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Uber: Between disruptive innovation and regulation challenges

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CHAPTER 1: INTRODUCTION

Over the last few years, there has been a buzz around the words "sharing economy" and "crowdsourcing" and it was followed by a discussion regarding if this phenomenon will positively or negatively impact the future of work and more in general of the sectors where it's spreading.

In this dissertation, I am going to analyze first of all what is the meaning of these new terms, in particuar the application of the word sharing economy in the transportation sector and I will analyze in deep what is the meaning of a new emerging way of doing business: crowdsourcing and its application on mobile devices which has became very popular thanks to technology improvements, spread of Internet and use of GPS systems. In recent years, advances in information and communication technology helped these apps to grow fastly and have enabled them to provide a wide variety of real-time and on demand services.

I will focus my study on the most popular and controversial company which handles with transportation service, and in particular with technology: Uber.

This recently created service has emerged offering a smartphone application that links riders with a community of self-employed drivers. Passengers request a ride from a privately owned vehicle driven by a non professional driver through the mobile application, which then communicates the passenger's location to drivers via GPS. This app is very easy to use, it charges the rider directly on the registered credit card and approximately 80% of the fare amount goes to the driver, with the remaining 20% to the ridesourcing service. I will go through the history of the company, founded by two young and talented entrepreneurs called Travis Kalanick and Garrett

Camp. We will see how they raised a huge amount of money from the biggest capital ventures in few years, which strategy they adopted during the first months and later, and we will see how effectively their app works and why it is so innovative. We will consider the rider and the driver aspects, we will analyze what kind of relation they have with Uber and we will have a better undertsanding about the technology behind this incredible service and its international expansion, Uber is now available in 60 countries spread around the world, from USA to Europe, China, Australia, India and Africa.

In the recent months this service has grown rapidly in terms of customers, drivers, and geographic areas served so I think it is important to get a deeper undertanding of its implications in the world economy.

The biggest part of the dissertation will focus on the regulations and policies problems that Uber had to face in every country it started its business. Of course I took only few cities as example, I choose San Francisco, Washington DC, London, Delhi and Europe in general because everyone of them offers a different example regarding the issue faced by Uber management.

Why Uber faces difficulties in most countries it operates and why it has been often banned?

Its service, like the service offered by Lyft car or Hailo for example, appears similar to taxis, and it has caused a great policy confusion and tension among incumbent firms regarding the "fairness" in regulatory treatment between taxis and these new ridesourcing companies. Proponents of these services though, claim that they differ from taxis because they are linking passengers to drivers, so their core business model is completely different. Much debate has gone into defining these services and a lot is still on. At this time, there is no consensus on terminology. Other names include: "Transportation Network Companies (TNCs)," "real-time ridesharing"," "ondemand rides" and "app-based rides." Uber often tends to precise that it is

not a cab service, it merely "links riders wih drivers" that's why it changed its name from UberCab in Uber as soon as problems started.

These services have directly challenged existing regulations and practices that have been existing for years. In the last years governments asked themselves questions about appropriate regulatory and public policy responses; much of the existing regulation was written in the past when smartphone, GPS and Internet did not even exist. Supporters view Uber and its similar service providers as a new competitor in the transportation sector, as an additional option that serves previously unmet demand for fast, flexible, and convenient cabs in urban areas and they can be seen as a way to reduce auto use, ownership, and environmental problems. (Some studies show real figures about the reduced number of cars on the roads)

On the other side, taxicabs are clearly against such service since they saw a loss of profit and they sustain that ridesourcing services are not respecting existing regulations, they would like to see Uber following the regulations that they have to follow because at this moment Uber is considered to be an unfair competitor: operating with less obligations and costs but earning revenues. Incumbents think that Uber is in competition also with public transport, it increases congestion at peak times, it follows an unclear pricing practice and it put riders at risk since drivers are not well checked and trained as it happens for taxidrivers.

At the end of the dissertation I would like the reader to have a better understanding about this innovative, disputable and breakthrough service but most important, I would like to be able to give some answers about this open debate on regulation. I can't know how the future for Uber will be, we will see that the company is trying to follow some alternative paths, not focused only on the transportation but exploiting Big Data, deliveries and logistics. Uber...hate it or love it!

CHAPTER 2:

MOBILE CROWDSOURCING PHENOMENON

Crowdsourcing, according to the definition¹, "is the process of getting work or funding and in that case it is called crowdfunding, usually online, from a crowd of people". The word, as one can easily guess, is a combination of the words 'crowd' and 'outsourcing' and the principle behind is to share work, ideas or opportunities from a crowd of workers, instead of focusing only on the interanl resources of a firm.

The term was coined in 2005 by two editors Jeff Howe and Mark Robinson, working at Wired Magazine², to define the new Internet-based business model through which services, ideas, or content are exchanged and contributions are given from a group of people, usually an online community (in this case the "crowd") rather than from traditional employers. During the last years companies have been looking overseas, to the far East (China, India) in order to find cheap labour, the phenomenon was called outsourcing but now, thanks to Internet and IT, it doesn't matter where the labourers are, the only important thing is that they are connected to the network.

Technological advances are helping to break down the cost barriers that in the past separated freelancers from professionals. ³Nowadays thousands of amateurs can deal directly with companies requests to boost their efforts and talents and these new emerging companies help creating a match

Davis Bratvold, "What is crowdsourcing", Daily Crowdsource, April 2014, available at http://dailycrowdsource.com/training/crowdsourcing/what-is-crowdsourcing. Assessed May 20, 2015.

² J. Howe, "The Rise of Crowdsourcing", Wired, June 2006, Issue 14.06, 1-4

³ E. Bons, M. Daams et al, "Open innovation: the benefits of crowdsourcing", Tilburg University,

between a person owning a certain resource, which can be a good, a service, an ability to perform a certain job, and a company needing that resource, at the right time and cost. Especially when companies have to deal with irregular demand or a large number of tasks to be performed in a short period of time, the crowd is always a good alternative since it makes a large number of workers available on demand without creating any overhead costs because these thousands of workers are payed and work on a flexible basis. Usually the crowd is best used for tasks that are easily divided into individual work parcels and then reassembled to the overall result and these tasks must not require any profound knowledge of your own product or company. This is essential to ensure that a project is implemented on time, and with satisfactory results.

Crowdsourcing can be used in many different fields, in open innovation for example, it brings together people from all over the world and from different sectors of business such as designers, inventors, and marketers to collaborate into a unique project, in this case everyone gives his contribution. ⁴Microtasking is another branch of crowdsourcing, it involves dividing work into tiny tasks and sending the work to a crowd of people so that the job can be done in a cheapest, fastest and more accurate way because every freelance focuses on its own part of the whole project. Crowdsourcing is widely used for problem solving or to generate new ideas in the design and marketing sectors, like in the case of 99design or Crowdspring. Crowdsourcing has nowadays became an everyday activity, rather than just something for the cutting edge or early adopters, it is not a niche industry anymore, it's becoming a common tactic for small businesses and larger brands as well which are starting to integrate crowdsourcing

⁴ D.C. Brabham, "Crowdsourcing as a model for problem solving", Convergence: The International Journal of Research into New Media Technologies, London 2008

platforms into daily business.

In the era of mobile devices like tablets and smartphones a new niche of crowdsourcing phenomenon had the possibility to spread around the world easily and rapidly, I am talking about the phenomenon called Mobile crowdsourcing. Uber app is one of the most popular crowdsourcing platform of these days, together with TaskRabbit (a mobile platform where users give names and prices to a task that needs to be done, and a network of contractors compete to complete it, this app allows users to outsource small jobs and tasks to others).

In details, according to the definition, it belongs to the branch called "Mobile crowdsourcing" which describes crowdsourcing as 5 < activities that are processed on smartphones or other mobile devices>>. Even if crowdsourcing has still not fully penetrated the mobile sector, the trend shows that mobile crowdsourcing will increase year by year, due to the smartphones' usage unique characteristics and features and because they are widespread, they became an everyday use tool and allow people to be always connected. The spread of mobile crowdsourcing has been possible thanks to the growing presence of smart phones and the ease with which apps can be created, downloaded and used by consumers, in this way mobile is a useful platform for crowdsourcing and projects can gain greater reach and accessibility. On January 2007, when Steve Jobs said 7 "Today Apple

⁵ N.A.,"Mobile Crowdsourcing", Clickworker, 2015, available at http://www.clickworker.com/en/crowdsourcing-glossar/mobile-crowdsourcing/. Assessed May 13, 2015

⁶ Owen Andrew, "The importance of mobile crowdsourcing in 2015", Huffington Post, 30th January 2015, available at http://www.huffingtonpost.com/fueled/the-importance-of-mobile_b_6582388.html Assessed May 20, 2015.

⁷ N.A., "Apple Reinvents the Phone with iPhone", Apple press, 2007, available at http://www.apple.com/pr/library/2007/01/09Apple-Reinvents-the-Phone-with-iPhone.html. Assessed May 16, 2015.

is going to reinvent the phone", during the launch ceremony of the first smart-phone, he would not know that less than 10 years later people would be carrying smartphones everywhere in every moment of their lives. Some of the most successful crowdsourcing apps are related to travel and transportation. Mobile crowdsourcing is mostly used for situations of "emergency", which require a 360° connection and a quick action with less thinking. Traditional crowdsourcing is used for example for translations, description of objects, design, global problem solving and so on. Mobile crowdsourcing apps thanks to the GPS system integrated on smartphones offers a realtime answer that's why they are used for transportation for example.

In general these APPs offer an easy to use platform in which users share their own info like GPS position (Uber), and even their homes address and pictures via social media networks (Airbnb).

Thanks to the improved, technological smartphone features, including reliable GPS, very good cameras, and continuously new apps, mobile phone users can always be updated and can work on crowdsourcing tasks without difficulties.

The idea behind crowdsourcing mobile platform like Uber, SideCar and Lyft is the peer-to-peer rides for urban transportation, in our case.

Before going on with this discussion I have to make the reader aware that there are 2 models of sharing economy:⁸ the first one is the B2C or Business to Consumer like ZipCar where we have a company with a fleet of cars that are rented to drivers, the second model is the P2P or peer to peer a marketplace that allows individuals to rent their private owned cars to other

⁸ C.Bisio, D.Frigerio, "Business to consumer a misura di cliente. Una visione dell'e-commerce focalizzata sulle esigenze dei consumatori", Franco Angeli, Milan, 2004, Pages 18-27

drivers and we will focus on this second model called also "ride sharing."

To be clear, the services that these companies offer is far from carpooling or carsharing, which by the way are legal and promoted because they are a way to cut down car ownership figures, reduce greenhouse gases and pollution. These start-ups are saving drivers money especially when people need occasionally a car, according to ZipCar UK ⁹a driver can save up to £3000 per year. However the "ride share" companies that I will treat, usually operate more like unlicensed taxi or limo services on demand than as a way to connect two riders who share a common destination and want to split the travel expenses, they instead connect drivers with riders.

In markets like San Francisco and other big cities around the world, they've become a welcome alternative to the existing taxi supply which, in most of the cases, is unable to face the demand. In all the cities where Uber is present competition became tough and it means that now there are more options for inhabitants, more drivers and more alternatives when trying to go around.

One of the key determinant in the adoption and in the consequent success rate of these kind of business models is related to the culture of local markets. Culture plays a crucial role indeed; USA for example has always had a national culture that is more receptive to these kinds of platforms and it's not a surprise that USA shows a higher rate of adoption compared to Europe where these companies still struggling. American customers have a more positive disposition towards online activities, Americans are less risk-averse than European counterparts and it is not a case that all these companies were born there, in detail in the San Francisco area. In Europe, customers are

⁹ J. Whittle, "Consumers drive down costs by car sharing", Zipcar Press Release, March 2012 http://www.zipcar.com/press/releases/cost-savings-data-released

more uncomfortable with contracting with strangers through the internet and to conduct business with them and it is just a matter of culture. We can see it in our culture as well, all around the world people buy goods on Internet, especially fashion, here in Italy it is not so common, but I have to admit that the new generations are starting to be more familiar with such way of purchasing goods. To overcome this low attitude towards online services, the European Union could improve trust in online activities with a detailed framework where ID check, rating systems and customer protection are improved. This could be a solution to make these business prosper, like it's happening all over the world.

2.1 THE SHARING ECONOMY

The term sharing economy appeared in the mid-2000s when this new kind of businesses began to prospere due to financial crisis and enabling social technologies. Call it "collaborative economy", "on-demand economy", platform economy", "collaborative consumption", "Uber economy" but the meaning is always the same. Among all the definitions of sharing economy that I found during my research I decided to cite Alex Stephany's definition, ¹⁰he defines the term in his interesting book "The Business of sharing: making it in the new sharing economy" as "the value in taking underutilized assets and making them accessible online to a community, leading to a reduced need for ownership of those assets". If we deeply analyze this definition we find out that there are some remarkable characteristics to define this kind of economy.

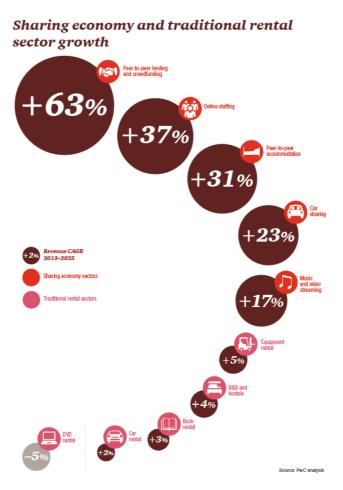
The first one ¹¹ is that the sharing economy is a VALUE CREATOR, such platform creates reciprocal economic values for users. Let's take as example Airb&b (an online platform through which peers can list, find and book accommodation). There are several advantages for the house owner who can get additional money by renting his house or part of it in selected period of the year and for the host who can save money and make a "different experience" staying in someone else house, meeting new people etc. Economically speaking, today we estimate that the five main sharing economy sectors which are, according to an analysis of Pwc, peer-to-peer

¹⁰ A.Stephany, (2015), "The business of sharing:Making it in the new sharing economy", PalgraveMacMillan, London, Page 9

¹¹ A.Stephany, (2015), "The business of sharing:Making it in the new sharing economy", PalgraveMacMillan, London, Pages 9-12

finance, online staffing, peer-to-peer accommodation, car sharing and music and video streaming, generate \$15bn in global revenues. However, according to a survey made by PWC, by 2025,¹² "these same five sharing economy sectors could generate a potential revenue opportunity worth \$335bn". Over that period, sharing economy sectors are likely to grow much quicker than the rate of traditional rental sectors.





¹² N.A.,"The sharing economy – sizing the revenue opportunity", PWC, 2015, available at http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/the-sharing-economy-sizing-the-revenue-opportunity.html Assessed June 3, 2015.

¹³ Fig.1: Sharing economy and traditional rental sectors growth, PWC, 2015 (Web)

The second thing to underline in the definition given by Alex Stephany is that sharing economy exploit "UNDERUTILIZED ASSETS" and it does it especially in periods of the year when extra value could be extracted from them. Unused value called also slack resource, is the time during which products, services and talents are not used at all and this time, before the sharing economy, was wasted, the classic example is that the average car is unused for 92% of the time; shared economy can turn an asset downtime that is often a cause of expenses, into revenue, citing again Airb&b house and flats can be shared in periods of the years when they would have been empty.

Third, the sharing economy requires that these assets are ¹⁴ACCESSIBLE which in other terms means to put them online, to list them in the online platform so that other users can see them and gain value from their use.

Another important characteristic is the presence of a COMMUNITY, value would not be created if a real community of people does not exists. Putting the goods accessible is not enough, in successful sharing economy businesses the existence of a community makes the difference between a sharing platform or a mere rental business. The community in these cases helps the business to take off and keeps it alive later on.

The fifth and the most important thing to underline is the reduced need for OWNERSHIP, because if people can access assets within a community, even without owning goods, there will be a reduced need to own those assets. It seems a paradox but shared economy can help people to have a better and richer life because we can have what we want in the right moment, and then, when we don't need it anymore we don't have to spend money in maintenance. Consider for example Zipcar and the Carplus Annual

¹⁴ A.Stephany, (2015), "The business of sharing:Making it in the new sharing economy", PalgraveMacMillan, London, Pages 9-12

Survey made by Car Clubs London¹⁵ that estimates that each shared car in London prevents the purchase of 17 other cars with positive impact on environment, traffic, congestion and so on.

2.1.1 SHARING ECONOMY EMPOWERED DURING CRISIS PERIODS and THANKS TO INFORMATION TECHNOLOGY

There are several macro-economic factors¹⁶ driving the growth of the sharing economy. One such factor is the fact from 2008-2009 we saw a deep increasing in unemployment rates due to the global financial crisis, and the purchasing power of consumers has dropped. Therefore people started to look for other additional ways to earn or save money and in some cases they became real micro-entrepreneurs, as it's happening for businesses like Airb&b or Uber where people can add money to their monthly income or make some money if they do not have a job.

Furthermore, in recent years the required technology for hosting an online peer-to-peer market, such as Internet, PC or Smartphones has become spreadly available at a reasonable cost. As a result, the potential of the sharing economy is significant, as its annual growth is exceeding 25%... As a result of the improvement in technology and the economic crisis, consumers have become more receptive to peer-to-peer business models which are centred on consumer needs, both as a supplier and buyer. Indeed all these platform have been created and later, had succeeded in a period

¹⁵ Steer Davies Gleave, Carplus, 2014 (Web), available at http://www.carplus.org.uk/wp-content/uploads/2014/04/London-report_Final-with-cover_2.pdf. Assessed on 18th July 2015

¹⁶ A.Stephany, (2015), "The business of sharing....cit Pages 24-33

where people are in a shortage of money. After the Great Recession sharing or renting emerged as new social culture phenomenon against overconsumption and over-ownership¹⁷. If we have a look to the data, it is not a case that most of the currently successful apps were launched around 2008/2009, like Uber. Rather than owning a specific object, people focus on practices such as sharing and Airbnb and Uber apps provide the necessary freedom for these more sustainable practices. Occasional renting, made possible with these new businesses, is cheaper than buying something or renting from a traditional provider such as a hotel or a traditional car rental firm. Sharing can be seen as a remedy to overconsumption and in the same time it has also environmental benefits because it uses resources in a more efficient way.

