Analysis of the sharing economy trend: The case of Uber

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Degree program
International Management and Leadership
Code of the degree program: 0573

Master Thesis

To obtain the academic degree:
Master of Arts in Business (MA)

Title of the Master Thesis:

Analysis of the sharing economy trend: The case of Uber

Submitted by:	Elena Korábová
Matriculation Number:	1610573014
Cohort:	International Management and Leadership 2016
Supervisor:	Dr. Tamás Csermely
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Vienna, 17.07.2018

Statutory Declaration

I declare in lieu of an oath that I have written this master thesis by myself, and that I did not use other sources or resources than stated for its preparation. I declare that I have clearly indicated all direct and indirect quotations, and that this thesis has not been submitted elsewhere for examination purposes.

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Date 17.07.2018   Signature

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List of Abbreviations

CPI	Consumer Price Index
GDP	Gross Domestic Product
TAM	Technology Acceptance Model
TNC	Transportation Network Company

Abstract

This paper provides an overview and a critical analysis of the sharing economy, which is a new consumption paradigm driven by technological innovations and executed primarily through online platforms. The goal is to provide insights into the current theoretical background, categorization of the sharing activities, factors that shape consumer behavior in this context, as well as future outlooks and impacts of this trend.

The focal point of the whole research was Uber with the ambition to assess its situation and the opportunities and threats it might bring. This has been done through reviewing relevant literature sources, financial statements as well as conducting own quantitative empirical research through an online survey. The results were analyzed using descriptive statistics, non-parametric chi-square tests and legacy dialogs.

Upon analysis of these areas, it became clear that the sharing economy is gaining attention. Sharing companies are expanding globally, bringing new customer benefits and often disrupting the traditional sectors. The economic indicators, legal frameworks, employment standards and the environmental situation of the planet might be affected by this trend what makes it a very relevant research field. The research showed that people are willing to participate in these activities and show positive intentions to engage in this trend in the future, mainly when it comes to swapping platforms and peer-to-peer activities, while these intentions are affected mainly by the economic benefits. Furthermore, the analysis of Uber illustrated how a specific sharing platform might challenge the traditional industry, provide new benefits and threats, and some of the critical problems that the sharing companies must tackle such as legal issues and bans, profitability, or infrequent use.

The results provide comprehensive insights into the current situation of the sharing economy; however, the limitations such as non-probability sampling, non-parametric test and a lack of financial data might influence the results.

1 Introduction

The consumption habits of people are influential factors affecting the future of the world, whether from the economic perspective or not. Nowadays, the most prevailing model of consumption is based on individual ownership. However, owing to new technologies, more modernized practices are becoming more and more widespread. The manner of consumption that is referred to as the sharing economy has received significant attention, whether from the general public or the business sphere. Through using technological innovations, placing access over ownership, capitalizing on the communities and the elimination of middlemen in economic transactions, these practices became a competition for traditional industries. Even though it is still unsure how this trend will evolve and whether it will sustain, it is increasingly important to dedicate attention to this topic because it might affect not only the day-to-day life of people but also the business environment, the legal framework and the environmental situation in the world. There is a lack of clear theoretical background and empirical findings regarding this topic, and therefore, this research aims to contribute to the current situation with new findings.

The aim of this research is not only to bring clarification to the chaotic theoretical background, but also provide practical recommendations and an analysis of the possible future impacts. This will be delivered through answering the following research questions:

1. What are the practices of the sharing economy?

2. What are the drivers and barriers that shape people's participation in the sharing economy activities?

3. What are the outlooks and future impacts of the sharing economy trend?

4. What are the opportunities and threats that Uber can bring in the future?

5. Which elements are crucial for a successful business based on the sharing economy model?

As these questions reflect, the thesis focuses not only on the practices of this consumption trend itself but also on the consumer behavior connected with the sharing economy. It is essential to understand the reasons why people engage or do not engage in this type behavior in order to understand why this behavior is becoming popular and how it might evolve further. The methods that will deliver the findings are a literature review of relevant books, articles, reports, financial statements and other relevant sources, as well as a quantitative empirical study conducted through an online survey. The findings will be organized in six sections. Due to the fact that the sharing economy affects numerous

industries and business spheres, in order to provide more detailed and accurate findings, one of the most significant and most disruptive sharing companies – Uber will be taken as a focal point for the analysis.

This work is beneficial for numerous auditions. Firstly, the general public might get an overview and understanding of the accessible practices of the sharing economy; researchers could benefit from the summary and critical analysis of this trend and use the recommendations for future research, and entrepreneurs might employ some of the recommendations for a successful business based on the sharing economy principles in practice.

2   The sharing economy

Almost every person has heard or used the application Uber or Airbnb in their life. At first sight, they seem just like another alternative to a typical taxi or an accommodation service. In reality, they are only two examples out of numerous platforms driving forward one of huge current trends in consumption that is referred to be the sharing economy. This new system has attracted the attention of the public, as well as professional businesses (Farronato, Levin, Brusson, Abele, Iacangelo, & Schmid, 2015, p. 27). The term suggests its explanation already from the name. Its principles are based on sharing, splitting, swapping, bartering, distributing objects, services or capacities (Botsman & Rogers, 2010). Nevertheless, the definition of the term, elements it compasses, and its subsequent division are quite complex and complicated topics. The following section will provide insights into these problematics and introduce the definitions, the related terms and crucial elements of these activities and how the various different companies and business models can be distinguished.

2.1   Theoretical framework

Sharing economy, collaborative economy, collaborative consumption, gig economy, and many other terms circulate through the society referring to very similar concepts and behavior patterns which are based on providing, sharing, giving or receiving products and services mostly from and to other peers through a platform rather than traditionally purchasing them from institutions and companies. The mentioned terms are even used interchangeably (Hodkinson, Galal, Martin, & PwC, 2017, p. 6; Yaraghi & Ravi, 2017, p. 3). One of the factors that might have caused this is the ambiguity of the terms and no officially accepted definitions that would provide clear guidelines regarding the meanings and examples of these phrases. Nevertheless, the academic focus in this field is increasing and many researchers attempted to provide a theoretical background and definitions to grasp and explain this new sharing behavior trend.

The first element that needs to be discussed is the nature of the term sharing economy. To clarify the individual words, an economy is a system of production, exchange or trade and consumption. The word sharing refers to the process of granting something without any compensation (Farronato et al., 2015, p. 53). On the first sight, this definition seems to refer rather gift giving than a particular kind of a market exchange. Even though the sharing economy-related behavior does have some underlying principles based on solidarity and pro-

social behavior, the actual execution nowadays is slightly different from the provided definition of sharing.

Generally, the sharing economy behavior involves three sides of the transaction – the provider, the user and the intermediary. However, the middleman does not work typically as in the capitalistic model (Botsman, 2015). In this case it is mostly a platform which enables a direct transaction between the other two parties (provider, consumer) thanks to matching algorithms. Owing to this matching, the providers and consumer are able to increase the value created by their assets (Petropoulos, 2016, p. 11). Therefore, it is not driving people to consume more, but rather encouraging and enabling people to use more what is already purchased. It is also important to point out that, in the majority of cases, the capacity employed in this type of transaction was previously underused. As a result, people are able to transform this idle capacity into productive resources (Wallsten, 2015, p. 4). Sometimes, these mechanisms are so efficient and successful that they become competitors of well-established players at the market and traditional industries (Wallsten, 2015, p. 2). This phenomenon is visible mainly in the transportation industry owing to Uber.

The topic of idling capacity was highlighted in definitions of some researchers. Rachel Botsman describes the sharing economy as a new economic model which has roots in sharing either tangible or intangible assets which are underutilized. The compensation for this sharing might be monetary or also non-monetary. Currently, these practices mainly occur through a P2P process, but there are opportunities present also in B2C relationships (Botsman, 2013). Petropoulos is in line with this opinion and states that the sharing economy is based on numerous business models and exercises that have common elements of transformation of the idle capacity into economic benefits (Petropoulos, 2016, p. 6). However, the underused capacity is not only relevant for definitional purposes, but it is also a source of controversy within the sharing economy topic. Ideally, consumers should occupy only the capacity that is already created and idle (such as a person who needs to go on a business trip to a foreign city and offers free car seats on Blablacar). In contrast, the platforms categorized under this trend often create a new capacity, such as Uber or Lyft cars, when the driver will make a trip that would not happen in the first place, without the order from the customer (Frenken & Schor, 2017, p. 4). Undoubtedly, this very much depends on the specific drivers and transactions, and it cannot be generalized, but it is still an important point to mention in connection with the sharing economy. Also, it is a factor that increases the complexity of this problematics. From another perspective, activities such as knowledge sharing, and open-source software do

fall under the umbrella term sharing economy (JustPark, n.a.; Pais & Provasi, 2015, p. 349) while they do not necessarily use any idle capacity. In the same time, it can be argued that they involve an honest sharing intention to even greater extent than other platforms such as eBay. Therefore, the use of underused capacity as a rigid criterion for the exclusion of activities that do not involve it, might end up creating distorted image regarding the sharing economy trend. It is rather one of the effects and motivators that are facilitated through the platforms.

Along with the term "sharing economy", "collaborative consumption" has also been popularized, mainly by Rachel Botsman and Roo Rogers' well-known book dedicated to this topic (Botsman & Rogers, 2011, p. 71). They provided definitions which were further summarized in the work of Selloni (2017, p. 18) stating that the collaborative consumption is an economic model that is founded on activities such as the sharing, renting or bartering products and services while focusing on access rather than ownership. Huber (2017) also developed a working definition of the collaborative consumption as "all forms of practices in which at least two members of a community get engaged in direct interaction and draw on the same units of material goods or services for performing practices" (p. 55). This definition is interesting due to the fact that it points out the interaction as one of the crucial elements of this type of transaction. This might subsequently distinguish collaborative consumption from other types of sharing behavior, such as car sharing, which does not involve direct interaction of the users. These activities are according to Bardhi and Eckhardt (2012, p. 881) considered to be access-based consumption. This division between collaborative consumption and access-based consumption does provide interesting insights but has not been widely accepted and recognized and therefore, for the purpose of this thesis, activities that do not involve direct contact (such as car or bike-sharing) will still be considered as part of the sharing economy.

Except for the interaction of the users, technology was also involved in the various definitions. Not only researchers (Botsman, 2010; Wallsten, 2015, p. 4), even the official report published for the European Parliament identifies information technology as a crucial intermediary in case of sharing economy transactions (Petropoulos, 2016, p. 6). Codagnone, Biagi, and Abadie (2016, p. 22) even claim that the sharing trend is a wide scope of digital platforms that function either for profit or non-for-profit and simplify and enable the exchanges among the involved parties through numerous interaction types, whether P2P, B2P,

B2B, P2B or even involving government. Consequently, this enables utilizing capital assets, time, goods or skills, or just time.

