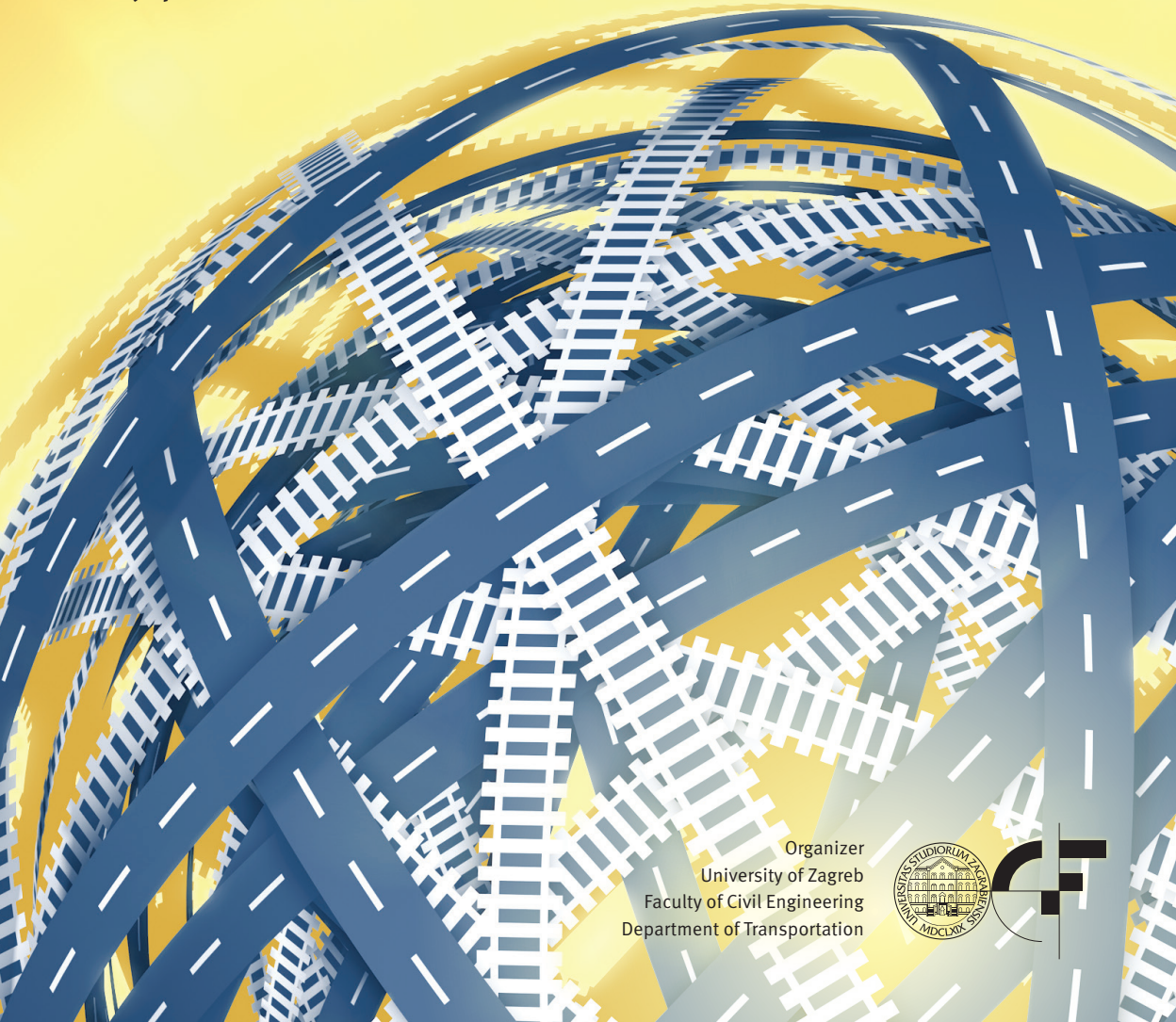


CETRA 2016

4th International Conference on Road and Rail Infrastructure
23-25 May 2016, Šibenik, Croatia

