Dipartimento di <u>Economia e Finanza</u>   Cattedra <u>Introduction to business economics</u>

SHARING ECONOMY CURRENT ANALYSIS AND EXPECTED FUTURE ENVIRONMENTS
THE CAR SHARING BUSINESS MODEL

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ANNO ACCADEMICO 2015/2016

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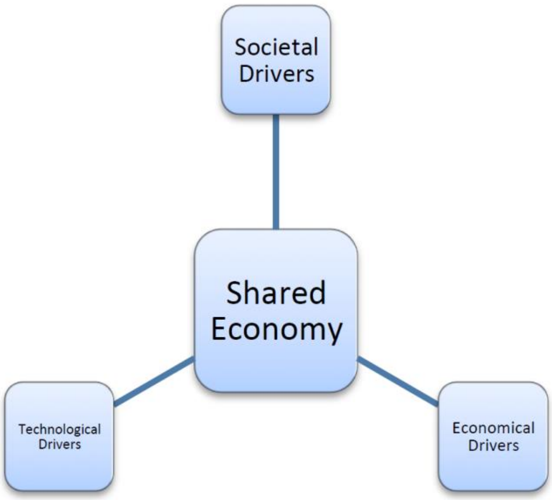
Chapter I – The source and definition of "sharing economy"

Sharing economy is a kind of market based on a model which refers to peer-to-peer-based sharing of access to goods and services coordinated through community-based online services. The positive aim is to increase the utilization of the existing resources, avoiding the over-production, reducing the pollution and sharing fairly; to mention Ray Kurtzweil: "*from possess to access*". Some examples of resources that are already widely shared are agricultural machinery and self-service laundries. Since all resources are limited, when the crisis started, the necessity to reduce the consume of pluriannual goods has showed up, in order to employ the reduced incomes. Two ways were mainly adopted at the beginning: repairing or bartering (the recycling market); and here a third way comes out.

The sharing economy exploits a variety of tools: technological drivers (information of technology, online market places), societal drivers (the collaborative soul of the people, the social networks), economical drivers (financial crisis). These tools can help the different corporations or even the Governments to optimize the utilization of the resources in order to redistribute them to the customers.



Societal Drivers[1]:

- increasing population density: as Kriston admits, high population concentration enables sharing to occur with less friction;
- drive of sustainability: the consumption practices can have a well huge environmental impact, that can be measured and indicated by the corporate social responsibility, because of the new cooperations;
- desire of communication: new ways to communicate and socialize to each others;
- general altruism: the strong sense of collaboration among the community's members to ensure a more probable development.

[1] Bockmann M., *The shared economy: it is time to start caring about sharing; value creating factors in the sharing economy*, University of Twente, 2013, Page 3.

Economic Drivers;

- cash excess or idle inventory: the inventory which includes many resources that can be shared and even monetized;
- increasing financial flexibility: people are able to find out the benefits of the ownership; this is possible only through the total and effective globalization;
- access over ownership: the complete ownership on various goods gives a lot of benefits and profits, expecially for businesses, and allows a large use of resources;
- influx of venture capital funding: without that funding, the rise of the shared economy wouldn't be possible.

Technological Drivers;

- social networking: very useful to the P2P transactions;
- mobile devices and platforms: these devices have become very useful, above all by settling in them some applications like the GPS maps, giving to the customers the chance to locate every single point of distribution of the goods/services, wherever and whenever they want/need;
- payment systems: mostly credit cards are used as main payment system to facilitate the transactions.

Besides being able to spot the drivers who determine the diffusion of the sharing, it is possible to set the effects, that this phenomenon produced, in four different broads[2]:

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[2] Juliet Schor, "*Debating the sharing economy*", Great Transition Initiative, 2014, p. 2-3, "Sharing economy activities fall into four broad categories: 1) recirculation of goods, 2) increased utilization of durable assets, 3) exchange of services, 4) sharing of productive assets. The origins of the first date to 1995 with the founding of eBay and Craiglist, two marketplaces for recirculation of goods that are now firmly part of the mainstream consumer experience. Sophisticated software reduced the traditionally high transaction costs of secondary markets, and eBay, reputational information on sellers was crowdsourced from buyers, thereby reducing the risks of transacting with strangers. The second type of platform facilitates usingdurable goods and other assets more intensive. In wealthy nations, households purchase products or hold property that is not used to capacity. After the 2009 recession, renting assets became more economically attractive and similar initiatives proliferated. There are some non-monetized initiatives such as tools libraries, which are typically neignborhood-based in order to enhance trust and minimize transportation costs for bulky items. New digital platforms include the sharing of durable goods as a component of neighborhood building. The third practice is service exchange; in the US began in the 1980s to provide opportunities for the unemployed. Time banks are

- recirculation of goods;
- increased utilization of durable assets;
- exchange of services;
- sharing of productive assets.

In a few words, these tools don't only help the corporations and the Governments to handle better the available resources, but also make the customer's life easier, pushes the customer himself to accept the shared economy inside the society. By this way, the consideration for the "sustainability" will increase, just because the people will start looking for a new way, different from the usual purchase, like in fact the P2P services or the smartphones applications in order to find quickly the right points of distribution. At the end, with the high sustainability, even the efficiency of the products will increase, so will the financial flexibility.

Giana M. Eckhardt and Fleura Bardhi in an interesting paper published in the *Harvard Business Review* in January 2015, titled "*The sharing economy isn't about sharing at all*" argue that "sharing economy" is a misnomer, and that the correct word for this activity is "access economy". The Authors in fact say, "*When «sharing» is market-mediated — when a company is an intermediary between consumers who*

community-based, non-profit multilateral barter sites in which services are traded on the basis of time spent, according to the principle that every member's time is valued equally. In contrast to other platforms, time banks have not grown rapidly, in part because of the demanding nature of maintaining an equal trading ratio. The fourth category consists on efforts focused on sharing assets or space in order to enable production rather than consumption. Related initiatives include hackerspaces which grew out of informal computer hacking sessions, makerspaces, which provide shared tools, and co-working spaces, or communal offices."

don't know each other — it is no longer sharing at all. Rather, consumers are paying to access someone else's goods or services"[3].

1.1. Main factors that allow the spread out of sharing economy

The sharing economy, or better his conception and the beginning of the spread was made possible mainly by tecnlogical progress, then the spread of informatic platforms, connecting people through the network has allowed to relate and share goods and / or services.

Then internet is the main management system, by allowing adjustment of the central operations, in a quick and easy way to use, to let supply and demand meet more efficiently than paper or mechanical systems, in order to reduce in parallel the transaction costs.

Another factor that allows the diffusion of the sharing economy doubtless consists in the ecological benefits which are so appreciated and seen as methods to reduce the demand for new goods and the related inflation. It permits also a reduction of gas emissions because of substantial lowering from a small fraction of households, even if a lot of people think that the free access to the cars would increase the emissions4.

In 2008 prof. Latouche released its "*Petit traité de la décroissance sereine*", which showed a new economic theory based on some thoughts that have influenced the common thought. These reflections covered the following aspects:

- infinite growth is incompatible with a finite world;
- production / consumption cannot exceed the regenerative capacity of the biosphere;
- production / consumption must be reduced;
- the logic of systematic growth must be challenged along with our lifestyle;
- measure the extent of the flood that threatens to destroy the whole;
- propose an alternative to the "society of growth": the Utopia of degrowth;
- specify the tools for its realization.

He states the necessity of the abandonment of unlimited growth objective, with disastrous consequences for the environment and thus for humanity. GDP can not therefore constitute a measure of the

[3] Eckhardt G., Bardhi Fleura, *The sharing Economy isn't about sharing at all*, HBR, 2015.

[4] Schor Juliet, *Debating the sharing economy*, Great Transition Initiative, 2014, p. 6. "The ecological benefits of sharing are often seen as obvious secondary markets reduce demand for new goods, so footprints go down. A measurable reduction in greenhouse gas emissions, but only because of substantial reductions from a small fraction of households. For the majority, carsharing, by expanding access to cars, increased emissions."

society’s wealth, but The degrowth is different from the negative growth, because inserted into a social concept which involves not a production that must always be bigger, but the improvement of the living conditions of the people. The taking of conscience of the environmental crisis has added a new dimension: not only perpetual growth is not desirable, but it is not sustainable.

In this context, sharing goods or services determine an inevitable decrease of the production, because not everyone needs no more to buy all the individual goods for their personal use, but anyway the benefits of the community keep increasing, thinking, for example, to the car sharing, due to:

- the reduction of waste because it avoids unnecesary movements;
- reduced trasportation costs;
- reduction of pollution emissions;
- traffic efficiency.

This is a main example of the accuracy of the Latouche’s thought, in fact despite the GDP decreased due to the reduction in production, the general wellbeing increases.

1.2. Regulatory arrangement concerning the sharing economy

The regulatory arrangement, which by its own nature is not enough flexible, very hardly keeps following its steps with the sharing economy institutes. In a particular way, both in the file sharing case and in the car sharing one, the most diffused main examples of this practice, the relevant aspects that have determined some critics profiles are the same ones relative to the fiscal, security (for the street and informatics), civil/criminal responsibility determinations. It is not easy to regulate a market in which you can negotiate goods or services risk to become public goods. For a long time, indeed, these goods are studied by the economics experts as they’re characterized by non-excludability and absence of rivalry in the consume.

This aspect made up huger problems in the file sharing case, for the fact that the availability, not wished by the producers of every kind of files, through the “torrent” programs, determined an inevitable decrease in the "palatability" and in the creative will[5]. So the monitoring of the downloads and of the relative tax liability become pretty difficult too. In many different countries various regulatory strategies have been applied [6] [7].

We may also mention an aspect of the regulatory strategy applied in Italy, through a particular case happened in the last month: the case talks about the reimbursement of expenses to an employee, who uses a car-sharing vehicle to take a passenger from a place to another, that resulted free, exempt from the Irpef, the income tax on individuals or entities, imposed by the Italian Government; the sums, if supported by a correct documentation, do not constitute an income, just like if the worker used the normal taxi or the usual public transports[8]. This case is a considerable point to indicate the car sharing politics applied in Italy, because of the fact the sums of money given back both to the employee and to the employer for the job with this service do not compete to the formation of the worker's on transfer inside the same city where the work place is set up, both in the case the billing, impost by the firm of car-sharing is directly intestate to the worker, and in the case is intestate to the employer, as these billings are comparable to the taxi/public transports ones; It is all explained by the directives present in the rules schedule of the Italian entry agency (Agenzia delle Entrate) that, by a recent resolution, warns us the car-sharing has to be seen as the next step of the evolution of the traditional mobility systems.

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[5] Aigrain P., "*sharing and the creative economy: culture in the internet age*", Creative Commons, 2010, page 11, "legislation was passed in many countries to allow the copying of works for private use, under certaing conditions. The corresponding laws framed the right to private copying in a restrictive and narrow manner, but they already represent an attempt to compromise between freedom to use digital works and the generation of resources towards new creative works".

[6] Aigrain Philippe, "*sharing and the creative economy: culture in the internet age*", Creative Commons, 2010, page 13, "They will for instance put their works under Creative Commons licenses that authorize users to copy and redistribute digital works. As we will see, this laisser faire attidute may be too optimistic. The criminalisation of sharing will indeed not stop it, but it might prevent it to develop its cultural potential. Certainly, stating a war between creators and the public will not help in building a new social contract between them so all contribute to the culture of tomorrow."

[7] Janelle Orsi, "*The Sharing Economy just got real*", Shareable, 2013, p. 1, "The legal problems of the sharing economy just got real. The plaintiffs are drivers who give rides to strangers for money, paying a portion of their earnings to the companies. The class action lawsuits argue that the drivers should be classified as employees of the companies. Regardless of the outcome, the lawsuits call attention to the potential harms arising from the non-sharing parts of the sharing economy. It's a good opportunity to declare that the so-called sharing economy needs a new business model. For now, the sharing economy exists almost entirely in legal grey areas. Zoning, securities, public utilities, health and safety, and employment laws aren't usually barriers to feeding, housing, lending a hand, and giving a ride to our family and friends. But they are barriers when we engage in the same activities as commercial business, such as restaurants, hotels, or taxis."

[8] Stroppa Valerio, "*Car-Sharing rimborsato: equiparato al ristoro per le spese del taxi*", section "Imposte e tasse", "ItaliaOggi", page 29, 2016.

Outside the income, the employers manage to provide the reimbursements to the employees, who use the car-sharing service to move around, inside the city; this works like this because of the fact the billing issued by the car-sharing itself is intestate to the worker or the firm he works for. Due to this circumstance, there is the surnamed “Crossed Utilization” mechanism, that allows an employer, as client of the car-sharing society, to be the accountholder of the bills for the transport expenses, supported by its own employees, in order to look after and authorize the transfers. So, after all this, the worker’s reimbursed expense due to the use of the vehicle does not influence the income formation.

According to the article 51, comma 5 of the TUIR (Testo Unico delle Imposte sui Redditi), the Italian unique text of the income taxes, the bill impost by the Car-sharing society, towards the employee, spots the recipient of the performance, the carried path, the time and the amount due; it is a whole collection of informations in order to certificate the effective movement of the work place and the utilization of the service by the employee, similar to the documents released by the taxi drivers. Of course the firm must to show that among all its activities there is also the performance of the advice services in the info/technology field, management activities on behalf of third parties, services and technological infrastructures, strategic and direction advices.

Among the main problems, there is always the one of the expenses the employees have to handle with by themselves, above all for the transport costs, when they are on transfer, resulting different or greater than the ones they have to pay when they drive next to their work place, as preview in the hiring contract. That is why in Italy the sharing economy firms of the transport field appeal the article 51 comma 5, to be able to reduce the transport expenses paid every year by their employees, through an equality operation of the billings impost by the Society, requested by the instant firm, that would prevent the subjugation of the relative reimbursements to a taxation.

The equal matching of the documents due to the application of the article 51, would be justified by the type of service given by the sharing firm. Working at the same way of the taxi service, the car-sharing service sets a vehicle on disposition of the client, next to the starting point as it is early chosen, to reach the destination. Also to this new service, the owned payment to the driver is quantified as reason of the car's utilization according to the time and the distance.

Even if the billing for that utilization is usually destined to the client as direct user of the car, taking note of the details about him, the driver, the conditions of the vehicle, and the conditions of the travel, some car-sharing firms release the possibility to make a bill also towards to another client, who can be a juridical person; and here there is the justified final score of the crossed utilization. The notehead of the bill for the employer who authorized the crossed utilization and allowed the worker to the driving of the car, on the base of the subscribed contract, confirms this option can be applied if the worker himself can substain the payments for the movements, inside and outside the area of the work place, and pay them back to the employer through the "at the bottom of the list" system ("Sistema a piè di lista").

There might be a solution, as working as the most of the taxpayers say. The instant society affirms the reimbursement of the transport expenses, relative to the car-sharing services and not amenable to the journey from the house to job-place and reverse, and supported by the employee, are assessable as written in the article 51. This documentation, as instant warning, is fully assimilable to the documentation released by the vehicle to journey costs. In order that the documentation is not taxable to the employee and deductible from the income of the enterprise, the expense must be inherent, whereas the document must not be taken on a joint account; in absence of the joint account, indeed, with no reference to the firm the employee belongs to, the Ministry claimed for the necessity, or at least the sufficiency, of a connection between the transfer job and the material documents due to the reimbursement of the owned expenses, to assure the completion the job itself.

The point risen by the instant society is relevant to the relevance, in the scope of the incomes of the self-employee, of the reimbursements for the service costs. As answer this question, we need again to consider the article 51, realizing that the indemnity or the expense reimbursements for the movements, in the scope of the municipal area, except for the transport costs reimbursements, proven by the documents of the vector, take part in the income's realization. So, the hypothesis of a job committed inside the municipal area, where the work-place is located, all the already mentioned main reimbursements are excluded by the taxation.