Furthermore, a relevant topic discussed in the connection to the sharing behavior is the fact that it should involve the coincidence of wants (Botsman, 2010), or double coincidence of wants (Starr, 1972, p. 290). These terms identify situations when two parties which are interested in an exchange are willing to barter their goods for exactly what the other party has to offer (Oxford Reference, 2018). This can be illustrated through the example of swapping platforms, where people can exchange clothes, furniture or anything else that they find useless. However, if the exchange does include money, such as in the case of the application TaskRabbit, which is a platform that helps users to find people to do on-demand jobs such as gardening (Robinson, 2018), the coincidence of wants becomes questionable. TaskRabbit brings another sharing economy-related term since it is often categorized as part of the "on-demand economy" (Maselli, Lenaerts, & Beblavý, 2016, p. 2).

From the provided theoretical overview, it is obvious that authors place focus on various elements, whether it is using excess capacity, enabling interaction between people or technologies, and the focal point also depends on the aim of the specific author. For example, the factors relevant for policymakers, such as whether the platform is for profit and how many transactions occur, might not raise equivalent concerns in the scientific field. Aiming to develop a general, universally applicable definition is outside the scope of this thesis; moreover, with the current speed of innovation in this field, it might become obsolete soon. However, the connection of the various terms is an important point that should not be excluded. Fanny Schiel (2015, p. 12) developed a graphical depiction of the relationship between the sharing economy and other related terms based on the work of Frenken, Meelen, Arets, Van de Glind, Botsman and Rogers (Botsman & Rogers, 2011; Frenken, Meelen, Arets, & van de Glind, 2015).

This depiction is presented in Figure 1. The sharing economy presents the umbrella term for diverse types of activities and business models. In the center of this consumption practice is the collaborative consumption which should, as was already specified earlier, involve also the interaction among people who are connected through the transaction. Three neighborhood concepts surround the core term in the middle, which are on-demand services, redistribution systems, and product-service economy. The logic behind the categorization of the terms is that the on-demand economy specifies platforms when you hire someone to do a job (hire a driver to travel somewhere), product-service systems enable you to access the

resource to do the activity (hire a car to travel somewhere) and redistribution markets enable you to buy used items (buy/swap an older car, prolong its usability). The three yellow terms signify the points of differentiation between the sharing economy and other market exchanges – sharing through consumer-to-consumer (C2C) transactions, sharing access, and more efficient use of assets (Frenken et al., 2015). More detailed overview regarding various types and business models of the sharing economy will be provided in the next subsection.

Figure 1 Interconnections of the sharing terms
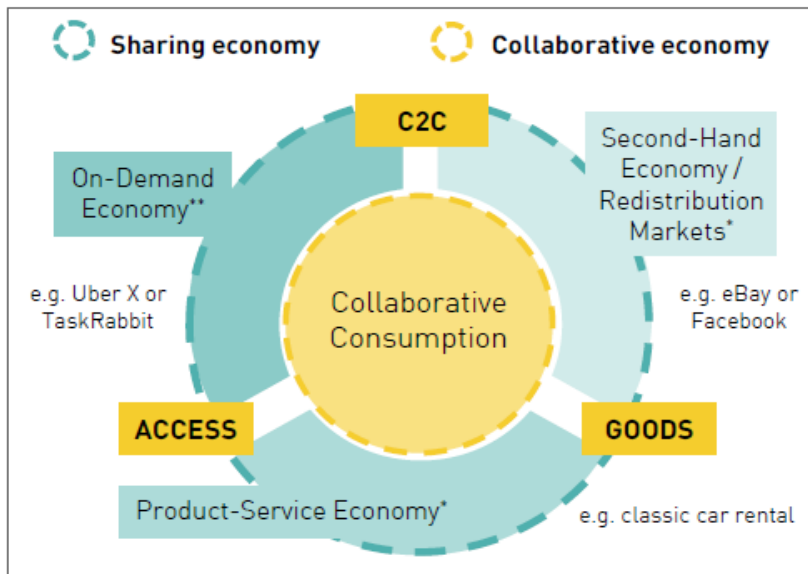
Figure 1. (Botsman & Rogers, 2011; Frenken et al., 2015; Schiel, 2015, p. 12)

To sum up, the sharing economy is often used as the core terminology to describe the current sharing consumption trend (Frenken et al., 2015; Schiel, 2015, p. 12) and this mindset will be adopted also within this paper. Other terms, such as "collaborative consumption", "collaborative economy" are for now often used interchangeably with no accepted distinctions and definitions. Therefore, for the purpose of this thesis, publications which mention not only the term sharing economy but also its synonyms will be taken into account.

2.2   Business models and sectors

Car-sharing, bike-sharing, open source software, swapping and renting things and second hands are just a few examples of how people participate in the sharing economy nowadays. Due to the uncertain current stage of definitions of various sharing-related terms, the overview and the analysis of specific business practices might provide more useful

insights into how the sharing systems nowadays look and work. Also, these real-life examples and observations are crucial in order to understand the current sharing behavior properly.

Firstly, there are essentially two ways how a person can participate in the collaborative consumption system: as a user, as a customer, or possibly as both (Botsman & Rogers, 2011, p. 70). Each of these roles has its own functions and contributions to the transactions. The most widespread model and form of the exchange is shown in Figure 2 (Wahl, 2017).

Figure 2 Model of sharing transactions
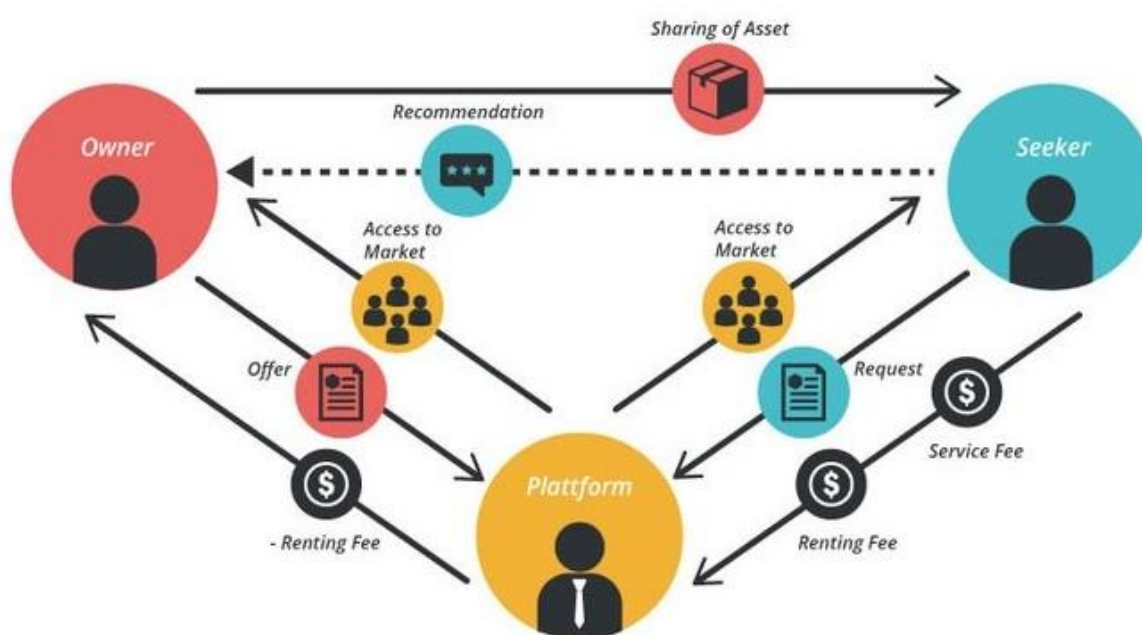
Figure 2. (Wahl, 2017)

To move further to a specific division of the activities, categorizations are often based on the industry sector the company is working in. This division makes logical sense and also works well for estimations of the impact in the future, such as in the case of analysis conducted by PwC, where the future revenues of the sharing economy were estimated and divided between five fundamental sharing economy areas. These areas were identified to be collaborative finance, peer-to-peer transportation and accommodation and on-demand professional and household services (PwC, 2016)

However, a more thorough analysis of the sharing economy business models reveals that a closer look should be taken on the dynamics of the company's operations and its

purpose in order to gain deeper insights regarding the ways how sharing economy operates in practice.

Rachel Botsman and Roo Rogers (2011, pp. 70-73) developed a categorization of the collaborative consumption activities, which is probably the most widespread and the most cited division among all (Bellotti, Ambard, Turner, Gossmann, Demková, & Carroll, 2015, p. 1088; Hawlitschek, Teubner, & Gimpel, 2016, p. 3; Roh, 2016, p. 505). This grouping consists of three categories, which are product-service systems, redistribution markets and collaborative lifestyles (Botsman & Rogers, 2011, pp. 70-73). Firstly, product-service systems entail activities that provide users with access, but do not transfer the ownership of the items. As a result, the customer is paying for a temporary experience the product offers, not for the good or ownership itself. Examples of such activities would be car-sharing which is provided by applications such as Zipcar, car2go or DriveNow (Le Vine, Zolfaghari, & Polak, 2014, p. 7). The main benefits these sharing activities provide are not only environmental, since the usage of products increases and the idle capacity decreases. For users, it might have also economic benefits because their overall costs can be shared or disappear – no upright payment for ownership or ownership-related costs such as repairs, maintenance or insurance. Consequently, the range of experience possibilities people can afford increases (Botsman & Rogers, 2011, p. 72). Also, the owners do not have to bear the costs by themselves. Nowadays when companies are successfully pushing people to consume more through the powers of persuasion, smart selling tactics and life-cycles of products, (Botsman & Rogers, 2011, pp. 21-22), this type of behavior makes perfect sense to slow down the hyper consumption trend.

The second type, redistribution markets, involves reusing or reselling already owned items to other users. This exchange might happen with or without monetary transaction involved, it even encompasses the free exchanges of goods. Examples of these platforms are eBay, Freecycle, SwapStyle, or thredUP (Botsman & Rogers, 2011, pp. 72-73; Quilty, n.a.). Even though the benefits are similar to product-service systems – products are used more often, costs are decreased, it also cuts waste. The greatest difference lies in the fact that the ownership of the item is changing (Botsman & Rogers, 2011, p. 72). Therefore, even though this type of consumption is not based on access and/or its domination of it over ownership, it is still categorized in the collaborative consumption practices and provides very similar benefits as other sharing-related practices.

Collaborative lifestyles which are the third type of the collaborative consumption presents sharing less tangible items such as skills, space or time. Some examples of services

found in this category are ride-sharing (Blablacar, Uber), or sharing spaces for various purposes such as Airbnb, Rentity, Desks Near Me and others (Botsman & Rogers, 2011, p. 73; JustPark, n.a.).