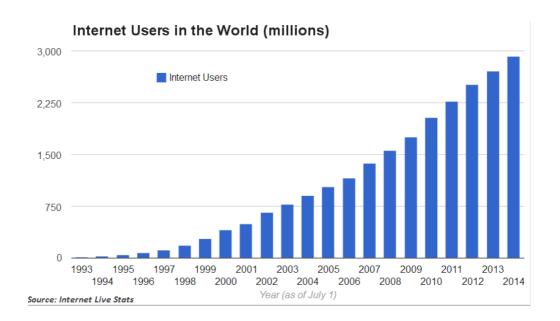
A second driver that helped to strengthen sharing economy is for sure the advance in mobile technology ¹⁸that occurred in the last decades. I already spoke about mobile crowdsourcing phenomenon. The increasing penetration of Internet and mobiles, has opened the doors for people to share goods and make money with little effort giving them the possibility to address to a waste number of consumers. Without such technology sharing economy would have struggled and would not have reached these results. Thanks to this technology sharing goods, services and information became more efficient, faster and effective due to reduced transaction costs. Indeed, the Sharing Economy is believed to be not only an economic phenomenon, but a "social revolution" as well because, it leads to the transfer of power from a few large incumbent firms to a multitude of loosely coupled actors who will be the new entrepreneurs of the future. As you can see from the

¹⁷ A.Stephany, (2015), "The business of sharing....cit Page 11

¹⁸ Cor Molenaar, (2015), "Why customers would rather have a smartphone than a car", Ashgate Publishing, Surrey, Pages 15-25

following image, Internet penetration raised considerably, from 16 million people in 1995 to 3 billion in 2014.

Fig 2: INTERNET USERS IN THE WORLD¹⁹



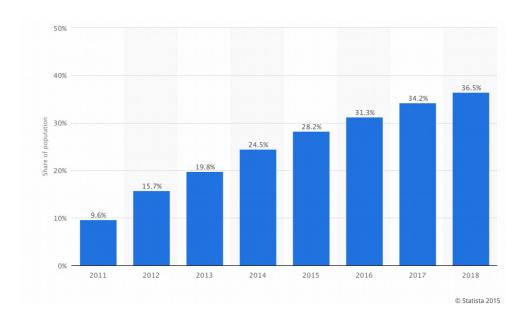
To make the reader have a better idea about the size of technology I found this other image on the Web²⁰, about the global smartphone penetration per capita from 2011 to 2018. As you can see from the chart, by 2017 more than 33% of population is expected to own a smartphone while in 2011 this percentage was only 9,6%. According to this forecast from Statista 2015, western Europe will be the largest regional market with a 65% of people owning a mobile, followed by USA with a 64%. Almost 1

¹⁹ Fig2: Internet users in the world, Internetlivestats, 2015, available at http://www.internetlivestats.com/internet-users/

²⁰ N.A. "Smartphone user penetration as percentage of total global population from 2011 to 2018*", Statista, 2015 available at http://www.statista.com/statistics/203734/global-smartphone-penetration-per-capita-since-2005/. Assessed on 8th July 2015

billion smartphones were sold in 2013 and, the last year this number was 1,3 billion, the growth is surprising. So as the number of smartphones increases, it is obvious that the sharing economy will have more power to spread. More and more users can be reached and a big community can be created with almost zero costs and little amount of time. These platforms can connect individuals locally, on a face-to-face basis, but the new path will be being global, that means connecting people from all over the world digitally and it will be possible only through new technology like smartphones and tablets.

Fig.3: Smartphone user penetration as percentage of total global population from 2011 to 2018^{*21}



²¹ Fig.3: Smartphone user penetration as percentage of total global population from 2011 to 2018* http://www.statista.com/statistics/203734/global-smartphone-penetration-per-capita-since-2005/

CHAPTER 3: UBER APP

3.1 CREATION

Uber is an American transportation start-up company founded in San Francisco, California in 2009 by Travis Kalanick and Garrett Camp who created an extremely innovative app for cab service putting together the technology coming from everyday use of smartphones, cashless payments, better and cleaner cars, no tips and mandatory driver ratings. This service is now available in 70 countries around the world but let's start to see its creation 6 years ago.

Travis Kalanick is an American entrepreneur who founded in 2001 Red Swoosh, a peer-to-peer content delivery company that develops technology for supporting, managing and distributing media files between servers and end-users desktops; this is a software that makes more efficient the way content such as documents, music, videos is moved around on the Internet.

On the other hand, Garrett Camp is a Canadian entrepreneur who founded in 2002 one of the TIME's 50 Best Websites²²: a website recommendation service called StumbleUpon, this system produces a list of recommendations or suggestions for the consumer through content-based filtering, it builds a model according to the user's past behaviours and tastes, for example items previously purchased or merely selected as well as previous researches and according to these past choices and preferences the model can predict items that the user may be interested in, it works pretty much like Amazon, when according to your previous researches, the website suggests you books that you might be interested in.

²² Maryanne Murray Buechner , TIME, 8th July 2007 available at http://content.time.com/time/specials/2007/article/0,28804,1633488_1633594_163359 8,00.html, Assessed July 5, 2015

Coming back Uber, the idea came in 2008, when Kalanick and Camp were trying to get a cab to attend a conference in Paris, "LeWeb techology conference" and they could not get any. ²³The problem of taxi shortage is common in the majority of big cities, in New York and San Francisco as well, so they decided to start their new business there because of the presence of a well established tech community always at the research of something new to improve life quality and because we know that American are more open to these innovations as we saw in the previous chapter.

Like every start-up's early stages, Kalanick and Camp realized they needed a general manager to keep them on track. In order to find the right person for this important task, Kalanick used Twitter looking for their next GM; which explains the agile state of this successful brand. The person who answered this tweet was Ryan Graves a normal guy who worked as database administrator at General Electric and in the business development at Foursquare, he simply replied "hire me:)"²⁴ to this tweet about a job with an unknown start-up that promised "BIG equity". So everything started from the Internet and social media, and the company is still using such ways to grow and to be recognized worldwide.

The company was founded first as "UberCab" and it is not a traditional cab or car service as one might think, instead it is a firm that exploit new technology to match drivers of vehicles with passengers.

By the beginning of 2010 they created a prototype app with the same name, the first city launch was in San Francisco in March 2010, the hometown of

²³ Edmund Ingham "S,tart-ups Take Note: Uber Made It Big, But Did They Get It Right?", Forbes, 05 December 2014 available at http://www.forbes.com/sites/edmundingham/2014/12/05/start-ups-take-note-uber-made-it-big-but-they-get-it-right/. Assessed July 10, 2015did-they-get-it-right/

²⁴ Maya Kosoff,"How a tweet turned Uber's first hire into a billionaire", Business Insider, 3rd March 2015 available at http://uk.businessinsider.com/how-a-tweet-turned-ryan-graves-into-a-billionaire-2015-3?r=US&IR=T, Assessed May 7,2015

the company and the town where getting a cab was more difficult than in any other cities around the States, it was actually a nightmare as citizens used to say. At the end of October 2010 the company faced the first (of many) legal issue, the San Francisco Metro Transit Authority & the Public Utilities Commission of California ordered the start-up to cease and desist, so the company in that occasion changed its name from UberCab to simply Uber to underline the fact that it is not a traditional cab company but a platform to connect riders and drivers, in that case it does not violate any regulation concerning cabs, since it has nothing to do with cab services. On Uber website, under the new section you can read 25 that UberCab is a cutting edge technology, first to market, and regulatory bodies have to understand that the existing regulations have been written in an historical period where the innovation that we know did not exist. Therefore Uber is happy to help to educate the regulatory bodies and work with them towards the creation of new principles and to ensure that Uber will be available all over the world.

After San Francisco, in May 2011, Uber's founders did the first so called soft test in New York with three cars around the SOHO, Chelsea and Union Square Areas and few people started to use the system, it was still a testing programme. New York City could work very well as an engine to build a national brand, and it was important to do it before competitors. Newyorkers are known to be demanding, they know what they want and they value their time as they are always in rush. New York was the perfect combination of people who go fast and appreciate innovation to make their lives easier. Uber's system does all of these things, is fast, reliable and innovative. Kalanick said that 'New Yorkers demanded Uber²⁶'. Before coming

²⁵ Ryan Graves, "Uber has been served", Uber(Web), available ar

http://newsroom.uber.com/2010/10/uber-has-been-served/. Assessed June 2,2015

²⁶ N.A., "Uber loves NY", Uber(Web) available at http://newsroom.uber.com/2011/05/uber-

to the Big Apple, 1,000 New Yorkers had registered their credit cards on Uber's site for a service that didn't yet exist for them.

At the beginning few early adopters were using the on-demand taxi service but in a few weeks, thanks to the word of mouth communication and "hundreds of friends"²⁷ as Kalanick said, the success of the app was shocking. In less than 1 year the service was present in 6 major American cities: San Francisco, New York, Boston, Chicago, Seattle and Washington.

In January 2011, just 1 year after its first launch, Uber had between 3,000 and 6,000 users and had already done between 10,000 and 20,000 rides.

3.2: INVESTMENTS AND COMPANY FOUNDING

The company's initial seeding amounts to \$200'000 from its founders Kalanick and Camp, since 2010 the two started a race for raising capital to expand the company. They received venture funding amounting to \$1.3 million in late 2010 from First Round Capital a venture capital company with a considerable portfolio of companies, and a group of investors in Silicon Valley including the venture investor Chris Sacca who is popular in the sector for its early bets, on Twitter and Uber for example.

In early 2011, ²⁸Uber raised more than US\$11.5 million, it received the capital from Benchmark Capital, another American venture capital firm

nyc-launches-service/. Assessed June 5, 2015

²⁷ Morgan Brown, "Uber — What's Fueling Uber's Growth Engine?", Growth Hackers, 23rd October 2013, available at https://growthhackers.com/growth-studies/uber. Assessed July,27

²⁸ Michael Arrington, "Huge Vote Of Confidence: Uber Raises \$11 Million From Benchmark Capital", TechCrunch, 14th February 2011, available at http://techcrunch.com/2011/02/14/huge-vote-of-confidence-uber-raises-11-million-from-benchmark-capital/. Assessed on the 25th July 2015

responsible for the early stage funding of some other successful startups that we know very well including the social networks Twitter, Instagram and Snapchat.

In late 2011²⁹, Uber raised an additional \$37 million in funding from several investors, including the popular Goldman Sachs so at the end of that year its total funding amounted to \$49.5 million.

Google Ventures, the Google section dedicated to investments, invested \$258 million in 2013, it amounts to morelsess the 85% of Google total yearly amount of capital to be invested. For Uber, Google is the best partner to be in business with since it can provide huge amount of money and resources and because of its house-by-house maps of the entire planet. In addition the two CEOs said they will be working together on a project for develping self-driving cars.

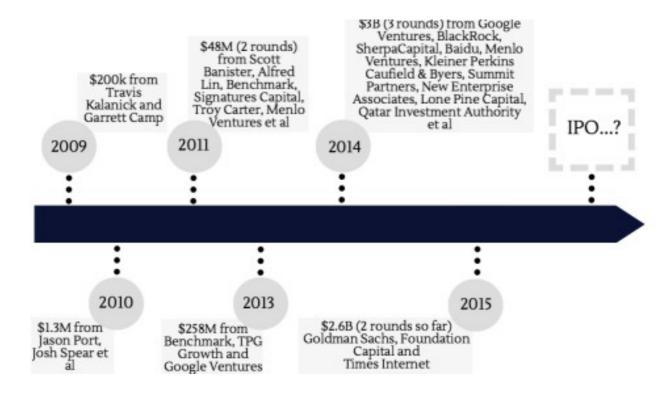
Year 2014 was a lucky one in term of capital raising, the company totalised 3 billion in 3 rounds. Remarkable is the one which came at the end of 2014 from the rich Middle East, Uber has raised US\$1.2 billion from a number of investors, including the Middle East Sovereign Wealth Fund Qatar Investment Authority. These investments are of particular importance as the start-up seeks to build ties with powerful allies who can help ease its expansion into new geographic regions.

The successful investors, the names of which Uber did not disclose and which remains an elitè of shareholders, participated in a competitive bidding process that lasted weeks; their investments drove the valuation of the ridesharing company up to more than \$41 billion.

²⁹ N.A., "Uber Fundung Rounds", Crunchbase, September 2015, available ar https://www.crunchbase.com/organization/uber/funding-rounds. Assessed n the 30th September 2015.

Series E of investments will now allow for \$2.8 billion in venture financing; in January 2015 the company raised \$1.6 billion in convertible debt from Goldman Sachs's private wealth clients and the following month it raised 1 billion from Foundation Capital. In the following graph all these funding rounds are summarized per year and with the name of investors.

Fig.4: Uber funding rounds³⁰

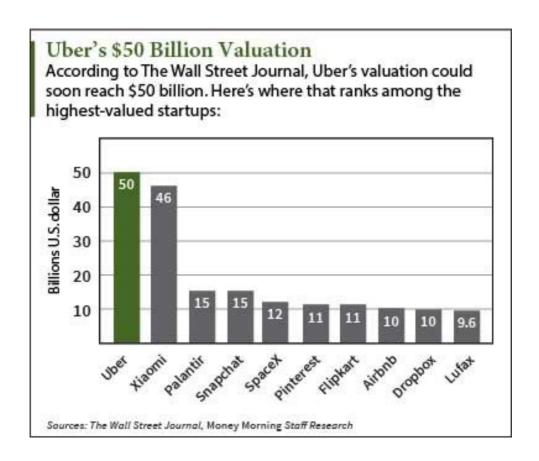


In September 2015, Uber received \$1.2 billion in new funding, from Baidu, a Chinese website and search engine, this will hepl the American company to boost its growth in the Chinese market. Thanks to all these investments, Uber is valued more than \$50 billion, nowadays it is the world's most

³⁰ Fig.4: Uber funding rounds available ar http://themarketmogul.com/uber-10-rounds-funding-later/

valuable start-up, with this new wave of investments it is worth more than companies like FedEx, with a market value of \$48 billion, and Nissan Motor, with a capitalization of \$47 billion.

Fig.5: Uber's \$50 Billion valuation³¹



How will the company use all this money? In recent months, Uber has encouraged its investment in developing new technologies, it started a partnership with Carnegie Mellon University to build robotic cars and a new

³¹ Kyle Anderson, "Uber IPO Update: What a \$50 Billion Valuation Means for Uber", Money Morning, 12th May 2015, available at http://moneymorning.com/2014/06/09/uber-ipo-where-its-18-2-billion-valuation-ranks-among-startups/. Assessed^h June 25, 2015.

mapping software. Moreover, we have to remember that the company is already in a partnership with Google for the development of self-driving cars. In March 2015, Uber announced its purchase of a startup called deCarta, its first publicly disclosed acquisition. Infact Uber acquired a small number of other startups, but all of those deals still top secret. DeCarta was Founded in 1996 and since the beginning it has been building a mapping platform. The aim of the acquisition is to improve the existing products and services that Uber offers and which rely on maps.

In conclusion as you can see from the figures its growth has been a totally unexpected success, the fact that Uber has raised money so relentlessly in 6 years from the major venture capitalist of USA and not only, explains the power of simply reinventing an already existing industry, with a stagnant and underdeveloped technology, like the cab industry. Uber is just doing business in a totally new way, exploiting new technologies and resources and expert venture capitalists with an eye for business understood it from the very beginning.

3.3: EARLY BUSINESS STRATEGY

Let's see now how Uber was successful, where is the secret of its quick diffusion? Which kind of strategy did Uber use to be recognized among thousand of people?³²

From the beginning Uber used a noisy entry strategy after a period of testing and soft marketing in every single city, it used intense market focus to create local network effects and kind of buzz. In their launch city, San Francisco, they started fueling word of mouth communication through targeting the early adopters, well established, tech community of the Bay Area.

As I said before, Uber focused on the tech community of San Francisco to begin its business: Uber initial target were early adopters and it reached them through event sponsorship. Uber started to be highly active at local-area tech and venture capital events and provided free rides to attendees in order to expand its network of users and to start to be known. Uber knew that these attendees were well connected among each other and highly likely to share their experiences with friends, tech press and social media blogs after trying Uber, it was the best way to create brand awareness.

They were able to create a growth engine based on the fact that these early adopters would show their friends the new service that let you call a cab simply tapping your smartphone, these friends would become new users after their first "WOW" experience and this process would lead to a growing network of passionate customers, without big efforts or money.

San Francisco, as the other major American cities, did not provide an

³² Martin Bryant, "Hitting the ground: What it takes to launch Uber, Hailo and Citymapper in a new city", TNW News(Web), available at http://thenextweb.com/entrepreneur/2014/07/28/hitting-ground-takes-launch-uber-hailo-citymapper-new-city/. Assessed on 19th June 2015.

excellent cab service so it was the perfect place for the launch. Early adopters started to try Uber, as they were fed up with the taxi situation in the city, they started to speak about this app on blogs and social media and used every other way possible to tell their friends about this new way to ride. So for Uber the service was so good that there was no need to make huge investments on marketing and advertisements, it was promoted just by user's word of mouth and it is what happened to me as well, I was told about Uber by a colleague.