The underlying ratio to the different tax regime, recognizing the indemnity and the expenses reimbursements in the place of the job, must be researched in order to prevent episodes in which not so relevant journies and not matched files released by third parties can substitute the ordinary retribution conditioned by the taxation; and also in this case the car-sharing firm is under exam of all the documentation, finding out later the direct recipient of the service's performance, with all the written details, including, of course, the bill.

After the registration, the informations will appear suitable to allow the movement from the main work place, and let the self-worker drive around.

In addiction to the regulatory aspect, the sharing economy determined some adaptive behaviors by the economical operators, who influenced the market itself, for the fact some behaviors, based on the assumption that the intellectual property is hardly transferable are no more possible. Even by the point of view of marketing the strategies are therefore changed, thinking for example to the disco industry where, before the file sharing's coming, there was the diffused practice of creating the albums with different songs to be sold on half CD (price). At the beginning of the file sharing, transferring the files was however difficult because of their dimension and low connection speed. The technological progress, answering this problem, was oriented to the files' compaction, sometimes happened even casually, as often happens in the inventions' field. In the case of the music, all that allowed a reduction of dimension of the music files has been the introduction of the mp3 system, which uses an algorithm of compression that neglects the sounds, not hearable by the human ear, keeping, this way, the listening ability almost unvaried. The first CD used for the compress test was the Suzanne Vega's one, "Tom's Diner", taken as model of reference of the compress algorithm for the mp3. This CD was chosen for its sweetness and simplicity, making the listening of whatevery imperfection the compress can cause in the middle of the registration, easy. Anyway, the low transmission speed, until the end of the 90s years, limited and slowed the sharing of files and knowledge at a global level. The advent and the spread of the ADSL system, before and after the optic fiber, has also eliminated, in fact, this last barrier.

The possibility to access to Internet is actually considered not only as just a necessity, but also a sort of freedom; it's not a case that the French constitutional Court expressly recognized it, by admitting that "the access to the Internet is a necessary condition for the freedom of expression and the communication which is essential to democracy, declared that this access can only be restricted following a decision by court of law". The developing countries, as example the African ones, where there is an appropriate infrastructure that allows to connect quickly on internet, are indeed making increase their own digital divide, going far away from the productivity's levels of the already developed countries.

But the sharing, unlike it was confirmed by someone, hasn't just destroyed the richness of someone, but simply transferred it to someone else[9]. Always mentioning the case of the discographic industry, the Majors were surely affected by the decrease of revenues, caused by the uncontrolled sharing of the first years, when the specific rules hadn't been defined yet. In any case, more operators, specifically the telecommunication ones, made some deals with the same Majors in order to bring the spread of the music files on a legal plan, even if less profitable than earlier, for these last ones. We can take as example the Apple that, with the introduction of the Ipod in 2001, and through a "iTunes" property platform, let realize any music file at the same price: € 0,99, after ripping/achieving some deals with the main music majors that saw themselves forced to subscribe them because otherwise they would have anyway looked at the continuing of an uncontrolled spread of their own files[10].

The sharing economy, as we have noticed, has attracted a great deal of attention, in particular by the sector of the transports which is experiencing a remarkable growth, leading it by time to regulatory and political battles, and also by the network sector, the main source of diffusion of informations around the world. But focusing on the tecnology's field, we can see that while the boosterism is its main rule, someone asks if the popular claim the sharing economy is fairer, lower-carbon, and more transparent, participatory, and socially connected is anything more than rhetoric for the large monied players.

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[9] Sarah Cannon & Lawrence H. Summers, "How Uber and the Sharing Economy can win over regulators", Harvard Business Review, 2014, p. 1, "Sharing economy firms are disrupting traditional industries across the globe. The global sharing economy market was valued at $26 billion in 2013 and some predict it will grow to become a $110 billion revenue market in the coming years, making it larger than the US chain restaurant industry. These firms bring significant economic, environmental, and entrepreneurial benefits including an increase in employment and a reduction in carbon dioxide emissions. Rather than rolling out the red carpet, city Governments have many of these new entrants issuing subpoenas and cease-and-desist orders. Regulation is often the most significant barrier to future growth for sharing economy firms."

[10] Juliet Schor, "*Debating the sharing economy*", Great Transition Initiative, 2014, p. 4, "The operation and the long-term impacts of these platforms are shaped by both their market orientation and market structure. While all sharing economy platforms effectively create markets in sharing by facilitating exchanges, the imperative for a platform to generate a profit influences how sharing takes place and how much revenue devolves to management and owners. For-profit platforms push for revenue and asset maximization (Airbnb and Uber have strong backing from venture capitalists and are highly integrated into existing economic interests. Significant divide between P2P and B2P platforms: P2P entities entities earn money by commissions on exchanges , whereas B2P entities often seek to maximize revenue per transaction."

There are some discussions about the labor exploitation, the race to the bottom dynamics, some particular eco-impacts, unequal access for low-income and minority communities, and the status of regulation and taxation engaged. Another important question is whether that sector would evolve in line with its stated progressive, green, and utopian goals, or would turn into a real business. The sharing, as itself, has become a global phenomenon, both because of the expansion of some platforms, like Airbnb and Uber, which are proliferating to many countries especially in Europe, and for the fact that the idea of sharing has caught on around the world; Europe has even become the principal point of the "sharing" operations[11].

1.3. Pros and cons of sharing economy

The "sharing economy" expression is used to make a reference to a system, apparently built on the trust and the collaboration and evokes altruistic meanings, which however are not often effective. Anyway, this expression gives a sense of altruism and trivially commercial transactions, referring to the logic of the profit. We can already notice this substantial difference in the utilization of the terms to describe their employees, by some enterprises, as example Uber, that names them "people", or Lyft, that names them "your friend with a car" and Favor, that names them "operators whom asking for some favors to"; these terms, indeed, aren't involved with the voluntary activities. The Uber itself, in fact, commands the drivers to accept a request of service before knowing the client's destination and the payment's congruity, as well as to bring back the objects left in the car, to the clients without any reward. The prices of the races vary also when it wants, according to some logics in which the drivers aren't allowed to enter. This example seems not so coherent with the idea that should be installed in the public opinion of the workers as partners, who would be able to have a speech, or also as self-entrepreneurs. The truth is that it is simply about services where there is a line connection among the people who need a product or a service, and the people who supply it through a rate payment.

[11] Bockmann M., "*The Shared Economy: it is time to start caring about sharing; value creating factors in the shared economy*", University of Twente, 2013, p. 3, "Companies such as travel, automotive, multimedia, and electronics are first impacted by the shifts in value creating factors in the shared economy. They claim that all markets will be impacted by a varying degree of disruption depending on which market forces come to play. Enterprises face a high risk in the shared economy of being disintermediated as customers monetize their assets and compete directly. The model of consume and throw away will develop into a different model of consume and collaborate. Innovative platforms and increasing consumer approval will help individuals to find easy ways to monetize goods and services, and to purchase directly from one another at lower cost and at greater conveniences. Customers will be on the search for products that are more durable and maintain their value for a longer period; in other cases, customers will be looking for products of higher quality."

Uber, as example, does not constitute nothing more than an intermediary that facilitates the meeting between the demand and the offer, through an efficient platform with which the drivers can connect to the potential clients, but the trouble is born for the fact this platform is mainly oriented to let the client save and let the owners of the same platform gain, by the transactions, as the real suppliers of the service who initially are satisfied by a constant volume of job, realize then the gain's margins remain low.

Seems doubtless the new services offered on the market show some positive aspects, both for the potential clients and for the workers, even if of course not for all. The fast development of the sector indicates, on the other hand, that these performances satisfy some very demanded needs. With the care of the clients, the trips, the rents, the dinners, the pack deliveries more efficient to millions of people got better, as they also tend to make the life less expensive. Regarding the transport of people, the new services guarantee a more remarkable quality, a bigger flexibility and normally more restrained costs, with greater satisfaction of the client. For example the quantitative shortage, also serious, of taxis in many cities and countries in the world, the irregularities recently made by a small group of drivers in the progress of their activities. With Uber and Lyft the transaction costs to get a service are reduced, making disappear the boring sense to look for a car by telephone or on the road, to pay on cash and get the rest, you have not to give tips, while you can early know the cost of a certain route. Uber, by this way, gives the client the chance to choose among many kinds of cars, generally of the last model. From this detail, the demand increases much faster and in some countries like USA the rate of the use of vehicles is higher in the case of the Uber vehicles, compared to the traditional taxi drivers' ones, but from the variability of the tariffs you can consider a negative factor, as they show great fluctuations over some job turns, exponentially increasing in the times of greater affluence and traffic, or rather when the demand is big and the offer is limited, as previewed in the market economy.

Regarding the possible advantages for the workers, you can record a greater flexibility and autonomy, compared to a traditional dependent activity, at least in the case it is about of a free choice. The self-workers, named also "freelancer", get a great control in their own lives, by choosing when and how they want to work. The earnings gained from the part-time job allow to sustain the payments for the other services, like in the case the students, above all the university ones, who practice some part-time jobs to go on with the studies. The increase in the freelance workers gives businesses a great alternative to hiring full-time, salaried workers, as they have the ability to outsource work on a per-project basis and keep working with that kind of workers, in the case they intend to do the job well, and achieve the final objective.

We might make a simple distinction between the pros and the cons, just to have a cleaner idea on the best path to take to judge the utilization of this new system;

PROS:

- The sharing economy smooths out the self-employing revenue, allowing anyone else to handle with a good business;
- The available technology is provided to make the people's lifestyle much better than earlier;
- Billing, invoicing and more other similar things are taken care by parent companies, a huge detail for the self-workers;
- Everyone who is involved in the sharing economy system has got the opportunity to be more flexible, by choosing the times and the location for the job.

CONS:

- There is a serious competition among the platforms, that makes the wages for the employees decrease;
- The employees have a very little protection because of their liability;
- Working by themselves takes as consequence a reduction of the benefits to the employees, like the assurance for their health in case of crash or for the security of the vehicles that will be on their own;
- The provision of comfortable services can take barely no advantages for the competition among the suppliers of that kind of service;
- The sharing economy is not intended as literally as its name mentions, for the fact people will however be forced to pay to afford the service;
- Platforms control the price of the service provided to people.

It may happen that someone misunderstands the real meaning of the term sharing economy, as realize later that this new system does not involve an availability of a new service by paying nothing, but a simple transaction of money that works as a recycle, keeps going forward and returns to the starting point of the business process, just like a circle.

The sharing economy is created not only on the idea the sharing, generally, is more efficient and cheaper for the use, the time and the use, but on the idea that if you wish to take advantage from something for necessity, there is no need to deal with the costs of ownership and employment, like car and health insurance, maintenance, issues, and moreover it cuts out the middle man, whether that is a traditional employer or the company you buy goods and services from.

There are some services, for example Task Rabbit, which give the professional employees the ability to outsource mundane personal tasks, including the picking up operations for the errands, the ability to work by themselves and of course the ability to show how this new transport system is more convenient than the usual transports.

Unluckily, a sharing-economy-based firm means surely fewer employees in the workforce. As the unenmployment rate drops, this detail could result as a real shortage of the national occupation; from this event, the businesses scramble for help from what is a pretty small group of skilled workers who wish to work with a strongly structured office schedule.

The “ad hoc” environment can result very satisfying to the business owners, who can take advantage of the large variety of available and trained self-workers. More shared work spaces intend to open up across the country, providing desks and meeting space for a variety of talented independent workers and small businesses. Co-working spaces encourage collaboration, prompting entrepreneurs to learn from and help each other as they build their businesses; these centers are also useful to help the local economy by encouraging business growth.

Anyway, there is still someone concerning about the shared labor concepts; according to the economics expert Dean Baker, the wages the workers get from this job may equate lo less than the minimum wage. He expressed his deep concern about this dangerous side of the service, adding also that it may create a downward pressure on wages overall that could impact the earning ability. However, for the most entrepreneurial employees, this kind of job can help to build the trust that they all need to begin in a good, if not perfect, way their own business.

The new sharing economy opens opportunities for both consumers and workers, allowing people to work, by following their straight terms; but the truth would be another, that is with the unemployment rate still high, the sharing economy is enabling people to make money while they wait for the job opportunities to open up. A strong sense of being the boss of anyone else is spreading out, among people, becoming even more powerful, and can inspire many aspirants to start a business by their mind and forces, a particular but important factor that gives many benefits to the entire economical system.

Chapter II – Car sharing, National and international perspective

2.1. Successful and unsuccessful car sharing business models

The car sharing, after the file sharing, appears like the most diffused example of the actual practical economy in the field of the sharing economy. Its introduction is pretty recent, with the first steps are realized at the beginning of the 2000s years.

To be able to describe well the phenomenon, firstly you need to carry out a distinction between the car sharing and another similar practice, but however diffirent: the car pooling.

Car- pooling consists in a group of people that voluntarily join together a car for sharing the costs of some common journeys. The cars used for the journeys are owned by some of the participants to the pool.

With the car-sharing public, business or non profit institutions, owning some cars, sell a group of people the right to use them when needed. There is an effective use rather than the ownership, similar to a rental or leasing service.

Car-pooling would be considered even more convenient than car-sharing, in fact it implies private savings, social responsibility, the sharing of the cost of fuel, parking and tools to access highways or city centres, but it is sometimes hindered by the attachment to the private property (“my own car”), a coordination failure (lack of centralized communication and matching between drivers with compatible needs, a feeling of freedom (independence from anyone else, strongly emphasized also by advertisement), the force of habits (difficulty to face an innovation). Sometimes, in order to overtake those problems, a public intervention may be justified, for example providing monetary or indirect incentives, challenging force of habits or centralizing the crucial processo of matching between drivers with compatible needs in terms of routes and times.

On the other hand, the car sharing presents some different, but also important, advantages, many more than the car pooling; for example, the maintenance cost for the cars indirectly affects only the users, the operators of the sector focus on informatics platforms that can guarantee, beyond a greater efficiency in the utilization of the cars, also the highest freedom for the users, unlike the car pooling ones, are not forced to coordinate themselves to more people, and to have to seek matching paths, as once they got in the vehicle, can effectuate freely a route, without other passengers, and without the need of paying neither parking places or tariffs, because the cost of these last ones is usually included in the subscription’s one.

