hours a day, cars can be rented by the minute and by the hour, not only by the day as with the rent-a-car, fuel costs are include in the rates (Danielis *et al.*, 2012). The members, 770 000, pay a monthly or annual membership fee and the effective time they reserve a car, via Internet or mobile apps. The zipcars, a fleet of roughly 10 000 vehicles, more than 50 brands and models, have RFID transponders to lock and unlock the doors. The heavy weight incumbents on the market pay attention to these developments; Avis Budget Group acquired Zipcar in March 2013 for around 500 million dollars, to control traditional rental car as well as carsharing.

Zipcar could be considered as a semi-common (Fennell, 2011), as the members are part of a community the fees are used to invest in the resources, even if for profit. The carsharing initiatives are exploding, because of environmental problems on the one hand, of pivotal market issues on the other hand.

On the one hand thus, a lot of public initiatives have emerged to solve traffic and parking congestion, pollution problems in the cities. Non-profit equivalents to Zipcar are available for the citizens. City CarShare founded in 2001 in the San Francisco Bay Area for instance. It is the largest non-profit carsharing service in the US. Public carsharing solutions are today available over a thousand of cities across the world, in addition to bikesharing, Autolob' for instance in France offering small electric cars, GoGet, Mobizen more globally.

On the other hand, carsharing represents a huge market; its development highlights deep changes in the preferences, the behaviours of the consumers; the emergence of new market designs related to the most important industrial sector of our economies. Car manufacturers have been scared at the idea to be the next Nokia or Kodak, the two undisputed technological leaders which have failed not because of inadequate technological innovation, but because they had not seen the market design evolutions, the rise of the platforms and open mobile applications. They begin to pay attention to these evolutions, basically the general movement from products to services that is driving the evolution of the markets as well as of the society.

Car manufacturers have thus introduced their own carsharing services, including Daimler's Car2Go, BMW's DriveNow, Volkswagen's Quicar, Fiat's Enjoy, General Motors' Let's Drive NYC to give some examples, but Toyota, Peugeot, all manufacturers have experiences or projects running, offering their members alternatives to owning a car, the possibility to access one when needed and to pay its use per the minute. The rationale behind carsharing is simple, instead of selling once a product, an expensive car, it becomes better to sell thousands of times a service, the access to the same car.

Finally, carsharing for-profit peer to peer platforms have flourished everywhere, the equivalent of Blablacar or Airbnb for cars, with the same features, network externalities, insurance, trust..., we will not develop again here. The platform does not own any car, it simply allows the sharing of

cars owned by individuals, users which make their vehicle available for other users to rent for a period of time. Platforms like Relayrides, Zimride, Spride, Getaround, Drivy, Kolicar among the numerous existing ones, have grown rapidly, the economic incentive to share the second-most-valuable asset with a stranger may be compelling.

Carsharing for-profit peer to peer platforms dedicated to tourists have also grown in airports, allowing travellers to rent their cars to tourists, approved members of the platform, when they are themselves flying away from home for some days. The concept is developing also by the stations. Given the prices of the parking areas the travellers have to bear, the carsharing solutions proposed by these innovative start-ups, FlightCar, TravelerCar, Tripndrive, Carnimise for instance, have been rapidly adopted. Easyjet is also developing its own service, easyCarClub. The platforms usually offers the parking fees to the approved members (proofs of ownership, vehicle's stats) accepting to share their car when leaving, and pays some amount for each kilometer traveled when their car is effectively rented. Approved members get the lowest rental rates of the market, 50 % of the rent-a-car rates, and a free insurance. The platforms are free to join, as their business model depends on the size of the community. They underlie market places in which car owners and car renters do not meet, neither online nor offline.

Summing-up, the platform economy services have exploded, there are open to the tourists and it has never been to easy and cheap to travel, to find information on the mass of competing solutions existing on the markets, and to bypass the less convenient ones regarding price, environmental, societal issues. Regarding transportation, sharing is no more a private matter; the scope of the platform economy is amazing, involving start-ups, unicors, as well as the main actors of the sector. Concentration and globalization are key words of the platform economy, both fuelled by the network externalities attached to these market places. Consequently, the leaders of the global economy, which are nowadays platform based, are concerned by these evolutions. Google will

certainly the core of the travel economy to come. Google Maps, geolocalization, real-time services are already the foundations of most of the platforms. Google Ventures, is very implicated and invests in many start-ups; it invested besides 200 million dollars in Uber years ago and has been a support to the growth of the former start-up. It is also present through Google Wallet, which allows paying directly the journeys. Nevertheless Google is more and more directly involved. It has bought Waze, the GPS powered, crowdsourcing, traffic-thwarting Israeli start-up for 1.1 billion dollars in June 2013, and created recently RideWith, a short-distance ridesharing solution run via Waze. The Waze community is involved in crowdsourcing, reporting mapping errors, traffic jams or accidents. RideWith is experimented now in Israel. But the Waze community is global, and amounts to 70 million across the world... Finally Google is developing the Google Car, an autonomous self-driving car capable of navigating without any human input, which can revolutionize car sharing. Uber is consequently also investing a lot in the technology, and develop a partnership with the Carnegie Mellon University of Pittsburgh to produce its own self-driving car, seemingly a necessary condition not to be uberized. The whole car manufacturers have followed; both self-driving car and carsharing platforms are a key of the competition in the car industry, a competition the car traditional manufacturers will not necessarily win.