Much of Uber's success can be attributed, as mentioned above, to the fact that it is completely innovative if compared to the problematic existing taxi service. According to Kalanick, Uber relies almost exclusively on word of mouth, indeed he said³³ in a interview that Uber's fuel is the typical old school word of mouth, diffused in the office's water cooler or at a party with friends. Indeed he said that a survey showed that 95% of Uber's users heard about it by other people, and it was what happened to me as well. Word of mouth communication is really important in nowadays world since information can be spread in a faster way even through the media communication such as blogs and social networks, it is called "viral marketing" or marketing buzz and refers, according to the definition to marketing practices that, in order to increase brand, product or service awareness exploit new technologies. It can both be delivered by word of mouth or by the network effects of the Internet and social networks and it is costless for companies.

Another strong point about Uber strategy is the fact that in the taxi

³³ Morgan Brown, "Uber — What's Fueling Uber's Growth Engine?", Growth Hackers, 23rd October 2013, availble at https://growthhackers.com/growth-studies/uber. Assessed on July 14,2015

industry there was a technological discontinuity, the company recognized the growing frustration that many customers had with the cab industry. Before "Uber era"³⁴ when you needed to get somewhere, calling a cab was a nightmare. You had to stand outside under every kind of weather condition such as wind, rain, sleet, snow and wave your hand in the air hoping that a cab would have stopped to pick you up or you could call a taxi dispatch and wait 20 minutes until a car arrived. At the destination you had to pay in cash or credit card, if you didn't have cash at your disposal, hoping that the card machine was working. Before starting the ride you never knew the right amount of money that your trip would have costed, it was pretty much a surprise and sometimes if you were not familiar with a city or a particular area, the driver could have taken the longer or busiest way to increase the due amount.

To sum up the taxi service was perceived as poor and low quality due to dirty, old and late cabs, rude drivers often unwilling to accept credit cards; an increasing number of consumers was unhappy with the situation and eager to find anything better, they were even willing to pay a superior price to have convenience, professionalism, and cleanliness and Uber tapped into that demand in the right timing and was able to find its niche in this high valuable market. It was willing to serve time-sensitive rather than price-sensitive consumer since the service is superior in quality, customer satisfaction and punctuality.

In addition Uber understood the technical incompetence, or cognitive gap, of incumbent firms. Nearly every person on this Earth has a smartphone nowadays, as we saw in the previous chapter regarding the sharing economy,

³⁴ N.A., "Uber Technologies Inc.: Managing Opportunities and Challenges", Daniel's Ethics-University of New Mexico, June 2015, available at http://danielsethics.mgt.unm.edu/pdf/uber.pdf. Assessed July 14, 2015

it is a primary object and Uber realized the growing potential of this market of consumers who use such devices.

Uber is easy to use because the app is connected with Google maps so that you can see on your screen, how far the nearest cars are, set a meeting point on the screen, and agree upon it. You can even see your driver's information (including ratings, names, picture) as you watch the car getting closer to your location.

The App technology is straightforward and there is a very small learning curve for early adopters to understand how to deal with it. Even if Uber started with a niche customer base of tech experts and upper class professionals sick of the existing taxi services, it has been able to grow its installed base 30-40% ³⁵per month because of its ease of use. As Uber releases its product in new cities, it has also taken a "noisy" marketing strategy ³⁶to get the brand recognized. What the company adopted is a tailored local effort for every city because what worked for San Francisco may not be appropriate for Chicago or New York, Uber founders understood that growth should be tailored well. There is need for differentiated strategy city by city according to the politics, regulations, and interests (nightlife, sport events, cultural events).

Kalanick is the face and main spokeperson of the company and is heavily involved in the launch parties which take place in every city; he organises and take part at every launch party³⁷ which is an occasion to

³⁵ Laurie Segall, "Uber CEO: 'Our growth is unprecedented", CNN, 12TH June 2014, available at http://money.cnn.com/2014/06/12/technology/innovation/uber-ceo-travis-kalanick/index.html. Assessed July, 8th 2015.

³⁶ Nicholas Johnson, (2015), "The Future of Marketing: Strategies from 15 Leading Brands on How Authenticity, Relevance, and Transparency Will Help You Survive the Age of the Customer", Pearson Education, New Jersey.

³⁷ N.A., "Launch party", Uber(Web), available at http://newsroom.uber.com/tag/launch-party/.

increase brand awareness since Uber supporters, friends and the city's Tech's brightest stars and experts are usually invited to celebrate the official new mission. Kalanick is a successful businessman who knows the value of early adoption and provides one free ride to individuals attending its launch party. In addition, Uber has received numerous celebrity endorsements, which will help to increase the fuss. The company successfully uses mass media including Twitter and Facebook to showcase its product. Kalanick has the habit to publicly fight the legal issues facing the company and uses each opportunity to make people speak about Uber, on Uber website news section you can find articles, links and company press releases regarding regulations issues and problems faced in the past and present by Uber.

Beyond the marketing strategies, Kalanick has beaten its own forecasts thanks to a very capable management team that values the importance of measuring as many inputs and outputs as possible to make better and smarter decisions. Uber management uses sophisticated technology and agorithms to measure service metrics related to all levels of customer service, such as speedness and product quality. Measurement really matters for Uber, its Math department has the duty to try to predict the demand ³⁸for drivers, match the supply with the demand, and then position the cars where the demand will be according to the information that comes at every second of the day. The main objective of the Math department is to minimize pick-up times and waiting times, maximize utilization and customer satisfaction.

Returning to management point, we have to say that the software layer

Assessed August 5, 2015.

J. P. Titlow, "Uber Can Now Predict Where You're Going Before You Get In The Car", FastColabs, 08 September 2014, available at http://www.fastcolabs.com/3035350/elasticity/uber-can-now-predict-where-youre-going-before-you-get-in-the-car. Assessed August 9, 2015.

between the company and its contractors eliminates a huge amount of middle management. This software layer has 2 parts,³⁹ Uber has a mobile app (UI) that talks to their servers (API). The actual driving is completely controlled by software, and it's not a secret that Uber in the future intends to replace all their drivers with self-driving cars, Uber indeed has been working for years with Google on this project. What's remarkable in Uber tehcnology is that the servers of the company directly control real humans, drivers in this case as the Uber API dispatches a human to drive from point A to point B. Once you introduce the software layer between "management" (Uber's full-time employees building the app and computer systems) and the human workers (Uber's drivers), there's a real possibility that these software layers will get thicker. As a natural result in the future engineers will be pushed to automate driver's jobs with for example self-driving cars and drone delivery causing a high unemployment rate. But this is another story.

³⁹ Ulysses X. Dryvver (2015), "Uber X, Uber alles", Amazon (Kindle Edition only)

3.4: INTERNATIONAL EXPANSION

Between 2009 and 2014 Uber implemented its technological innovation in USA and abroad. ⁴⁰North America has Uber service in 142 cities including for example Chicago, Detroit, Miami, New York, Toronto. Central and South American cities include Sao Paolo, Lima, Bogota, Rio de Janeiro, Santiago.

Uber is in Europe, Middle East and Africa as well in capital cities like Amsterdam, Dublin, Frankfurt, Doha, Milan, Rome, Prague, Paris, London, Oslo, Moscow. Asian expansion started recently in Bangkok, Jakarta, Bali, Mumbai, Singapore and Tokyo. But lets have a look to the expansion trend during the years.

The service, as I said before started in USA, with the launch of the service in San Franciso, after 18 months in the US market Paris was the first city outside of the U.S. where Uber's service began operating, in December 2011 prior to the international LeWeb Internet conference⁴¹. Uber launched its first french service with 60 cars at the beginning. According to Kalanick, about half of all of Uber's drivers are fully dedicated to using Uber as source of income, others will use the product to fill their dead time and gain extra money. The plans of the company for the following year 2012 were to lauch the service in 2 cities per month, and it actually happened: a total number of 25 cities in 13 months.

The company expanded to Canada 42in March 2012, where the

⁴⁰ Ulysses X. Dryvver (2015), "Uber X, Uber alles", Amazon (Kindle Edition only)

⁴¹ Travis Kalanick, "Uber's Founding", Uber, 22 December 2010, available at http://newsroom.uber.com/2010/12/ubers-founding/. Assessed July 10, 2015

⁴² Jim Bell, "Uber: A Lone Rogue in Toronto", 18th October 2012, available at http://www.torontosun.com/2012/10/18/uber-a-lone-rogue-in-toronto.

transportation system in major Canadian cities like Toronto is under a lot of strain. Uber can offer an alternative to taxis when public transport like the subway or GO Train are down. In Canada, unlike in US where the stories of new Uber locations spread around the country creating a buzz, and the new city launches took advantage from an existing market, the challenge was to build a brand with little awareness, to build a business from scratch. The process of diffusion is the same as in US: if five people use Uber in a day, they tell five other people and it will go viral. Uber started to partner with a lot of local charity, corporate and fundraising events to get the word out.

In July 2012, the company launched its app in London⁴³; as it has done with other city launches, the Uber crew enlisted a few VIPs to be the first passengers. London was an intriguing city since competition is tough: as we will see later on, London has its traditional Black cabs, but it also has two other classes of cars for hire: small, independent local minicab firms and more established car service companies (like Addison Lee) which most closely matches Uber.

On 30th November 2012 Uber landed officially down under⁴⁴, it was introduced in Australia following a six-week test period. Sydney was Uber's first launch in the Asia Pacific Region and the electro house band ArtvsScience participated in an early promotion as "RIDER ZERO". Like it happens in every city, Rider Zero are usually actors, sport stars or singers.

Kalanick expressed an intention to expand into Asia in an early 2012

⁴³ Paul Sawers, "Uber officially launches its private 'driver for hire' service in London", 29 June 2012, *The Next Web*, available at http://thenextweb.com/uk/2012/06/29/uber-officially-launches-its-private-driver-for-hire-service-in-london/. Assessed August 6, 2015.

⁴⁴ Seamus Byrne, "Car service Uber launches in Sydney", 28 November 2012, CNet Magazine, available at http://www.cnet.com/news/car-service-uber-launches-in-sydney/. Assessed August 8, 2015.

interview and the soft launch of Uber in Singapore⁴⁵ began one yer after in January 2013. In this city-state there are more than 2000 miles of roads and about 25,000 cabs but Uber was able to get into in the area thanks to its technology and well operating customer service. The city, a technology hub, was chosen since it has a great potential, it has a history in welcoming innovation and the unpredictable weather makes Uber service more appealing for its inhabitants.

After Singapore's success Uber was launched in August 2013 in South Korea, in the capital Seoul and the "rider zero" was a football star. In September of the same year Uber was launched in the South African capital Johannesburg ⁴⁶ and it was the first city in Africa to take advantage of the service. One year later the company landed in India, Bangalore; this country represents a key market for Uber because of its huge population of more than 1.2 billion people of potential customer. Now the service is present into 10 Indian cities, becoming the company's largest market outside the US in terms of the number of operational cities.

Following a 6 months soft launch of the Uber app in Shanghai⁴⁷, the official launch was held in February 2014. Over there, unlike its American model in which individual drivers register as Uber drivers in Uber website, Uber

⁴⁵ Jon Russell, "Uber finally drives into Asia as the private car service begins testing in Singapore", 22 January 2013, The Next Web available at http://thenextweb.com/asia/2013/01/22/uber-finally-drives-into-asia-as-the-chauffeur-service-begins-testing-in-singapore/. Assessed August 4, 2015

⁴⁶ Cutcher, Richard, "Uber exploring M-Pesa payment integration for Nairobi service", 10 October 2013, *HumanIPO*. Available at http://www.humanipo.com/news/34013/uber-exploring-m-pesa-payment-integration-for-nairobi-service/. Assessed August 6, 2015.

⁴⁷ Tejada, Carlos, "Uber Launches in Beijing, Will Face Uber-Heavy Traffic Jams", 15 July 2014, *The Wall Street Journal – China*, available at http://blogs.wsj.com/chinarealtime/2014/07/15/with-beijing-launch-uber-to-face-uber-

works with Chenghuan car, a local rental company, which provides well trained drivers to Uber, the service has a Chinese name [] [] (You Bu) and it supports online payments via Alipay, China's top e-payment service.

Uber launched its service in Nairobi, Kenya, on January 21, 2015. Nairobi was Uber's first city in Kenya. To promote the launch, the company partnered with local platform EatOut. As you can see from the graph Uber is currently available in 60 countries spread around the world.

Fig. 6: Uber's Global Expansion⁴⁸

Uber cities



Even if Uber is having a growing success throughout the whole planet, it has not been so easy. First of all expanding internationally involves a series of

heavy-traffic-jams/. Assessed August 5, 2015.

⁴⁸ Fig.6: Uber's global expansion available at https://www.google.it/search? q=uber+global+expansion&biw=1366&bih=643&source=lnms&tbm=isch&sa=X&sqi=2&ved=0CAcQ_AUoAmoVChMImLf82e-yyAIVhbwaCh1DuAB-#tbm=isch&q=uber+cities&imgrc=JsPR4AKAJbnRGM%3A

changes to the mobile application and business model in order to tailor it to the market and culture which you are going to deal with. Most obviously, Uber has had to make changes to accommodate different languages, currencies, and distance measures (e.g. miles vs. kilometers). The key aspect of Uber internationalization is that every city and every country requires a different approach, as Travis Kalanick wrote: "As we started expanding, it became clear that individual cities were the unique factor in our launches. Each city is unique in its transportation pain points, its density, its transportation alternatives, regulation, even its transportation culture."

To face all these issues, in September 2013, the company hired Ed Baker as head of international growth in order to support Uber's global vision. Moreover Uber has hired locals in each market it expands ⁵⁰ in order to adapt their product and service offerings to meet the needs of each single market. For example Uber's growth in Asia hasn't been easy at all for regulations and culture. In China the company is spending a lot of money to crack the Chinese market, even paying its drivers more than the fares they collect. Chinese people tend to favour Chinese-branded services.

In India competition is huge as well and local suppliers have deeper knowledge of the market and the local culture and they hold a much bigger market share than Uber. As I said before Uber usually works to hire general managers with local experience to handle with cultural discrepancies. Uber was also recently banned in the Delhi region after a passenger was raped by an Uber driver.

⁴⁹ Travis Kalanick, "We're Going Global with Big Funding", Uber, 7 December 2011, available at http://newsroom.uber.com/paris/fr/2011/12/were-going-global-with-big-funding/. Assessed August 7, 2015.

⁵⁰ Yasmin Hyder, "UBER'S EVOLUTION: FROM SAN FRANCISCO TO INTERNATIONAL DISRUPTION", 7 February 2014, University of Minnesota, available at http://www.tc.umn.edu/~ssen/IDSC6050/Case15/Group15_index.html. Assessed August 5, 2015.

CHAPTER 4: UBER APP

4.1: HOW DOES IT WORK?

Uber is an on-demand car service that allows the costumer to request private drivers through applications for iPhone and Android devices. To sum up the service utilizes a software to connect the rider to the nearest driver to its location. The service charges your ride directly to the preregistered credit card from Uber website so there is no need to carry cash.

To use this service you only need to download the app on your smartphone,⁵¹ Android or Apple, you have to register your credit card detail in order to make payment, so cash is not needed to get a ride with Uber and tips are not mandatory.

When you need a cab you only have to press the button and Uber will send you the closest driver, according to your GPS position. You can track the driver and know exactly when he will arrive to your location. Uber drivers call or text to confirm that they're on the way and they confirm to have received your request, using the driver Uber app so the private mobile number of the rider is not disclosed. Once your car arrives usually within no more than 10 minutes, the driver asks your name and after that you can get in the car. Riders are also provided with the name and picture of the Uber driver who is legitimated to pick them up, in addition riders get information about the vehicle that has been dispatched to transport them, so when you see a car approaching you can recognize your taxi from car type, model and licence plate.

Once you arrive at your destination, the app charges your card so there's no

⁵¹ Ulysses X. Dryvver "Uber X...."

need to deal with cash, change, tips, or receipts and as I said before drivers are not authorized to accept tips unless the rider insist upon giving.

Uber started it business as a luxury limo service for hire but it soon expanded its business and it is now offering a differentiate service to fulfil all kind of requirements, there are up to five types of vehicle services for Uber, depending on the city you are in.⁵²

- First of all there is the **Black Car** that is Uber's original service and it gave to the company a high-end reputation in the business world. These car are usually high end sedan or SUVs.
- **Uber Taxi** service, this service calls a taxi that has an agreement with Uber, these drivers have been provided Uber driver application and they have a regular licence to drive cabs. These taxis are pretty much like any normal taxi, the only difference is on the payment which will be handled by credit card through the app and on the way you contact the driver, you don't need to stand up in the street with your raised arm, you can call your cab from your house or a pub or wherever you are.
- The UberX option, it is the ride sharing service that matches riders with independent drivers who own a personal car, this service sends independently owned car (in London such cars are Hybrid Toyota), UberX drivers are not professionals, do not have a commercial license and they only collaborate with Uber to make extra money. This is Uber's budget option and is now the company's most strategic and

⁵² N.A., "Car types", Uber, 3 July 2012, available at http://newsroom.uber.com/tag/car-types/. Assessed June 7, 205.

growing service even if this is the service that cause the biggest reguation troubles to the comoany. The service can also be called **UberPop**, according to the country in which it operates for political reasons; UberPop is declared by Uber company as a kind of ride-share service, but it actually masquerates an unlicensed taxi service

- The UberXL ⁵³service will send a minivan or a SUV to your location with a bigger seating capacity, it is the same as UberX with the difference that a SUV will pick you up.
- Finally, for demanding requirements Uber offer UberLUX, its most expensive service, the premium option for business men or demanding rich people, which will send a high-end luxury car like a Rolls Royce, Porsche, Audi, BMW or a Mercedes, to your location.

⁵³ Dylan Tweney, "Uber brings a cheaper SUV service, UberXL, to San Francisco", Venture Beat, 12 May 2014, available at http://venturebeat.com/2014/05/12/uber-brings-a-cheaper-suv-service-uberxl-to-san-francisco/. Assessed May 21, 2015.