From the overview by Botsman and Rogers, it is visible that while the industry focus of the sharing economy companies might be different, there are similarities in their business models. Furthermore, Pais and Provasi (2015, pp. 348-350) developed a slightly more detailed categorization framework which helps to distinguish between various practices of the sharing economy. Their overview of activities reminds about some types of sharing which could easily go unnoticed or as uncategorized under this trend. It includes all endeavors that fall under two criteria. Firstly, the transaction must take place through a network or a technology, and secondly, it should differ from the traditional market economy (Pais & Provasi, 2015, p. 347). They classify the activities into six distinctive groups: rental economy, peer-to-peer economy, on-demand economy, time banking and local exchange trading system, free/libre open source software and social lending and crowdfunding (Pais & Provasi, 2015, pp. 348-350).

The first two categories are very similar to product-service systems identified by Botsman and Rogers because they are explained as renting platforms providing access to goods. But in addition, they provide a further distinction between goods that are provided by companies (rental economy) and by individuals renting own items (peer-to-peer economy). These types of platforms are useful for underused assets, occasionally used products, and specialized equipment (Pais & Provasi, 2015, p. 348). The next two groups are again similar, they provide professional and also non-professional services (car-pooling, ride-sharing, household works, consultancy, teaching, etc.), but the way of compensation is different. While on-demand economy includes monetary payments, the time banking and local exchange trading system uses rather barter of time or credit system which work as an alternative currency (Pais & Provasi, 2015, p. 349). The last two categories are slightly more industry oriented. The free/libre open source software, as the name suggests, refers to open-source software, free IT solutions and computer user freedom (Stallman, 2016). The last category, social lending and crowdfunding comprises of alternative financing sources, such as crowdfunding platforms and private loans for individuals (Pais & Provasi, 2015, pp. 349-350). These classes are summarized in Table 1 supplemented with platform examples from various sources to provide a comprehensive picture.

Further interesting insights can be also gained by taking a closer look at technologies. Even though all the sharing activities do not necessarily happen online or through a platform, IT innovations are definitely one of the greatest facilitators of the sharing economy practices nowadays (PwC, 2015, p. 15) and their role in various sharing business models can offer interesting insights. The information systems, respectively the platforms that are used, might have three various roles: meeting space, marketplace and matchmaker (Hafermalz, Boell, Elliot, Hovorka, & Marjanovic, 2016, p. 6). The main difference between them is the level of intervention within the transaction. The meeting space has the least active or participative role. In this case, the platform enables communication and connection between the users, provides information about one another (profile, reviews, etc.), but is rather passive, for example Blablacar. In the case of the marketplace, the platform already facilitates the transaction (payment, insurance, etc.) and might become an active party in case of a dispute such as Airbnb or Madpaws. The Matchmaker is an active mediator of the transaction, which not only matches users with similar needs but interferes with deals negotiation, such as Uber which has an algorithm that modifies the ride prices for various town parts at various times (Hafermalz et al., 2016, p. 6).

In a nutshell, there are numerous ways how the sharing economy is practiced and how the activities might be distinguished. This section provided three various frameworks that might be used for the purpose of distinguishing the activities, also with numerous real-life examples from various countries around the world. In the majority of cases, these activities work in the form of a two-sided platform where a person can be a consumer, provider or both. As was shown in this section, restricting the division according to industries is very common and understandable; however, it could obscure the similarities and differences between the business models which are often relevant. There is no single right way how to categorize these activities, but there are essential elements that should be taken into consideration when looking on various models: whether the ownership changes, what is shared (tangible or intangible goods), the nature of the provider (company or an individual owner), whether monetary transaction and compensation takes place and the degree of involvement of the platform.

Table 1 Categorization and examples of sharing platforms

Name	Examples
Rental economy	Borrow a car - ZipCar, Hyrecar Borrow a bicycle – Citybike
Peer-to-peer economy	"You can live in my flat" – Airbnb, BedyCasa "Borrow my car "– Fleety, easyCar Club, Getaround "Borrow my boat" – Boatlers, Board a Boat "Borrow my bicycle" – Spokefly, Otter "You can borrow items you do not want to buy" – Baatna, Re-lendo
On-demand economy	Ride-sharing: Uber, Blablacar, Toogethr Small job outsourcing - TaskRabbit Consultancy, business advice – Sooqini, Willid, The Found Table Teaching – Coomuna, Vanford, Inc., Uguru.me
Time banking and local exchange trading system	TimeRepublik
Free/libre open source softwar	Linux, Apache Web server, Perl,
Social lending and crowd-funding	Kick starter, Wefinance, Lenderly, Finsquare

Table 1. (Benkler, 2006, pp. 37,60; Citybike, n.a.; Crunchbase, 2018a; JustPark, n.a.; Pais & Provasi, 2015, pp. 348-350)

3 The transportation industry and Uber

The possibility of hiring a car has its importance within the society. It serves as an alternative to pedestrians, bikers, public transport and also car owners, whether they are residents or just tourists (Ngo, 2015, p. 9). So far, the taxi industry has been the major provider of occasional on-demand car rides, however, in the past years; a new trend of so-called ride sourcing through smartphone apps is emerging. The ordering method is not the only difference in comparison to traditional taxi services (Rahel, 2016, p. 2). The ride-sharing platforms normally do not own any vehicles, drivers are non-professionals and the payment takes place through applications (Ngo, 2015, p. 9). Moreover, the prices tend to be lower (Stefansdotter, Von Utfall Danielsson, Nielsen, & Sunesen, 2015, p. 7). Even though these new services provide significant benefits to users, such as greater efficiency, innovative pricing models and driver tracking (Edelman, 2015, p. 2), this new trend has brought a lot of disputes with itself and has been challenged by numerous jurisdictions (Ngo, 2015 p. 9). The greatest issues are related to laws and regulations due to the fact that these platforms typically do not require their drivers to have licenses, medallions or commercial insurance, which are normally required for official taxi drivers (Malhotra & Van Alstyne, 2014, p. 25). The well-known examples of ride-sharing platforms are Uber, Lyft or Taxify. However, Uber is the strongest player in this market, currently operating in more than 80 countries around the world (Uber, 2018a), and had significantly positive revenue evolution throughout past years (Efrati, 2018). Moreover, the valuation of the company was rising rapidly, from $3.9 billion in 2013 to $68 billion in 2017, which is not only the fastest valuation evolution among some other sharing economy players but also the highest valuation within the ride-sharing industry. The only company that is coming close to Uber's valuation is Didi Chuxing, which is a ride-sharing giant in China which probably benefits not only from the rising sharing economy trend, but also from the fact that China's start-up field is very dynamic (Dai, 2018). Comparisons are visible in Figures 3 and 4.

These facts prove that Uber is definitely a strong player in the sharing economy world and one of the leaders and flagship brands of this phenomenon. Therefore, the focus of this thesis will be placed on this company and deeper analysis will be provided.

Figure 3 Comparison of valuation evolutions of some key sharing economy players
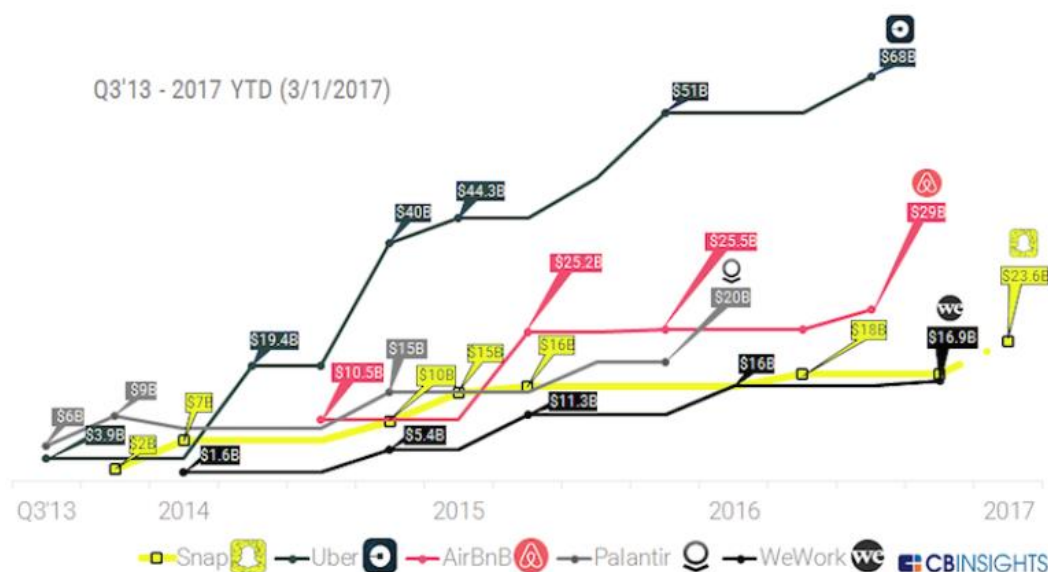
Figure 3. (CB Insights, 2017)

Figure 4 Comparison of valuations of key ride-sharing companies
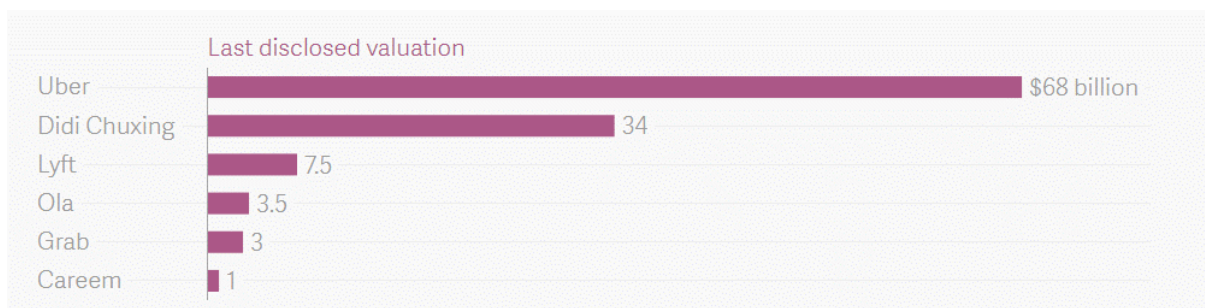
Figure 4. (Punit, 2016; CB Insights, 2017)

3.1 The analysis of Uber

Uber was established in 2009 by Travis Kalanick and Garrett Camp and is actively operating in the market since 2010 (Soko Media, 2017, p. 2). It is run by Uber Technologies Inc. and based in San Francisco (Crespo, 2016, p. 85; Soko Media, 2017, p. 2). Regarding the recent events, Uber has made significant changes to its leadership and ownership structure. Travis Kalanick was the CEO until August 2017 when he was substituted by Dara Khosrowshahi due to numerous scandals and the long-term crisis that the company was facing

(Reuters, 2017). Also, Uber has recently gained a new major investment from the Japanese telephone company SoftBank that replaced Benchmark as the owner with the biggest number of shares (Molla & Schleifer, 2018), what might be the reason why the company took a new direction.