The users who mostly take advantage from the car sharing service regularly show common characteristics of all the countries; many studies underlined in fact the main users of the car sharing are:

- Male customers, with a high instruction
    - Customers living in locations, perfectly reachable by the public

- Customers travelling for a certain average distance (around the 10,000 km)
- Customers living alone, in small flats
- Customers with an age, 26 to 49 years
- Customers who do not own a car
- Customers living in town, with an inefficient public service

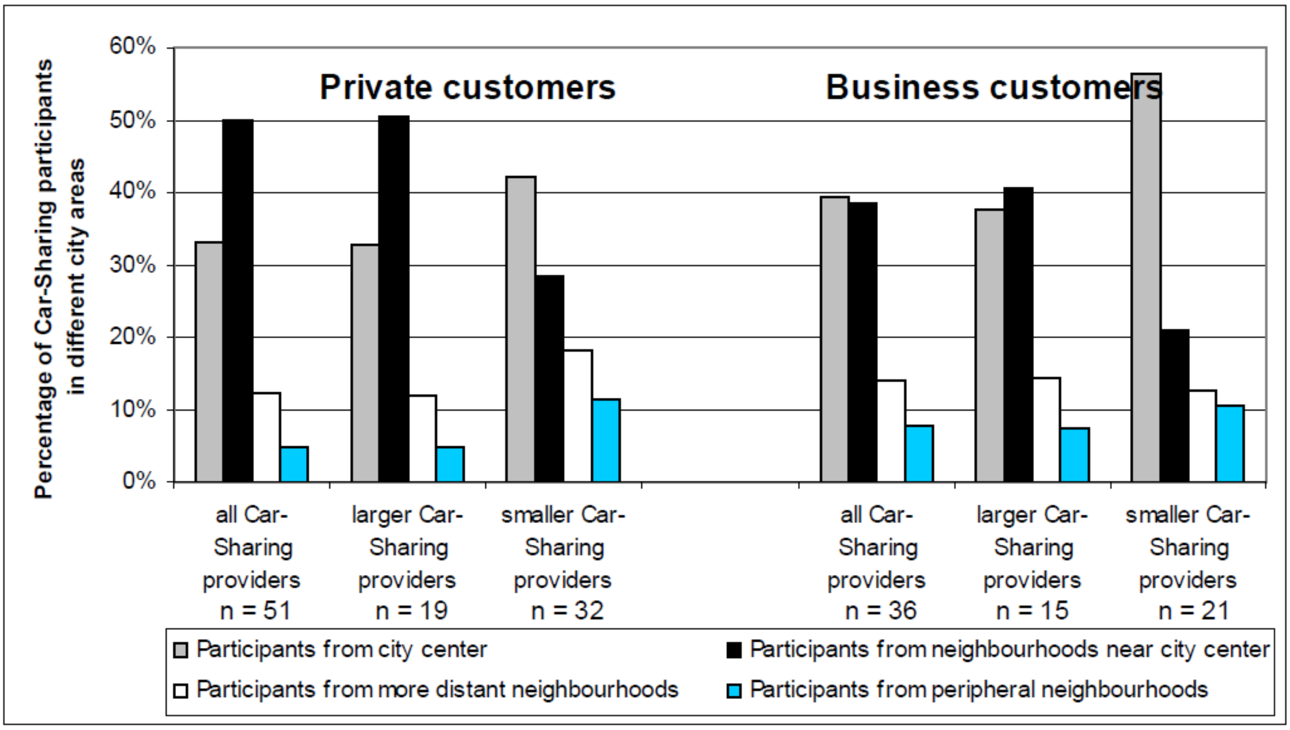
In Italy, particularly, the 58% of the customers are of male sex, the 93% have got the high school qualification or are graduated, and the 52% own no car; the environmental aspect does not play a cruel role to the car sharing users, who are pleased but above all driven to the utilization of this service for a greater comfort and an economic saving; in fact, with the car sharing, the parking times and costs decrease, making up some potential benefits, even for the life quality and the traffic, due to maximize also the available space in the center of the cities. So the reduction of CO_2, moreover, represents, an appreciated positive spillover, but not determinant for the choice.

Below here, we have reported, on European level, the main motivations which persuade the users to the use of the car sharing:

Car-Sharing provider or area	**1st priority**	**2nd priority**	**3rd priority**	**Source, notes**
cambio Brussels, Belgium	"Have no car but need one occasionally" 33.2%	"Contribution to environmental improvement" 18.7%	"No worries about vehicle maintenance" 16.5%	Taxistop, cambio 2009; 3 possible answers from given alternatives
various providers, Italy	Permanently or temporarily without a car 48%	Economy of the service 17%	Practicality of the service 15%	IME 2009
3 providers in London, Great Britain	"Car-Sharing is cheaper than a personal car" 52% as main reason, 28% as additional reason	"Car-Sharing is more environmentally friendly than using a personal car" 16% as main reason, 38% as additional reason	"Car-Sharing is just as convenient to use as a personal car" 12% as main reason, 31% as additional reason	Synovate 2006
Mobility, Switzerland	"Environmental reasons" 29.6%	"Mobility was a financially attractive service" 21.4%	"Increasing transport need in the household" 6.7%	BfE 2006
2 providers in Frankfurt, Germany	Infrequent need for a vehicle 1.4	Expedient complement to public transport 2.0	Environmental protection 2.3	traffiQ 2007; average value, scale from 1 = very applicable to 5 = not applicable

Car-Sharing provider or country	Specific CO_2 emissions of Car-Sharing fleet	Number of Car-Sharing vehicles	Specific CO_2 emissions of the average personal car in the country in the reference year	Reduction in emissions of Car-Sharing fleet	Reference year	Source
10 large providers in Europe, various countries	141.9 g/km	3,828	153.5 g/km (only new cars in 26 EU countries)	7.6%	2009	momo survey (see chapter 3); EC 2010
9 large providers in Europe (excluding Mobility), various countries	129.6 g/km	1,628	153.5 g/km (only new cars in 26 EU countries)	15.6%	2009	momo survey (see chapter 3); EC 2010
10 small providers in Europe, various countries	128.1 g/km	94	153.5 g/km (only new cars in 26 EU countries)	16.5%	2009	momo survey (see chapter 3); EC 2010

Business customers of car sharing in Italy mainly work for private firms (92%) and a lesser degree from public administration (8%). The 80% of business customers have fewer than 15 employees. On average, the firms and administrations have 1.7 electronic access cards for the car sharing vehicles and they are used on average by 3.1 people. The 40% of business customers are located in the low emissions zone, and 76% in a zone with active parking management.



employment sector of customers	Number of companies	Percent breakdown by sector	Number of access cards distributed	Proportion by access cards distributed
Services	89	60.0%	281	68.9%
Industry, construction	22	14.2%	61	14.9%
Non-profit organisations	14	13.5%	36	8.8%
Public administration	10	7.1%	19	4.7%
Other	7	5.2%	11	2.7%
Total	142	100.0%	408	100.0%

Unique in Europe, the development of car sharing organizations in Italy was facilitated by far-reaching governmental support. After the decree n.179 of the Italian Ministry of Environment of Susteinable mobility policy, the Ministry founded "ICS"- Iniziativa Car Sharing, an aggrement between municipality which was established with the aim to:

- Ensure the development of the different car sharing services in the country's most important cities in an unitary network;
- Garantee "professional standard" of the service to the users;
- Promote the awareness of car sharing all over the country;
- Ensure a full interoperability among all the different local services and operators.

Cities and regions were promted by ICS to launch car sharing services, local partners decided how cooperate with the companies founded, many italian car sharing providers, are in hands of the local authorities, or subsidiaries of local transport operators. Due to those aggrements vehicles used for car sharing have access to low emissions zones and free parking in the blue zone of the city centre, as well as the use of the bus lanes are privileges that italian car sharing users can take advantage of all the cities.

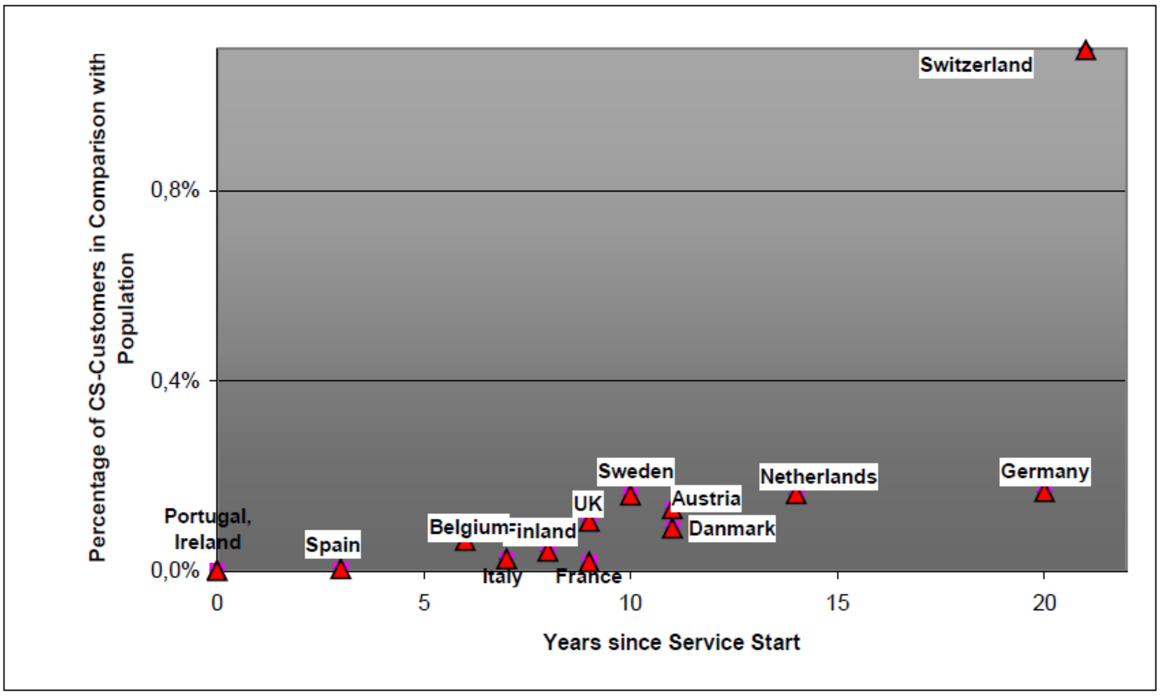
Customer since	Households without a motor vehicle in the household before joining Mobility	Number of households without a motor vehicle
1991 – 1996	38	51.4%
1997 – 1999	72	54.5%
2000 – 2001	68	57.6%
2002 – 2003	48	51.6%
2004 – 2005	46	47.4%
Total	272	average 52.9%

Within the limits fixed by service standards, the single local operators have autonomy in all the operational, commercial and managerial aspects. In particular they are responsible and free for:

- Their price scheme and market policies;
- Investments and other developments;
- Cooperation and integration with local bodies and other companies who provide car sharing services.

However local operators have to respect all the ICS standards and to adopt the same technology.

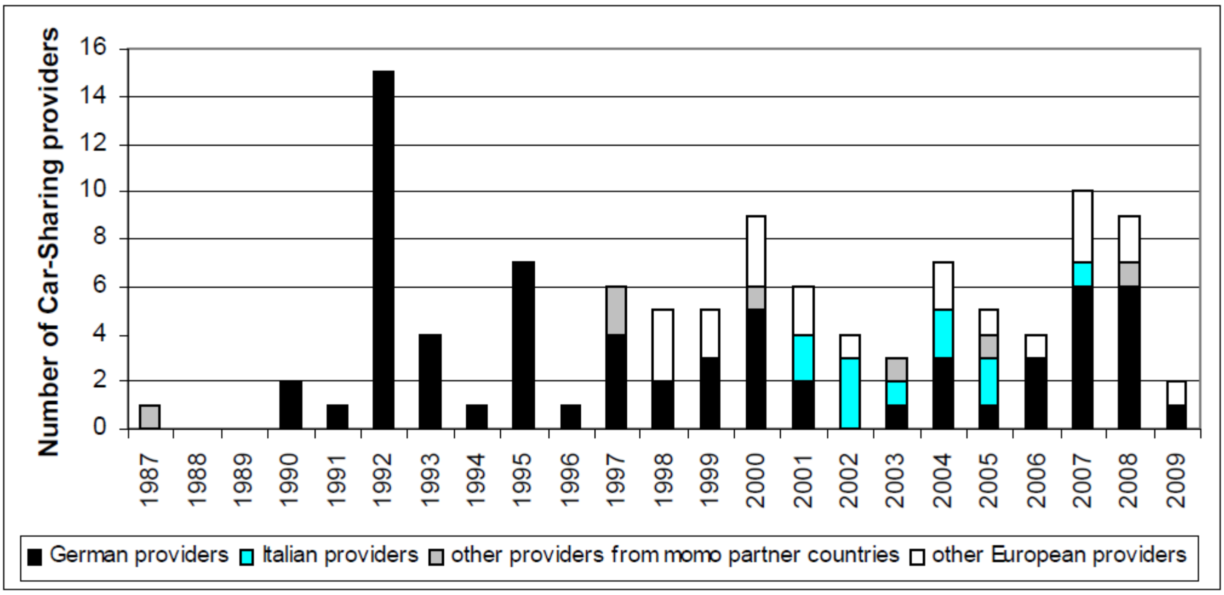
Within Europe, car sharing enjoys its most comprehensive state support in Italy. Because of persistent environmental problems in large Italian cotoes, national programmes were approved as early as 1998 for the development of environmentally-friendly mobility services in cities, including car sharing. The programme, and thus national support for car sharing, is the responsibility of the Italian Environment Ministry. Italy was the first country to introduce the car sharing, whereas the other UE contries started with this initiative later, starting 2000.



Its first concrete achievement was the establishment of the national coordination point ICS. The intention of ICS was both to advance the development of car sharing services in Italian cities, and also to ensure that an unified technology system and service are made available nationwide, thus ensuring the interoperability of the various services in the cities and the regions.

In the start-up Phase of each individual car sharing service, ICS assumed up to 50% of the investment cost; the Italian Environmental Ministry has invested € 9 milions in the development of car sharing.

Thanks this program, the number of the italian providers has always been escalated, especially in the middle of the 2000s years.



Country	Car-Sharing customers	Vehicles in Car-Sharing	Statistical ratio of users per Car-Sharing vehicle
Austria	11,000	169	65:1
Belgium	6,932	248	28:1
Denmark	approx. 5,000	225	22:1
Finland	2,232	38	59:1
France	13,000 (estimated)	700 (estimated)	(19:1)
Germany	137,000	3,900	35:1
Great Britain	64,679	1,459	44:1
Ireland	23	9	3:1 (data from the early development stage)
Italy	13,208	498	27:1
Netherlands	27,000 (estimated)	1,832	(15:1)
Portugal	100	12	8:1 (data from the early development stage)
Spain	2,504	127	20:1
Sweden	14,889	More than 492	(30:1)
Switzerland	84,500	2,200	38:1
Total	**382,067**	**11,909**	

As we can notice from the scheme up here, Germany shows to own available the highest number of car sharing's vehicles, among the other european countries, and consequently the highest number of consumers who enjoy the service, with an average of 35 users for each vehicle, in spite of the fact that in Austria we can see an average of consumers that corresponds to more than the double of the users' average in Germany. Italy is placed at the 6th place for the number of the service's vehicles, with an average of users that's only 8 units less than the average of the german users.

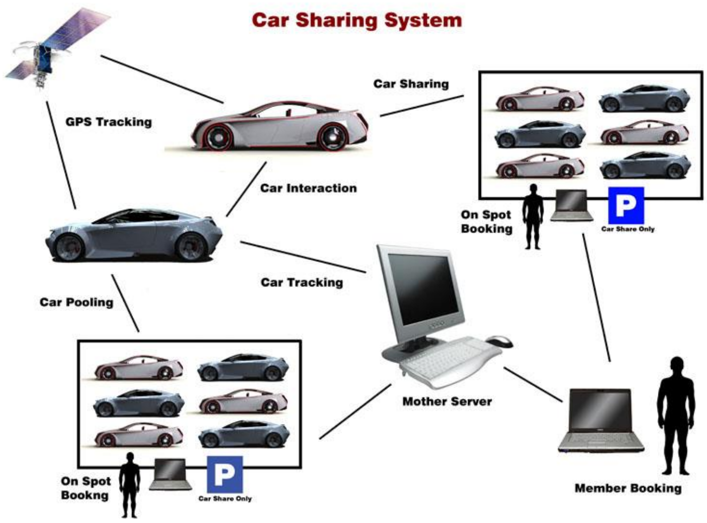
2.2. Different points of view (perspectives)

2.2.1. Founders and investors

Taking in consideration the structural modifications applied by the car-sharing and the founders of the enterprises who handle that system, it is barely about subjects already operating in related sectors, that guessed the potentialities of the business and wanted to be the pioneers of it, so that they could benefit some competitive advantages deriving from it. Of course, they have however had to face some trouble inherent to the shortage of regulation and the risks that a new business can carry on. One of the greatest problems was the generation of appeals for an alternative service to the taxis, but guaranteeing the use of a good, not of property, but in a location for a very short time.

The companies of car-sharing have to take profit from the scale-economies, deriving from the purchase of various cars, trying to get strong reductions in that purchase. Then they have to try standardizing the purchases, also to reduce the maintenance costs of the cars themselves. We can think, as example, to Car2Go, that releases only the Smarts available to the consumers, or Enjoy disposes only the Fiat 500. The standardization of the used cars allows the costs reduction to the maintenance and the maintenance's speed, as we can even buy the spare parts, in big quantities, and get some discounts, and the speed of the maintenance repair decreases too, with the workers/mechanics who take care of an only typology of car, and achieve in getting better with the time and guaranteeing a greater efficiency.

The main problems, that the first experiments of car-sharing have found, were inherent on the management of the cars' security, to get preserved from the thefts and vandalisms acts. Indeed, they implemented many technical awarenesses, by availing themselves of more technologically advanced resources.