4.2: PRICING POLICY AND SURGE PRICING

Different service requires accurate pricing policy; during the years Uber has been able to maximize value by efficiently fulfilling customer's demands, Uber management has been able to understand how much customers are willing to pay and to price effectively and it is possible thanks to the BIG DATA that Uber collects and analyzes every day. Uber's employees carefully analyze customers price sensitivity and are able to understand how to maximize customer demand, driver's earning potential, and consequently, their own profit capture.

Before better understanding Uber's pricing policies we have to clarify some key elements; first of all as we know drivers are all independent agents, self-employed who own their cars. Each day these drivers decide if and when to open the application. They earn 80% of the total fare and the rest is retained by Uber for profit and expenses coverage like payment processing, refunds, customer service and dispute resolution. We will see that the latter, requires a huge amount of money and effort since Uber is facing issues pretty much all around the world.

Uber initially started with static rates, however it experienced supply-demand imbalance during certain time of the day especially the weekend and special occasions. So in early 2012, Uber decided to shift to dynamic pricing⁵⁴ offering the drivers a higher rate to stay on the system during certain periods. This is the so called *surge pricing* which can increase a lot the cost of a ride and which seems to have annoyed some customers who

⁵⁴ Bill Gurley, "A Deeper Look at Uber's Dynamic Pricing Model", Above the Crowd, 11 March 2014, available at http://abovethecrowd.com/2014/03/11/a-deeper-look-at-ubers-dynamic-pricing-model/. Assessed August 18, 2015.

were asked to pay even 7 times more for the same fare. Uber tends to underline that this is not an arbitrary price decided by Uber, but a sort of dynamic pricing, carefully planned, where prices are raised on weekends nights, during big events, tube strikes and bad weather conditions in order to encourage and motivate more drivers to stay on the roads to satisfy higher customer demand since⁵⁵ supply is not controlled by the company but by the independent drivers who provide this service; such drivers would prefer not to be working at those times. So, in conclusion, by offering more money to drivers, Uber can eliminate "two-thirds of unfulfilled requests and increase on-the-road supply of drivers by 70-80%", without such dynamic pricing a lot of unsatisfied customers would stare at screens reading "No cars available". Uber's numerous price decreases have all resulted in materially increased demand as Kalanick said on an interview. Basically, Uber's marketplace is highly efficient when you consider that both sides of the model, Uber's riders and drivers, are large groups of fragmented and independent agents.

4.2: TWO MAIN PLAYERS: RIDERS AND DRIVERS PROFILE

We just saw how this company operates, in this section we will see who are the people who use it ⁵⁶and the general profile of Uber drivers. Uber users are people who have transport demands both personal and professional, they usually require Uber occasionally, to attend a meeting in the opposite

⁵⁵ N.A., "A Deeper Look at Uber's Dynamic Pricing Model", Uber Newsroom, 12 March 2014, available at http://newsroom.uber.com/2014/03/guest-post-a-deeper-look-at-ubers-dynamic-pricing-model/. Assessed August 18, 2015

⁵⁶ Jianwei Dong, Christina Filipovic, et al, "Uber:Driving change in transportation", TUFTS University, April 2014, available at http://fletcher.tufts.edu/~/media/Fletcher/MIB/pdfs/B236%20Student%20Case %20Studies/Uber%202014.pdf

side of the city, to go home after a night out in the week end, when it starts to rain too much and when they are late and public transport can't help. They are usually young and intelligent professional with a superior background, they know what they want and they are demanding, they are the new generation of people who "were born with a smartphone in their hands" and use it in everyday life for leisure or work. They are usually well educated and very familiar with mobile technology. Where are they located? Uber's most active users are concentrated in cities' richest neighborhoods or where highend shopping, trendy restaurants, bars and night life are available; for example in New York Uber is clearly popular in Manhattan and Brooklyn. But in poorer areas few people seem to use the service and public transport is preferred. When they use Uber service they have to respect some rules, imposed by the company like not smoking in the car, be clean, not wandering away from the pick-up point and so on. They are rated from drivers, from 1 to 5 stars, where 1 star would be the lowest rating and 5 the highest. Every rider has a general score that the driver can see when the request is submitted by the rider. However most Uber passengers don't know about this rating and if they are not courteous and polite enough to the driver, they could get a poor rating and next time they request a ride, Uber driver may refuse to pick them up as they might be "blacklisted". Passengers can only see driver ratings through their version of the Uber app. There's no opportunity for the riders to see passenger ratings, because Uber only shows that information to drivers for security reasons. How many riders are there? Nowadays there are more than 8 million of Uber riders in the world and everyday 1 million of rides is made.

On the other side Uber drivers are common people with a car corresponding to Uber requirements who try to get extra money from this additional job. According to a survey from FORBES⁵⁷, "*Uber's active driver base has grown from basically zero in mid-2012 to over 160,000 at the end of 2014*".

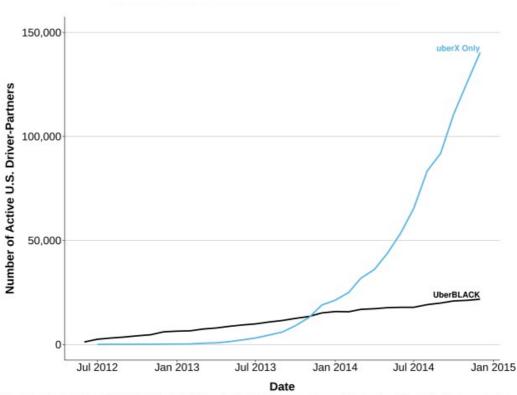


Fig.7: Active Uber driver-partners by Service 58

Note: Sample consists of all U.S. UberBLACK and uberX driver-partners making at least four trips in any month (284,898 individuals).

The number of new drivers who decided to register on Uber website, has more than doubled every six months from 2013 and this growth is linked to the cheaper UberX service, where drivers are allowed to use their own cars to pick up riders and they don't need a professional licence. Citing again an article entitled "The Numbers Behind Uber's Exploding Driver Force" by

⁵⁷ Brian Solomon, "The Numbers Behind Uber's Exploding Driver Force", Forbes, 1 May 2015, available at http://www.forbes.com/sites/briansolomon/2015/05/01/the-numbers-behind-ubers-exploding-driver-force/. Assessed August 8, 2015.

⁵⁸ Fig 7: "Active Uber driver-partners by Service", available at https://s3.amazonaws.com/uber-static/comms/PDF/Uber_Driver-Partners_Hall_Kreuger_2015.pdf

Brian Solomon published on Forbes on May 2015, 'on average, Uber drivers are young and well educated. If we have a look at some figures, 49.2% of Uber drivers are under 40 years old and nearly 37% have college degrees, and 10.8% have postgraduate degrees too (vs. 14.9% and 3.9% of taxi drivers, respectively)''.⁵⁹ Drivers pretty much could be divided in 3 main categories: for the 39% of them Uber is the ony source of income and they have no other job, for 31% Uber is an additional income to another full-time job and for the remaining 30% Uber is an additional income to another part-time job.

Why do they join Uber? Drivers who partner with Uber choose it for its flexibility (drivers set their own hours independently), possibility of income and no need of additional investment (if you own a car, you don't need anything else). Uber very often function as a bridge for people seeking other employment opportunities, who start to be Uber drivers waiting for a more appealing job. Most of Uber's driver-partners, as we saw in the previous section, have full-time or part-time employment and many continued in those positions after becoming part of Uber team. On average, Uber's driver-partners access the app more than five times per day but weather and when to access the app are their decisions.

Let's see few figures now, how many are Uber drivers? The number grew in an exponential way since 2011: it started from a base of near zero in mid-2012, more than 160,000 drivers actively partnered, who completed 4 trips in one month, at the end of 2014 in the United States. This exponential growth clearly indicates that the creation of these kind of businesses created

⁵⁹ Brian Solomon, "The Numbers Behind Uber's Exploding Driver Force

[&]quot;, Forbes, 1 May 2015, available at http://www.forbes.com/sites/briansolomon/2015/05/01/the-numbers-behind-ubers-exploding-driver-force/. Assessed August 8, 2015

a lot of job opportunities that are found attractive by a segment of workforce.

On the other side we can say that it created some occupational problems in term of decreased revenue since traditional taxi drivers had some trouble after Uber advent.

Drivers are independent contractors⁶⁰ who registered on the local Uber operations server, they can access whenever they want to the online employment application to handle with training, practices and procedures required from Uber; their personal profile contains all the fundamental digital documentation like driver's licence, insurance policy (that since 2014 is in charge of Uber company) and information about their previous rides, payments, ratings, car details and so on. They directly own the vehicles and are responsible for their cleanliness and good functioning, they are completely responsible for maintaining the vehicles in a *'mechanically safe condition'*.

About the compensation system, every trip is recorded by the local server records from the start point till the end, considering time and more important distance. Partner drivers receive the 80%⁶¹ of the total fare collected, so Uber retains the 20%. Sometimes drivers receive bonuses according to their ratings and financial support if they need to buy a new vehicle for example. Uber riders rate drivers on every trip, they must rate them after every ride, with the same system used for riders rating, so from 0

⁶⁰ Catherine Clifford, "Who Exactly Are Uber's Drivers?", Entrepreneur Magazine, 22 January 2015, available at http://www.entrepreneur.com/article/242096. Assessed August 8, 2015.

⁶¹ Johana Bhuiyan ,"What Uber Drivers Really Make"BuzzFeed News, 19 November 2014, available at http://www.buzzfeed.com/johanabhuiyan/what-uber-drivers-really-make-according-to-their-pay-stubs#.ymZv8aA29. Assessed August 8, 2015

to 5 stars. A good driver usually tends to carry average above 4.75, if the average is above this level Uber contacts those drivers to ask them explanation about these low rating values. Like riders, even drivers have some rules to respect: they should respect rider's privacy, be prompt, welcome music requests, be clean and never cancel a trip for no reason. Uber management is in constant communication with drivers in order to increase their safety, welfare and professionalism, the company is very attentive to drivers performance and support, drivers receive a weekly performance review summary and SMS messages with updates about events, weather conditions, road closures.

4.4: LOCAL SERVERS, IT and BIG DATA THE KEY FACTORS TO SUCCESS

Uber is not only virtual, it has real offices in every city it operates to face problems that riders and drivers can not solve through the traditional customer service, by e-mail or FAQ. Moreover, the Uber local Operations staff⁶² makes sure that the internet based technology is reliable and safe and able to connect drivers and riders in their local area. This staff is called "Back Office Operation", it is available 7 days per week and 24 hours per day in its assigned geographic area, there is a Local Office in every city Uber operates. Drivers and the support staff are in constant communication between them and they use only emails and other online support ways. The support team assists the partner driver community and provides training, weather forecats, pay and so on. In addition, such staff is a bridge between the "virtual" company and the real customer, who can go there to solve any problems or issue with Uber.

⁶² Ulysses X. Dryvver (2015), "Uber x, Uber alles", Amazon, (Kindle Edition only)

I found an interesting answer to a question made on Quora.com. The question was "how is to work in Uber?" ⁶³and the guy who answered, in December 2011 is an engineer called Mr Narducci who work in the Headquarter of San Francisco. To sun up his answer, he says that working in such an innovative company is amazing, because he can work with well prepared and talented colleagues, with whom he has drinks and share ideas even outside the office. The challenge for Uber is to keep all its employees well connected and active since there are offices all over the world, the company often organizes chats and teleconferences to support remote staff. The environment in relaxed and he is happy to work there because he can use cutting-edge and powerful technologies that no other firm can boost.

Generally speaking the Local Office usually deals with 3 main issues: the first one is the supply side, there are usually 2 people who have the duty to configure and set up new I-Phones for drivers and make sure, with the help oF big screens and real time maps, that the number of cars on the road meets the demand.

Secondly, there is the demand side; Uber always hires a Local Community Manager for a new city who is in charge to handle with Twitter, Facebook, manage the marketing campaign and deals with customer support and emails. This Manager makes sure everyone in the city knows about Uber and that there are enough people demanding cars to justify the supply. This kind of role tries to make people aware about Uber existence and usually set up discounts and promotions for Uber rides in special occasions like on 4th of July 2014 or daily Tweeting limit (1,000 Tweets in a 24-hour period).

The third and last side is growth: the Growth Manager does the hiring and

⁶³ A.Narducci, "What is it like to work at Uber?", Quora (Web), 23rd December 2013, available at https://www.quora.com/What-is-it-like-to-work-at-Uber. Assessed on 24th June 2015.

keeps the team together. He spends its time setting up strategic partnerships in the city, in which he is responsible. He makes sure Uber is present in big events and he partners with nightclub owners, celebrities or sponsoring local events.

Technology is a very important issue in Uber functioning and is one of the reason why it works so well. Uber has been able to find a unique way of integrating existing technologies to a more efficient service. ⁶⁴Uber did not invent anything special, it started to use and combine in one cohesive service existing innovation such as Global Positioning Systems, Smartphones and Internet in a completely new way. The communication between riders and drivers, is based upon software applications on both rider and driver devices and is a faster and easier.

Its technology can be, in effect, divided into two main components, there is the traditional app technology for consumers, it is the application for riders which works on both Apple and Android and uses the GPS system of the device of the user to pick him or her up at the desired location. To start a journey the riders needs only to register personal details and credit card on the website so that all fares and fees can be charged directly on that card, then the rider can start to hail a cab just a tapping the mobile's screen.

The second technology is on the firm level and each driver is given an I-Phone with an app to manage incoming customer requests, all the drivers have the same device so that incompatibility problems are avoided.. The firm employs prediction algorithms⁶⁵ and heat maps to predict expected demand

⁶⁴ J.Wilson, "The conomics of smartphones technology and the taxi market", The student economic review (The Trinity College Dublin), Vol. 28, Pages 119-125

⁶⁵ T. Hwang, M.C.Elish,"The disingenuous ways Uber hides behind its algorithm.", Slate Magazine, 27 July 2015, available at http://www.slate.com/articles/technology/future_tense/2015/07/uber_s_algorithm_and_the_mirage_of_the_marketplace.html. Assessed May 10, 2015

at different times of the day so that the right number of cars is in the right place at the right time. It analyses in advance how long the ride will take according to weather conditions, traffic, public events and road works.

The two applications are connected through local servers that are operated by local Uber service franchises. When the rider needs to make a trip⁶⁶, he simply uses the App to request pick up, the location is perceived by the GPS system within its smart-phone and communicated via mobile data to the local Uber operation server. The server then transmits the rider's position, name and rider rating, to all partner drivers who are online in that specific area, in that moment. The first driver that responds to the request is authorized to transport that specific rider. The driver doesn't know the destination in advance because Uber wants to avoid that drivers refuse short trips because of low fares. As the drivers get closer the rider can see on the device how far approximately the driver is, and when he reaches the exact pick up point he transmits a signal to the rider "ARRIVED", the driver then waits for the rider and if he doesn't show within 2 minutes, the driver can call the rider using the virtual voice link that connects the two parties through the central Uber voice switchboard system, through this connection no personal phone number is divulged.

The driver transports the rider to the desired destination, fares are calculated combining time and distance travelled. At the end of the trip both parties are obliged to rate the other, from 1 to 5 stars. The rider then receives an email with the receipt for the trip containing all the details like distance, time, fare, from the local operation server.

The central server keeps records, information and statistics for every trip, these data are the support analysis tool of Uber in order to predict high demand. Uber's key success is the fact that it has been able to exploit big

⁶⁶ Ulysses X. Dryvver, (20150) "Uber X, Uber alles", Amazon, Kindle Edition only

data⁶⁷ to exploit underutilised inefficiencies in the economy. Indeed, Uber's main asset is the massive amount of data collected through their technology platform every second of every single day. Because of this data, they have been able to create added value for riders and drivers and ensure that demand and supply are perfectly balanced. Uber ensures that demand for car transportation and drivers willing to provide such service are in relationship at the right place and time so that waiting times are reduced and a better service is provided. Another source of operations management is what the firm calls "God View"⁶⁸, which allows the company's staff to track both Uber vehicles and customers in real time to ensure quality and security are maintained on the system. In addition to its vehicles, Uber can also see when and where users are looking at its app.

All coding for the application is done by Uber employees who launch and update the application. The only outsourcing the company does is for payment methods, it uses Baintree, we will see in detail how, and Paypal which allows the rider to simply hold up the credit card in front of the phone's camera, it is a kind of contactless payment. The app sees the card, reads the numbers without need for entering the data manually. Except payment systems, Uber's operations relating to the functionality of Uber are vertically integrated. As I just mentioned.

Uber outsources only its Finance and Accounting Operations to a company named Braintree⁶⁹. Uber switched to Braintree in February 2011

⁶⁷ Jiani Zhang, "Discovering new business models with the Internet of Things", 1 July 2015, IBM, available at http://www.ibmbigdatahub.com/tag/5075. Assessed May 12, 2015.

⁶⁸ K. Hill, "'God View': Uber Allegedly Stalked Users For Party-Goers' Viewing Pleasure", Forbes, 3 October 2014, available at http://www.forbes.com/sites/kashmirhill/2014/10/03/god-view-uber-allegedly-stalked-users-for-party-goers-viewing-pleasure/. Assessed May 12, 2015.

⁶⁹ N.A., "Uber case study", Braintree, available at https://www.braintreepayments.com/case-studies/uber. Assessed May 20, 2015

for all of its international payments. Braintree, as written on the website, offers set of mobile tools and is the only platform that enables mobile app developers and e-commerce merchants to easily accept payments within a mobile app — no web browser required. At the beginning it was not easy because Uber had some troubles in the data portability but after this laborious process of data extraction, the company was able to quickly and easily integrate the new technology into its existing service.

This was a primary need for the company as soon as it started to expand internationally, it needed an efficient and simple payment system to handle with foreign currencies.