The platform economy is imposing access against ownership, the shift from the products to the services has induced new market designs and new business models, changing the way to travel. In the emerging global world of standardized services, the tourists can be autonomous. Through their smartphones and their mobile applications, information, geolocalization, route planning, platform travel services..., the tourists can travel their own way more and more easily. Their smartphones will have thus soon wheels, Google and Apple cars driving them safely over unknown landscapes.

4. Conclusion

Building on transportation cases in tourism, the paper has disentangled the various approaches and motives under sharing. The spreading of “*sharing out*” (Belk, 2010) as a significant substitute of the traditional markets is gone with the steadily strengthening of a platform economy. The shifts from ownership to access, from products to services are the bases for far-reaching economic changes. These services have been implemented by Knowledge Innovative Service Suppliers, start-ups at the origin of innovative marketplaces run through platforms, which allow the meeting between the ‘haves’ and the ‘wants’ on a global scale. Sharing-out is a complex and plural phenomenon, often encapsulated in a uniform model in the literature. The paper has shown that diversity is in fact a basic feature of the platforms, as they can be non-profit, for-profit, the two sides of the markets they link embodying also different actors and organisation of the marketplaces, peer to peer, providers to peers...

The paper has rationalized this diversity and highlighted the common features, network externalities and trust as central elements of the viability of the platforms, which link highly dispersed individuals. The taxonomy proposed makes a conceptual contribution to both the platform economy and the tourism management and marketing literature. Moreover, it provides insights that might be relevant for both policy makers and managers.

The resulting economy can be interpreted in very different ways, depending where the focus is put. Indeed, the platform economy has two dimensions, two levels which coexist, and have not necessarily the same objectives, incentives; the ‘haves’ and the ‘wants’ aiming at sharing, and the platforms often aiming at profit. The peer to peer exchanges can be seen as non-market decentralized systems, where the resources are no more concentrated but dispersed across a multitude of individuals, when the platforms necessary to aggregate the microscopic peers and to organize the matching are more often seen as leading to a unprecedented concentration of the activities in some hands, in line with the network externalities working on two-side markets. The

two arguments are somewhat true, and this is one of the paradoxes of this new market economy.

The platform economy raises a lot of issues that would be worth exploring and are part of our research agenda, but are impossible to tackle in this paper. They are often summarized as the shift of the risks from the firms to the individuals, the worsening of social conditions and security, the unfair behaviours regarding taxes and regulations, when other advocates platforms offer solutions towards additional revenues for people, flexible and efficient market solutions for services, pollution and congestion issues solving... Whatever the regards on the platform economy, its very existence is clearly changing the whole society and also the way marketers and users of transportation services might offer and customize their offerings on the basis of the new sharing paradigm.

More and more affordable and efficient travel opportunities become available for tourist, as well as for business travelers. The rise of new market designs from the entry of innovative actors questions both the sharing of economic value and the regulation of the whole tourism industry. How value is created and later apportioned among the multiple stakeholders in the transportation sector deserve further attention. More than the sharing economy, the sharing of the economic value is the key issue at stakes.

References

ADEME (2015). Leviers d'actions pour favoriser le covoiturage de courte distance, évaluation de l'impact sur les polluants atmosphériques et le CO₂ – *Leviers d'actions, benchmark et exploitation de l'enquête nationale Transports et déplacements (ENTD)* – Etude réalisée par INDIGGO et EnvirOconsult. 233p.