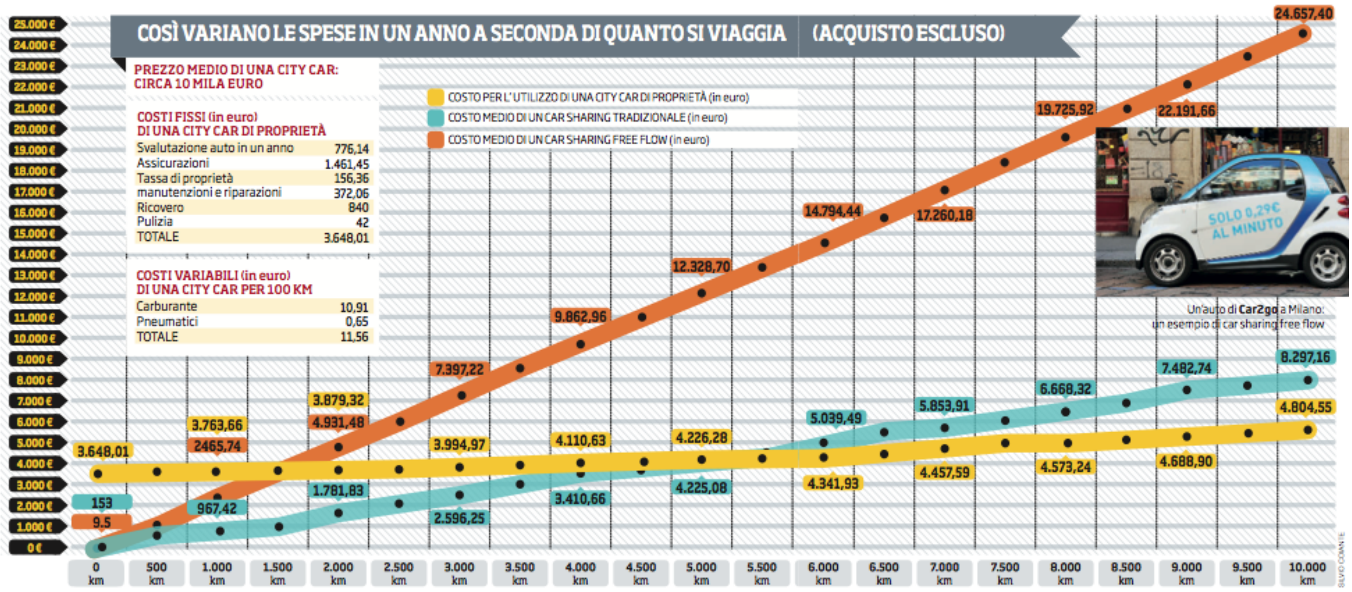
Moreover, they looked for a way to limit the utilization of the cars in delimited city areas, preventing, by this way, the route in dangerous or not very advisable suburban zones.

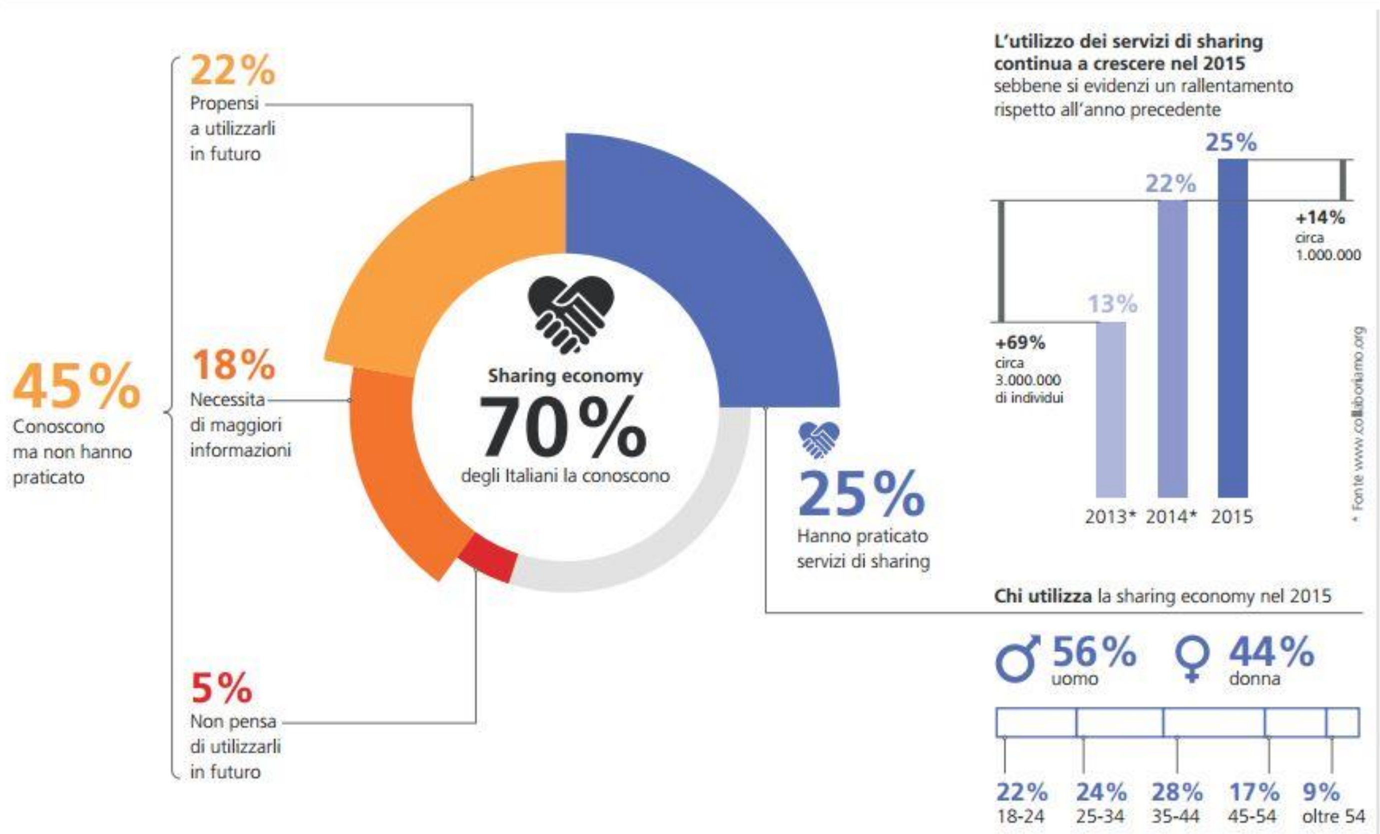
The investors, as already indicated earlier, are subjects operating in the car sector or in related sectors have been able to diversify, like ENI (oil sector) with Enjoy. The exploitation of the differentiation and scale economies has permitted to create great margins of profit. Even if the cost to the final user results, until now, enough escalated. Anyway, to expressed strategic choice, the service, in spite of the fact that increasing the catchment area would be desirable to every enterprise, is still addressed to one kind of clients, still enough benefiting, guaranteeing a minimal level of accordant utilization of the cars, reducing the costs of the repairs and the risk of thefts.

So, if the investors were been looking for a business to diversify their own activity or to make the core business increase, surely have found, in the car-sharing, an excellent alternative with an activity that, albeit cannot be defined as innovative, seen that the experiments had already been started in the ‘80s years, in USA[12], they found, in this period, the best moment to stimulate the success of it, happened not only thanks to a political will, that through “ad hoc” normative measures has generated a better appeal in the investment, but also thanks to a cultural change, a greater attention in the background (some car-sharing firms use old cars) and a pretty slack conjuncture, if not so negative, given that, despite the evident price reduction of the oil reduced the price of the fuel, sees many families in an economical difficulty and does not allow the purchase and the constant replacement of the cars.

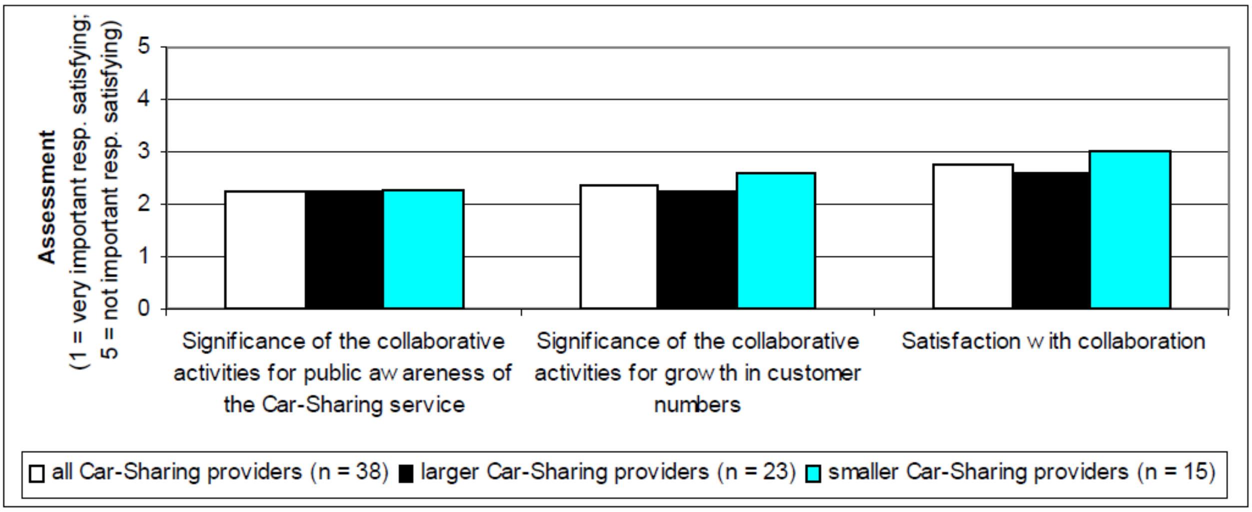
Moreover, the increase of the traffic (and of the pollution connected to it) generated the necessity, in the main metropolitan cities, to take some measures which limited the use of the private cars, constituting some delimited traffic zones, if not “green zones”, where the transition of cars is totally forbidden. To these aspects, there is also the introduction of the surnamed “blue trails”, or rather some parking areas on payment, that exponentially increases the cost of the transaction and of the cars’ parking in the center of the city, turning into a prohibitive expense for many income brackets.

The challenge, impost on the field to the enterprises that practice this activity of car-sharing, will consist in further reduce the costs of administrative and operational management in order to be able to offer the consumers an even more efficient and less expensive service, by applying the profit margins of the enterprises themselves; above all, by taking on count the actual costs of utilization of the car-sharing appear however enough high.





2.2.2. Automotive corporate, customers and final users



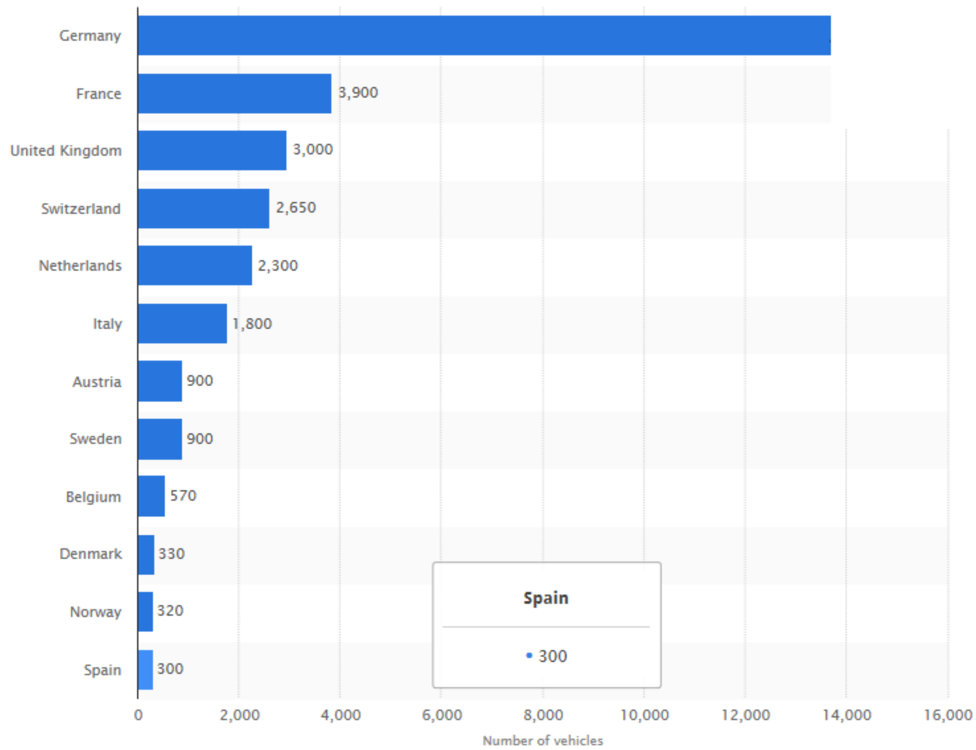
The enterprises that craft the cars, before the coming of the car-sharing, were used to have direct relationships with the final consumers who, to a lesser extent even now, were used to purchase the proprieties of the same cars. The weight of the sales to other firms, as example the leasing ones, was important but still limited, and these firms could get some softly discounted incomes thanks to the bought quantitative of the cars. But for about five years, the propriety of the cars has sometimes become too expensive, for the reasons, already indicated in the early paragraph (parking on payment, stamps, assurances, limited traffic zones) and that made the direct purchase less desirable, and its surrogate to the leasing, the long-term rental and the car-sharing have been thereafter the natural alternatives to the direct buying of the car, allowing, unlike the leasing, to enjoy some the inherent benefits of a contract that foresees, beyond the use of the car, to include also the assurance cost, the maintenance one and sometimes also the tires-changing one. The car-sharing, on integration of the advantages of the long-term rental, also includes the chance of transit in the limited traffic areas and the (included) parking in the payment areas.

The car-crafting firms, then, started to make a deal, in the case in which they had not to practice the car-sharing activity, with some referents who purchase big quantities of cars, but request great discounts to the purchase act, by showing a great contractual strength, because they can interpose themselves between the final user and the car builder. Even if it is true, that the necessity of standardization forces the enterprises of car-sharing, once chosen a car model, to get supplied always with it and the related replace parts, it is also true that the car manufacturing firms neither cannot afford the lost of an important client like the car-sharing firms that , with their “clients-package”, could take away a great market share in a blink of eye, maybe as benefit of a direct competitor.