Uber wanted a payment gateway that was specifically created for mobile. The app needed to be fast as Uber service is and allow users to hail a ride in just one click. It was also important that the provider offered 100% data portability if Uber ever decided to switch providers, to avoid the problems that it had at the beginning.

During its initial expansion into Paris, and before Braintree, Uber had to charge Parisian passengers in U.S. dollars and display Euros on-screen. This discrepancy was a large source of confusion and customer complaints, making passengers slow to adopt the new service. As Uber expanded into other international cities, new customers have been equally pleased using their local currency for local rides, instead of US dollars. Braintree today processes payments in over 130 currencies around the world, so Uber's international passengers are able to begin making payments in their local currencies from the day one of the launch in the new country.

CHAPTER 5: UBER BUSINESS MODEL

5.1: BUSINESS MODEL CANVAS

If we focus on a managerial point of view and if we have a look at Uber business model we can see that it is disrupting and quite different from traditional taxi's one. As I already mentioned more times during my dissertation, Uber is not a conventional taxi business because no cars are owned by the company and drivers are not employees. Uber is said to be the orchestrer or matchmaker between drivers owning private cars and riders looking for rides from a point to another.

If we try to create a business canvas⁷⁰ for Uber we can say that its *value propositions* come from the fact that it offers exclusive transport service at an affordable price, the service is on demand and in a certain way tailored to customer needs and it becomes a way to use slack resources. *Key partners* are Uber drivers in primis, followed by major credit cars like American Express. About the *key activities* that Uber run the first one is defending the company in all the lawsuits and legal issues faced, secondly hiring operation for Uber drivers and employees working in the back office (about 900 people are involved in those operations).

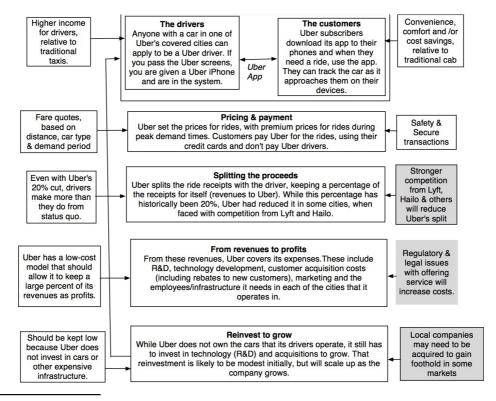
What are Uber *Key resources?* Its main asset is for sure the huge amount of BIG DATA gathered every second (this part deserves more attention and will be analysed in the following section), the innovative software that Uber created in 2009, another asset is the staff behind this, composed by engineers, managers, marketing people, tech experts and so on. Going on with our canvas I found out that Uber's main customers are wealthy and

⁷⁰ Jeffrey Funk, "Uber's business model", Slideshare, 13th April 2015, available at http://www.slideshare.net/funk97/ubers-business-model. Assessed September 23, 2015

young people, with a strong attitude towards technology and smart-phones and their relationship with the company is built on trust only, without strong commitment.

What are Uber *costs*? In general costs are very low since the company doesn't have to bear inventory expenses and composed by wages for operational staff, we have to remember that drivers are not employees, and expenses for lawsuits. *Revenues* are composed by 20% of the total fare of rides. The figure below can help us to better understand the strengths and the diversity of Uber and why it is so successful. ⁷¹

Fig.8: Uber canvas 72



⁷¹ Aswath_Damodaran , "A Disruptive Cab Ride to Riches: The Uber Payoff", Forbes, 10th June 2014, available at http://www.forbes.com/sites/aswathdamodaran/2014/06/10/a-disruptive-cab-ride-to-riches-the-uber-payoff/. Assessed September 26, 2015.

⁷² Fig 8: Uber canvas, available at http://www.forbes.com/sites/aswathdamodaran/2014/06/10/a-disruptive-cab-ride-to-riches-the-uber-payoff/

To sum up Uber business model characteristics we can say that, differently from traditional business that focus on one quality, it focuses on 3 qualities: it is cheap in comparison with traditional cabs and considering the high standard service it offers; it is fast because you can call a car just tapping your mobile and the car will reach you in less than 8 minutes and it is high quality since it is on demand and cars are usually new and clean. Uber business model has been imitated, in many different sectors, since 2009, some people call it "Uberification" of the service economy. On demand mobile services are defined as "apps which aggregate consumer demand on mobile devices, but fulfill that demand through offline services" and in the last years they are very diffused. Before Internet and smartphones era finding a provider was not an easy task, now everything is possible just with a click. There are thousands of apps emerging in the recent years and in all categories like real estate, office cleaning, medicine and so on. These on demand services are exploding in term of use diffusion and investment (we saw the figures about Uber investments and funding). The so called "Uberification" refers to the vertical integration of the customer experience. This phenomenon points the shift from an economy based on P2C services, to one based on C2C where the way of creating, distributing and consuming resources is completely different; modern entrepreneurs should take this concept into consideration when making business, because it will be the trend of successful businesses.

We are observing an Uberification of work as well, Uber is changing the labor market and how people think about jobs. The transportation sector is only the first one, these new technologies could tap into other traditional jobs, divide the tasks and assign them to people just when needed. It will

Maria Gonzales, "The Uberification of Society", Mobile World Capital, 07th November 2014, available at http://mobileworldcapital.com/503/2. Assessed September 24, 2015

bring for companies less expenses since wages will be more dynamic and based on the real demand for that task. ⁷⁴

In its business model Uber exploits the enormous amount of BIG DATA that it gathers every day with every ride. Uber's business model is based on this ⁷⁵, while Uber is taking people from a place to another, it collects valuable information about customers interests and behaviors and, it makes it possible for Uber to offer a tailored and individual service that common taxi companies can't even imagine. Uber is using this data not just for its own purposes but it has recently became one of the Big Data seller together with Facebook, Google and the major credit cards companies. Uber is using the private information of its users to generate revenues, selling this data to other companies that need it for their business purposes. Uber strenght is formed by the database of drivers, willing to give rides in every city Uber operates and riders, in the need for customized rides. Uber uses such information to determine for example which neighbourhoods will be busy and when, and which areas will require the highest number of cabs.

There is no doubt that Uber is not a niche start-up anymore ⁷⁶, it not only helped million of passengers and drivers to match their needs, but most important it is transforming its core business from transportation to Big Data company. Uber recently announced that it sold part of its customers

⁷⁴ Brigg Patten, "How startups are using big data tech to disrupt markets", Datanami, 17th March 2015, available at http://www.datanami.com/2015/03/17/how-startups-are-using-big-data-tech-to-disrupt-markets/. Assessed September 25, 2015

⁷⁵ Robert Cordray, "Uber's Big Data Effect On The Taxi And Transportation Industry", Digitalist Magazine, 10th September 2015, available at http://www.digitalistmag.com/big-data/ubers-big-data-effect-taxi-transportation-industry-03396123. Assessed September 26, 2015

⁷⁶ Bernard Marr, "The Amazing Ways Uber Is Using Big Data Analytics", Linkedin, 10th May 2015, available at https://www.linkedin.com/pulse/amazing-ways-uber-using-big-data-analytics-bernard-marr. Assessed September 24, 2015.

information to a hotel chain, Starwood Hotel and Resorts⁷⁷ who was interested, as many others, on having information on where people go, stay, and live and how often they travel and so on. This could be the next step for Uber, expanding its business on the field of Big Data can bring more money than thousands of rides.

But there are some risks related to this topic⁷⁸, I'm essentially talking about risk for consumer's privacy. The mild negative side is connected to the fact that companies can use your location or interests to send you ads and can use you as the target of their marketing campaigns. The worst negative side of Big Data by the way is connected to the fact that sharing private information and details could be risky since crooks might know when your flat is empty or when your kids are alone or they can make engineering effective attacks, find out your passwords or using your profile for other goals.

⁷⁷ Nancy Trejos, "Starwood, Uber partner to let you earn points per ride", 25 February 2015, USA Today News, available at http://www.usatoday.com/story/travel/hotels/2015/02/25/starwood-uber-points-per-ride/23952149/. Assessed September 25, 2015.

⁷⁸ Ron Hirson, "Uber, the big data company", Forbes, 23rd March 2015, available at http://www.forbes.com/sites/ronhirson/2015/03/23/uber-the-big-data-company/. Assessed September 25, 2015.

5.2: UBER SWOT ANALYSIS

I would like now to proceed with my analysis about Uber, in a more detailed academic point of view and I will run the SWOT analysis⁷⁹. If we analyse Uber's strengths and weaknesses, opportunities and threats, we can see that the first two are internal factors and the latter are external. Let's see in deep the SWOT Analysis.

Uber's strengths: With the years Uber became the first company in the market, the brand is well known all over the world and can boost the fact that it has no competitors for the moment, a part of Hailo and Lyft. Or at least these competitors are not "dangerous". Uber can count on the huge amount of information, as I just mentioned, about customers behaviours. The company offers a high quality service, with trusted drivers, checked every year and brand new cars responding the company's high requirements. In addition the cars are not owned by the company, so Uber can avoid all the expenses related to their maintenance. Uber's drivers are not hired by Uber, they just enter in partnership with the company so the company does not have responsibilities toward employees. Drivers are free to set their working hours. The company run a user-friendly mobile platform so operational costs are kept low since everything, or the most is virtual. The price Uber offers are lower if we compare them to traditional cabs ones and it makes it appealing to consumers.

⁷⁹ Jim Makos, "Swot analysis for Uber", Pestleanalysis, 11th March 2015, available at http://pestleanalysis.com/swot-analysis-for-uber/

Uber's weaknesses: Uber does not have competitors ⁸⁰ for the moment but the idea can be easily imitated and even if the brand is well established and enjoys the first mover advantages, it has to be careful. Another important weakness of Uber is that it is facing thousands of lawsuits and problems with state regulations because is considered to be illegal and an unfair competitor, these issues very often slow down its growth and are the major source of expenses that the company has to bear, all these costly legal battles threaten the business. Legal issues raised also because Uber keeps records of all its customers, like previous rides, private address, credit card number, private mobile number, and it causes privacy concerns. In addition, the relation between Uber and its drivers is really weak, they have no incentive to remain in the company and in most of the cases they remain with Uber in transition period, so when they find a more appealing job, they simply quit. They have no incentives in being loyal to Uber for a long time.

Uber's opportunities: at the moment Uber focuses its service on main cities around the world, ignoring the 95% of the rest of the country. In the future Uber could expand to rural and remote areas, maybe offering different services; not only transportation of people but deliveries coul be useful in those areas. This high number of untapped consumers could bring to the company huge revenues, exploiting the already popular brand name.

Uber is now starting to expand its service to other sectors: last year it launched in California UberFRESH for food deliveries, and UberRUSH for package deliveries. Last June it lauched in Istanbul a service called UberBOAT, a water taxi service. Another "funny" service that the company

⁸⁰ N.A., "The swot analysis for Uber", Cayenne Apps, 9th February 2015, available at http://blog.cayenneapps.com/2015/02/09/the-swot-analysis-for-uber/. Assessed September 27, 2015.

introduced in 33 cities and which is doing pretty well is UberICECREAM⁸¹ where an ice cream truck will be sent to your location. So the trend for Uber will be the expansion into untapped sectors and offering alternative services.

Uber's threats:⁸² all the lawsuits that the company is facing are not healthy for its future development and growth, the high costs that Uber has to bear in order to face courts issues could limit its expansion opportunities or at least slow down the growth.

In addition, as I said before, the model could be easily imitated and competition is emerging. Car pooling applications and quick-rent services like ZipCar could be dangerous.

5.2: IS THIS BUSINESS MODEL STABLE?

During the writing of my dissertation I found out that there are 2 different tendencies. On one side there are Uber supporters thinking that this app is perfect and in the long term will be extremely successful since it has been able to identify a service of today and it's transforming it into a better business model for tomorrow⁸³. People supporting this idea think that Uber is slowly transforming into a company of logistics, travel and delivery, like Amazon did: from book store to web retailer. As we saw on the SWOT analysis Uber has incredible opportunities, apart from transportation

⁸¹ N.A., "Uber ice cream goes global, Uber, 17th July 2013, available at http://newsroom.uber.com/2013/07/ubericecream/ Assessed September 26, 2015.

⁸² Jim Makos, "SWOT analysis for UBER", Pestle Analysis, 11 March 2015, available at http://pestleanalysis.com/swot-analysis-for-uber/. Assessed September 25, 2015

⁸³ Adam Vaccaro, "Uber isn't a car service. It's the future of Logistics", Inc,13th December 2013, available at http://www.inc.com/adam-vaccaro/uber-isnt-a-car-service.html. Assessed September 26, 2015.

of people. The CEO Kalanick⁸⁴ said that Uber in the future will be the "cross between lifestyle and logistics".

On the other side, there are people doubting that Uber is so powerful and stable as it seems. Uber needs drivers to make its service sustainable and to make it staying alive. Uber bears all the cost of recruiting the drivers and it spends huge amount of money in marketing campaigns in order to enlarge its fleet. In addition, to new members the company promises \$5000 per month as a fixed wage to make its offer more appealing. By the way having more drivers does not mean being successful, it means surviving in the competitive arena. In addition the company has to face the expenses for lawsuits. So the question is, will this company dominate the transportation market?

First of all this market is heavily regulated and incumbent firm are protected by law and governments. The existing players will make it difficult and challenging for Uber to survive and compete, but fortunately we saw that something is moving in the direction of innovation and new regulation. It is not going to be easy for the company, the growth process could be slow and costly. Not only external opposition is faced by the company, last January drivers brought Uber into court⁸⁵ because they want to be classified as employees and not as independent contractors. The difference is connected to income and Medicare taxes, Social Security and in general to the higher degree of protectionism that you get being an employee. The main point is

⁸⁴ Alyson Shontell, "The Vision For \$3.4 Billion Uber Is Much More Than Just A Car Service, And It Could Vastly Improve Our Lives", Business Insider, 23rd August 2013, available at http://www.businessinsider.com/why-uber-is-worth-34-billion-2013-8?IR=T. Assessed September 26, 2015.

⁸⁵ Abygail Tracy, "The Massive Costs Uber Faces If All Drivers Become Employees", Forbes Magazine, 18 June 2015, available at http://www.forbes.com/sites/abigailtracy/2015/06/18/the-massive-costs-uber-faces-if-all-drivers-become-employees/. Assessed September 27, 2015.

that Uber bases its business model on the fact that it doesn't have to bear maintenance costs for cars and wages for drivers, but if this lawsuit is won by drivers it will completely change its business model.

An important structural defect in its business model is the surge pricing⁸⁶, as I explained when the company foresees a demand increase, it will put prices up in order to induce more drivers to go into service. Surge pricing can have a bad impact on riders and drivers safety since drivers, in those periods of unknown length, will be willing to get more rides and they will to it speeding up and in general not respecting the rules of the road. The problem here for Uber is intrinsic given that the company provides financial incentives, higher fares, for drivers who are fast enough and get more rides during peak hours. Another weakness regards the fact that, as the company rises prices during peak hours, it can also reduce them to expand the customer base, without regard for drivers costs and it can bring to a loss of drivers, sick of seeing the price going up and down so often.

Another weak point for Uber is the fact that it can be copied,⁸⁷ Uber is not the only company using technology in the sector. This competition will put pressure on Uber which will be forced to reduce its fares to remain in the market, reducing fares means less revenues to cover all the costs that I cited above. Reducing fares means also less drivers willing to give rides, due to the decreased wage that they can make.

Uber will be forced to reinvest in new technologies and in acquiring new companies because the revenues deriving from the mere transportation will

⁸⁶ D.M. Burney, "The Uber business model and dangerous driving", Uberbusinessmodel, 16th March 2015, available at http://uberbusinessmodel.com/. Assessed September 27, 2015.

⁸⁷ Siddaiah Thirupati, "Uber Taxi Business Model, In & Outs To Analyze...", ReachOut, 14 November 2014, available at http://www.reachoutsid.com/uber-taxi-business-model-to-analyze/. Assessed September 27, 2015.

not be enough to survive. Another thing that worries me about Uber's success is the fact that it is a really young company and its market evaluation is very high. Uber could be another bubble⁸⁸, ready to burst tomorrow. Uber is a young start-up with high fixed cost and its valuation is growing rapidly, despite its real revenues. The company is valued \$50 million, but is it really worth it? People love it but some hate it, competition is raising and legal issues are worldwide.

⁸⁸ Pui-Wing Tam, "Uber Said to Be in Funding Talks for More Than \$10B Value", Bloomberg, 16th March 2014, available at http://www.bloomberg.com/news/articles/2014-05-15/uber-said-to-be-in-funding-talks-for-more-than-10b-value. Assessed September 28, 2015

CHAPTER 6: INNOVATING IS NEVER EASY

6.1: Regulatory Barriers to Growth

The Uber technology is innovating in a very large way and in an incredible rapid pace the personal transport industry. Starting from these years, this industry will face huge changes since Uber could be a solution to many of the problems of the exiting transportation service.

We know that when something is truly innovative it will encounter resistance for sure, in the case of Uber this resistance comes not only from governmental bodies that are unable to set proper rules and regulations, but also from competitors like incumbent taxi companies who would like to see Uber being regulated under the taxi law, or better, would like to see Uber not operating at all.

While Uber is extremely popular with consumers, the company is not without enemies⁸⁹. Since Uber's launch in 2010, complaints from incumbent taxi drivers, taxi commissions and government officials over the legality and regulation of the company have been of the main issues that the company had to deal with. On one side taxi drivers insist that Uber is essentially a taxi service, with the difference that it does not have to invest in the expensive medallions⁹⁰ (medallions are the US taxi driver licences which date back to 1930, they are quite expensive nowadays) or follow the same regulations they do in order to operate.

⁸⁹ Ingrid Pan, "Why Uber faces problems with regulation and existing services", Yahoo Finance, 23 June 2014, available at http://finance.yahoo.com/news/why-uber-faces-problems-regulation-170038814.html. Assessed June 27, 2015.