Even though the core operations of Uber are connected with the transportation industry, it does not categorize itself as a transportation company, but rather a technology software company. These types of enterprises are commonly referred to be so-called Transportation Network Companies, or shortly TNCs (Edelman, 2015, p. 1). A TNC is referred to as a certain entity which connects riders and drivers through a transportation network on a pre-agreed route, while this process has a for-profit orientation (Alberta Government, 2016, p. 1) and uses online-based application (Azevedo & Maciejewski, 2015, p. 1)

3.1.1 Uber services

As was already mentioned earlier, Uber provides ride-sharing services which are categorized as a part of the sharing economy. The core business is based on providing a supply of private vehicles with - mostly unprofessional - drivers and matching them with the demand from passengers, while the matching process takes place through an online platform. The application facilitates the whole process and communication between the driver and the rider – it processes payments, offers rating systems for drivers and passengers, tracks location of the car and driver and sets fares of the rides (Glöss, McGregor, & Brown, 2016, p. 1632; Ngo, 2015, p. 14).

Initially, the business was based on providing solely black cars (Edelman, 2015, p. 5), but with time, the portfolio of services started to grow and differentiate. Nowadays, Uber offers services that have various versions and pricing levels, and they are categorized into Economy, Premium and Carpool options. The Economy category offers UberX, UberXL or UberSELECT possibilities, which are distinguished by the number of available seats, features of the car, or the rating of the driver. For example, UberSELECT includes highly-rated drivers, UberXL offers space for up to six people and so forth. Premium services provide an additional touch of luxury through UberBLACK, UberSUV and UberLUX whose names are quite self-explanatory (Uber, 2018b; Uber, 2018c). The more luxurious services also have higher demands and requirements on the drivers (such as commercial insurance or vehicle

inspections) (Dough, 2016), but they are still lower than the standards in the taxi industry. Finally, Carpool or UberPOOL allows sharing costs with other riders going in the same direction (Uber, 2018d) which is a practice that is the closest one to the theoretical sharing economy principles. Not all Uber services are available in all countries, and sometimes they are called by different names. For example, in Poland there are only UberPOP (the cheapest options) and UberSELECT, the Czech Republic has the additional service of UberBlack (Gyódi, 2017, p. 3). Also, Uber keeps on innovating its services. Except for the basic ride-hailing offer, they also introduced additional options such as Uber Eats, Uber for Business and Uber Freight.

Firstly, Uber for Business aims to simplify the organization of rides for companies through providing a platform to manage numerous trips and rides, of course including the billing and payment process (Uber, 2018e).

Uber Freight is also based on matching systems but not for passengers, but for truck companies and for loads that need to be hauled. The greatest benefits are supposed to be the ease of the process, transparency and fast payments in comparison to traditional methods (Uber Freight, 2017). This service is currently launched only in certain regions of America, but according to the online sources, Uber plans to focus and enhance the application in 2018 (Uber Freight, 2018) what might include also expanding to other countries. Finally, Uber Eats is partnering with restaurants to deliver food to customers' homes while the delivering agents might use not only cars but also bikes or scooters (Uber, 2018f). From the data from the last quarter of 2017, Uber Eats represents 10% of Uber's business (Newcomer, 2018).

It is also important to mention that Uber experiments with new formats of services when there is a need on the market. An example is the auto rickshaws in India (Bhattacharya, 2018). Even though this model was not successful so far, it is a proof that Uber has the ambition to succeed globally and is ready to be innovative and flexible to adapt to conditions in various markets in the future.

3.1.2 Countries of operation

Uber is a globally operating company. According to the information from their official webpage, Uber sites are launched in 82 markets (Uber, 2018a). The countries with the highest concentration of Uber active cities are the United States of America and Brazil (Uber Estimator, 2018). Nevertheless, it is questionable whether Uber can maintain such a strong

global position due to the rising number of legal disputes regarding its operation, which sometimes lead to various types of bans. In Figure 5, an overview of countries with regional or national bans is provided. A complete country ban of Uber within Europe is valid in Bulgaria, Hungary, Denmark, and the newest ban was issued in Slovakia. In all four cases, the reason has been connected with taxi drivers such as lacking taxi meters which are required for taxi services (Denmark), pressure from the taxi industry (Hungary), the lack of official registration of the drivers (Bulgaria) or the opinion that Uber is essentially a taxi company and therefore should comply with all the taxi industry regulations and laws in order to be able to operate (Slovakia) (Hao, 2017; McGoogan, 2017; Reuters Staff, 2018). Interestingly, Uber still mentions Hungary and Denmark in the list of countries where their enterprise operates (Uber, 2018a) while Slovakia was immediately deleted, what might signify their future intentions to launch in those countries again or appealing against the bans.

A second option, country-wide partial ban, signifies countries which issued bans for the whole country territory but did not suspend the whole app, just particular services. This is the case of Spain, German and Italy where only the UberPOP (the cheapest service) has been banned. Thirdly, also regional bans within countries take place when Uber is prohibited only in particular cities (Brno, London) or particular region (Northern Australia) (Hao, 2017). The newest bans which were issued during the year 2018, except for already mentioned Slovakia, are in Greece and Vienna (AFP, 2018).

Figure 5 Map of Uber bans around the world
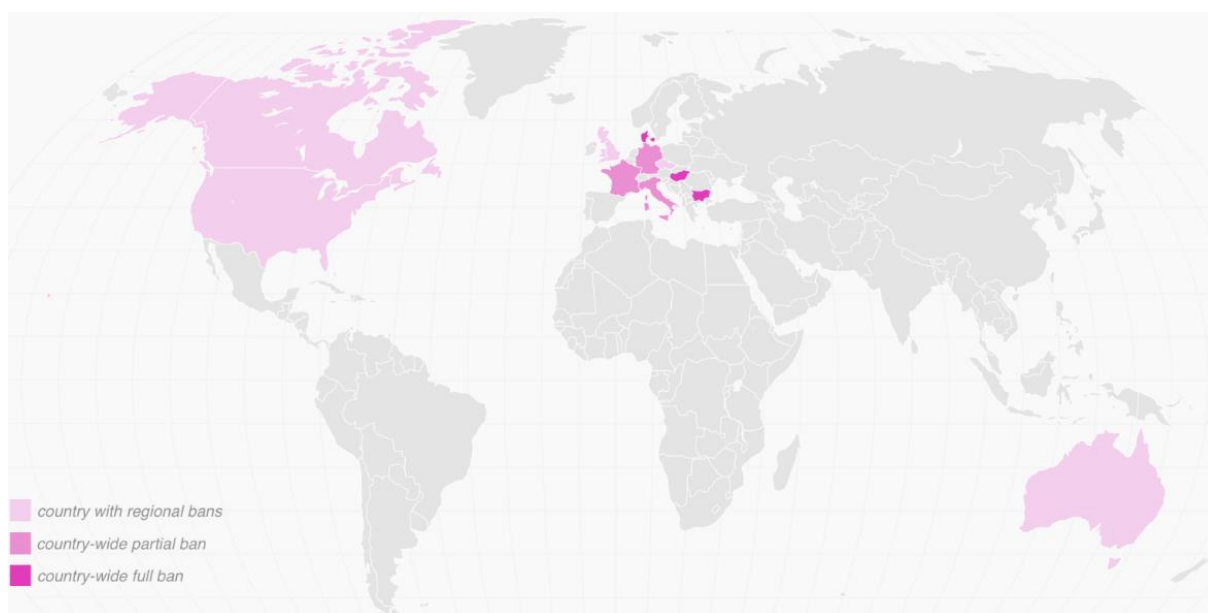
Figure 5. (Hao, 2017)

Despite these bans, Uber still maintains a very strong position in the ride-sharing market. In the U.S., it is the clear leader of the market with around 71% of market share, even though the campaign #deleteuber as well as the leadership issues weakened their position and benefited the main competitor, Lyft, whose market share is rising (Bhuiyan, 2017). According to research conducted in August 2017 in Europe, the market share of Uber was 68% in the UK, 53% in Poland, and in Italy and France slightly below 50%. In comparison to the US, the main competitor seemed to be MyTaxi and not Lyft (Holmes, 2017).

3.1.3 Financial situation

Uber as a privately held company does not have to publish their financial statements, and therefore, they are not accessible in full. However, the company provided a limited amount of information to particular sources, and as a result, some analyses and insights into their financial situation and evolution are accessible. Nevertheless, the articles and reports often provide or emphasize just partial information, such as the fact that the losses are decreasing. In addition, Uber makes them extremely confusing by not maintaining consistent accounting policies and definition of losses and disclosing different types of numbers (unadjusted and adjusted net revenues). Measures such as counting gross revenues from the service UberPOOL into net revenues only for some quarters, also contribute to a chaotic overall picture. This also escalates the numbers artificially (Wilhelm, 2017).

The only source which provided detailed and more comprehensive information was an article written by Amir Efrati for the portal The Information (Efrati, 2018). He published a snapshot of six quarters of Uber's financials through years 2016 and 2017. Even though some of the figures were not disclosed by Uber and Q1 2017 is missing completely, this source seems to provide the most detailed and credible insights into this problematics, which are nowadays publicly available. Therefore, this report will be used to figure out the key trends regarding Uber's financial performance. The transcript of the financials is displayed in Table 2 and 3, supplemented by the author's own calculations – e.g. the evolution of numbers between particular quarters as well as the calculations of the respective proportions of various costs in relation to revenues.

Firstly, it is important to point out that there is a steady increase in Uber's revenues. The growth of particular quartiles has been double-digit during the whole monitored period, and Uber almost managed to double their gross revenues when comparing Q4 2017 vs. Q4

2016. While the row "other revenues" is decreasing at the end of 2017, the accessible part of the article did not specify what the row represents exactly. The amounts are not that significant, in comparison to the gross numbers and therefore, no special focus will be placed on this part of the report. Regarding revenues, it can be concluded that Uber does not have a problem with the growth of revenues, even though it is slower than in the last year.

The percentage evolution of total payouts and discounts, which includes expenses for drivers, rider promotions, refunds, taxes and fees, was very similar to percentage evolution of the revenues. However, these evolutions among particular components were not equally distributed. There has been a huge increase in rider promotions at the Q3 2016. In contrast, the evolution of drivers' earnings and bonuses had a decreasing tendency. While at Q2 2016 drivers' earnings presented slightly more than 71% of gross sales, at the end of 2017 it was 68.2%. A similar story is visible with driver bonuses, which decreased in the same period from 6.7% to 4.2%. As with other financial aspects of Uber, it is hard to find verifiable, credible information regarding what caused these changes. However, there are accessible articles reporting that in 2016, Uber implemented changes into their policies to fight rising competition, mainly Lyft, who announced at that time a launch of a strategic cooperation with General Motors to develop self-driving cars. In order to improve their penetration in key markets, they introduced price changes to attract more customers (Rogers, 2016). Also, testing a new loyalty program focusing on UberBLACK cars rewarded customers with free trips in the US West Coast might have affected the increase in the riders' promotions (Tepper, 2018).