- Aldebert B., Dang R.J., & Longhi. C. (2011). Innovation in the Tourism Industry: The Case of Tourism@. *Tourism Management*, 32(5), 1204–1213.
- Anderson C. (2004). The Long Tail. *WIRED magazine*. [Issue 12.10](#), October, 1-5
- Bardi F., & Eckhardt G.M. (2012). Access-based consumption: the case of car sharing. *Journal of Consumer Research*, Vol. 39, 881-898.
- Belk R. (2010). Sharing. *The Journal of Consumer Research*, Vol.36, n°5, 715-734.
- Belk R. (2014). Sharing Versus Pseudo-Sharing in Web 2.0. *Anthropologist*, 18, 1, 7-23
- Botsman R., & Rogers R. (2011). *What's Mine is Yours: How Collaborative Consumption is Changing the Way We Live*. Collins, London
- Buhalis D. (1998). Strategic use of information technologies in the tourism industry. *Tourism Management*, Vol. 19, No. 5, 409–421.
- Buhalis D., & Law R. (2008). Progress in Information Technology and Tourism Management: 20 Years on and 10 Years after the Internet—The State of eTourism Research, *Tourism Management*, 29(4), 609–623.
- Buhalis D., & Zoge M. (2007). The Strategic Impact of the Internet on the Tourism Industry. In M. Sigala, L. Mich, J. Murphy (eds), *Information and Communication Technologies in Tourism 2007*, 481–492. Wien: Springer-Verlag,
- Choudary S. P. (2014). *From social media to the sharing economy: the three drivers of business disruption*. June 5. From Platform Thinking, <http://platformed.info/>
- Cohen W., & Levinthal D. A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, 35 (1), 128-152.
- CWT (2015). Faster, smarter, better? Emerging technologies and trends and their impact on managed travel, CWT Travel Management Institute, May
- Danielis R., Rotaris L., & Valeri E. (2012.) Carsharing for tourists, *Rivista Italiana di Economia Demografia e Statistica*, Vol. LXVI-2, April, June, 103–119.
- Edelman B.G., & Geradin D. (2015). *Efficiencies and regulation: how should we regulate companies like Airbnb and Uber*, working paper 16-026, Harvard Business School, September 15.
- Evans D.S. (2011a). *Platform Economics. Essays on Multi-Sided Businesses*. Competition Policy International. Available at SSRN: <http://ssrn.com/abstract=1974020>
- Evans D.S. (2011b). *The Internet of Things How the Next Evolution of the Internet Is Changing Everything*. CISCO White Paper, April, San Jose, 2011.
- Felson M., & Spaeth J.L (1978). Community Structure and Collaborative Consumption: A routine activity approach. *American Behavioral Scientist*, 21, 614–24.
- Fennell L.A (2011). Ostrom's Law: Property Rights in the Commons. *International Journal of the Commons*, Vol. 5, n°1, 9–27.
- Fiske A.P. (1992). The Four Elementary Forms of Sociability: Framework for a Unified Theory of Social Relations. *Psychological Review*, Vol.99, n°4, 689–723.
- Gansky L. (2012). *The Mesh: Why the Future of Business is Sharing*. Portfolio Penguin.

- Geron T. (2013) Airbnb and The Unstoppable Rise Of The Share Economy, *February 11, 2013 issue of Forbes*, <http://www.forbes.com/>
- Henderson R., & Clark K. (1990). Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms. *Administrative Science Quarterly*, 35, 9–30.
- Kim W.G., Lee C., & Hiemstra, S.J. (2004). Effects of an online community on customer loyalty and travel product purchases. *Tourism Management*, Vol.25 (3), June, 343–355.
- Kozinets R.V. (1999). E-tribes and marketing: virtual communities of consumption and their strategic marketing implications. *European Management Journal*, 17 (3), 252–264.
- Longhi C. (2009). Internet and Organisation of the Industry in Tourism: A Focus on the Distribution of Travel and Tourism Services. *Int. J. Leisure and Tourism Marketing*, 1(2), 131–151.
- Longhi C., & Rochhia S. (2015). Long tails in the tourism industry: towards knowledge intensive service suppliers. *Int. J. Leisure and Tourism Marketing*, vol.4, n°3/4, 241-259.
- Mariani M.M., Baggio R., Buhalis D. & Longhi C. (eds.) (2014). *Tourism Management, Marketing and Development: the Importance of Networks and ICTs*, New York, Palgrave.
- Miranda S. (2012). *Les nouveaux paradigmes du tourisme mobiquitaire*. MBDS, University Nice Sophia Antipolis, mimeo
- O'Reilly T. (2006). *Web 2.0 Compact Definition: Trying Again*. Radar, December 10, <http://radar.oreilly.com/>
- O'Reilly T., & Battelle J. (2009). *Web Squared: Web 2.0 Five Years On, Special Report*. San Francisco: O'Reilly Media Techweb, 2009.
- OECD (2014) *Work on Science, Technology and Industry*. Paris, 1-34.
- Ostrom E., & Hess C. (2007). A Framework for Analyzing the Knowledge Commons. In Hess C. and Ostrom E. eds, *Understanding Knowledge as a Commons. From Theory to Practice*. The MIT Press.
- Pick F., & Dreher J. (2015). Sustaining hierarchy –Uber isn't sharing. *Kings Review*, May 5th.
- Price J.A. (1975). Sharing: The Integration of Intimate Economies. *Anthropologica, News series*, Vol.17, n°1, 3-27.
- Putnam R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Rochet J-C, & Tirole J. (2006). Two-Sided Markets: A Progress Report. *The RAND Journal of Economics*, Vol.35, n°3, 645-667.
- Schor J. (2014). *Debating the sharing economy, the Great Transition Initiative*, working paper, October
- Velikova M. (2014). *How the sharing economy is reinventing business travel*, Travlpeer, July 31
- Wade Ph., & Raffour G. (2000). *Tourisme et technologies de l'information et de la communication : le futur est déjà là*, Rapport au Conseil National du Tourisme, <http://www.tourisme.gouv.fr>
- Wang R. (2013). *Monday's musings: four elements for a #SharingEconomy biz model in #MatrixCommerce*, May 26, Software Insider.
- Wang Y., Yu Q., & Fesenmaier D.R. (2002). Defining the virtual tourist community: implications

for tourism marketing. *Tourism Management*, 23, 407–417

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