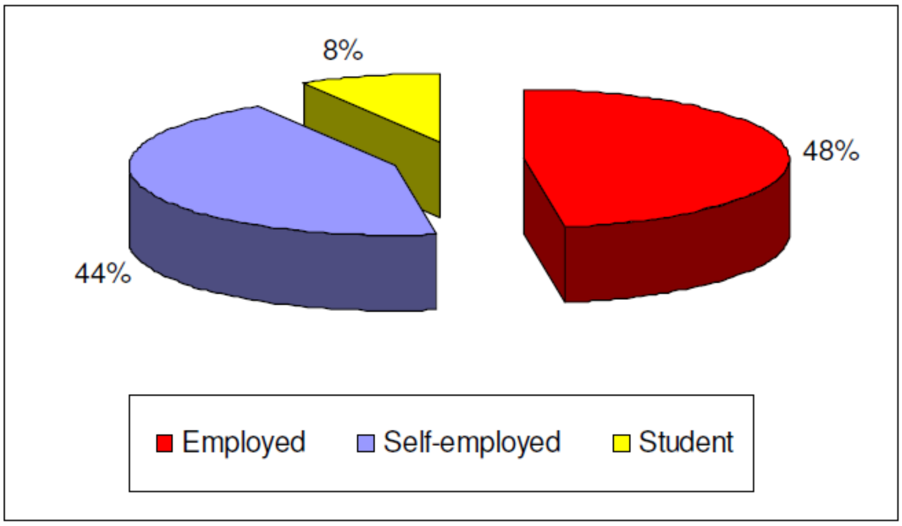
Then they did a particular scheme of sales, represented like this:

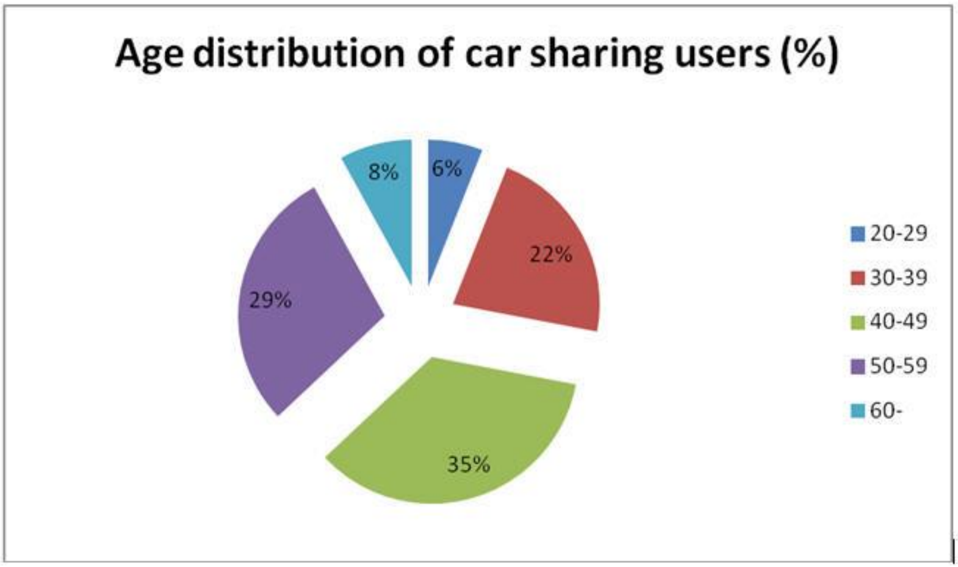
car manufacturer > client: car-sharing firm > final user

The effective final user of the car no more directly calls on the producing firm, but on the car-sharing firm, that then acquires a remarkable contractual strength, when purchasing the cars from the manufacturer because gathers a high number of users, moreover on strong increase, as the following graph shows and indicates the number of the vehicles which belong to the “fleets” of car-sharing in Europe.



In the following graphs there are also highlighted the compositions of the car-sharing users, indicating as the most profitable market niches (employees and self-workers), that were early used to buy the cars.





Age distribution of carsharing users (2013). Source: Avalon

2.2.3. Governments, advantages, the need to regulate the business

Looking on the political aspect, someone asks the public powers for the necessity to intervene in order to rule on a phenomenon that, if was left to itself, could realize some effects, even devastating, on the whole economic, social, political, situation of many countries. But we can say that until this year, this intervention request has basically remained disregarded. At a level of industrial politics, this great initiative acted by the Governments is possible, above all by the Governments inside the European Union, considering, besides, the great enterprises operating in the sector of the new technologies are almost exclusively under both the US capital and the Chinese capital, in the substantial absence of some relief of the European firms and without forget that the most of the owners themselves tend to dominate the world. The EU must to understand that the politics of the car sharing can be developed in every single part of the continent, can improve the transport system, reduce the costs and the times spent in seeking the most adapted vehicle to travel from one point to another; in fact it could favor the birth of a new transport network, absolutely working, something that if will not be made up, we will all risk to arrive relegated in a gloomy period, pretty close to the margins of the global economy. At this point, it is up to the people to look in front of the increasing superpower of the corporations which can become the rulers and the regulators of this business, and dangerously be able to ignore the local laws, and try to impose their own ones, allowing the return of a sort of “Lex mercatoria”, the world will become like the one in the Middle Age; moreover the corporations will impose a ward upon the freedom of every single country like if they were persons. If we look back, from the European level to the national one, we notice that in Italy, despite the fact that some firms are going around the cities, to sponsor the car sharing vehicles and their advantages, the local system of transports, that is supposed to sustain and carry on this initiative, may still appear enough backward, and we do not know if it is because the people are not ready to adapt to this project or because they keep ignoring the importance of the changes are coming out around the world, but it looks like there is need to make some more steps to turn to this new lifestyle. In Italy there is a sense, or even a fear, that this technological revolution might not take the so much promised effects to the society from a point of social, ecological, and political view, and might not consequently help an already lacking economical model of competitiveness in many other fields, still locked, mostly, on the productions of the traditional sectors, not always guaranteeing a decent and adequate survival to the system.

2.3. Possible future trend of the car sharing

If we look and think forward, we can find out how deeply the technology firms shall be better set up than the usual carmakers to the vehicles’ development and profit from the software will underpin both self driving system and vehicles sharing; some firms might also be able to craft this kind transport by themselves. The actual rumors say the car firms are teaming up with the technological ones because each one of them absolutely needs the other one.

Building and marketing cars, dealing with safety and emissions regulators are all serious and risky factors to look after. We have got some examples of firms that want to spread out their lines to the car field, like Tesla, that has crafted some electric cars for more than ten years, the Apple, that is already planning for the building of an electric car, through the intervention of a contract manufacturer, just like the iPhone case. The carmaking firms are far away from the right path to handle with this technology for the fact they are still working on the vehicle’s design, or partly or fully, without understanding how to match it with the driving system of next generation. Among the factors which determine the course of the technological progress for the car sharing are mainly robotics, drones and search engine, well useful enough to help to seek and guide a car, from wherever you are, close to every street, every corner of the area, and available at any time; in a not far future, there may be also some driverless cars that, once you registered yourselves for them and took them, will go along the road on their own, avoiding pedestrians, obstacles and other vehicles, reducing so much the level of car crashes, thanks to the powerful software placed inside the car to interpret the masses of data received both from the sensors of the car itself and from the external sources through wireless connections.

In this "competition" between the techno and the car firms, profits may seep away towards the producers of the software and the owners of the data, and away from the makers of the hardware; the new models of cars, until now, have tended to be bought as status symbols and expressions of personal style, but if consumers become more interested in what software and entertainment systems a can run, rather than what it looks like, the industry's whole business model may come apart.

Ride sharing, car clubs and more alternatives to the ownership's concept are growing fast. Some "city-dwellers" are turning their backs on owning a costly asset that sits largely unused and loses value, right when it is early driven. Car makers insist that such consumers are merely deferring buying a vehicle, pointing to the fact that people keep driving at an older age than they used to be; but the pronouncements of the motor industry bosses suggest that the doubts are creeping in. Membership pf car clubs, which let people book by app in a few minutes, is increasing by 30% per year; Ford, now, started to test both a car sharing service in USA and a car club in UK. Of course these services need to match the returns, especially for premium makers, from the selling of the vehicles, and in this case it is a hard work. At the same time, the taxi services based on the apps, like Uber, are making increase their profits more than it was expected, thanking above all the factor represented by the cheap costs and the more efficient and conventional cabs. Once they are able to dispense with drivers for their vehicles, including the taxis, the car clubs and the car sharing businesses will really turn into a great, convenient and affordable alternative to the "owning-a-car" concept.

According to some reports of its, Google teased that that its first driverless cars will be released on circulation around the streets by 2018, as one and only kind transport and no more as "weird" prototype going around under the watch of people remaining also speechless, even if some other consultants coming from other firms warn that we will probably wait for their exposition for about 15 more years. Other firms, like Barclays, claim that the fully automated vehicles will be ready to be driven within a greater period, comparing with Google, at least talking about the hardness to make changes in the United States.

The Self-driven cars will have however some troubles for the bad weather, because could struggle to recognize that shining a puddle off is harmless or guess that a pedestrian is up to step in the middle of the traffic without looking around. But luckily there are some sophisticated systems for hands-free driving on motorways, and for automated parking, all of them available on a number of manufacturers' models. Convincing regulators to allow the self-driven cars right in the streets is the next hurdle. Insurers and consumers also need to be satisfied in every detail. If those cars can be introduced on private roads or designated areas of cities to prove their worth in avoiding accidents and reducing congestions, then it would be useful. The real, main question is not whether this future will arrive, but whether the technological firms or the normal car firms will get the spoils.

We can find out many reasons for the considerable growth in car-sharing in recent years, such as traffic congestion and limited parking areas inside the cities, as well as increasing environmental pressure and pollution.

Another reason is the recent change in the utilization of cars' patterns, by favoring, then the use of the car without ownership. In particular, young and urban individuals no longer consider car ownership as an important status symbol; they regard it as one of several modes of transport. One vehicle used as a shared car can replace four to eight personal cars. Given this and provided the positive development of mobility services continues in future, car-sharing can help to improve the quality of life in the cities, in order to lower the levels of noise and exhaust fumes, more space for bicycle lanes and local parks.

Another strong argument in favor of car-sharing is cost savings for those who do not regularly use a car. The use of shared cars pays off for people driving less than 10,000 to 12,000 kilometers a year. The car-sharing clients save on the maintenance and the purchase costs. Some station-based firms of car-sharing, like the Flinkster in Germany, the Mobility Car-sharing in Switzerland or the companies in USA share several characteristics, and offer good service and guarantee a dense network of stations in residential areas, which suffer from a lack of parking places.

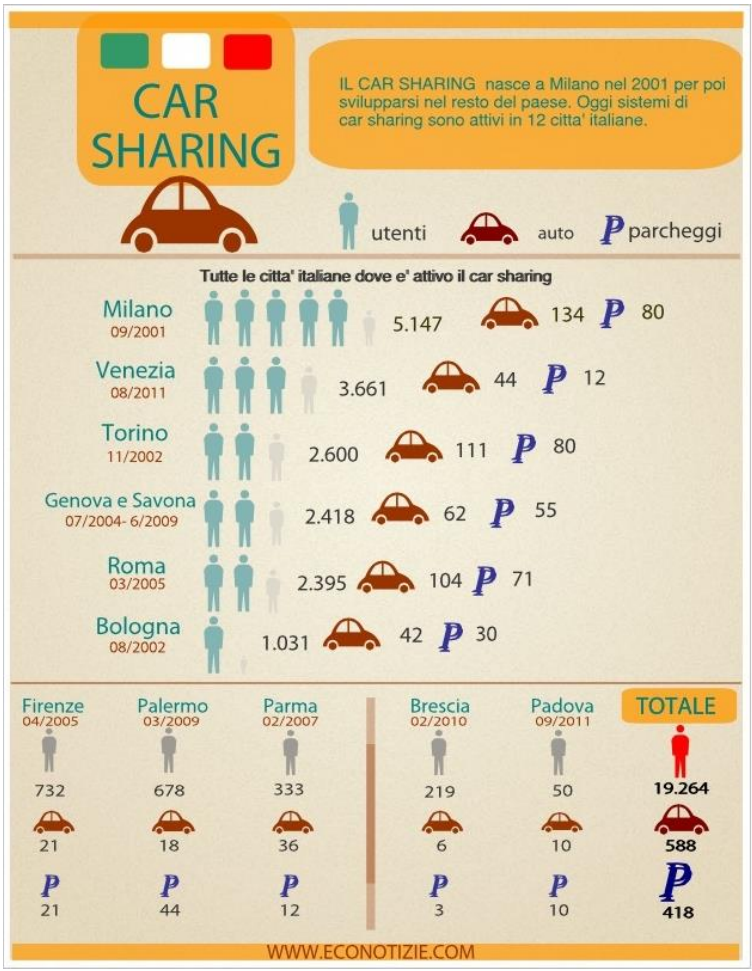
Other aspects are simple tariff structures, with transparent prices and a broad vehicle group, with cars for any need. In 2010, a study reported that in 14 countries of the European Union about 380,000 car-sharing participants had access to approximately 12,000 car-sharing vehicles, and by calculating the relation with the population, we can notice an increase in the share from 0.001% up to 1.08%. Hence car-sharing is a good service. Car rental firms are the new players in the market of station-based car-sharing. Someone of them have set up their own car-sharing services, such as Hertz Connect, that operates in many European cities like Berlin, Paris and Madrid.

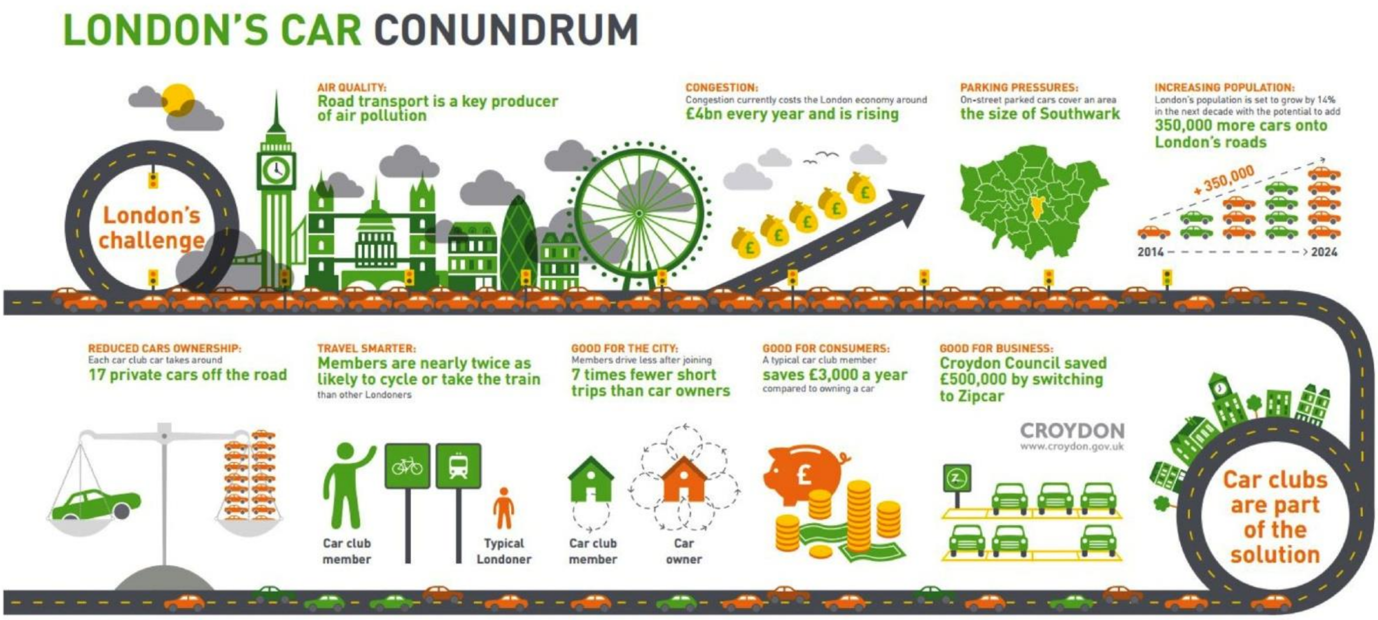
The range of success of their business concept are not measurable yet. Free floating systems operate without fixed stations and do not require a booking process in advance; this means the user can take and leave the car at any point within a predefined area. So, the system is particularly suitable for spontaneous and short trips in the city. So far, primarily car manufacturers offer free floating car-sharing services. In Germany, for instance, there are Daimler Car2Go, BMW Drive-now and VW Quicar; to these last ones, a study indicated an improvement in terms of CO2 emissions per average user and anticipates less car ownership in cities as a direct result of the car-sharing usage.