Regarding the decrease in drivers' earnings, the main underlying reasons might be the fact that Uber needed to invest additional funds in marketing and overhead costs (Mosbrucker, 2016) as well as due to the high rivalry within the industry and the decreasing prices.

The second part of my analysis on Uber's expenses takes a closer look at the operating expenditures. Uber is suffering losses, and rather than cutting riders' earnings, great improvements could be gained through improving operational efficiency. The evolution of total operating expenses shows that after the end of 2016, there have been cuts in these expenditures. The evolution got even into negative numbers and started to rise again in Q3 2017. However, this result might be affected by the fact that there is no data for Q1 2017, thus, a comparison of Q2 2017 and Q4 2016 had to be made. In the beginning, it can be

spotted that Uber invested more into marketing and sales, while these costs were cut at the end of 2017 and did not rise, even though the revenues kept increasing. Also, operations and research slightly decreased in the last quartile of 2017.

The proportion of total operating costs as part of gross sales was decreasing. When the beginning and end of the monitored period is compared, the biggest cuts were made in general and administrative expenses, the smallest in research and development costs. A look at the evolution of losses shows that Uber suffered the highest increase at the beginning of 2016. At the end of 2017, the cuts in the expenses were visible also on the shrinking losses. This is often attributed to either the new CEO trying to make savings or to a potential preparation for an IPO, which is planned for the year 2019 (Blumberg, 2018). At the same time, in 2018, Uber's CEO claimed that even though the loss is uncomfortable for the company, their major priority is to keep investing in developing markets as well as in research and development to keep the pace of innovation even at the expense of being unprofitable (Cook & Price, 2018). Therefore, it can be assumed that, if the company placed profitability as a major priority, cuts in research and development and expansions could ensure reaching this goal. According to the words of the CEO, it should be enough to reach positive numbers in a shorter time span (Cook, & Price, 2018). Currently, one can only guess whether these statements are true or whether they serve just to paint a good image of the company for investors. The financial data for 2018 is not accessible yet and it is questionable when and whether they will be public. However, Uber's motivation to invest huge amounts into research and development might also be connected with the profitability of the company due to the fact that autonomous vehicles, which are the biggest research focus of Uber, are considered to be necessary innovation for the company, especially due to their labile financial situation (Coren, 2018). The drivers' salaries are the highest costs incurred by Uber (Efrati, 2018) and their elimination could significantly improve their profitability and overall financial performance.

In a nutshell, the losses definitely decreased during the last year and the evolution presented in Figure 2 and 3 suggests that Uber might be on the right way to reach profitability. The costs that were decreased during the monitored period include riders' earnings and bonuses, sales expenses, marketing costs, and general and administrative expenses. This paints a positive picture, nevertheless, as Smith (2018) argues, even though Uber did manage to decrease the losses, they are still deep in negative numbers and it is questionable whether there is space for further cost cuts in areas such as drivers' compensations. Even though the majority of Uber drivers agree that they are satisfied with

their experience as a Uber driver, the survey on Uber and Lyft drivers conducted in 2018 revealed that the pay is still the most important factor for the drivers and that almost 52% of them feel underpaid. Considering the fact that drivers of Lyft have slightly higher gross earnings per hour and higher driver satisfaction (Campbell, 2018, pp. 4-7), the threat for Uber is not that their drivers would stop with ride-sharing activities, but that they would switch to competitive applications. In addition, potential threats are further legal costs and other one-time expenses.

Furthermore, additional insights might be gained through looking at profitability indicators. According to Efrati's article, the gross profit of the company in particular quartiles is positive due to the fact that it takes into consideration only the costs categorized under driver payouts and rider discounts (Efrati, 2018). When the gross margin is calculated with these numbers, one can see overall positive increase in the ratio during the monitored period, what is showed in Table 4. The best result was reached in Q3 2017.

Table 2 Evolution of Uber's costs and revenues

REVENUE (in millions)	Q2 2016	Q3 2016	evol Q3 vs Q2 2016	Q4 2016	evol Q4 vs Q3 2016	Q2 2017	evol Q2 2017 vs Q4 2016	Q3 2017	evol Q3 vs Q2 2017	Q4 2017	evol Q4 vs Q3 2017
Gross Revenue	$4,333	$5,449	26%	$6,883	26%	$8,741	27%	$9,705	11%	$11,055	14%
Other Revenue	$46	$73	59%	$88	21%	$89	1%	$81	-9%	$72	-11%
Total Revenue	$4,379	$5,522	26%	$6,971	26%	$8,830	27%	$9,786	11%	$11,127	14%
DRIVER PAYOUTS AND RIDER DISCOUNTS (in millions)											
Rider promotions	$97	$219	126%	NA	NA	$426	NA	$452	6%	$522	15%
Driver earnings	$3,087	$3,880	26%	NA	NA	$6,051	NA	$6,612	9%	$7,535	14%
Driver bonuses	$292	$391	34%	NA	NA	$384	NA	$388	1%	$459	18%
Refunds	$14	$24	71%	NA	NA	$21	NA	$19	-10%	$22	16%
Taxes and fees	$83	$102	23%	NA	NA	$201	NA	$325	62%	$365	12%
TOTAL PAYOUTS AND DISCOUNTS	$3,573	$4,616	29%	$5,589	21%	$7,083	27%	$7,796	10%	$8,904	14%
Net revenue	$806	$906	12%	$1,382	53%	$1,747	26%	$1,990	14%	$2,224	12%
Cost of revenue (insurance)	$384	$576	50%	$735	28%	$830	13%	$965	16%	$1,100	14%
GROSS PROFIT	$422	$330	-22%	$647	96%	$917	42%	$1,025	12%	$1,123	10%
OPERATING EXPESES (in millions)											
Operations and support	$183	$215	17%	NA	NA	$309	NA	$370	20%	$366	-1%
Sales and Marketing	$247	$498	102%	NA	NA	$533	NA	$572	7%	$529	-8%
Research an development	$156	$231	48%	NA	NA	$277	NA	$314	13%	$313	0%
General and administrative	$245	$233	-5%	NA	NA	$332	NA	$375	13%	$391	4%
Depreciation	$63	$87	38%	NA	NA	$110	NA	$127	15%	$132	4%
Total operating expenses	$894	$1,264	41%	$1,638	30%	$1,561	-5%	$1,759	13%	$1,731	-2%
GAAP Net Income	NA	NA	NA	NA	NA	-$1,064	NA	-$1,462	37%	-$1,097	-25%
GAAP EBIT	-$471	-$904	92%	-$991	10%	-$894	-10%	-$1,150	29%	-$906	-21%
Adjusted EBIT	-$408	-$847	108%	-$991	17%	-$645	-35%	-$734	14%	-$607	-17%
Adjusted EBITDA	-$408	-$847	108%	-$882	4%	-$534	-39%	-$607	14%	-$475	-22%

Table 2. (Efrati, 2018; own calculations)

Table 3 Proportions of costs in relation to gross revenues

	Q2 2016	Q3 2016	Q4 2016	Q2 2017	Q3 2017	Q4 2017
Operations and support/Gross revenues	4.2%	3.9%	NA	3.5%	3.8%	3.3%
Sales and Marketing	5.7%	9.1%	NA	6.1%	5.9%	4.8%
Research an development	3.6%	4.2%	Na	3.2%	3.2%	2.8%
General and administrative	5.7%	4.3%	Na	3.8%	3.9%	3.5%
Rider promotions	2.2%	4.0%	Na	4.9%	4.7%	4.7%
Driver earnings	71.2%	71.2%	Na	69.2%	68.1%	68.2%
Driver bonuses	6.7%	7.2%	Na	4.4%	4.0%	4.2%
Refunds	0.3%	0.4%	Na	0.2%	0.2%	0.2%
Taxes and fees	1.9%	1.9%	Na	2.3%	3.3%	3.3%
Loss/gross sales	-9.3%	-15.3%	-12.7%	-6.0%	-6.2%	-4.3%

Table 3. (Efrati, 2018; own calculations)

Table 2 Evolution of profitability ratios

	Q2 2016	Q3 2016	Q4 2016	Q2 2017	Q3 2017	Q4 2017
Gross revenue	$4,333.00	$5,449.00	$6,883.00	$8,741.00	$9,705.00	$11,055.00
Gross profit	$422.00	$330.00	$647.00	$917.00	$1,025.00	$1,123.00
Gross margin	**9.7%**	**6.1%**	**9.4%**	**10.5%**	**10.6%**	**10.2%**

Table 4. (Efrati, 2018; own calculations)

In order to provide a more comprehensive picture, profitability ratios should be compared with other companies. Unfortunately, Uber's main competitor, Lyft, does not publish their financial statements and therefore, a comparison between these two companies is not possible. Conversely, the total amount of losses Uber suffered during the year 2017 is claimed to be almost $4.5 billion, a tremendous figure (Newcomer, 2018). Even though Uber is expanding rapidly, the huge loss is alarming, especially considering the fact that the company has not been able to earn profit even though they shifted a big part of their starting investment (namely cars) on the drivers (Doctorow, 2016). In addition, drivers must pay other car-related fees such as fuel, maintenance, insurance and cleaning (Ngo, 2015, p. 31). This happened while UBER managed to raise more than $19 billion in more than 20 funding rounds into their business model (CrunchBase, 2018b). However, as Smith (2018) points out, the most important question, rather than how big the losses are right now, is whether the business model demonstrates economies of scale that could turn around the situation and improve the margins. As I showed in the analysis, in the end of 2017, Uber did manage to decrease their operating expenses. The question remains, whether these improvements are

underlined by significant advancements in operational efficiencies which would have sufficient power to compensate more than $4 billion of loss.

On the other hand, the losses are heavily influenced not only by issues connected to the company's core processes, but also by dealing with well-publicized scandals regarding sexual harassment, toxic company culture or long-term lawsuit with Waymo, a trade theft case, which had to be settled and resulted in tremendous expenses (Sharma, 2018).

The ride-sharing model might have higher changes to be profitable with the exclusion of the regulatory issues, since some of the penalties are only one-time events, but still, changes in the company's operations might be necessary due to the huge amount of losses incurred.