Road and Rail Infrastructure IV

Stjepan Lakušić – EDITOR



Organizer
University of Zagreb
Faculty of Civil Engineering
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CETRA²⁰¹⁶

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THE EVOLUTION OF URBAN TRANSPORT – UBER

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Abstract

Uber is an application that connects passengers with drivers who have a contract with Uber. To order a vehicle it is necessary to own a smartphone and to register within the mobile application by entering your name, e-mail address, a cell phone number and a credit card number that is to be billed automatically at the end of the ride. Global positioning system in the smartphone is used to determine the location so the passenger does not have to know the exact pickup address. The ride order appears on the nearest driver's smartphone application and he/she can accept or reject the ride. Uber is controversial because of its UberPop service that connects passengers with unlicensed drivers, people that own a four-door car and a smartphone, and have passed a background and employment history check. Due to this service, some countries have changed laws regarding transport services. Uber's position in these cases is constant because they are officially not a transport company, but they are a technology company. In 2014 Uber introduced its UberPool service in San Francisco that allows sharing a ride with a stranger who intends to ride along the same route. The savings when joining that type of service can reach up to 40%. Uber started in Zagreb on 21 October 2015, offering fares about 15% lower than the conventional taxi service who greeted their arrival negatively. Taxi service in Zagreb was regulated until 2010 when a partial deregulation was conducted, allowing new companies to enter the market, the biggest and most successful being Taxi Cammeo and Eko Taxi. The purpose and goal of this paper will be research of demand for Uber service in Zagreb, to make a price comparison with major taxi companies and to explore the possibilities for improving the legislation regarding the area of taxi service.

Keywords: taxi, uber, transport service, smartphone application, Zagreb

1 Introduction

Travis Kalanick, one of Uber's founders says: "There was an Uber way before Uber. And if it has survived, the future of transportation would probably already be here". It was called Jitney Bus [1], and the idea behind it was that every driver can put a sign on his or her car to drive anyone anywhere they want to go for a jitney (which was a slang for a nickel, a five-cent piece). Within the first year, in 1915 the Jitney bus had a 150K rides per day in Los Angeles and much more in total across the country; in comparison, Uber is doing 157K rides per day today. The "trolley guys", as he calls them, were not happy about this and got to cities across the country, had regulations put in place to slow down the growth of the Jitney. What happened was that by 1919 Jitney was regulated out of existence.

Now, almost 100 years later, Uber operates successfully in Zagreb, saying they have 50K people opening the Uber app in the first two weeks after launch, and 13K even before Uber was launched. Furthermore, [2] 8K users was registered in first two weeks and the average driver score was 4.8 (out of 5) which makes Uber Zagreb drivers one of the best in the area.

The idea behind this paper was to see what Uber is, how it was launched in Croatia, what stood (and still stands) on its way in terms of legislation, to compare it with the conventional taxi service in Zagreb and to answer the question why Zagreb (and any other city) needs Uber and what are the advantages that Uber bring to the community.

2 About Uber

2.1 History

Uber Technologies Inc. is an American company that develops and offers the Uber mobile application, the application that connects potential passengers with drivers who use their own vehicles. The company was founded in San Francisco in 2009 and started marketing the free mobile application in 2011. That same year Uber expanded to New York City, Chicago and Washington, D.C. and later that year in Paris, France. Since then they continued their expansion to Toronto, London, Sydney, Singapore, Johannesburg and other markets such as Seoul, Tijuana, Peking and Delhi. 2014 saw them entering smaller markets such as Warsaw, Anchorage, Copenhagen and Lagos. As of April 2016, Uber services are available in 405 cities in 60 countries on all 7 continents. In October 2015 Uber came to Zagreb, the capital and the biggest city of Croatia (Figure 1).