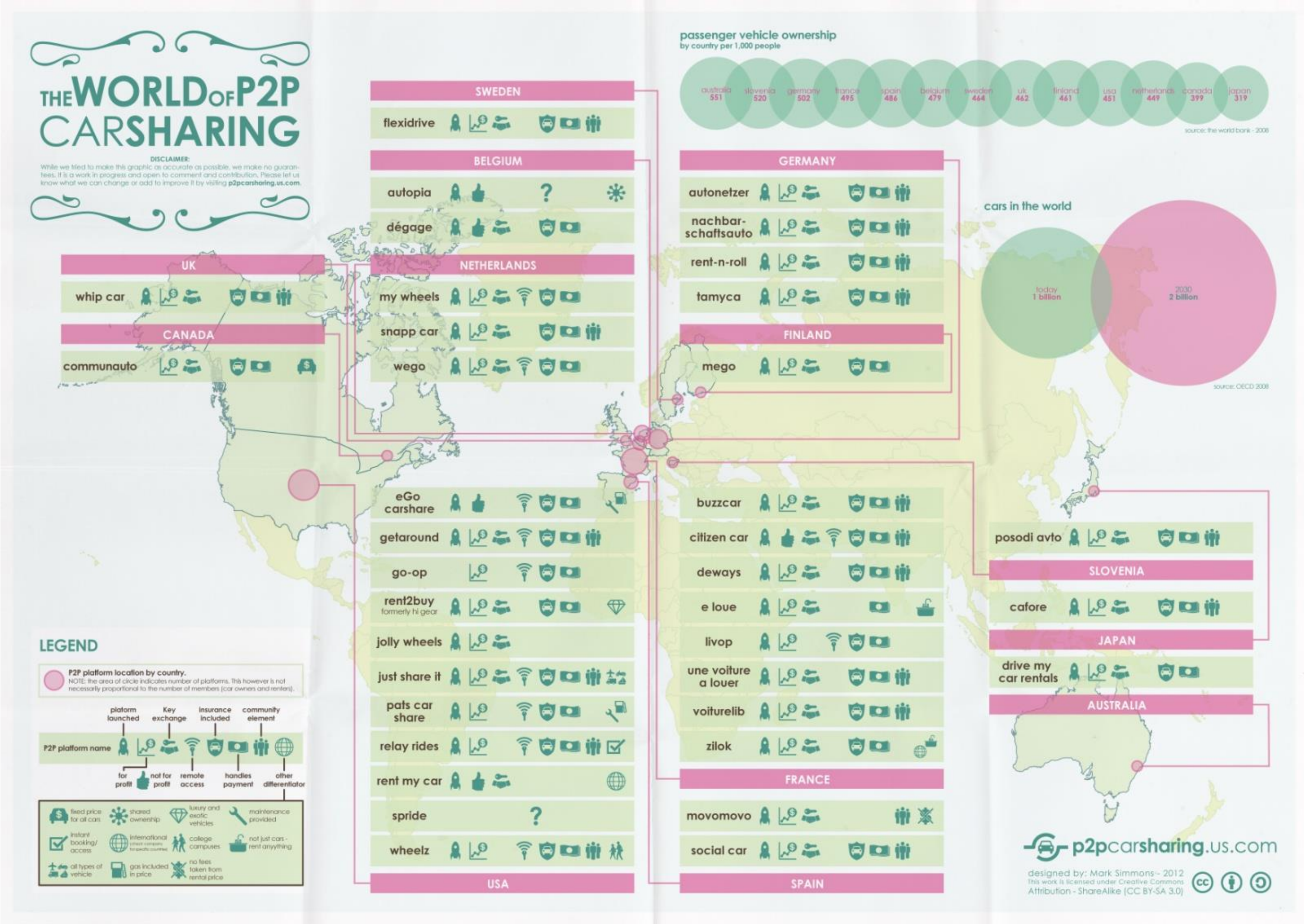
In the case of the private car-sharing, a single car is used by a limited group, often of "friends and neighbors". The car owner does not seek to gain a profit. Only the users have to cover the operating costs, such as the parking fee and the oil costs. Legal issues as insurance and liability are usually covered in the contract, especially. Of course, between the car owner and the car user. Yet, in some European countries, some organizations have set up some professional car clubs due to match users and owners. For example Autopia, in Belgium, supports car shares through a platform on which car owners and car users can connect; other equivalent firms are the Tamyca Carsharing in Germany, the WhipCar in Great Britain.

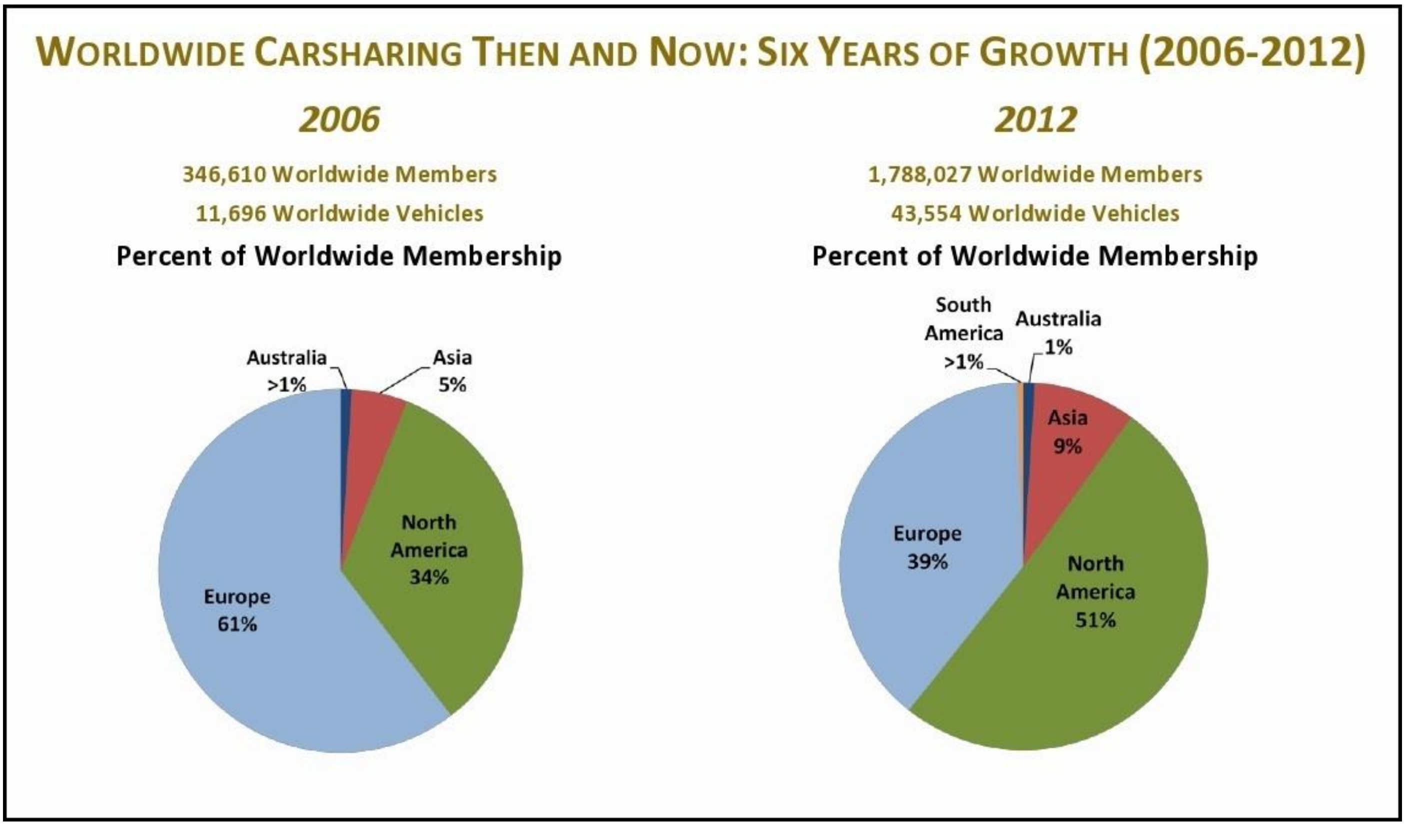
A related and pretty new concept is private ride-sharing organized by the web, the mobile or the navigation system. Online platforms like some start-ups that offer their users some applications for their mobiles or navigation systems so that they can arrange spontaneous and flexible carpools. Green Mobility, a carpool project, supported by the German Ministry of Economic Affairs, also includes public transport in the routes to raise the environmental value.

2.4. Car sharing around the world



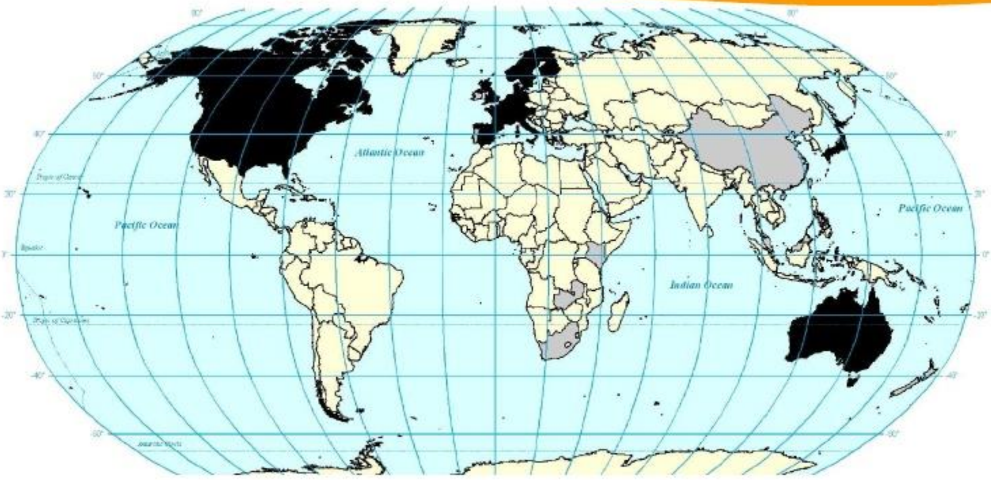



THE WORLD OF P2P CARSHARING
DISCLAIMER:
passenger vehicle ownership
by country per 1,000 people
australia 551
slovenia 520
germany 502
france 495
spain 486
belgium 479
sweden 464
uk 462
finland 461
usa 451
netherlands 449
canada 399
japan 319
cars in the world
SWEDEN
flexidrive
BELGIUM
autopia
dégage
NETHERLANDS
my wheels
snapp car
wego
UK
whip car
CANADA
communauto
GERMANY
autonetzer
nachbar-schaftsauto
rent-n-roll
tamyca
FINLAND
mego
USA
eGo carshare
getaround
go-op
rent2buy
jolly wheels
just share it
pats car share
relay rides
rent my car
spride
wheelz
FRANCE
buzzcar
citizen car
deways
e loue
livop
une voiture a louer
voiturelib
zilok
SPAIN
movomovo
social car
SLOVENIA
posodi avto
JAPAN
cafore
AUSTRALIA
drive my car rentals
LEGEND
P2P platform location by country.
P2P platform name
platform launched
Key exchange
insurance included
community element
for profit
not for profit
remote access
handles payment
other differentiator
p2pcarsharing.us.com
designed by: Mark Simmons - 2012


WORLDWIDE CARSHARING THEN AND NOW: SIX YEARS OF GROWTH (2006-2012)
2006
346,610 Worldwide Members
11,696 Worldwide Vehicles
Percent of Worldwide Membership
Australia >1%
Asia 5%
North America 34%
Europe 61%
2012
1,788,027 Worldwide Members
43,554 Worldwide Vehicles
Percent of Worldwide Membership
South America >1%
Australia 1%
Asia 9%
North America 51%
Europe 39%

Ministero dell'Ambiente
e della Tutela del Territorio e del Mare

Il car sharing nel mondo



CONTINENTE	UTENZA	VEICOLI
Europa	213.424	7.686
Nord America	117.656	3.337
Asia	15.700	608
Australia	1.130	65
TOTALE GLOBALE	**347.910**	**11.696**

su circa 650 aree urbane nel mondo

Car-sharing schemes

	Year of implementation	Who owns the vehicle?	Reservation	Return car to original station?	Service charge	Vehicle access	Important operators and year started	Active region
Two-way car-sharing	1987	Car-sharing operators	Required; online/phone	Yes	By the hour or distance	ID card/lockbox key	Mobility carsharing (1987), Zipcar (2000), City Car Share (2001), Cambio (2000)	E.U., United States, Canada
Peer-to-peer car-sharing	2001	Individuals	Required; online	Yes	By the hour/day /week	Key exchange	Buzzcar (2009), Getaround (2009), Relayrides (2010)	E.U., United States
One-way car-sharing	2008	Car-sharing operators	On demand	No	By the minute	ID card	Car2Go (2009), Autolib (2011), Drivenow (2011)	E.U., United States

Table by EMBARQ.

Chapter III – Automotive industry: strategic S.W.O.T. analysis concerning the car sharing

The SWOT analysis inserts itself in that strategical-based analysis that intends to define the context of reference, in which a society operates, and value the best profiles, taking in consideration the difficulties that might meet. Being able to value in advance and examine all the known and knowable elements that constitute the conduct of the activity represents an important aspect to the strategical orientation of the management, that always keeps looking for research tools useful to the administration of the society to maintain a coherence of conduct and a line of operability, directed to the enterprise economy.

The SWOT analysis, also known as SWOT matrix, is a tool of strategical planning, used to value the strength points, the weakness ones, the opportunity ones and the threats ones of a project or of a firm, or in any else situation, in which an organization or an individual has to take a decision to the achievement of an object. The analysis can be about the inside environment, by analyzing the strengths and the weaknesses, or the outside environment, by analyzing the threats and the opportunities.

- We define a desired final status/objective;
- We define the main points of the SWOT analysis;
- We define the actions to practice to the achievement of the objective, starting from the combination of those points.

Thus, the SWOT matrix is presented in the following way:

- The planning of the job, as part of the development of strategies and plans to allow the objectives' achievement, so every organization can utilize a systematic and strict process, well known as "enterprise planning", and the SWOT analysis can be used as source for the analysis of the firms and of the environmental factors;
- Settlement of the targets: the definition of what the organization is going to do;
- Environmental scanning: the valuation, inside the organization, of the SWOT, that include a valuation of the actual situation, as well as the ones of the portfolio and the lifecycle of the products/services;
- Analysis of the existing strategies: the check-out of the pertinence of the results of an inside/outside valuation, that can include the gap analysis that will examine the environmental factors;

- Defined strategical questions: the key factors to the development of an enterprise plan that must be faced with the organization;
- Development of new strategies and review of them: the review of the analysis of strategical questions can involve the necessity to modify the objectives;
- Definition of critical factors of success: the achievement of the objectives and the execution strategy;
- Preparation of operating informations, resources, projects for the executions plans of the strategy;
- The results of the monitoring: the mapping process on the spare of plans, corrective intervention that may mean the modification of targets and strategies.

By following the SWOT planning activity, we achieved to identify the different elements that characterize the specific sector of the car-sharing, that is represented here below:

	FATTORI POSITIVI	FATTORI NEGATIVI
FATTORI INTERNI	**PUNTI DI FORZA** ▪ Convenienza economica (entro certe soglie di utilizzo) ▪ Livello di servizio (disponibilità 24ore, flotta di auto, parcheggi dedicati) ▪ Agevolazioni (parcheggio strisce blu, accesso a zone traffico limitato) ▪ Aspetti tecnologici innovativi ▪ Flessibilità (diverse classi di veicoli) ▪ Sicurezza (controllo delle vetture,assistenza) ▪ Benefici ambientali (veicoli e carburanti a basso impatto ambientale)	**PUNTI DI DEBOLEZZA** ▪ Alta Incidenza dei costi per uso poco frequente e intenso ▪ Servizio soggetto a prenotazione e disponibilità (inefficienze organizzative) ▪ Cattivo stato d'uso delle auto ▪ Malfunzionamento delle vetture ▪ Riconsegna nel punto di prelievo
FATTORI ESTERNI	**OPPORTUNITA'** ▪ Costi (di acquisto e di gestione) delle automobili ▪ Problemi sociali (traffico) ▪ Problemi ambientali (inquinamento) ▪ Riforma del trasporto pubblico locale ▪ Percezione del servizio vicina al trasporto pubblico ▪ Coinvolgimento Enti locali per lo sviluppo del servizio ▪ Interoperabilità nelle varie città ▪ Il mobility management	**MINACCE** ▪ Cultura italiana dell'automobile (molto legata alla singola proprietà) ▪ Bassa awareness ▪ Attuale assenza del servizio ▪ Alto tasso di motorizzazione per la città di Bergamo ▪ Assenza di una forte promozione dello standard nazionale

Strengths:

- Car sharing companies 's biggest strength lies in its customer friendly and disruptive business model which makes it unique from its competitors.
- The company provides its customers the highest accessibility as possible by making it available where people live or work.
- The company gives the customers the flexibility to use their company's cars whenever required.
- The company has the first mover advantage. Car sharing companies was the first company who introduced the concept of car sharing in the United States as a systematic

multi-city business model. The company allows its member to get a car without any need of interacting with a front office.