This analysis provided an overview on the basic trends in Uber's financial performance, however, it carriers numerous limitations due to incomplete financial statements and limited data about competitors. Therefore, it cannot be used as a universal predictor of future events. Also, an analysis of a single company is not sufficient to make conclusions on how scalable the ride-sharing or sharing economy models are in general. However, it can be concluded that Uber is definitely successful when it comes to attracting new customers and they expand their customer base rapidly. Also, the business model attracted a huge amount of investments, which proves its innovativeness and usability. However, the company was not yet able to reach profitability despite cuts in costs in various fields such as drivers' payouts or operating expenditures. Moreover, the business model gets into conflict with regulatory bodies, which causes additional expenses and might lead to a further decrease in future revenues (such as new country bans), which might threaten Uber's future financial performance in the end.

3.1.4 Benefits and drawbacks of Uber

The next section will focus on the advantages and disadvantages that Uber brings and the comparison of its services with traditional taxi companies in order to assess the differences. It will provide deeper insights into the operations of the firm, which is one of the focal points of this thesis, and also provide a basis for determining the factors that are relevant in this context and should be addressed in the empirical part.

To start with, costs are undoubtedly a big aspect. Uber, like any other peer-to-peer transportation service, is often claimed to be a cheaper option than regular taxis (Byrne,

2017). However, making an actual comparison is a quite challenging task due to different pricing models. When it comes to taxi companies, the prices are mainly fixed and calculated according to the distance and time that the trip took. Often, also regulatory bodies interfere with the price setting (Zeng & Oren, 2014, p. 1135). Uber, on the contrary, uses dynamic or so-called surge pricing. The principle is based on the comparison of the supply and demand of cars and, in the case of a higher number of open orders that cannot be fulfilled; the price automatically increases to motivate the drivers to provide more supply and to decrease the amount of orders from customers (Gurley, 2014). In practice, in high demand times, the normal price is multiplied by a multiplier that depends on the level of scarcity of the drivers (Dholakia, 2015). The principle works also in the opposite direction – if there is a low demand for drivers, the prices fall. Furthermore, reports show that Uber can be cheaper by even 40% in comparison to taxis. When there is a ride combining more independent passengers (UberPOOL), this difference might escalate even to 60% (Stefansdotter et al., 2015, p. 7). To provide more specific information, according to the data from the portal Gorentals (2017; own calculations), which compares fares to the city center from airports in various cities, within Europe the prices of taxis are on average 44% more expensive. Within the US, with the exception of New York City, Washington DC and Nashville, Uber also provides significant cost savings in comparison to taxi services. Their competition which is working on a similar principle, Lyft, has comparable prices which are also lower than taxis (Rideguru, 2017). In Australia as well, Uber prices in 2015 were measured to be 19.8% lower on average than taxi companies offer (Deloitte Access Economics, 2016, p. 6).

Cost benefits are also transferred to the drivers. Thanks to the possibility that the drives can see and choose from the prospective customers according to their pick-up location, the cars' utilization can be maximized. If a driver does not have this overview and only reacts to a concrete, limited amount of offers that (s)he receives from the dispatcher, the unpaid way without a passenger might be getting longer, leading to a loss of money and time (Edelman, 2015, p. 2).

The area of pricing also offers additional benefits that should be discussed. With taxis, the final price is in the majority of cases communicated after the ride is finished, or when the taxi arrives to the customer. Conversely, with Uber, the prices are shown in advance. Besides that, various price categories for the given route are showed to the user, what is outlined in Figure 6. The publication of the exact prices adds to the level of transparency and increases

customer benefit since it also enables direct comparison between various ride-sharing applications (Azevedo & Maciejewski, 2015, p. 3).

Figure 6 Various Uber fares showed in advance to the customer
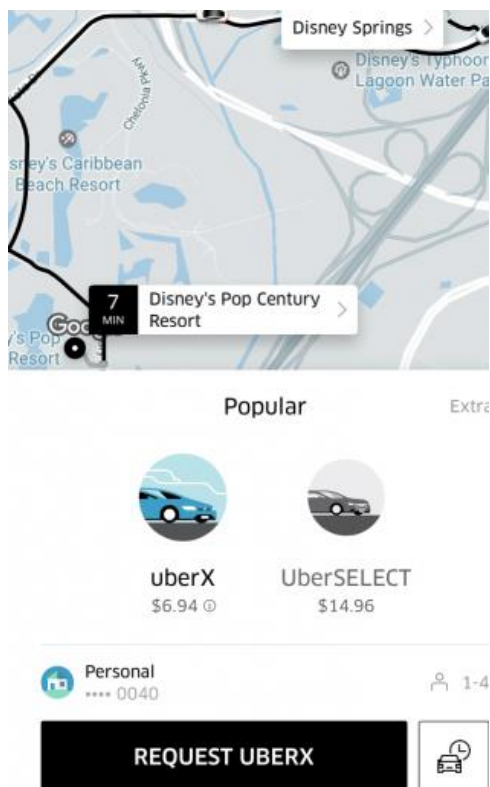
Figure 6. (Shannon, 2017)

However, the dynamic pricing model has also received negative feedback and bad press. Drivers complain that the prices change too often and vary greatly according to locations. Also, it challenges trust that drivers and customers have towards the application (Dholakia, 2015). Since the drivers are independent contractors (Smith, 2016), it sounds understandable that they demand particular power when it comes to pricing. However, it can be argued in favor of the surge pricing that it is able to decrease the prices at peak-off times, which benefits the customers. Also, Uber does not present itself as a taxi company, neither do they own any vehicles (McRae, 2015) but rather as a marketplace for drivers and riders facilitating the connections (Uber, 2018a). Therefore, it can be expected that they will have ambitions to also interfere with pricing levels. As a result, unless the surge pricing will cause riders to stop driving for Uber, or will be banned by legal authorities, it is expected that it will stay in use.

The last factors related to the pricing and payments are the taxation disputes which are more controversial than the dynamic pricing. The controversy is based on the fact that the company is using the so-called Double Dutch system to lower the taxes they are paying and, as a result, does not support the cities or countries by fair share of taxes, for example for infrastructure which is crucial for their operations (O'Keefe & Jones, 2015).

The principle is based on transferring money through more subsidiaries connected through a licensing agreement and situated in strategic positions. Uber has numerous subsidiaries, but key players are Uber Technologies (situated in the U.S., San Francisco), Uber B.V. (situated in the Netherlands) and Uber International C.V. (incorporated in the Netherlands but based in Bermuda). In practice, the payments from customers are transferred to Uber, but not to the national subsidiaries respective to the location where the ride took place, but to Uber B.V. to Netherlands. Around 80% is paid to the driver (who is an independent contractor and has to pay taxes from his or her income in the respective country). The remaining 20% is divided between Uber B.V.'s operating margin (1%), to cover its costs (minimum amounts) and the rest is transferred as a royalty payment according to an Intangible Property License Agreement to Uber International C.V. to Bermuda. The controversial point lies in the fact that under the Dutch law, royalty payments are not taxable (O'Keefe & Jones, 2015; Kunashegaran, 2017). Furthermore, Bermuda does not charge any tax on corporate income (Deloitte, 2018, p. 2). As a result, the only parts of Uber's income that are taxed is a small percentage that can be transferred to local subsidiaries or stays in the Netherlands to cover the costs of Uber B.V. (which is approximately up to 2% of the income), and 1.45% of the income which is transferred to Uber Technologies according to another licensing agreement for the use of intellectual properties (O'Keefe & Jones, 2015; Kunashegaran, 2017). Even though this issue is not that relevant until Uber will turn to be profitable, nevertheless, it can be expected that, as almost any other business, they will aim to reach profitability in the future.

Another area that should be discussed in connection with the benefits and drawbacks of Uber are the entry barriers to the industry, which are eliminated. Obtaining licenses and necessary taxi certificates and signs might take months and cause significant expenditures. Sometimes the taxi medallions, which are the licenses to operate a one taxi cab in the U.S (Badger, 2014), are sometimes worth even $600,000 (Cumming, 2009, p. 12). The regulations regarding the taxi drivers are generally strict, requiring licenses, tests, and proofs of good

behavior. In countries such as Belgium, Germany or France, even the number of licenses is limited. Often, language tests (Brazil), local knowledge examinations (Spain, UK), medical certificates (Germany) or even courses lasting months (France) might be demanded along with other requirements (Rienstra, Bakker, & Visser, 2015, p. 13) which requires investment and also time. These requirements are coming from the area of public regulations, which was created in order to ensure security for passengers and manage the issue of information asymmetry, what happens when one party of a bargain (mostly the provider) has a so-called "information advantage" over the other. The aim was also to create rules applicable for the whole sector that generate more benefits than costs for all actors of the market transactions (Chovanculiak, Rod, Nikolova & Šumskis, n.a., pp. 4-6). It can be argued that such regulations do have their importance and aim to serve for social welfare; however, high entry barriers, as these, also limit the competition. This is mentioned also by the Federal Trade Commission (Frankena & Pautler, 1984, pp. 6-7), whose findings are still discussed recently (Holloway, 2015, p. 29), which claims that some of the entry barriers are rather oriented on hindering the competition and protecting the current taxi networks, than providing actual customer benefits. The process of deregulation of the industry was already empirically tested in some territories of various countries including United States, Canada, Sweden, Australia, and others (Bergantino & Longobardi, 2000, p. 86). The results varied according to the countries, but they were unsatisfactory on the general basis. Even though the supply increased, new players have mostly been small, even mono-vehicle companies what resulted in higher fragmentation of the industry, volatile market, limited specialization and worse labor conditions and quality of the service (Bergantino & Longobardi, 2000, pp. 87-89). Therefore, an alternative approach might be necessary to tackle this issue.

On the other hand, with the arrival of sharing economy players, there are new opportunities that are arising such as reputational systems that serve as a source of information and pressure to behave adequately for both parties. Also, the analysis of big data and computer algorithms might act as control mechanisms that can reliably monitor and analyze all of the transactions and spot or block suspicious cases (Chovanculiak et al., n.a., p. 12). These innovative functions enable new information sources that might ensure similar benefits as the public regulation. Moreover, a private regulation also presents an option, through allowing the owners of the platforms to set the rules. This might result in numerous benefits due to the fact that the owners have the highest motivation to keep their platforms

running and maintain a maximum amount of transactions through keeping all the parties satisfied (Chovanculiak et al., n.a., pp. 8-9). Owing to this fact, they should aim to increase the benefit of the actors. While these arguments are valid, it is questionable whether it is safe to let the business owners to set the standards by themselves. Also, some limits to the amounts and range of changes of these rules should be set as well as control mechanisms, what might be a very complex process.

To return to the major point of the discussion – the entry barriers, it should be concluded that Uber increases the ease of the process incredibly with its background checks that involve only requirements such as no major moving violations, less than three minor moving violations, complying criminal record of the last seven years, and a valid driving license with at least one year of licensing history (Uber Help, n.a.). However, the simplicity of the process and the independence of the drivers that Uber brings caused an increased level of risk for the users of the application. A concrete example might be that in the US, Uber only checks for violations in the recent seven years, while federal law has no limitations in this context (Edelman, 2015, p. 4).