Figure 1 Uber application openings since launch (left) and trip route coverage (right) [2]

2.2 Uber services

Uber was started with an idea of a luxury transport which can be hailed via mobile phone, but has developed into something much more over the years. New services were offered and they can be chosen in the application while detailing a pick-up location. Those services are:

- UberT – Potential passengers can hail the official taxi service in that particular town. In New York City, for example, those are “yellow” taxi cabs with a medallion and Boro taxi cabs. Uber charges the application usage and the passenger pays the driver himself.
- UberX – The most famous Uber service. Usually cheaper than the official taxi cabs for 15-20%.
- UberPop – A service that connects potential passengers with unlicensed drivers that have a contract with Uber and have passed their background check. This service is the cause of great controversy which escalated into riots in the city of Paris.
- UberPOOL – Launched in 2014, this is Uber’s most affordable service. It allows ride sharing with strangers who intend to go the same route. Fare savings can reach up to 40% and if the application cannot find another passenger the sole passenger gets a 10% discount.
- UberMOTO – A low-cost motorcycle transport service launched in February 2016 in Bangkok. Passengers can pay the cab fare in cash or with a credit card.
- UberBlack – The original Uber service which includes luxury vehicles.

- UberSUV – Passenger transport with spacy vehicles.
- UberXL – Passenger transport for large groups.

2.3 How Uber works

To order a ride it is necessary to own a smartphone and to register within the mobile application by entering a name, an e-mail address, a cell phone number and a credit card number that is to be billed automatically at the end of the ride. Global positioning system in the smartphone is used to determine the location so the passenger does not have to know the exact pickup address. Booking a ride in advance is not possible. Before confirming the order, the passenger can enter a pick-up and a drop-off address and get a price estimate. Once completed, the ride order appears on the nearest driver's smartphone where he or she can accept or reject it. It is possible to keep track of the vehicle that has accepted the ride. Driver's and passenger's contact information is also shown so they can contact each other if needed. The ride can be cancelled free of charge within five minutes, after that a fixed fee is charged to the passenger's account. An automated message is sent by the application upon the car's arrival. The driver starts the ride on the application and the passenger is shown the route and the estimated time of arrival. After the ride, the credit card specified in the app is automatically charged and the bill is sent via e-mail. The application allows bill sharing with other passengers. The driver and passenger can rate each other in application with a score from one to five stars. Uber charges a base fare, the distance and the time spent driving regardless of whether the vehicle is moving or not. Prices vary from city to city but each one has a fixed minimum fare to be paid if the fare is lower. Uber uses an algorithm that increases the cost in time of increased demand, such as rush hour or a city-wide emergency. It is called "surge pricing", a method of pricing in the free market that involves the raising or lowering of prices depending on supply (how many cars are available) and demand (how many passengers want to ride in them). Sometimes prices for Uber services, depending on the intensity of demand, are increased by a certain percentage, and at other times they could even be doubled or tripled, and these fare hikes take effect during periods of high demand for cars (e.g. rush hours, dates of concert events, and during rain and snow storms or public transport strikes). Depending on supply and demand, the fare may be increased tenfold. However, the potential passenger is always shown this information before confirming the ride.

3 Legislation

When Uber announced its presence in Zagreb, they faced many obstacles related to legislation, mainly due to a lack of understanding what Uber really is. Uber is perceived as a taxi company by the authorities and the conventional taxi companies thus expected to follow the rules that all other taxi companies in Zagreb have to follow.

3.1 The reasons for banning Uber around the world

What most people will first remember when someone says "Uber" are riots in Paris in January 2016, then Uber being banned in Brussels in September 2015 and articles like "Uber ordered to shut Brussels service within 21 days ..." etc. What they do not know is that in fact the problem was the UberPop service where the drivers were independent individuals that undergo only Uber's internal check and they have to have a valid driver's license for at least 3 years. And there is the problem – an "ordinary" driver can become a competitor with the taxi drivers who have to undergo a much thorough check and have to obey all applicable laws and regulations. Yes, UberX is, more or less, "common ground" but, in case of Zagreb, drivers that use Uber can and should be able to continue working if they have a company that offers the services of renting a vehicle with a driver.