- Car sharing companies has been known as the market leader for the Net Promoter Score. The company has maintained its competitive advantage by keeping a high level of NPS.
- The company is well updated with the latest market trend and consumer's preferences. Car sharing companies has been consistent with the general market trend by promoting environmental friendly transportation solutions.
- The company has maintained its membership over time even after increasing its annual membership fee; Car sharing companies has always managed to retain its loyal customers.

Weaknesses:

- The company faces the greatest challenge of creating a high level of initial costs besides dealing with the customer's complaints of car unavailability often times. However, the company can leverage itself by expanding its market leadership with car manufacturers in order to secure better deals of procurement i.e. partnership with the Ford company for its Student Drive Campaigns.
- The membership of the company is based on the seasonal usage i.e. longer weekend trips, travelling for work/school etc.
- Each time when the company plans to enter a new market, it also has to make a huge upfront investment in vehicles. As the company expands its business in the cities like London and Barcelona which can lead to a heavy expenditure overall.

Opportunities:

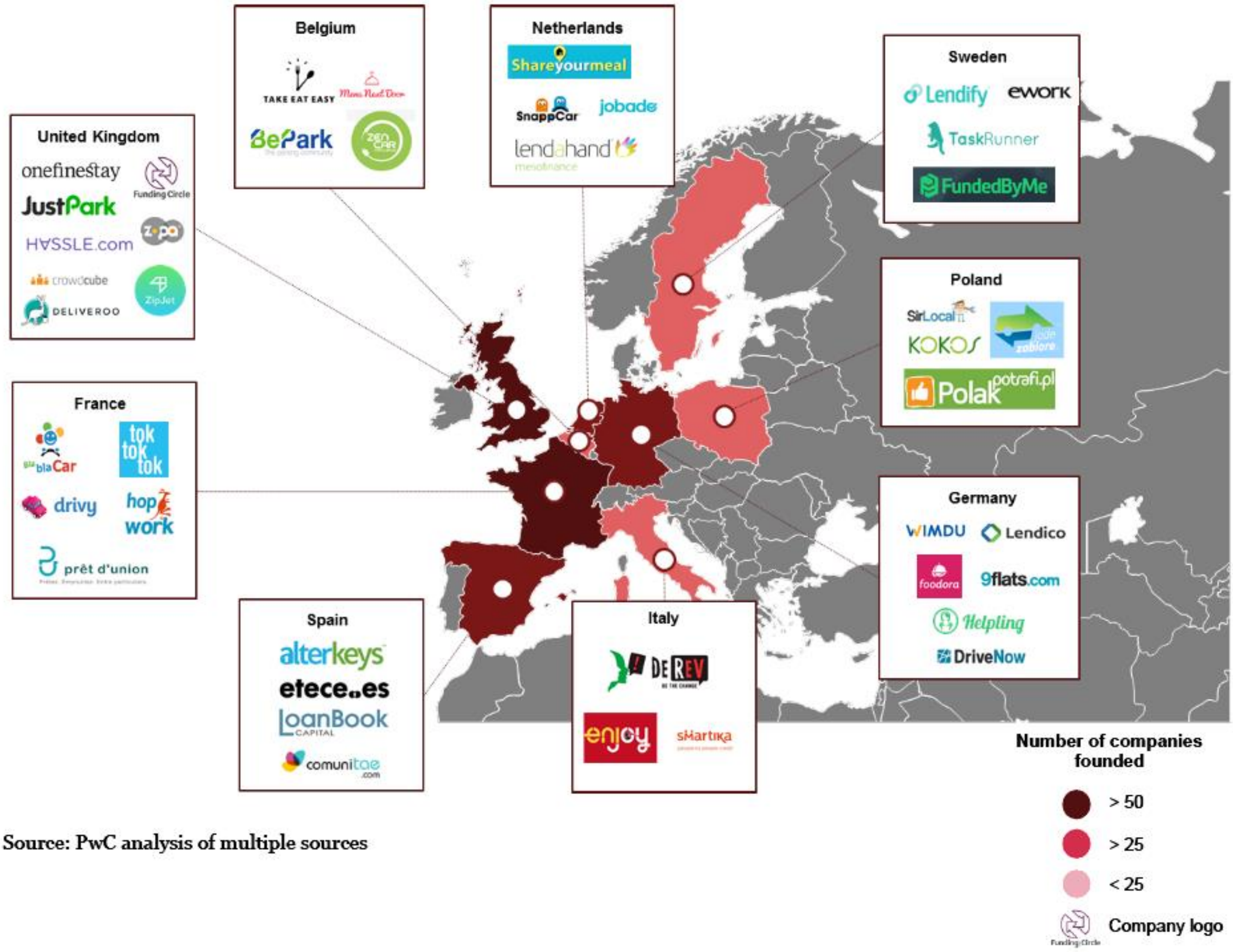
- The company has to adopt a market expansion strategy to sustain itself globally. The target market of Car sharing companies exist in the high population metropolitan areas. Most recent areas where the company has expanded its growing market is in the universities and local businesses.

- Similarly, the company also has to expand the business globally. The recent acquisition with a London based competitor, Streetcar.Inc the company is able to expand its presence aggressively into the European markets in the long run.
- Rising fuel cost can be beneficial for the company when people will consider going for car sharing options instead of buying new cars to save their money.

Threats:

- Fierce competition with other car rental companies like Hertz and Avis that already have made a strong presence in the car rental industry.
- While an increase in the fuel cost can be an advantage for the company but on the flip side, it could also reduce the company's existing floundering profit margins.
- The local smaller sized sharing programs like Chicago's I-Go Car sometimes work in associations to attain better economies of scale to compete against Car sharing companies's.

Number of collaborative economy companies by country of origin



Source: PwC analysis of multiple sources

Chapter IV – Law proposal in Italy and in EU

4.1. The Italian law proposal called: “sharing economy act”

On 27th January 2016, in the Italian parliament they made the law proposal n. 3564, untitled "Discipline of the digital platforms due to the sharing of goods and services for the promotion of the sharing economy. With this document they are meant to propose a discipline to the new cultural and economical model capable to promote some forms of conscious consumption that prefer the rationalization of the resources, by basing on the utilization and the exchange of goods and services rather than on their purcase. We identify the scope of the analysis of the references, to discipline, of the sharing economy as well as the one in which the access is preferred, rather than the ownership. In the document in object, we can recognize ho the traditional economical models and the employment crysis have created the favorable conditions for the spread of this new mechanism of consumption, proposing an alternative and an opportunity of growth, employment and entrepreneurship, founded on an economically, socially and environmentally substainable development, and having a direct approach to the active participation of the citizens, and to the building of resilient communities which are able to improve their ability to influence the course of a changement, facing it a positive way.

There is underlined the fact the information technology and the use of the social medias have reduced the obstacles in which they organized themselves and of the sharing-based business. The coming of the Information Technology, meant as facilitator of the sharing economy, can be compared to the role of the coin’s introduction, as facilitator of the exchange. Since some enabler technologies became objects of common use (as example the smartphones), it became easier to have a direct report among the people, eliminating the intermediaries, even in the transactions, so being based, then, only on digital interconnection platforms. The proposal law, born with the best intentions to make the regulation good to this time and to make it adequate to the phenomenons in continuing evolution, also to supply a reference point for the taxation, presents, some different gaps and troubles like:

1) Anticipation of European regulations that could be in contrast. The European Union is elaborating a similar proposal on the topic of the collaborative economy and there are some strong rumors on the guide lines and directives in coming before the summer so it would be appropriate to compare ourselves on the actual status of the committed jobs in the European Union, due not to duplicate the job and to need to adequate. Italy was rarely able to do it, but there is still time to believe in it again. However, the proposal does not take any count of the dialogue in progress in the commission and acts on fully different coordinates. Hence, with a similar law, Italy would go forward on its own, with the risk of have to face, soon, a whole different scenery.

2) <u>Discipline in contrast with the one will be soon adopted in the European Union</u>. If also the intent of the legislator is to anticipate and discipline a juridically relevant phenomenon, it can also be the result of a conscious strategy, but the proposal dictates rules that contravene the communitary right does not appear coherent. For example, to set an authorization for the collaborative platforms violates the treaty on the functioning of the Union with regard to the performance of services and to the stability right (articles 49 and 56 TFUE) and opens up in contrast with the services' directive (2006/123/CE), that states it is possible to subordinate the supply of a service to the release of an authorization only on presence of very strict conditions, which are missed here (cfr. Article 9). Then, if the authorization is result of the approval of a document of enterprise politics, with great margins of handling for the guarantor of the competition, the proposal contradicts also the jurisprudence of the Justice Court that imposts to circumscribe the practice of the discretionary power of the national authorities in the emanation of the administrative measures.
3) <u>It does not face the job topic</u>. For about the job, the law is taking care not so much of it, but the article 2 contains a sentence of doubtful interpretation: "between the managers and the users there is not a relationship of subordinate work". So, imperiously, the law decides that for definition the relationships of the peers with the platforms can never integrate a relationship of subordinate work. And what if, instead, concretely, this relationship has got all the characteristics (control, submission to directives and prescriptions, etc.) the law and the jurisprudence consider as safe subordination indices?
4) <u>It does not face the consumers topic</u>. One of the crucial points of the sharing-economy is to take care of the recipients of the services without oppress, with rules elaborated for the professionals of the sector, who offers those services without neither being a professional. In a few words, how can we prevent that anyone who tries to book with Airbnb ends to have a flophouse without asking who offers the house, a few weeks per year, to respect the many prescripts the hotels are subscribed under? There are the ways, The European Union is thinking about it, and some European countries already offer some important and valuable examples on which we would worthly work. Of all of this, unfortunately, there is not a clue of it, in the law.
5) <u>It does not face the topic on the responsibility of the platforms</u>. The other great topic of the sharing-economy is the regime of responsibility of the platforms. To define it we firstly need to understsnd if the P2P platforms are some service providers, or better some true suppliers of services or simple hosts, that simply give a virtual space in which the peers themselves offer the service. Even on this point, the reflection is on act, and at the European level, they have been working, for a long while, on a review of the Directive & Commerce (2000/31/CE), that disciplines the question, but now shows the marks of time. In the Italian proposal, there is nothing on it too.
6) <u>The creation of a facilitated-taxation-based regime, bound to the belonging to the sharing economy</u>. There might be some evident problems of application that might make great margins of tax avoidance, with certain negative impacts on the tax revenue, rather than be able to effectively intervene and specifically discipline the topic. Although there is the fiscal aspect, in the claimed intention of the proposers, they should confirm the principles of transparency and equity with a flexible and diversified settlement between who practices a not-professional and entrepreneurial micro-activity on integration of the own income, and who instead operates on a whole professional or entrepreneurial level through the spot of a standard and unique € 10,000 sill that, then, should constitute the watershed between professional activity and not-professional activity, where the custom is "professionally" meant. The managers of sharing-economy platforms, by acting as substitute withholders for the incomes generated by the operating users, are constrained to correspond to a fixed rate of 10% on every transaction.

7) The sharing is mildly defined as the common use of a resource in a different way from the traditional exchange forms, the P2P relationship, namely the horizontal relationship, among the involved objects, that distinguishes itself from the traditional forms of relationship between manufacturer and consumer, answering to new needs, including, for example, the continuing necessity to get integrated with the firms in a more participatory mode; the presence of a digital platform supporting this relationship, and in which a mechanism of digital reputation is present, and the transactions happen through an electronical payment.
8) They try going forward with this law of supplying a list, that, however, does not appear exhaustive, of forms and objects of the sharing, indicating that they can be the most various ones, starting from the physical goods like transport vehicles, coming to accessories, digital products, spaces, times, competences and services, whose value cannot necessarily be determined by money, and can keep in consideration some elements, generally excluded from the traditional exchange logics, like the environmental or social impact.

In this script they mention some authoritative sources, which brought to the end some jobs of market study, the one realized in Italy by the Università Cattolica that indicates the collaborative platforms in 2015 are 186, with an increase rate of about 35%, compared to the previous year, indicating also that the most interested sectors are the crow-funding, the transports, the exchange services of consuming goods and the turism.

We also notice that the law proposal expressed the intention to favor the sharing-economy, recognizing the strategical benefits it brings to the general economy.

The alternative, however, is not the passivity. Whereas, the places of reflection that put together institutions and stakeholders are needed; and, in parallel, there is the need to set up some channels to make the Italian voice in Europe "feel strong". Only by this way, we will be able to accept no regulation model, born somewhere else, and make ourselves authors of this process. If there is a merit this proposal contains, is just that to signal the wish of being an active part in the construction of the European rules of the sharing-economy.

4.2. Work in progress in the EU Commission about the sharing economy

The European Commission presentend in Brussels, 2 June 2016 a guidance aimed at supporting consumers, businesses and public authorities to engage confidently in the collaborative economy, better known as "sharing economy". It starts suggesting that "These new business models can make an important contribution to jobs and growth in the European Union, if encouraged and developed in a responsible manner".

It is recognized that the collaborative economy is growing rapidly. As it takes root in the EU, national and local authorities are responding with a patchwork of different regulatory actions. This fragmented approach to new business models creates uncertainty for traditional operators, new services providers and consumers alike and may hamper innovation, job creation and growth. As announced in its Single Market Strategy, the Commission has today issued guidance to Member States to help ensure the balanced development of the collaborative economy.

Commission Vice-President Jyrki **Katainen**, responsible for Jobs, Growth, Investment and Competitiveness, said: *"A competitive European economy requires innovation, be it in the area of products or services. Europe's next unicorn could stem from the collaborative economy. Our role is to encourage a regulatory environment that allows new business models to develop while protecting consumers and ensuring fair taxation and employment conditions"*.

Commissioner Elżbieta **Bieńkowska,** responsible for Internal Market, Industry, Entrepreneurship and SMEs, said: "*The collaborative economy is an opportunity for consumers, entrepreneurs and businesses – provided we get it right. If we allow our Single Market to be fragmented along national or even local lines, Europe as a whole risks losing out. Today we are providing legal guidance for public authorities and market operators for the balanced and sustainable development of these new business models. We invite Member States to review their regulation in the light of this guidance and stand ready to support them in this process"*.

The Communication “A European agenda for the collaborative economy” provides guidance on how existing EU law should be applied to this dynamic and fast evolving sector, clarifying key issues faced by market operators and public authorities alike:

- **What type of market access requirements can be imposed?** Service providers should only be obliged to obtain business authorisations or licenses where strictly necessary to meet relevant public interest objectives. Absolute bans of an activity should only be a measure of last resort. Platforms should not be subject to authorisations or licenses where they only act as intermediaries between consumers and those offering the actual service (e.g. transport or accommodation service). Member States should also differentiate between individual citizens providing services on an occasional basis and providers acting in a professional capacity, for example by establishing thresholds based on the level of activity.
- **Who is liable if a problem arises?** Collaborative platforms can be exempted from being held liable for information they store on behalf of those offering a service. They should not be exempted from liability for any services they themselves offer, such as payment services. The Commission encourages collaborative platforms to continue taking voluntary action to fight illegal content online and to increase trust.
- **How does EU consumer law protect users?** Member States should ensure that consumers enjoy a high level of protection from unfair commercial practices, while not imposing disproportionate obligations on private individuals who only provide services on an occasional basis.
- **When does an employment relationship exist?** Labour law mostly falls under national competence, complemented by minimum EU social standards and jurisprudence. Member States may wish to consider criteria such as the relation of subordination to the platform, the nature of the work and remuneration when deciding whether someone can be considered as an employee of a platform.
- **Which tax rules apply?** Collaborative economy service providers and platforms have to pay taxes, just like other participants in the economy. Relevant taxes include tax on

personal income, corporate income and Value Added Tax. Member States are encouraged to continue simplifying and clarifying the application of tax rules to the collaborative economy. Collaborative economy platforms should fully cooperate with national authorities to record economic activity and facilitate tax collection.