Insurance, which has already been mentioned within the differences between Uber and taxi services, is another important factor. While Uber claims that they partner with insurance companies to bring great commercial insurance deals to their drivers (Uber, 2018g), they do not generally require any commercial insurance on cars driving for them (Dough, 2016). Even though they seem to make a progress towards better conditions in this matter, which is proven by the fact that since 2013 they provide commercial insurance for riders in the U.S, however, no similar information was found with respect to Europe (Uber, 2015; Uber Newsroom, 2016). In addition, due to the fact that the drivers are not official employees of the company, but independent contractors, Uber is on a general basis not liable for their actions and accidents. Therefore, it might be more challenging to receive appropriate compensation for victims of an accident in comparison to the traditional employee-employer contract. The regulation regarding ride-sharing companies is still not mature and sometimes the insurance situations fall under a so-called "legal twilight zone" (Lee, 2015). Making an own insurance deal is possibly the safest choice for the driver. However, personal insurance would not cover commercial trips made with Uber and commercial insurance is often too costly for part-time drivers. Therefore, there is a possibility that new insurance models are going to appear.

Further points that need to be discussed are the ease of the process and the benefits arising from the features of the application. Great advantages can be spotted in higher efficiencies and accountability. In the case of taxis, the operator and the drivers are organized only through communication with each other, which might result in bias, errors, delays or inefficient pairing of drivers and customers. In the case of Uber, matching algorithms, GPS and real-time tracking of the cars eliminate these errors and also provide additional benefits to customers owing to the fact that they can track the location of the vehicle by themselves (Edelman, 2015, p. 2). In addition, multi-passenger routing is facilitated through the online platform (Gyódi, 2017, p. 3; Uber, 2018d), which is much more challenging to execute for regular taxis, if the people did not organize themselves in advance. The application also provides quite comprehensive information about the driver to the customer in advance, such as license plate, car model, name, photo and rating of the driver. A taxi passenger would obtain these pieces of information only when having already entered or seen the vehicle (Deloitte Access Economics, 2016, p. 16).

The next point within this section is dedicated to the environment. At first sight, it might seem that Uber is beneficial for the environment since it transforms private vehicles into commercial ones, which increases the supply of riders without increasing the number of vehicles in towns. However, this benefit would be questionable in cases when Uber replaces the function of public transportation, when it would actually worsen the environmental situation due to higher emissions, while the public transportation would also continue working (Haider, Donaldson, & Nourinejad, 2015, p. 14). Uber could bring positive environmental effects if people share rides in the same direction except for going with their own car (similar to the Blablacar principle). The preferences to use Uber either as a replacement of one's own car, public transportation and also taxi cars will be examined in the empirical research section.

As the last point, even though some of the researchers dispute that Uber would be a part of the sharing economy, the fact that the cars driving for Uber can be used in the spare time for personal purposes or to deliver packages or food, the capacity utilization of them increases. This does not happen with regular taxi cars, which sit idle until the next customer is available (Holloway, 2015, p. 28). The summary of the benefits and drawbacks of Uber are summarized in Table 5 below.

Table 3 Summary of the strengths and weaknesses of Uber

UBER	
Strengths	-lower costs -dynamic prices according to market conditions -higher pricing transparency -lower entry barriers to the industry -higher efficiencies -higher accountability, real-time tracking -rating systems -better capacity utilization -multi-passenger routing
Weaknesses	-lack of trust in the pricing model -taxation issues -higher risks due to less strict background check, certificate requirements, etc. -insurance uncertainty -no direct responsibility of Uber as an employer -possible negative effects on the environment

Table 5. (own summary)

4   Consumer behavior

Consumer behavior is a complex and widely researched phenomenon. A lot of scholars dedicated attention to this topic and the power consumers have on the direction and evolution of the market is indisputable (Klöckner, 2012, p. 1). However, with the rise of the sharing economy, the traditional ways how consumers behave are changing. This brings new challenges not only to researchers, to update the models and frameworks to the changing practices, but also to firms which strive to understand buyers' behavior and accommodate their offers accordingly. Nowadays, the trend of collaborative consumption is booming (Selloni, 2017, p. 15). It is undoubtedly important to know not only the reasons why people increasingly participate in this trend and the driving factors behind this behavior, but also the barriers demotivating people from the participation. Furthermore, as it was outlined in the theoretical section, most of this behavior happens through online platforms which match the supply and demand of the consumers, but they do not control the actual operation and how the marketplace behaves. Consequently, they are driven mostly by the social dynamics and behavior of people (Hamari, Sjöklint, & Ukkonen, 2015, p. 2050), which proves the importance of this topic in the sharing economy field. In addition, recognizing and understanding the wants, needs and motivations of the customers might assist organizations and entrepreneurs to develop new companies, platforms and services that will be accommodated to the customer needs and as a consequence, increase customer benefits (Hallikainen, 2015, p. 15).

For all these reasons, consumer behavior in connection to the sharing economy is of crucial importance. However, the amount of research in this field is still not sufficient and clear findings are lacking (Böcker & Meelen, 2017, p. 29). The following section of this paper aims to summarize the current state of knowledge in this area, contrast the available findings and provide theoretical background and framework to develop a questionnaire for the empirical research, which should further contribute to the knowledge in this field.

4.1   Origins of the sharing economy behavior

The sharing economy is rightfully connected to the presence of underused capacity, which is often stated to be the major reason why people start to participate in this type of behavior (Böcker & Meelen, 2017, p. 37). Nevertheless, to dive deeper into this trend and

understand consumers more deeply, the history and roots of this sharing behavior should be mentioned. Even though the players, as well as the users, are considered to be innovative, trendy or progressive, the novelty surrounding this way of consumption is slightly misguided (Frenken & Schor, 2017, p. 4). The principle of sharing itself is nothing disruptively new or innovative. People have been swapping, sharing, bartering already for years (Selloni, 2017, p. 16) for example through institutions such as libraries or markers. It was only later on, when the barter proved to be hard and inefficient to execute, people started to use money as the standardized mean of payment (Robertson, 2007, p. 2). Nevertheless, sharing has been the absolute a fundamental form of economic transaction in the past societies for thousands of years (Belk, 2010, p. 715).

Moreover, it can be argued that the behavior of sharing comes naturally to people and that it is a part of their innate culture (Buczynski, 2013, p. 3). Even though the current customs and manners are much more individualized and community-based values are mostly less dominant than self-sufficiency and independence (Botsman & Rogers, 2011, pp. 42-43), people kept habits of clustering, regularly getting together and taking care of each other through sharing (Belk, 2010, p. 715). Moreover, sharing is a way how people connect with each other, bond and bring up the feelings of support and solidarity (Belk, 2010, p. 717). It is also a common element of numerous cultures and occurs even beyond the immediate family (Belk, 2007, p. 132). Therefore, it should not be argued that sharing is a new phenomenon. It is rather a natural manner of conduct that became less dominant due to great transaction costs, such as in the case of the mentioned bartering at markets. The difference that transformed this behavior into one of the most promising consumption principles nowadays is the presence of technology, more precisely internet or web 2.0, which changed the previously static web pages and enabled online interactions (Belk, 2014, p. 7). It decreased the costs of making an economic transaction through sharing enormously (Frenken & Schor, 2017, p. 6), made matching offers and demands much easier (PwC, 2015, p. 15), and for many, sharing became not only social practice, but a socio-economic practice (Hall & Ince, 2017, p. 1).

Furthermore, the sharing economy did not evolve as an isolated trend in the society, but it is rather a response to numerous uncertainties and issues worldwide. To start with, economic factors are highly relevant. The crisis in 2008 and the collapse of global financial markets resulted is a signal that there is a shift of mindset and a loss of trust in governments, financial markets and even the traditional models (Finley, 2013, p. 6; Hall & Ince, 2017, p. 3;

Szetela & Mentel, 2016, p. 31). Additional factors such as growing inequality provided space and willingness for new markets eliminating the middlemen in the transactions to spread. Further economic factors which are relevant are more closely connected with individuals. Sharing economy practices eliminate the middlemen costs for both sides of the transaction. Owing to globalization and digitalization some of the sharing happens even at zero cost (Farronato et al., 2015, p. 53) such as knowledge sharing through the internet. Consequently, people are able to save money, spend less and sharing becomes a more common activity. Also, people might realize that the ownership does not have to be the factor which ultimately determines their happiness and their position in the society. At the same time, the way how people spend money through these platforms is well planned since it happens mostly through credit or debit cards. It has been proven that when people are willing to spend higher amounts of money with credit cards in comparison to cash payments (Runnemark, Hedman, & Xiao, 2015, p. 18).

Money and economic reasons are not the only factors that facilitated the spread of the sharing economy. People increasingly realize that natural resources are not limitless, and the environmental burdens of our planet are escalating. Especially the younger generation of millennials has a more environmentally and collaborative-oriented mindset while they are claimed to be still very ambitious and competitive (Botsman & Rogers, 2011, p. 54-55), which is a great combination for the spread of the sharing economy.

4.2 Theoretical background of the consumer behavior within the sharing economy

The model of consumption is beginning to change and even though the currently dominant model is still capitalism, some academics have already presented theories that, in the foreseeable future, this paradigm will change. For instance, Jeremy Rifkin (2014, pp. 1-2) states that by 2050, capitalism will no longer be the most dominant way of consumption and it will be replaced by the Collaborative Commons. Of course, it is still questionable whether this shift will come to reality in such a fast pace, however, the revenues of companies and the predictions regarding the size of the sharing economy market are in line with Rifkin's opinion, namely that this trend will be increasing (Vaughan, 2017). An analysis of the future and outlooks of this trend are provided in section 6 of this paper, however, under the assumption that the predictions of the growth are correct, the traditional model of buying decision

consisting of five basic stages: the problem recognition, the information search, the evaluation of alternatives, the purchase decision and the post-purchase behavior (Kotler & Keller, 2012, p. 161) starts to be challenged by the growth of the sharing economy (Ammerman, 2013).

As people start to share more and as peer-to-peer consumption becomes more prevalent, the theoretical models of consumer behavior should also adapt and include the sharing option in the process. Sarah Ammerman (2013) provided an altered consumer buyer decision-making process framework which, except for the traditional steps, includes also two possible paths of either a purchase or sharing. This model is provided in Figure 7 and it can be considered as a good starting point for further discussion.