⁹⁰ Emily Badger, "Taxi medallions have been the best investment in America for years. Now Uber may be changing that.", Washington Post Magazine, 20 Hune 2014, available at http://www.washingtonpost.com/blogs/wonkblog/wp/2014/06/20/taxi-medallions-have-been-the-best-investment-in-america-for-years-now-uber-may-be-changing-that Assessed June 27, 2015.

In all the cities where Uber had regulatory problems, the company was often highly successful at fighting through leveraging social media to increase public support. This is Uber's strength, it can rely on a multitude of trusted consumers who pressure politicians and government officials to re-write existing and outdated laws or strike down lawsuits.

As I said before, public utility commissions and taxi companies claim that Uber should be classified as a transportation company, together with traditional cabs, rather than as a technology firm and in recent year it has been the target of hundreds of complaints all over the world.

Problems for Uber started in 2012 when the company introduced an additional low cost service to its platform, UberX, ⁹¹ which allows non-professional drivers to make money by transporting passengers in their own cars. At the beginning, when Uber was a service known and used only by a small percentage of people nobody complained, but now that Uber has a growing worldwide presence and a growing number of drivers and riders it no longer has the luxury of going unnoticed. Uber is facing, or has faced, bans, restrictions, lawsuits or protests (even violent) of some kind in Brussels, Paris, Berlin, Milan, New Delhi, Seattle, Miami, New York, San Francisco, Chicago, Washington DC, Vancouver and so on.

Taxi drivers in effect must meet strict training⁹², they have to pay for their licences and have cars in good conditions, which are regularly inspected every year. While, on the opposite side, new UberX drivers are only asked to pass a criminal background check and have a proof of auto insurance as we will see in details in this section.

⁹¹ Meghan Kelly, "Uber releases its cabs service, Uber X, on San Francisco", Venture Beat, 18 January 2013, available at http://venturebeat.com/2013/01/18/uber-x-san-francisc/. Assessed August 10, 2015.

⁹² Lizzie Widdicombe, "Revving Up" The New Yorker, 3 August 2015, available at http://www.newyorker.com/magazine/2015/08/03/revving-up, assessed August 10, 2015

In general, regulations that govern vehicles and companies involved with personal transport vary by location and in most of the cases are local or state responsibilities. The only thing in common to all these regulations is that they are outdated since they have been written when personal transport was far from being developed and far from being so technological.

6.1.1: REGULATION AND LEGAL CHALLENGES

Uber has adopted an aggressive growth strategy both domestically and internationally, as we saw in the chapter regarding its quick expansion, but its successes have not come without several challenges as we will see in this chapter. The company has battled against regulatory powers in many cities. In 2012 Uber received a cease and desist letter in Boston and San Francisco⁹³. In many instances, the company has come out successful. In this chapter we will see cases where Uber has been successful and cases where, at the end of the debate, it was partially or totally banned.

I decided to focus on the case of San Francisco, Washington DC, London, Delhi and, a final look on European Union, because they are very different one from the other due to the reasons of the problems and in the way Uber was able to deal with the situations.

The most active and violent action by the way come from within the industry: other cab companies don't want Uber to enter in the transportation market since it operates with unfair advantage and create unemployment.

⁹³ H. Knight, B. Evangelista, "S.F., L.A. threaten Uber, Lyft, Sidecar with legal action", SF Gate, 26 September 2014, Available at http://www.sfgate.com/bayarea/article/S-F-L-A-threaten-Uber-Lyft-Sidecar-with-5781328.php. Assessed August 13, 2015.

For example last June⁹⁴, tensions between taxi unions and private car services became high; French taxi drivers blocked roads and train stations in Paris and not only, to protest against Uber and other similar services, because French taxi revenues seem to have fallen by 40% in 2 years, due to increased competition. Taxi drivers argue that non-professional drivers like Uber's ones, who don't have to pay for medallions, gain an unfair competitive advantage. On the other side traditional taxi drivers are required to pay up to €240,000 for their taxi license (the medallion that I cited at the beginning). Another strong protest occurred in London, traditional and world famous "black cabs" with their fascinating history are facing tough competition coming from these new emerging tech services. London cabs drivers have to pass a test called "The Knowledge" [I personally saw future potential taxi drivers wandering around the city by scooter with detailed maps in front of them, trying to memorize street's numbers and popular bars or restaurants), very demanding in terms of memorization, and it is so difficult that it takes them at least five years, while Uber drivers can rely on their GPS system and don't have to follow strict regulations.

Uber solution to all the disputes that raised worldwide is simple and based on technology, Uber considers itself a technology platform, not a taxi company which only provides the branding and platform for independent people to create a small business and become self-entrepreneurs, using that technology. Uber doesn't follow any rule, getting in legal troubles whenever it enters new and heavily regulated markets it. Some countries and regions

⁹⁴ Charlie D'Agata, "French taxi drivers smash cars in strike against Uber", CBS News, 25 June, 2015, available at http://www.cbsnews.com/news/french-taxi-drivers-smash-cars-in-strike-against-uber/. Assessed June 27, 2015

⁹⁵ John Tamny, "Uber Erases 'The Knowledge' In London, All The While Enhancing Driver And Passenger Knowledge" Forbes Magazine, 13 July 2014, available at http://www.forbes.com/sites/johntamny/2014/07/13/uber-erases-the-knowledge-inlondon-all-the-while-enhancing-driver-and-passenger-knowledge/. Assessed June 25, 2015.

have completely banned the service, as we can see from the map below, declaring it illegal. Other places, like France, Italy and Germany, banned just its discount service UberX.

Fig.9:Uber global expansion⁹⁶



In some cases, like Florida and South Korea, in response to the pressure coming from local regulators and taxi unions, Uber has independently decided to suspend operations. However, in other places, Uber has continued to operate in the face of that pressure, even if the service has been banned, as happened in Cape Town, Queensland in Australia and Taiwan.

But even after Uber becomes legal and regular it has to face other problems coming from competitors, there have been protests all around the world since taxi drivers claim that Uber compromised a big part of their revenues; in Brussels, a cab driver threw eggs and flour at an Uber employee.

⁹⁶ Fig 9: Ube global expansion, available at http://www.globalpost.com/sites/default/files/photos/201504/ubermap_lead_0.jpg?itok=J7Peimks

6.2: SAN FRANCISCO AND TNCs

After ride-sourcing services were launched in San Francisco in 2009 it became clear that problems would have risen without formal definitions and regulations. The point is that these services that call themselves "ridesharing," fell in a field that lays between the classical definitions of ridesharing and peer-to-peer taxis services.

In 2010 and in 2014, the California Public Utilities Commission (CPUC) issued cease and desist letters to Lyft, SideCar, and Uber for illegal operations.

In the first instance, in 2010 Uber was scrutinized because the company originally advertised itself as 'Uber Taxi', even if none of Uber's drivers possess a taxi medallion required to operate as a taxi in San Francisco. Since that moment, Uber has modified its company name to 'Uber', and is continuing to grow in San Francisco. Let's see what happened in detail in San Francisco.

On 20th October 2010 the San Francisco Metro Transit Authority & the Public Utilities Commission of California have ordered the start-up to cease and desist, the document started with this sentence ⁹⁷ "It has come to our attention that your business is operating without the appropriate licences, permits and approvals from the San Francisco Municipal Transportation Agency (...) because UberCab is operating without a permit and demonstrated numerous violations, we demand that you cease and desist all activities (...) The name UberCab indicates that you are a taxicab company or affiliated with a taxicab company and as such you are under the jurisdiction of the SMFTA",

⁹⁷ N.A.,"Uber's Cease & Desist Letter", CPUC, 19 October 2015, available at http://www.cpuc.ca.gov/PUC/transportation/Passengers/CarrierInvestigations/ Assessed June 26, 2015.

so apparently the problem is that Uber is operating in San Francisco as a taxi service but without a licence and continued operations will bring the company fees and days in jail.

Despite the order, the company never stopped⁹⁸ to serve San Francisco inhabitants, it continued to operate and, before its legalization, it has been working with the Public Authority to solve the problem. Uber began with the obvious company name change from UberCab to just Uber in order to avoid penalties.

In general, the incumbent taxi industry's concerns about Ubercab in San Francisco regard the fact that Uber operates like a cab company but without a taxi license and insurance. In addition taxi drivers are worried because after Uber creation, their profit significantly decreased.

In contrast, Uber defines itself not as a taxi service, but as an app that helps ride seekers to find a car and driver to find riders via mobile. On the company website we can find Uber's answer⁹⁹ to this letter from the Public Administration of San Francisco that I will sum up as follow. Uber believes that the service offered is in compliance with the cited regulations. Uber is a 'cutting edge transportation technology' and can't be regulated as a taxi company. Regulators must be aware that current rules are not suitable for such kind of companies so Uber will do as much as possible to help the regulatory bodies and will work with them on this new generation of technology to maintain its service available and legal because Uber's aim is to make cities better and more liveable.

So, Uber's solution to this concern is based on technology. Uber considers

⁹⁸ Lora Kolodny, "UberCab Ordered to Cease And Desist", Techcrunch, 24 October 2015, available at http://techcrunch.com/2010/10/24/ubercab-ordered-to-cease-and-desist/. Assessed June 28, 2015.

⁹⁹ Ryan Graves, "Uber has been serves", Uber Newsroom, 25 October 2010, available at http://newsroom.uber.com/2010/10/uber-has-been-served/. Assssed July 2, 2015

itself a technology platform, not a taxi company. Uber only provides the platform for bridging drivers and riders and refuses to be regulated under traditional taxi rules.

What is the situation now in San Francisco like? On December 2012 the CPUC opened a legal procedure in order to evaluate these new kind of business models, because the actual legal situation was not appropriate to face Uber entry and CPUC had the possibility to better understand the functioning of such services, to protect consumers and ensure public safety.

On September 2013, less than 1 year later, CPUC found a way to legalize Uber establishing a new and controversial category of people carriers, known as Transportation Network Companies (TNCs) including some rules, requirements and regulations about this topic. CPUC first defined a TNC as "an operator that provides prearranged transportation services for compensation using an online-enabled application or platform (such as smartphone applications) to connect drivers using their personal vehicles with passengers"¹⁰⁰.

As we can see from this first definition, Uber is considered a TNC since it is based on an online app and the ride is ususally prebooked. The creation of this new category of carriers is a remarkable historical event for the company and it opens the doors for Uber expansion, Transportation Network Companies are now allowed to operate in California, but not only, they are legal also in States like Colorado, Rhode Island and Illinois, permitting Uber to empower itself and grow. This definition creates a new class of companies which are in the middle between traditional taxis and carpooling, but at the same time are none of the two. This new kind of

¹⁰⁰ CPUC Commission,"Transportation Network Companies", CPUC, 19 September 2013, available at http://www.cpuc.ca.gov/PUC/Enforcement/TNC/. Assessed July 5, 2015

transportation company, as the other categories of people carrieris, has to follow some rules in order to be fully legal, for example they can't conduct operations in airports, in this way traditional taxis are protected as they keep the monopoly of airport services. In addition, to ensure customer's safety they are required to get a license from the CPUC, conduct criminal background checks (as Uber does in all the nations in which it operates) of all drivers, have a training program for drivers who can not use drugs and alcohol during the service, and maintain at least US\$1 million insurance coverage for accidents occurring during the trips.

With the introduction of these specific rules for ridesharing companies, California became the first State to make such services legal, creating a framework for them. There is still some work to do, for sure, but this first step is the signal tha USA is welcoming innovation. As I just said, some details must be definied better; for example the insurance coverage that should include also periods of time when the app is closed.

By the way this was a very important step for Uber growth since this regulations will serve as guide for other States all around the USA. This new set of rules was not welcomed well by taxi drivers, they think that now CPUC dereguated their industry because taxi drivers still bear the costs of fleet maintenance, insurance, licences and with this decision they could be decimated. CPUC on the other side affirms that finally a fair playing field has been ensured for both parties.

6.3: WASHINGTON DC: UBER DEALING WITH OUTDATED LAWS

Uber entered in the Washington DC area at the end of 2011 and the existing regulations were supposed to be some of the most progressive in the U.S. Those rules by the way, even if open and progressive, have been designed before the era of smartphones, GPS, and Google Maps and before the mere idea of Uber wasn't even in the mind of creators. The existing rules were outmoded as in many other US cities and Uber in every city it enters cooperates and collaborates with governments, civic bodies and even competitors in order to integrate itself in the city transportation network, as it did in San Francisco case. For example in Washington the problems at the beginning were many, however the city council with the collaboration of Uber, was able to update the existing policies.

In Washington DC¹⁰¹ Uber has agreed that its drivers won't pick up riders at the city airports, like it happens in San Francisco, picking up passengers at these airports is restricted to the taxi cab companies. But the most important and remarkable action that occurred in this city is the creation of a brand new set of rules to govern private vehicles for hire companies, such as Uber and its competitors. Washington regulators, as the San Francisco counterparts, realized that the interpretation of existing rules or the ban of Uber would not be a permanent and long-lasting solution.

Despite the violent protest coming from traditional taxi industry, on 24th October 2014 Uber won in Washington. That day, together with the day of TNC creation, represents for the company the "BIG DAY" as Kalanick the CEO, said in a press conference. But what happened in detail? The DC

¹⁰¹ Lori Aratani, "DC Council okays bill to legalize Lyft, Sidecar, uberX-type services in the District", The Washington Post Magazine, 28 October 2014, available at https://www.washingtonpost.com/blogs/dr-gridlock/wp/2014/10/28/d-c-council-okays-bill-to-legalize-lyft-sidecar-uberx-type-services-in-the-district/. Assessed July 16, 2015.

Council passed a legislative framework for "digital dispatch" called "Vehicle-for-Hire Innovation Act of 2014"¹⁰² that is, as the Council defined it, "pro-innovation, pro-consumer, and pro-driver". The DC Council's decision promotes innovation, consumer and driver safety and gives to Washington inhabitants the possibility to choose among different transportation services. The law, which makes clear that a company like Uber can continue to operate lawfully in Washington, first gives some definitions in order to clarify the matter, it defines a new class of "Private vehicle-for-hire as a class of transportation service by which a network of private vehicle-for-hire operators in the District provides transportation to passengers to whom the private vehicle-for-hire operators are connected by digital dispatch."

As we can see from the definition, the new word that is interesting for us is digital dispatch, which help driver and rider to be connected. In addition these kind of new classified vehicles offer rides operated through personal motor vehicle, owned by the driver. If we read carefully the Act, the Council gives also a definition of Taxicab, different from Uber, as "a class of public vehicle-for-hire that may be hired by dispatch, digital dispatch, or hailed on the street, and for which the fare charged is calculated by a Commission-approved meter".

So the difference between Uber and Taxicab is in the fact that Uber cars are privately owned and the dispatch is digitalized.

The Act, after giving the definition of this new class of vehicles, give some requirements that companies has to respect. First of all they have to dispose an application process to it make possible for people to register as a private vehicle-for-hire operator, in our case it is the Uber app for drivers. Then they have to keep all records of operators and vehicles associated to

¹⁰² The District of Columbia, D.G. ACT 20-489, 18 November 2014, available at http://www.dcregs.dc.gov/Notice/DownLoad.aspx?NoticeID=5213670.

the company, and as we saw at the beginning of the dissertation Uber does it even for commercial reason.

Like in San Francisco, drivers must respect a zero tolerance policy regarding alcohol and drug and they are asked to pass background checks before performing their first ride, to see if they incurred in criminal actions in the past. Moreover, to ensure safety, within 90 days of beginning service motor vehicles are inspected to see if they comply with Washington rules.

Additionally, it would be required to have a website that includes a customer service telephone number or email address, as customer support and this is due to their non standard service and to the additional layer of protection required. Even regarding this requirement we know that Uber is in line with it, as its Website provide al the needed information and because every city has its own physical Office to offer support.

The Act continues with the part about the private vehicle-for-hire operators, the part is divided in driver registration and requirements. Every driver is required to register in the company website, give personal details, his full driver history screened and, if the check shows that the driver in the past 7 years has not committed a crime, a sexual abuse and other crimes he is accredited by the National Association of Professional Background Screeners. Concerning requirements for private vehicle-for-hire operators they shall accept only rides booked through the private digital dispatch, so street hails are not accepted and left only to the monopoly of taxi companies. They must possess a valid driver's licence, be over 21, always carry a proof of personal motor vehicle insurance for the motor vehicle used to carry passengers.

The Act continues with the requirements of the car, inspectors will check all the motor vehicle equipment (like brakes, lights, steering, suspension, wheels, mirrors and so on) to ensure that such equipment is safe and in proper operating condition. Moreover not all the cars in good conditions can operate as transportation carrier, they must have a seating capacity of 8 persons or fewer, and more important be no more than 10 model years of age at entry into service.

These requirements ensure that the vehicles are relatively new and updated that those vehicles are proper passenger vehicles and not vans.

Insurance requirements are strict since the company shall maintain an insurance policy that covers at least \$1 million for accidents involving a private vehicle-for-hire operator occurred during rides. On top of this coverage during rides, private companies like Uber shall maintain an insurance policy that covers also period when cars are not engaged in prearranged rides.

All vehicles providing private vehicle-for-hire service must have a valid primary liability insurance, which will vary depending on whether there is a passenger in the car or not. When a driver is logged into the app but has not yet accepted a ride, the coverage is \$100'000 but it climbs to \$1 million per accident for accidents involving the driver when a passenger who booked a ride through the smartphone app actually is in the car. Drivers are required to maintain a personal automobile policy on the vehicle they drive, so this eliminates any insurance gaps that might otherwise occur.