The Communication invites EU Member States to review and where appropriate revise existing legislation according to this guidance. The Commission will monitor the rapidly changing regulatory environment as well as economic and business developments. It will follow trends on prices and quality of services, and identify possible obstacles and problems arising from divergent national regulations or regulatory gaps.

The EU Commission also provides a focus about the "Collaborative economy" (alias "sharing economy"), giving a generic definition "The collaborative economy, sometimes called the sharing economy, covers a great variety of sectors and is rapidly emerging across Europe. Many people in the EU have already used, or are aware of collaborative economy services, which range from sharing houses and car journeys, to domestic services. The collaborative economy provides new opportunities for citizens and innovative entrepreneurs. But it has also created tensions between the new service providers and existing market operators. The Commission is looking at how we can encourage the development of new and innovative services, and the temporary use of assets, while ensuring adequate consumer and social protection".

The EU Commission also preparede the "Guidance and policy recommendations for the collaborative economy", indicating that the collaborative economy offers greater choice to consumers and new opportunities to entrepreneurs, but citizens and businesses must be aware of existing rules and obligations. With the Communication on the European agenda for the collaborative economy, the EU provides clarity on applicable EU rules and policy recommendations to help citizens, businesses and EU countries fully benefit from the new business models and promote the balanced development of the collaborative economy.

A 2016 Eurobarometer survey showed that a majority of respondents had either used or were aware of collaborative platforms. Almost one third of respondents who have used the services of collaborative platforms also provided a service on this kind of platform at least once. This signals that users are also likely to act as service providers. Users appreciated in particular that collaborative economy services are easily accessible and cheaper than traditional services, and that products or services can be exchanged, rather than paid for. Three main drawbacks identified by respondents were lack of awareness of who is responsible in case a problem arises, lack of trust in internet transactions generally and lack of trust in the provider/seller.

The consulting firm KPMG, prepared a document for the European Commission called “Assessing the size and presence of the collaborative economy in Europe”, focused on the following specific sectors:

- “Peer-to-peer accommodation: households sharing access to unused space in their home or renting out a holiday home to travellers
- Peer-to-peer transportation: individuals sharing a ride, car or parking space with others
- On-demand household services: freelancer marketplaces enabling households to access on-demand support with household tasks such as food delivery and DIY
- On demand professional services: freelancer marketplaces enabling businesses to access on-demand support with skills such as administration, consultancy and accountancy
- Collaborative finance: individuals and businesses who invest, lend and borrow directly between each other, such as crowd-funding and peer-to-peer lending”.

In this paper, issued on april 2016, it is estimated that these five key sectors of the collaborative economy generated revenues of nearly €4 bn and facilitated €28 bn of transactions within Europe in 2015. Their findings show that growth in both revenues and transaction values has accelerated since 2013 – at a pace which has significantly exceeded our expectations from our 2014 global study and estimate that last year, these platforms doubled their revenues in Europe.

The declared scopes of the survey include:

- “An estimation of the size of five key collaborative economy sectors within the European Union;
- A summary of the market sizing methodology adopted;
- A qualitative indication across major member states of:
- The presence of the collaborative economy organisations;
- The relative adoption of the collaborative economy services; and
- The openness of the regulatory and policy environment.
- Case studies highlighting examples of collaborative economy enterprises within each of the five sectors and their experiences of operating in Europe;
- A short conclusion summarizing the key findings and suggested next steps; and
- A supporting appendix that includes reference information pertinent to the understanding of our study”.

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Assessing the size and presence of the collaborative economy in Europe

April 2016

Authors: Robert Vaughan and Raphael Daverio, PwC UK

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The key findings from the market sizing assessment are described below:

- “Overall, we estimate that platforms in five key sectors of the collaborative economy generated revenues of nearly €4bn in Europe in 2015 and facilitated around €28bn of transactions.
- Figures 1 and 2 highlight the breakdown between the five collaborative sectors we have assessed. We find that the largest collaborative economy sector by revenue is the peer-to-peer transportation sector, which includes ride-sharing, car sharing networks and driveway sharing models. However, we find that the largest sector by total transaction value is the peer-to-peer accommodation sector, which includes peer-to-peer rental platforms and vacation rental platforms, as well as home swapping platforms.
- Figure 3 highlights the rate of growth of the collaborative economy over the last few years. We estimate that growth in both revenues and transaction values has been very strong since 2013, and accelerated in 2015, as large platforms invested significantly in

expanding their European operations. We estimate that European revenues generated by these platforms almost doubled last year.

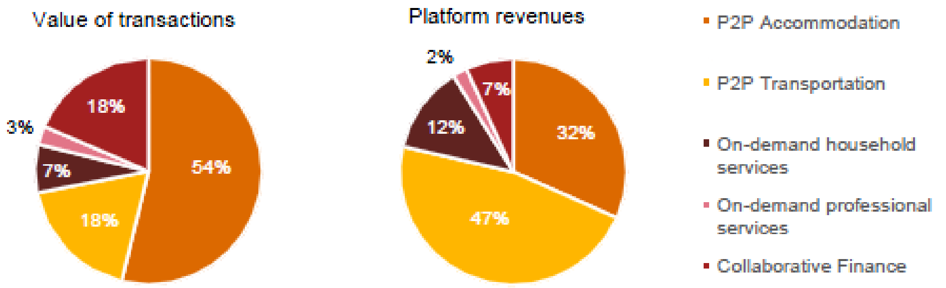
- We estimate that peer-to-peer transportation, collaborative finance and on-demand household services expanded revenues by several multiples in 2015. The fastest growing sector was on-demand household services, particularly driven by the growing popularity of freelancer platforms and crowdsourced networks offering services such as ready-made food delivery or DIY tasks.
- On average, over 85% of the value of transactions facilitated by collaborative economy platforms is received by the provider rather than the platform. The revenue models that platforms deploy vary significantly between and even within sectors. Most adopt a fixed or variable commission-based approach, with commissions charged ranging from 1-2% within peer-to-peer lending, to up to 20% for ride-sharing services.
- We are not able to make direct comparisons to our 2014 global study. This study focused on a different timescale, drew on a different set of sectoral definitions and involved different levels of data availability. However, we view the overall size of the collaborative economy indicated here as consistent with the order of magnitude identified in as our previous assessment.

Figure 1: Revenues and transaction values facilitated by collaborative economy platforms in Europe (€m, 2015)

Sector	Revenue 2015 (m)		Value 2015 (m)	
P2P Accommodation	€	1,150	€	15,100
P2P Transportation	€	1,650	€	5,100
On-demand household services	€	450	€	1,950
On-demand professional services	€	100	€	750
Collaborative Finance	€	250	€	5,200
Total	€	3,600	€	28,100

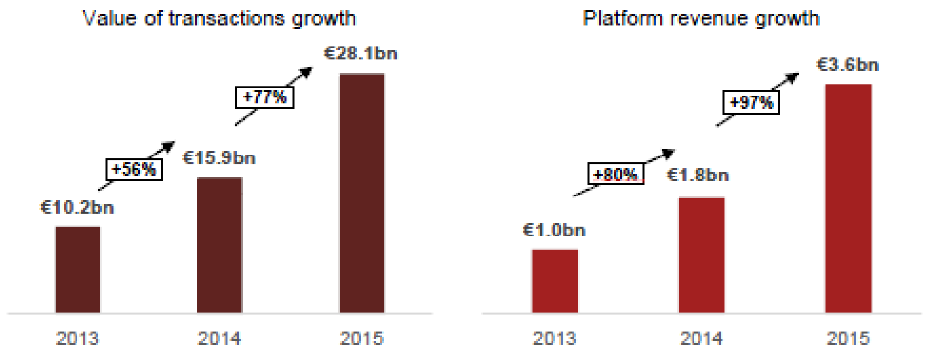
Source: PwC analysis. Note: Figures may not sum due to rounding.

Figure 2: Revenues and transaction values facilitated by collaborative economy platforms in Europe (% of total, 2015)



Source: PwC analysis

Figure 3: Revenues and transaction values facilitated by collaborative economy platforms in Europe (Growth, 2013-2015)



Source: PwC analysis

Adoption of the collaborative economy across member states

Belgium:

- Overall 8.5% of the local citizens declared to have exchanged or shared a service or an asset in exchange for money; the level of cooperation increased by 16% this year.
- ING estimated that the most popular sector is the P2P accommodation sector.
- Alternative finance is still underdeveloped compared to other countries of the European Union; in fact, on 16 countries, Belgium stays at the 13th place, for the finance volume.

France:

- About the 22% of people reported participating in the collaborative economy.
- France is the second biggest market in the world, with Airbnb, whereas Paris the second user of Uber in Europe.
- France is the leader in P2P car-sharing, with about 800,000 members.
- French consumers report high awareness of collaborative economy business: 41% use Blablacar, and the 20% use Airbnb.

Germany:

- Germany is the second country in the EU to adopt the P2P car-sharing firms, with about 140,000 members.
- In these last two years the Germany has been at the third place in Europe for the finance volume.

Italy:

- Car-sharing network in Italy enjoys of about 150,000 users, among the ones using Car2Go or Enjoy.
- IPSE estimated that the number of free-lancers has increased only by 12% in the last decade.
- Alternative finance is not very widespread in Italy, with a finance volume of 8 million in 2014.

Netherlands:

- In 2014, about 550,000 local households cooperated in the sharing-economy, among manufacturers and users.
- Users are generally of young age, with good education and motivated by financial considerations while the service providers have more idealistic considerations.
- Car-sharing is a relatively nascent market, even if shows itself as a great promise, with about 100,000 members in the P2P car-sharing system.
- Collaborative finance is increasingly popular in the Netherlands. It is at the fourth place in Europe for its market, and because of its finance volume that grew up by 59%, in 2014.

Poland:

- About a third of the population have only heard about the sharing-economy, whereas the 26% of them use it.
- Over the half of the Polish sharing-economy service claims the price considerations as the main advantage of the use of that kind of service.
- The total supply o P2P accommodation accounted for the 10% of the national accommodation capacity.

Spain:

- P2P accommodation rentals correspond to the half of the turism capacity in the urban areas.
- The main P2P markets used by the people are Airbnb (27%), HomeAway (24%), and Niumba (14%).
- According to the growth transactions, Spain is at the sixth place, among the finance markets in Europe.

Sweden:

- 12% of the working population work in the gig economy and 24% are trying to find a job on this way. The largest online free-lance platform, eWork, claims over 5,000 self-workers.
- The main drivers of the Swedish sharing-economy are its world-leading broadband infrastructures which have led to widespread tach and mobile adoption.
- Sweden is the third largest market in Europe in terms of volume of transactions per capita.

United Kingdom:

- About 87% of the students in UK, with the first or second degrees, are taking care of the free-lancing or gigging economy.
- UK is first in Europe for the alternative finance (75% of the European alternative finance markets).
- From an analysis of the London's hospitality market, made by PwC, in 2015 there were about 31,000 listings in the city, with the platform expanding room supply by several multiples in non-central boroughs.

Recent changes in the regulatory and policy environment affecting collaborative economy organisations in member states

Belgium:

- On January 2016, hosts renting their accommodation on P2P platforms in Brussels have to ask permission from local authorities and co-owners of their building.
- Some collaborative businesses point out that the absence of a micro-entrepreneur status would encourage more online self-working platforms to emerge.
- The current tax regulations are not adapted to the collaborative economy in Belgium.

- France:
- Public agencies are adopting a regulatory approach to regulate the P2P rental platforms.
- The current labor law, review by the legislative chambers would simplify the process of going from salaried employment to freelance work.
- Tide-sharing platforms have been the subject of intense scrutiny from regulators in France. Drivers are now obligated to by law to return to their garages after each journey.

Germany:

- In 2014, Berlin banned regular short-term accommodations rentals in the most popular parts of the city without prior permission from the authorities.
- Uber has stopped the operations; the drivers were required to register as private rental car enterprises.
- Over the half of the alternative finance platforms think the proposed regulations affecting their excessive and strict.

Italy:

- In 2015, UberPop was banned for unfair competition practices following a ruling by the court of Milan; Uber appealed the case.
- Italy has recently proposed a sharing-economy act, that requires all the platforms to sign up to a sharing-economy registry and provide documents for a competition authority approval.

Netherlands:

- The local Government has recently reviewed its regulations and support for the collaborative economy's growth.
- Food-sharing companies can operate in the Netherlands as it is the only member state of the Union to differentiate between commercial and not-commercial food activities.
- In 2014, UberPop was banned of drivers transporting people for payment without a license; despite of this fact, it kept operating.

Poland:

- Collaborative economy businesses active in Poland are creating an association for the sector.
- Some crowfunding platforms point out at the need to regulate their business.

Spain:

- P2P transportation platforms have been subject to regulatory pressure from the local authorities.
- P2P rental platforms are being regulated at a regional level.
- Alternative finance platforms are highly regulated.
- This year, the local regulator, the CNMC, published preliminary results from a study on the collaborative economy that will recommend lifting all unjustified barriers limiting the development of the collaborative economy.

Sweden:

- The regulatory environment is generally viewed as positive, and has stimulated the creation of the local firms.
- The local sole-trader status has proven to be a productive way for free-lancers to initiate their businesses with a little amount paperwork.
- The ride-sharing sector has faced some cases of resistance to the collaborative economy businesses.

United Kingdom:

- After the introduction of the P2P lending firms and of the crowfunding regulations, the 91% of the local alternative finance platforms regard the existing regulation as adequate and appropriate.
- In 2015, the Deregulation Act relaxed planning permission rules in London for short-term lets.
- The local sharing-economy platforms, in 2015, established a new industry association, the SEUK, the aims to promote and represent the sharing-economy businesses and facilitate the trust between the promoters and the consumers.

CONCLUSIONS:

So, as we noticed earlier, we realized that the sharing-economy facilitates the transactions through an online platform, thanks to these important points:

- P2P accommodation; in fact the households get and share the access to unused space in their home or rent out a holiday house to the travellers.
- P2P transportation; when there are some people who share a ride car or a parking place.
- On-demand household services; when the self-work places enable the businesses to access on-demand support with skills such as administration, consultancy and accountancy.
- Collaborative finance; when there are some individuals or businesses who invest, lend and borrow directly between all of them, like the crowd-funding and P2P lending firms.

By these points, the sharing-economy generated an income of €4 billion and facilitated €28 billion of transactions within Europe, all this only the last year. Comparing the data of the last three years, we understand at last that both the revenue growth and the transactions' one have doubled, against every prediction made before.

With the scenery of this new economical system, in Europe, we estimated that at least 275 sharing-economy platforms have been founded this year; we add the fact there is an increasing level of participation across the consumers of every member state of the European Union.

What we are seeing in this moment, especially this year, is that there is a real and strict policy/regulatory landscape which is affecting the collaborative economy across the European countries, and that there are some differences opened up in the complex system, spread around the countries practicing the sharing-based model. This "network", by time, is destined to be enforced, to make this policy even stronger.

On a personal consideration that everyone could make, it seems like the sharing-economy has become a socio-economic trend that is, step by step, but deeply changing our own lifestyle. The self-working platforms are just the beginning, because of the fact the sharing of food, or whatever other good/service is enough to change our point of view, our way to connect and communicate to each other; the states of the European Union are becoming a model needs to be followed by the whole world, from the consideration that, not only there will be a chance of improvement in the world economy, but there will also be a right way to make the policy of every country of ours better, make them grow wider and faster, make them more open to each other.

The development of a policy, regulatory and legislative environment should not mean only a forward step for the sharing-economy, but also a hope, rising in the imagination of all the consumers, to be fully satisfied for every requested need, because the priorities may be respected; of course there is even the possibility this framework will take a bit more time than hoped to be spread out and to understand the national regulatory systems, before to measure and monitor the impact of the approach, in every country; but mostly important, there will be need of a strict intervention and sense of collaboration among all the makers and the users of all the sharing-economy platforms, at a global level.

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