What should be emphasized, and it was not in Zagreb's case, is the way Uber operates – along with taking share of the markets and earning profit like any other company they try to improve the market by encouraging people to share rides and reduce the use of their own vehicles, increasing the mobility and lowering the pollution and the use of public space for parking. One of the positive examples is Estonia – one of EU's most advanced countries speaking in terms of using ICT – where the Tax and Customs Board and Uber created a working group to examine what are the appropriate solutions for payment of taxes for the expanding sharing economy services across Europe (like Uber, Airbnb and Coursera). The goal of the pilot project is to produce a new tax declaration platform and simplify the process of tax declaring for Uber's partner drivers. The first results are expected in 2016 and Marek Helm, the Director General of tax and Customs Board, says [3]: “Earning a revenue and payment of taxes on it should not be a burden. It is the tax authority's work here to think about how in the co-operation with businesses to create smooth and transparent technical solutions that give businesses the assurance that things are in order.” Looking from one point of view this is a great marketing from (and for) Uber, but looking from another – this shows how Uber wants to do business.

3.2 Why drivers that use Uber and Uber itself do not have to meet the legal requirements and other taxi drivers in Zagreb have to?

The answer is fairly simple – Uber Croatia LLC is not a taxi company and drivers that use Uber app are not taxi drivers. Uber is a company registered to represent and promote the company Uber and to do market research [4]. Uber drivers are not taxi drivers, they own a company or work for one that is registered for chauffeur service. If they are employed or own a taxi company they have to remove the TAXI signs when taking a passenger with Uber, they must not use a yellow lane like taxi drivers can etc.

After an article that, after only three sentences, concludes “Uber is legal in Croatia” [5], an e-mail was sent to the Ministry of Maritime Affairs, Transport and Infrastructure. On 4 March 2016 an answer was received “confirming the article as Uber Croatia LLC in fact does marketing and product promotion for the Uber application owned by a Dutch company UBER B.V. and that Uber Croatia LLC does not manage the Uber application for the area of Zagreb. In the following period the Ministry will control the compliance with the Croatian Road Transport Law and other legislation on taxi transport in Zagreb for the drivers/companies that use the Uber application. Furthermore, they forwarded the case to the Tax Administration, Customs Administration and the Croatian Competition Agency to further process this issue.”

On 21 March 2016 an answer was received from the Tax Administration stating that the Croatian Tax Law does not allow them to disclose the information on tax proceedings, and the Customs Administration confirmed that they never conducted an inspection control of the company Uber Croatia LLC. An answer from the Croatian Competition Agency states that they did not initiate any proceedings in this matter as it is not in their jurisdiction.

The Court Register in Zagreb stated on 6 April 2016 that they are aware of the “Uber issue” and that it is not possible to register a company with the chauffeur service and they suggest their clients that want to work with Uber to register the company for renting motor vehicles given that this is “a broader term than chauffeur service”.

This article describes the challenges Uber is facing and will have to face in the future – shortcomings in the legal system (it is not possible to register a chauffeur service), disinformation in the news, and linking the UberX service with taxi. In the above mentioned answer from the Ministry they stated “they will control the compliance with the Croatian Road Transport Law and other legislation on taxi transport in Zagreb for the drivers/companies that use the Uber application” which simply does not make sense – they are not taxi drivers. The best example for disinformation are articles where the question “Who is can be an Uber driver?” is answered with “Uber drivers do not have a taxi licence and a taximeter, almost anyone with a valid driver

licence and a vehicle can apply to be an Uber driver” [6]. The only thing the disinformation brings is more dissatisfaction and anger for those who would like order in this area of transportation, and many of them currently working in Zagreb taxi service.

3.3 How and why did the Customs check “Uber drivers”?

On 12 December 2015 an “incredible action against Uber drivers” was conducted [7], stopping more than 50 drivers in different locations around Zagreb. Four of them were found in violation of the Croatian Transport Law and the Regulation on Taxi Transport in Zagreb thus violating the law prohibiting and preventing the carrying out unregistered activities, punishable by Article 10 of that same law – their vehicles were impounded and they were fined. The same thing happened as in the case of the Ministry's response above – the drivers that use Uber were treated as taxi drivers which they simply are – not. The process not being finished neither side wanted to comment its outcome, and Uber officials during the Startup Wednesday [8] said that “they rented the vehicles for those four drivers to be able to work the day after and paid for the fines”.