The Act treats also some conditions about the pricing policy that these companies has to respect. Private vehicle-for-hire companies are allowed to offer services at fares different from the traditional metered taxicab rate but in that case, before booking a vehicle the customer should be aware about the calcuation method and should know in advance how much, morelsess, he or she will be going to spend for that ride. In this case it is actually what

happens for Uber because prior booking the customer can calculate the estimated fare, which ranges from a min and max price. The rider just needs to put in the system the current location and the destination and the computer will calculate the estimated fare and time needed.

So, to sum up, what does the DC law include? It explicitly gives the definition of a separate and new class of for-hire vehicles that operate through digital dispatch, which for their different way to operate are required to set high standards for price transparency, insurance, requirements for drivers, vehicles. Finally, even for Uber there are some requirements now, because before this law Uber could operate without rules, causing a problem of security.

Practically, with this Act Uber became fully legal and consumers can rely on it as an additional form of transportation in the city. For drivers, it means that they can do some sort of job during freetime, be more productive, substantially increase their income. And for Washington having Uber legal means that there will be more transportation options, which for sure will make its inhabitants happier and will give the city popularity as a city that support innovation.

6.4: LONDON:UBER AGAINST TRADITIONAL BLACK CABS AND TRANSPORT FOR LONDON

The case of London is of particular importance as competition in the capital is fierce, considering for example the hundreds minicab companies or Addison Lee ¹⁰³which has been serving the city since 1975 delivering people and parcels. Addison Lee is a private hire company with a fleet of about 55,000 minicabs, during the years it has been fighting London's popular black cabs but now it is facing increasing competition coming from the ridesourcing service Uber. Addison Lee, according to an interview to the CEO, said it will be able to prosper, as it embraced technology as well, indeed its first app was released in 2009 and mobile traffic now accounts for more than 50 per cent of the company's business. So technology will be the key to survive in this competitive arena.

London case is interesting even because it raised an issue between the traditional black cabs and TFL, accused of being too kind with Uber.

As I cited in the introduction to this chapter, London traditional black cabs drivers are required to pass a very rigid and intensive training regarding London's geography while Uber drivers can use their GPS system without problems. Hundreds of black cab drivers demonstrated outside the headquarters of Transport for London (TfL) in Westminster last May, against the unlicensed activities that new firms, like Uber, are running. The protesters from United Cabbies Group claimed TfL was not doing enough to enforce rules to ensure public safety in London taxis, they asked for a long-

¹⁰³ Monty Munford, "London's Addison Lee prepares for Uber challenge", The Telegraph Magazine, 14 March 2015, available at

http://www.telegraph.co.uk/technology/technology-topics/11471327/Londons-Addison-Lee-prepares-for-Uber-challenge.html. Assessed July 24, 2015

term strategy to enforce taxi regulation. Personally I think that taxi associations don't really want fairness, they would like instead TFL to take their side against Uber but TFL, which is an unbiased organ, won't because its job is to manage transport across London, not to be the taxi drivers' supporter.

From the United Cabbies Group pespective, Using technology to break the law is not progress. On their website they say: 104 "(...) If there were an App that could somehow intercept your wages in the process of moving from your employers bank account and yours and the user could divert 50% of your wages without being detected. Would you call that theft? or would you call it progress? (...) "

They are raising their voices to ask for protection from the Transport for London, against these new emerging services, they claim that App developers don't care about the legislation pertaining to the legal frame work they are entering, in addition they said that they are losing earnings because of the lack of regulation around private hire vehicles Explicitly they wrote on their website that they want these companies to go through an approval process to test that the "App" which has to comply with all necessary legislation.

On the opposite side TFL explains that there are two main differences between taxis and private hire vehicles. First, a customer can get a taxi in some different ways: at a rank, hail one in the street or pre-book one by calling the physical dispatch. Conversely, private hire necessitates pre-booking. Taxis and minicabs rules are fixed by law, in the page of the UK government as follows.

¹⁰⁴ N.A., "E-Hailing and a trivial little matter called "The Law" ", United cabbies Group, available at http://ucglondon.org.uk/e-hailing.html. Assessed July 26, 2015.

¹⁰⁵Taxi companies and minicabs ones needs a licence by the Transport of London to operate in the city, they must rspect some requirements as well. Have max seating capacity of 8 people, have a plate to show taxi licence number. Minicabs in London must have special discs on their windscreen and rear window to show that they're licensed.

The second and most important difference, and it is here that the controversy starts, is that taxis are required to have a taximeter approved by TFL, whilst an Uber vehicle is not permitted to have one. Indeed, it is a criminal offence for a Uber car, to be equipped with a taximeter and if such kind of vehicles are equipped with a taximeter, the owner is guilty of an offence and could get in trouble and be obliged to pay a fine.

The main issue in respect of Uber, in London, is whether Uber's Driver app constitutes a 'taximeter' or not¹⁰⁶ for the UK law. If the app is recognized to be a taximeter, Uber could not operate in London on the basis of private hire vehicle regulations but should instead put himself in the position for being legal.

As I mentioned in the introduction to this chapter, Uber explains its business as one "connecting riders to drivers", the company is not a transportation carrier and the company does not own the cars. Uber only supplies the drivers with equipment but in general they are self employed and they act as "partner" of Uber. This distinction is important because it helps to keep Uber away from laws that license taxis but let's see how Uber is dealing with London TFL legislation.

When drivers join Uber, they are given a smartphone, preloaded with the

¹⁰⁵ N.A. "London taxis and minicabs", UK Government, available at https://www.gov.uk/taximinicab-difference. Assessed July 12, 2015

¹⁰⁶ Neil Brown, "Uber: TfL and the Taxonomy of Taximeters", SCL, 16 September 2014, available at http://www.scl.org/site.aspx?i=ed38518. Assessed June 29, 2015

Uber app for drivers, which is integrated with Uber's systems. TfL has described the operation of the Uber service and, critically, the Uber Driver app, in the following terms: 107 Uber is an app that customers can download on their smartphone to book a private hire car. The ride demand is then accepted by the servers, and sent to all the drivers of the area. A driver accepts and is dispatched to the customer, who receives name, photo and registration number of the vehicle. After the journey fare are calculated remotely by the servers and comunicated to the smartphone of both parties.

The "hot" question for Uber is if the combination of the smartphone and the Uber Driver app constitutes a 'taximeter' for the UK law. If we have a look to the definition of taximeter given by legislation.gov.uk in a regulation of 2006, a taximeter is ¹⁰⁸

'a device that works together with a signal generator to make a measuring instrument; with the device measuring duration, calculating distance on the basis of a signal delivered by the distance signal generator; and calculating and displaying the fare to be paid for a trip on the basis of the calculated distance or the measured duration of the trip, or both.'

We notice that the fare must be displayed as well as calculated, and, perhaps of particular relevance to the issue of Uber, the meter works in conjunction with a signal generator fitted to the vehicle.

The TFL carried out a large inspection and careful analysis to check if Uber met all requirements for a private hire operation in relation to all the requirements above. TFL have also been in extensive correspondence with Uber to understand precisely how the business model operates in London.

¹⁰⁷ n.a., "Vehicle licences for private hire or taxis", UK Government, available at https://www.gov.uk/vehicle-licences-private-hire-taxis. Assessed July 1, 2015

¹⁰⁸ UK Statutory Instrument about the Measuring Instruments (Taximeters), Regulation 2006, number 2304 at reg 2(1)

At the end of this inspection TFL sent a letter to around 97000 recipients to explain its view as the following:¹⁰⁹

'TfL's view is that smartphones that transmit location information (based on GPS data) between vehicles and operators, have no operational or physical connection with the vehicles, and receive information about fares which are calculated remotely from the vehicle, are not taximeters within the meaning of the legislation"

So in the perspective of the TfL Uber's Driver app is not a taximeter because it has no 'physical connection' with the vehicle, and the fare is calculated remotely, not within the vehicle. Following this analysis, TFL have reached the conclusion that the way Uber operates in London is legal and in accordance with the law applied to private hire operators. Tfl added that however will continue to defend the right of taxis, that for sure won't give up with their battle and will continue to monitor such services like Uber as technology advances very quickly.

In conclusion, to summarize, TFL is adopting a perspective of technology neutrality because it is treating similar services like black cabs and Uber in different ways. To be honest, they both offer a transportation service but in slightly different ways. In addition, TFL is placing reliance on form rather than function because in the customer's perspective the two services are very similar since fares and prices are calculated on the basis of distance and time. The only difference is that the taximeter is placed out from the car. Is is really fair?

¹⁰⁹ James Cook, "Britain's laws may be too outdated to be used against Uber

[&]quot;The Business Insider, 5 October 2015, available at http://uk.businessinsider.com/ubers-taximeter-high-court-case-explained-2015-10.Assessed October 6, 2015.

6.5: NEW DELHI CASE AND THE MATTER OF SECURITY

India is Uber's second-largest market globally, after the States; the key to its growth is due to the vast market opportunity presented by the fact that there is a very low car ownership and highly inadequate and inefficient public transport systems and for sure, high number of people concentrated in the biggest Indian cities. High fuel prices have kept middle-class Indians far from new cars and driven up their demand for other options. In a recent interview Travis Kalanick said ¹¹⁰"India is one of our fastest growing markets in the history of Uber and one where we are investing heavily in continued growth,"

Uber started doing business in India on 2013 in Bangalore and now its network is composed by 11 cities. As Uber made in other countries, to generate buzz, it organised posh launch parties on the roofs of the best hotels and restaurants in New Delhi and Mumbai. In general, the estimated number of Indian customers per day is more than 15,000.

The competition in Delhi by the way is getting brutal and Uber is thinking to innovate the service it offers. Last April it launched a new initiative which it never launched in any other countries but have been created on purpose for this particular market. In New Delhi, in order to be competitive in comparison to its key indian competitor Ola, which already offers this service, Uber launched uberAUTO¹¹¹, a new hailing feature for autorickshaws, cash only, to fit better in the cash dominated economy (note

¹¹⁰ Saritha Rai, "In Fierce Cab Hailing App War In India, Uber Has Two Global Firsts", Forbes, 13 April 2015, available at http://www.forbes.com/sites/saritharai/2015/04/13/infierce-cab-hailing-app-war-in-india-uber-has-two-global-firsts/. Assessed July 10, 2015

¹¹¹ Jon Russel, "Uber Launches Auto Rickshaw Service In India, Allows Cash Payments For First Time", Tech Cruch, 9 Aprile 2015, available at http://techcrunch.com/2015/04/09/uber-autorickshaw-india/. Assessed July 5, 2015

that only digital payments are accepted elsewhere in the world) able to reach even the segment of the middle-class who can't afford a UberTaxi service.

We can say that Uber in India is a full success but it did not come without problems; problems for Uber India started in November 2014 when it was forced by the Reserve Bank of India to stop accepting credit card payments, and to set up a new system with local payments firm Paytm¹¹², which allows users to load cash onto a virtual wallet for making transactions. The company run into regulatory problems since its payment system did not includ the 2 step authentication process. Following Reserve Bank of India (RBI) regulations, there shall be 2 authentication phases in to the app, in the first one the customer would have to enter his or her banking pin and in the second one a password before the company could charge the fare to his/her card. Uber changed its payment method and partnered with the India-based virtual wallet provider, Paytm. So from July 13 customers could pay for all Uber rides using international and Indian credit cards in addition to the already exsisting paymet method through Paytm Wallet.

But problems for Uber India are not only related to payment methods. Last 8th December India's home ministry declared all ridesourcing firm like Uber illegal, after a Uber driver was accused of raping a 25-years old passenger in the capital Delhi 3 days before. We all know that sexual abuse in India are very common and, a well known company like Uber can't be involved in such scandals because it did not run the appropriate checks on drivers.

Uber and its similar competitors have been banned because they failed to

¹¹² Jon Russel, "Uber Launches Wallet-Based Payment System In India To Comply With New Regulations", Tech Crunch, 12 November 2014, available at http://techcrunch.com/2014/11/12/uber-launches-wallet-based-payment-system-in-india-to-comply-with-new-regulations *L*. Assessed June 15, 2015

carry out adequate driver background checks. In this specific case Uber appears to have ignored the standard procedures for backfround checks and security, procedures that the company strictly follows all over the world. GPS was not installed in the taxi and police background checks were not conducted on the driver, infact the driver had had problems with justice in the past, he was guilty of other sexual crimes.

Uber was obliged to cease its service in India, but only for one month, the service was resumed in January after applying for a radio-taxi licence. Uber tried to persuade the Delhi government that the normal rules of the taxi industry should not apply, because it is a technology company connecting riders and drivers. Uber tried to push the government to be regulated under the Technology Act 2000 (the primary Indian law treating e-commerce and high tech businesses), but it's clear that the transport department wants Uber to operate like every other radio-dispatched taxi company. Indeed if it true that Uber is an app, it is also true that the service it offers is not so virtual, when you step into the car you are not in the virtual world anymore and you have to embrace the risk of being in a car with an unknown person. Uber and common taxi companies are different because the second typically owns a fleet of cars, which can be pre-booked by a customer. Uber, on the other hand, simply connects individual drivers and their vehicles on its app, which a customer can use to find an on-demand car.

An Uber spokesperson, said that Uber will never be a radio taxi company, 113 "While we have applied for a license under the amended Radio Taxi scheme, Uber will remain a technology company and aggregator. The license would simply allow radio taxis to operate on our platform at our discretion, just like

¹¹³ Saptarishi Dutta, "A chastened Uber agrees to play by Delhi's rules and act like a taxi company", Quartz India, 23 January 2015, available at http://qz.com/331946/a-chastened-uber-agrees-to-play-by-delhis-rules-and-act-like-a-taxi-company/. Assessed August 1, 2015

What are the new requirements Uber and other tech companies must have to operate in Delhi's transport department to ensure Uber's legality, amended its Radio Taxi Scheme from 2006 and imposed certain conditions.

These rules are mandatory to get a redio licence in New Delhi. Firstly all cabs need to adhere to Motor Vehicles Act 1988 and Information Technology Act 2000. Secondly, such companies must be a registered company under Companies Act and must have the licence to provide transport for people. Every car should have a GPRS, placed within the car, to track the position of the cab at every time and a panic button which should alert the nearest police station in case of emergency (this was introduced after the rape case). For security reasons, cars must be yellow-white taxis and, most important and difficult for Uber, the company must have a fleet of 200 cars, owned by the company apllying for the licence. Last, the company should have a registered office in the city where services are being offered. A call center and website must be available for customers.

Of course Uber did not react well to all these requirements as it would change its core business model, it would be obliged to own 200 cars at least. The big change for Uber will be to convert into an aggregator of radio taxis and to establish a fleet of taxis as required by the law. All vehicles connected to the Uber app will have to be fitted with GPS-based tracking devices, which will be connected to a control center maintained by Uber. In addition, the car has to be painted white with the symbol of Uber. The driver will wear a uniform, and he must carry and dispplay his transport authority badge and photo.

Despite of all these changes that the company has to undertake, Uber on its

Delhi newsroom said that its goal is to make itself the safest place in the city and it will continue to work with the Authorities to be recognized as a tech firm under the Technology Act 2000.

After the rape scandal Uber decided (AND WAS FORCED) to intensify its background checks by sharing all existing driver and vehicle data with the transport department and police. Uber is now involving a third party for screening people, the First Advantage, a global leader in background checks which will bring in additional layers of screening including: address verification, a local criminal court search, and a national criminal database search.

The most important innovations are the SOS button¹¹⁴ that allows a rider to alert the local Police at the push of a button in case of an emergency and the Safety Net which will allow users to easily share their trip details and real-time location with up to 5 friends and family members. In order to support these two new features Uber established a dedicated local Incident Response Team, reachable 24 hours per day, who responds to incidents against property and person reported by riders and will also receive a notification (in addition to the local Police) when the in-app panic button is pressed.

Despite the ban Uber continued to operate, after having applied for the radio taxi licence but we know that laws and regulations change very often, last January the company had good news from another Indian city, Kolkata. Uber has been recognised as an information technology company, under the Technology Act 2000. for Uber it is a great success, a spokeman said that this decision, is only the first one and it will serve as an example for other States

¹¹⁴ N.A., "Introducing an Integrated Sos Alert Solution for Law Enforcement", Uber, 30 April 2015, available at http://newsroom.uber.com/india/2015/04/introducing-an-integrated-sos-alert-solution-for-law-enforcement/. Assessed July 18, 2015

in India. This important step has been achieved thanks to the collaboration between the company and the Council, considering only, as a main focus, the interests of riders and drivers¹¹⁵.

The company is supposed to be an intermediary of taxis and recognizes itself bette under the Act of 2000. Kolkaka, unlike the other states, that treated the company as a mere radio taxi operator (as I menioned Delhi's case for example) is recognising it under the IT Act. The company has been struggling in Delhi to be recognised as an intermediary to be governed by the IT Act. The only thing that the city did is the modification of the Radio Taxi Scheme, 2006 as we saw earlier in this chapter to allow aggregators to get licences. Most of the rules, by the way, go against the core business model of Uber which do not own the fleets.

What happened next? After this unexpected and positive outcome for Uber in Kolkaka, a Delhi court last July¹¹⁶ revoked the government ban imposed on Uber Technologies, making it possible for Uber to operate in the capital city and reapply for a license. The final outcome of the situation changed after June when Delhi's transport authority rejected Uber's application for taxi licence and began to fine vehicles because during the previous months it violated the ban. Uber and its lawyers went to the court to change the decision after local rival Ola's application was accepted. In addition, according to the jurisdiction of New Delhi, the state may impose restrictions on taxi companies but can not prohibit them and ban them in total. So finally the Delhi High Court canceled the ban.

¹¹⁵ N.A., "Breather for Uber, Kolkata tags it as IT firm", Redif Business, 15 January 2015, available at http://www.rediff.com/business/report/breather-for-uber-kolkata-tags-it-as-it-firm/20150115.htm_Assessed August 3, 2015

¹¹⁶ Suchitra Mohanty, Aditya Kalr, "High Court revokes ban on Uber in New Delhi", Reiters Magazine, 8 July 2015, available at http://in.reuters.com/article/2015/07/08/india-uberidINKCN0PI17V20150708. Assessed July 28, 2015.