4 Price comparison between taxi services in Zagreb and Uber

For the comparison shown in the Figure 2 below the route from the city centre to the Zagreb Airport was used, a distance of 16.4 kilometres in two different periods of the day – 8 a.m. (rush hour) when it takes about 40 minutes to make that trip and 8 p.m. when it takes less than 30 minutes. The variables for the calculation were: the price of a call (if the taxi service does not have a mobile application), the start price, the price per kilometre and the price per minute.

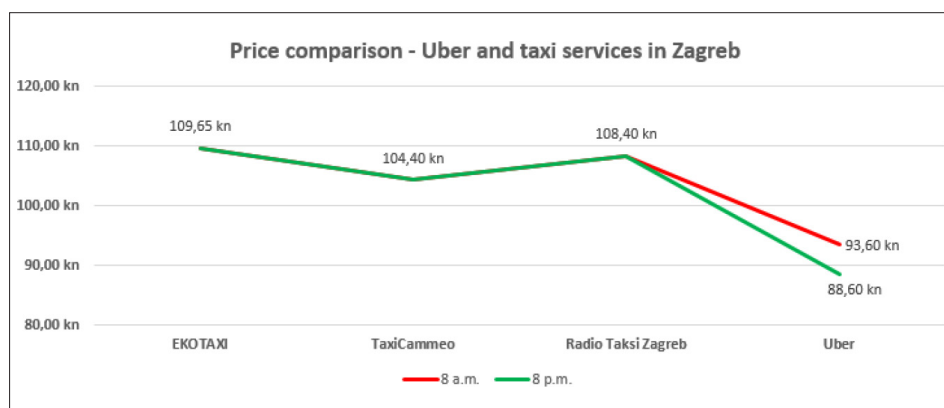


Figure 2 Price comparison

The practice in most cities where they have UberX shows that UberX is cheaper than the taxi service. In the future Uber plans to introduce the UberPOOL service to lower the trip costs even more. At the moment you can only share a ride with a person that is standing next to you – you input his or her e-mail address in the application and the price will be split.

5 Conclusion

Zagreb needs Uber mainly because the taxi services in Zagreb missed the opportunity to improve [9] in a way that will make Uber just “another player in the field”. They could have lowered the prices improving their operations so that more people can use the taxi service on a daily basis, they could have tried to change the regulations so rides can be shared, and they could have established a much higher quality control of their drivers' services – they had more than five years to do that.

If the fare price was taken out of the equation, Uber's biggest competitive advantages are convenience and transparency of services. No cash changes hands (thus the opportunity to hide the profit is none) and there is no need to have your credit card on you. When you arrive at your destination you can simply walk out of the car, your account will be automatically charged and an e-mail receipt will be sent to you – and life is much easier because there is no need to have any change or to collect and track paper receipts. Both unprofessional drivers and rude passengers are weeded out because they get to rate one another after the ride and see the rating before they accept the ride – and a consistently low rating will force both of them out of Uber.

One of Uber's goals is “get more people into fewer cars” [10] – a goal everyone with common sense should have – less cars, less parking spaces in the city area and that combined with stimulations for the use of hybrid cars can get us to a better, cleaner and less noisy society. The negative aspect of Uber is surge pricing, as seen in London during the tube strike [11]. However, if there is no cheap (yet high-quality) alternative to public transport the passengers are stuck either walking or taking a far more expensive taxi service. Another negative aspect is one that has not struck Zagreb yet – a battle to provide the cheapest service between Uber-like applications. Unfortunately, this battle is being fought on the backs of drivers, who bear most of the expenses and this can only add extra stress for the drivers and, if not corrected, will bring about poor service in the long term.

Uber will most definitely stir things up in Zagreb even more when they introduce the UberPOOL service. As seen from this paper drivers that use Uber are (still) considered taxi drivers even by the authorities and Croatian Law considers taxi ride to be “a ride where passengers are picked up based on one order and charged with only one receipt”.

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