Uber has asked the state transport department to issue the company a new radio taxi license in order to let Uber legally operate in the streets of Delhi, together with Ola.

So for the moment Uber in Delhi is operating under a normal radio taxi licence, while in Kolkaka for example is recognised as a tech firm, but I am sure that the dispute will continue in the next months until when a new set of rules will be implemented. The situation about the radio licence of Delhi is only temporary because Uber is not fully satisfied with its current status.

6.6: EUROPE:

The European Commission towards the creation of a common framework

How is the situation in Europe? We made a deep study about the situation in the USA and India and now I think it is the moment to see what happens next to us. Uber at the moment operates in 19 countries out of 28 but the European presence is not without problems. The company is facing resistance all over the Union because it is a challenging an old regulated industry. Its arrival in Europe generated demonstrations all over the Countries¹¹⁷ by taxi drivers and regulators who tried to restrict or ban the service in most of the circumstancies.

Recently Uber Technologies Inc. complained in Brussels, to the European Commission against 3 European Governments ¹¹⁸(France, Germany and Spain) who ban some of Uber services. Uber believes that those countries are violating some articles of the Treaty on the Functioning of the EU, I am talking about article 49 about freedom of establishment and article 56 about freedom to provide service. Generally speaking national governments deal with transportation policy while EU treaties require States to give all the companies freedom to offer new services without discrimination. Europe is supposed to be a unique single market but the reality is that Uber is being treated in different ways in different countries because it is treated as a transportation company and not as a digital firm as it wish to be treaten. There might be good news though; It is not clear how long it would take for

¹¹⁷ Alberto Heimler, "What's Behind Europe's Taxi Revolt Against Uber?", The World Post, 20 April 2015, available at http://www.huffingtonpost.com/alberto-heimler/europe-tax-revolt-uber_b_7097600.html. Assessed July 11, 2015

¹¹⁸ Sam Schechner, "Uber to Fight EU Rules in Europe's Top Court", The Wall Street Journal, 20 July 2015, available at http://www.wsj.com/articles/case-against-uber-referred-to-europes-top-court-1437402253. Assessed July 22, 2015.

Uber case to be clarified in Europe and to be regulated at EU level rather than at a national level but the company is sure to succeed and prevail because EU court decisions rarely have the effect to rectrict competition or close market.

The emergence of these high tech services is disrupting the transportation sector by increasing efficiency and creating advantages for consumers in terms of time and money savings. Member states are required to respect the general principles of non-discrimination and freedom of establishment of European Union law. At the moment the European Commissioner for Transport Violeta Bulc is working on the topic and by Spring 2016¹¹⁹ she will decide whether liberalize taxi services across the EU and whether peer-to-peer transport services should be considered as web apps or proper taxi services. Last May she wrote a letter to Michael Cramer, chairman of the European Parliament Transport & Tourism Commitee as an answer to his previous letter where he asked the Commissioner to legislate on Uber. On her letter she focuses on the next challenge which is related to technology and innovation in the transport sector. In brief, the letter says that such sector needs to adapt to all the new opportunities offered by innovation and digital technologies. The Commission plans an indepth study into the European taxi market in order to 120 "provide the necessary backgroud for the Commission to decide on the need for, and possible character of, any further action at EU level". In the letter it is also said that taxi regulations and laws were dealt at national level and as a

¹¹⁹ William Louch, "EU Commission launches study on Uber", The Parliament Magazine, available at https://www.theparliamentmagazine.eu/articles/news/eu-commission-launches-study-uber. Assessed September 21, 2015.

¹²⁰ N.A., "TICKET TO RIDE; Europe Considers Hitching a Ride with Uber", Michael Cramer Press, 15 April 2015, available at http://www.michael-cramer.eu/presse/single-view/article/ticket-to-ride-europe/. Assessed July 29, 2015

result Uber is treated differently in every single market.

Several commissions are at the moment working together and analyzing Uber complaints. On one side we see Uber and the spokesmen saying that in Europe protectionism is damaging consumers and denying the Union growth and job opportunities. On the other side the Commission is cautious because these new companies shouldn't skip national rules but at the same time sharing economy initiatives are very welcome.

In details, we will see two cases, briefly: the french case is interesting because of the existence of the Loi Thevenaud and because EU regulators are now putting pressure on France Parliament after UberPop service had to stop last July, in order to preserve Uber driver's safety after huge protests where Uber drivers were hit and their cars were burnt by regular taxi drivers. The other case that I will analyze is the italian one, where Uber X is still banned after a Milan Court decision this year.

6.6.1: FRANCE and the Loi Theyenaud

The European Commission at the moment is analyzing the "Thevenoud law"¹²¹ called also the anti-Uber law or pro-taxi law, recently introduced in France by Thomas Thévenoud, the foreign trade minister, which imposes a certain number of restrictions and regulations on both Taxis and VTC (licensed professional drivers of services like Uber, in french voiture de tourisme avec chauffeur). According to the text of the law VTC Drivers must return to their base after each ride and passenger, while Taxis don't have to, the text of the law says "les VTC, entre chaque course, doivent retourner au siège de l'entreprise ou dans un lieu, hors de la chaussée, où le

¹²¹ Assemblée Nationale, Loi 409/2014 "relative aux taxis et aux voitures de transport avec chauffeur".

stationnement est autorisé". This first point is in my opinion absolutely unfair since the base is usually outside the city centers and going back every ride means a waste of time, a growing congestion and not to mention the great pollution that is created to run such distances for nothing.

Another point of the Loi Thevenoud says "les voitures de transport avec chauffeur ne pourront plus être directement géolocalisées par le client" it means that such services can't use geolocalization services or other softwares to find clients and on the other side it means that customers can't visualize on their smartphones the location of closest cars in real time; with Uber a person has the possibility to see where the closest cab is, before deciding if hailing a traditional taxi; with the new law taxis can have a sensitive advantage because first of all they are the only ones to have the monopole to be hailed on the streets and second because no one would take the risk to reserve a cab without knowing when it will pick you up.

In addition the law says that they have to disclose the right and precise full price of the ride at the time of the reservation but it is nearly impossible because the price of the rides are usually calculated not only on the basis of distance, but also on the basis of time which is influenced by unpredictable factors such as traffic and weather conditions.

In conclusion UberPop at the moment is suspended in France,¹²² Uber suspended it after the violent protests occurred and to maintain the dialogue between Uber and local authorities. Uber X is still available for French citizens because cars and drivers are licensed. We are not sure when the French government will take the final decision, because Uber is trying all the

¹²² Sam Schechner, "Uber to Suspend One of Its Main Services in France", The Wall Street Journal, 3 July 2015, available at http://www.wsj.com/articles/uber-to-suspend-one-of-its-main-services-in-france-1435920525. Assessed August 6, 2015

possible ways to make its service legal and asked to the Costitutional Court of France to check if the law is in line with the supreme principles.

5.6.2: ITALY and the matter of unfair competition

In Italy from Uber's landing, thousands of taxi drivers have manifested against UberPop. Taxi services in Italy, like in France, are highly regulated and only those drivers who are licensed may offer such service. Uber has been banned last 25th May, by the Tribunal of Milan, ¹²³with all the other unlicensed car-sharing services. The service to be ban was UberPop (called UberX in UK) because it creates unfair competition. The other service provided by the company, UberBlack, still available in Rome and Milan because it uses drivers with professional licences. From the decision of the Court we can understand that UberPop has been treated just like any other taxi company which operates without a commercial licence.

After an analysis and a personal translation of the Tribunal decision ¹²⁴I can summarize it as follows the main points of the decision. First of all, for the Court, Uber created a system of radio taxi where taxi drivers can offer a service that don't differ a lot from traditional taxi but these services are operated without a licence. The judge focused on the "substance" of the service offered which is a ride from a place to another but actually, from my point of view the functioning is completely different in the form.

In addition the judge focused on the essentiality of the presence of Uber Inc, not only as a mere mediator, but as a decisive player, since without it drivers

¹²³ N.A., "Il tribunale di Milano respinge il ricorso dell'azienda: Uber resta bloccata", Il Secolo XIX, 09 July 2015, available at http://www.ilsecoloxix.it/p/italia/2015/07/09/ARCju83E-bloccata_tribunale_respinge.shtml. Assessed July 22, 2015

¹²⁴ Tribunale Ordinario di Milano, Ordinanza 25 May 2015, nr 36491/2015

and riders would not be able to communicate and be in contact, so for the judge it is a radio taxi service which differs from traditional cabs in the modality of "calling" the cab. The decision focuses on the fact that UberPop creates unfair competition because it divert customers to the more convenient service, which is in this case Uber and as a consequence traditional taxi drivers suffer a loss of earnings. Moreover the Court denies that Uber Pop is a car sharing because in this case the aim of the car owner is not the one of cost savings, but making profit instead. The Court believes that it is instead a direct competitor of a traditional taxi service, because its drivers are like common taxi drivers.

The service is considered as a form of "private" and "closed" transport since only the community who download the app can use it, it creates the possibility to share a private transport service among a big number of people thanks to the platform created by Uber Inc. on the other side traditional cabs are publicly available for everyone.

In addition, the Court has found that Uber's surge pricing policy, that we analyzed at the beginning of this dissertation, creates fares that are lower than the regulated taxi rates. The Court is sure that these low tariffs are made possible because Uber violates the minimum law requirement and escapes taxi regulations costs such as mandatory insurance obligations and costs connected to the installation of meters and we have to remember that Uber can reach considerable cost savings thanks to the fact that it does not own cars and do not have to pay fixed wages to drivers. Concerning prices and fares the judge said that they are not clarified and should be more transparent.

The judge added that Uber is banned also for security reasons, especially for

young people who are the main users of the app. to the customers, according to the judge, are not given information about the car status and the driver. Uber is supposed to lower pollution and congestion levels, but according to the Court, without Uber those customers would use bikes, public transport or city cars.

Even in this case Uber will not quit its battle and will work with its lawyers towards the creation of a possible solution because the Italian decision comes from the interpretation of a law written in 1992, and again I think that interpretation is not the best solution, instead a new framework would be ideal.

CHAPTER 7: CONCLUSIONS

Now that we are at the end of this dissertation, I would like to briefly sum up what we saw in the different cities and what such a new technology can impact the economy. As we saw when Uber entered the market in 2009, it offered a completely innovative business model with advantages for both drivers, who can gain extra income becoming associated with Uber and for riders since prices are considerably low and the service is suoerior in term of technology and overall quality. As we saw from the figures, the company had and is having a great success all over the world and this success is due to the fact that Uber provides a solution to problems faced every day by many people living in big cities. Sooner or later Uber will disrupt the monopoly of cab transportation, characterized by poor service composed by dirty and late cabs, poor customer service. The interesting thing is that Uber didn't focus on one aspect of the system (e.g. mobile payments for the existing taxi infrastructure, or offering brand new cars), it completely changed the entire experience from the way of hailing, to the payments, including high standard cars.

At the beginning Uber was able to escape from the buzz but after 2012, when the company introduced UberX, which allows nonprofessional drivers to make money, Uber no longer could go unnoticed. Of course the company has now became the target of protests by competitors and legislators. On one side taxi drivers must meet strict training, pay expensive licences, and pass all the required car characteristics. In opposition, new UberX drivers are only asked to pass a criminal background check and carry a license and proof of auto insurance.

As we saw at the beginning of chapter 2, Uber is not thinking to stop or change its service, instead it is taking an offensive approach to fight the incumbents, creating a community of supporters very active in all the social media, and tapping into the tech community in every new city.

One of the most interesting aspects about this "battle" is the way it is developed, we can see how the two opposite parties, Uber against the old player (taxi industry) face it in completeley different ways: on one side, in all the cases that we studied, the taxi industry adopted a policy of lobbying to try to block the new rival with classic weapons like strikes. In 2014 european taxi drivers organized a strike to make customers and Uber aware of taxi industry power, but they just obtained the opposite result because on the evening after the strike Uber turnover increased, in London alone, by 850%. On the other side Uber's reaction is brilliant since it leverages, as I just mentioned, on media communication and on loyal customers, who use Twitter, Facebook, blogs to defend the company way to operate. Other smart approahes were adopted in the case of San Francisco where Uber simply changed its name and in the case of Belgium where made its service free in order not to be illegal under Belgian law. All these examples underlines the inventiveness and capacity to overcome everyday problems of the new economy, Uber is innovative in 360 degrees. The classic instruments of opposition like strikes are no longer an adequate tool to deal with these kind of tech services, to win in the new economy I think that even old players have to find new ways to fight and to be competitive, they should respond offering new services and product, increasing the quality of their current services instead of banning the new competitors. Perhaps, then, rather than striking to preserve their status quo of "traditional firm", taxi drivers should start thinking about how they could adapt their business model to the new reality.

On my opinion it is just a matter of time before we will see the cartel of cabs in all the cities to collapse in front of innovation. We analyzed Uber's business model in chapter 5, we saw its strengths and weaknesses. The model presents many efficiencies and I'm pretty sure it will prevail over time. Regulatory authorities face nowadays two options. the first option is versus innovation and consist in resisting and banning the entry of Uber and other similar tech companies in the market. This approach would not be really smart and will damage users because they won't have the possibility to enjoy such services and there may be many years of litigation because Uber will react to make itself legal. The other option, that I personally support, is to embrace, technological change and allow Uber to compete in the arena together with taxi companies. Of course regulations are needed in order to prevent future strikes and disorders, like in the past. If this will be the path to be followed, deep regulatory changes will be needed. The common point in all the cited cases is the need for regulation improvement.

All the cases that I emphasized underline the common need for the creation of a regulatory framework able to support these new emerging services. Uber's general manager India Gagan Bhatia last July, after the Delhi Court decision said that the company is working with the local authorities in the creation of a new framework.

Uber is ready to help develop a regulatory framework that encourages innovation, it did it already in Washington with the creation of TNCs and in India. Uber was able to be successful in most of the challenges faced, for examle in London where Uber's Driver app do not constitute a taximeter for the law, or in the USA where the service is fully legal. Problems remain in Delhi where Uber can continue to operate, but with a radio taxi licence and

in Europe as well where the service is bannes and illegal. We saw that governments are working on new legislations but there is still much work to do.

We saw that in most of the cases, laws relating to private hire vehicles and to taxis are outdated and discourage innovation, that's why reforms all over the world are needed. The simple interpretation of existing rules, as happened in London, is not enough anymore. A new system of rules is needed and it will be most likely to create a sustainable pro-innovation environment.

According to Kalanick "the company has spent much of its young life fighting in courts, public utility commissions, and city councils for the ability to offer any service at all". As we saw in the previous chapters, in Washington D.C. and San Francisco, Uber has successfully fought back.

We know that heavily regulated industries are deeply fighting these developments instead of embracing a new way of doing business and they do that because innovation and regulation don't match. In all the strictly regulated industries, including services like consultation from lawyers and doctors, and so on competition is prohibited, and we know that innovative technologies like Uber are ruthlsess competitors. Taxi and limo services operate in a economy where they can keep prices and congestion under control, contorlling the number of allowed cabs (in the absence of control there would be too many taxis and this would create congestion moreover if taxis are too many, they would engage in ruinous competition). Moreover governments keep new entry under control (there is a limited number of vehicles authorized to provide taxi services in a given locality). In this framework there is a drawback though: without new competitors likely to come there are few incentives to innovate, when prices are controlled and

cabs can charge a fixed fare, who would spend money to differentiate its product if not for profit? And this is the situation that we are facing now, as I said at the beginning of this work in many cities taxis are dirty, old, late, expensive and historically technology played little role in the industry, but Uber undertood this problem, found a solution and is making money, huge money, on that.

My opinion regarding this topic is that I don't believe we should immediately eliminate all regulations, instead customers safety, insurance, adequate service, predictable prices are still the primary focus of Public Authorities. Innovation can't be reached at the expenses of public safety, this means that the regulatory framework should be adapted to allow Uber and other similar firms to operate legally.

During my writing I found out many way to interprete the current law that Uber can use in order to become legal but personally I don't think it is the right path to follow. The most effective way for the first period is to set up a pro-competition regulatory framework might be for the EU and not only for the EU but also for USA, India etc, to create a proper organ, with the aim to set up the general principles that should govern both traditional taxi services and online car transportation services, in order to create a sort of convergence among the two even if they are different in their business models. At the same time the implementation of such principles should be left to the responsibility of the single countries, which have to follow such general directives. By the way, this ideal single framework for both traditional cabs and new tech firms may create problems since Uber and similar firms's business model is different and unique. In the ideal future, I think that taxi companies should renovate their own business model because it is just a matter of time that in the medium-term Uber's business model, thanks to its uncountable benefits and efficiencies, will prevail over

them. According to this problem of business model asymmetry between the two, for the next future, regulators should allow Uber to compete (without advantages or disadvantages, in an equal way) with cabs companies and create a new regulatory framework specifically designed for these new emerging services, as it happened in San Francisco and Washington.

I am a Uber supporter because I think that people deserve a so valuable alternative, but I also sustain that it doesn't mean that Uber can operate as it is doing now without rules and regulations, both cabs and online companies should in primis ensure safety standards for both passengers and drivers, insurances and criminal checks must be a priority. To conclude, I think that Uber will be successful, but as we saw its business model is not without problems and dangers. All these legal issues are costly in term of time and money and they are damaging the grow of the company. The fact that some drivers protested in the past because they wanted to be employed by Uber, instead of working as self employees, is a signal that there might be some problems in the future, coming from "inside" Uber. So, not only has Uber to fight against competitors, legislators and taxi unions but also keep its drivers happy, in order to survive and prosper. Good luck Uber!

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