Figure 7 Adapted buyer decision-making process involving sharing economy
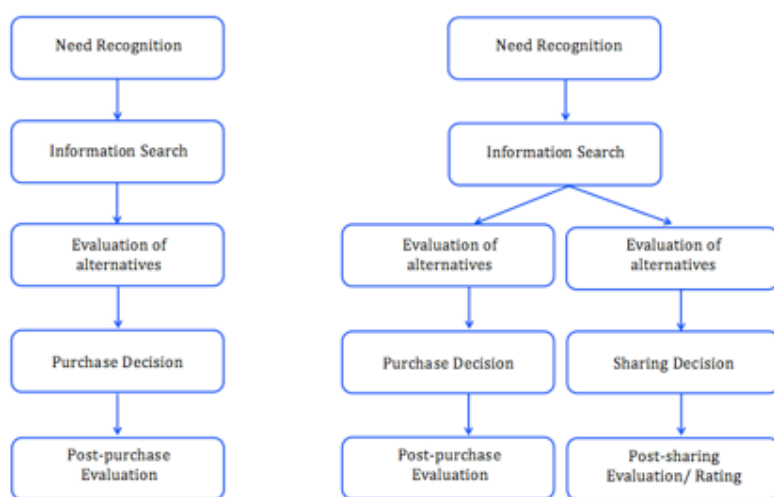
Figure 7. (Ammerman, 2013)

The question which factors people take into consideration and value when deciding whether to share or purchase remains unanswered. Some reasons why people started to engage in collaborative consumption activities were already presented in the historical part of this section. However, in order to achieve a better understanding of this issue and develop a well-focused questionnaire, further insights backed by consumer behavior theories and previous research are needed.

Numerous theories were created to study consumer behavior. However, the sharing economy is a new phenomenon and therefore, only an adoption of the already developed model does not seem to grasp the new concept in an adequate manner. Therefore, a combination of insights and models by various researchers will be used. In connection with

the sharing economy, the Theory of Reasoned Action was already mentioned (Chen & Salmanian, 2017, pp. 12,13). According to this theory, there are two factors affecting the intention to behave in a particular way - attitudes and subjective norms. While attitudes refer to the evaluation a person makes by himself or herself about a certain behavior, subjective norms refer to perceived influence from social groups (such as friends, family, partners, etc.) to either engage or not to engage in the studied behavior (Barnes & Mattsson, 2017, p. 9). The Theory of Reasoned Action and the principles behind were adapted directly to the sharing economy behavior by Stuart J. Barnes and Jan Mattsson. Therefore, for the purpose of this research, Barnes and Mattsson's model will be applied with its core principles, but with minor changes. The model of the Theory of Reasoned Action and also Barnes and Mattsson's model are attached in Appendix A. Within this section, only the final model is illustrated in Figure 8, which is the author's own depiction of the relevant factors. The changes that were made are not major and the basic logic and structure of the model were kept, however, according to the Technology Acceptance Model (TAM), the ease of use of the platforms was stated to be the second most important factor when adopting a new technology (Legris, Ingham, & Collerette, 2003, p. 192). Since the advancement of the sharing economy is predominantly found on technological innovations (Wallsten, 2015, p. 4) this factor was added to the model. While Barnes and Mattsson mentioned these factors in their work, this factor was missing in their original model (Barnes & Mattsson, 2017, p. 11). A more detailed analysis of the individual aspects that are present in the model is provided in the next section.
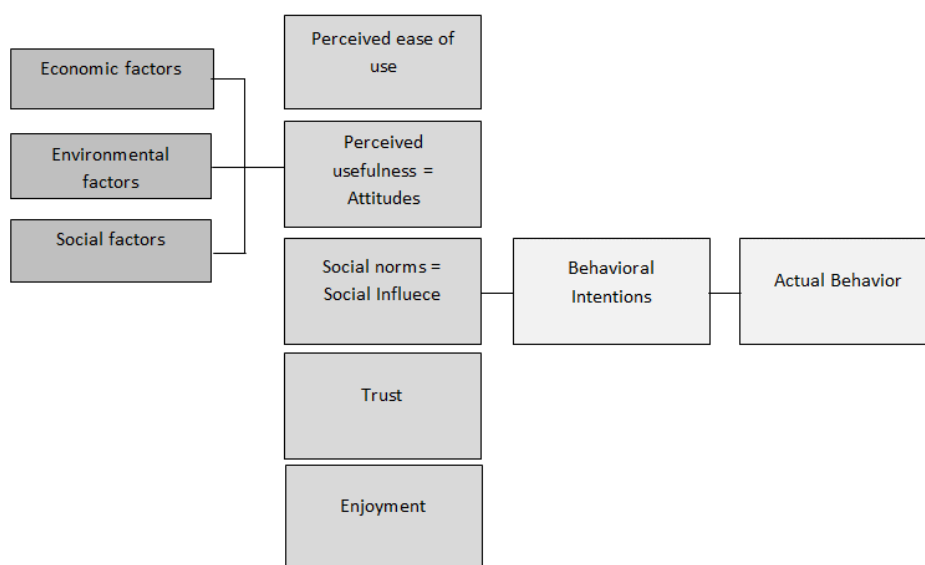
Figure 8 Final consumer behavior model

Figure 8. (Barnes & Mattsson, 2017, p. 11; Legris, Ingham, & Collerette, 2003, p. 192; own depiction)

4.3   Drivers and barriers towards participating in the sharing economy

The model focuses on the factors affecting the intentions to participate in the sharing economy behavior. Firstly, the perceived usefulness presents the "attitudes" from the Theory of Reasoned Action. It also presents the extrinsic motivators, which are driven by the expected outcome of an activity (such as cost savings, reducing emissions, etc.), not by doing the activity itself (Ryan & Deci, 2000, pp. 69-72). These intentions can be economic, environmental, or social. The economic benefits such as better price, replacement of ownership - which are often expensive, or earning money on underused capacity were proven to play an important role in connection to the sharing economy (Farronato et al., 2015, p. 53; Buda & Lehota, 2017, p. 26; Hamari et al., 2015, p. 2052). The importance of environmental factors was mentioned by Hamari et al. (2015, p. 2055), however, they highlight them only in a connection to forming attitudes, rather than causing actual behavior. Similar findings were confirmed by Tussyadiah (2015, p. 9), who proposes that economic benefits are the main drivers of collaborative economy. In addition, sustainability and social motivators also play a major role, such as more responsible behavior regarding the environment and an intention to connect with communities. Böcker and Meelen (2017, pp. 31-35) also confirm that economic, environmental and social motivators are relevant, however, they point out the various possible degrees of economic motivation between the users and providers. This applies especially in the case of expensive assets when the user might obtain more significant benefits by avoiding the expensive acquisition costs (such as for a car) than the provider, who gains just a small portion of the costs paid. Interesting is also the research by Bellotti et al. (2015, p. 1092) who state that the providers are often more environmentally motivated, trying to create a better world, while the users are just trying to satisfy their needs under acceptable conditions. Due to these findings, following three hypotheses are formulated:

H1: The economic benefits positively influence the intentions to participate in the sharing economy activities.

H2: The environmental benefits positively influence the intentions to participate in the sharing economy activities.

H3: The social benefits positively influence the intentions to participate in the sharing economy activities.

Furthermore, in addition to the perceived usefulness, also the ease of use of the platforms is a relevant factor, as it was argued at the earlier part of this section. When

speaking about the perceived ease of use, flexible system, immediate reactions, cashless payments (Buda & Lehota, 2017, p. 26) and generally the increased convenience were proven to be important drivers for people to participate in the collaborative consumption practices, especially for the end users (Bellotti et al., 2015, p. 1085). To verify these findings, following hypothesis was formulated:

H4: The perceived ease of use of the platform positively influences the intentions to take part in sharing economy activities.

A further aspect that is included in the model as a factor affecting the intentions is the enjoyment, which presents an intrinsic motivational factor. Enjoyment entails that the reason to perform a particular activity is the motivation to do the activity itself (Ryan & Deci, 2000, p. 71). This might not play such an important role in particular sharing economy areas such as car- or bike-sharing, but rather in activities related to knowledge sharing. The research of Van der Heijden (2004, p. 699) claims that the perceived enjoyment is very crucial when it comes to the acceptance of new information systems.

H5: Enjoyment of the activity itself positively influences the intentions to take part in the sharing economy activities.

Trust is also relevant when studying sharing economy-related consumer behavior. According to Botsman & Rogers (2011, p. 75) and Schiel (2015, p. 13), trust between strangers is one of the key underlying principles of the collaborative consumption, and one of the cornerstones the sharing economy relies on. Through services such as customer reviews and ratings, transparent use and traceability, sharing economy platforms are motivating customers to use them more in comparison to traditional services (Buda & Lehota, 2017, p. 26). A lack of trust can therefore be a barrier towards sharing economy activities and this factor will be examined within the empirical section. Further attention to the barriers towards sharing behavior will be provided at the end of this section.

The last influential factors whether to engage in the sharing economy are the social or subjective norms. The Theory of Reasoned Action and also Barnes and Mattsson (2017, p. 11) specify this, besides the attitudes, as a key determinant of the intentions to participate. The question is, whether positive or negative referrals regarding the application from social groups will be evaluated as a positive or negative influential factor for a significant part of the respondents. This will be examined through the following hypotheses:

H6: Positive reputation of the application in one's social group positively influences the intentions to participate.

H7: Negative reputation of the application in one's social group negatively influences the intentions to participate.

When discussing the division of motivators, it is also important to point out their connections to the external factors. According to the Cognitive Evaluation Theory, the intrinsic motivations flourish and re-surface if the extrinsic factors permit them to do so (Ryan & Deci, 2000, pp. 69-70). For example, there used to be no popular and convenient way how to share one's knowledge with a significant part of the population without a huge amount of time and effort. New online platforms, such as Wikipedia, enabled fast and easy knowledge sharing and as a result, supported the implementation of intrinsic sharing intentions in practice. Of course, this principle works also in the other way around and extrinsic rewards can also undermine intrinsic motives (Ryan & Deci, 2000, pp. 69-70).

In order to avoid a one-sided view, in addition to the factors driving people towards collaborative consumption, also the factors hindering and stopping people from sharing will be analyzed. The first factor to be considered is that customers need a sufficient amount of choices and providers in order to be satisfied. For example, if the Uber algorithm would not generate an available car in a couple of seconds, the customer would most probably not wait too long, but he or she would switch to some other application or a taxi service. The threshold where the customer already feels satisfied with the amount of choices and flexibility of the service is referred to be a so-called critical mass (Botsman & Rogers, 2011, pp. 76,79). The absence of this critical mass and therefore also having sufficient opportunities and flexibility can be a significant barrier towards sharing.

Furthermore, the sharing economy aims to eliminate ownership and therefore, materialism, the relative importance people attach to possessing items and subsequent non-generosity might be causes of lower willingness to share (Belk, 2007, p. 131). Also, people might value the ownership not only due to the materialism but also owing to a personal connection to a product. Catulli and Reed (as cited in Barnes & Mattsson, 2017, p. 5) confirm that the level of emotional connection or personalization of the product might affect the willingness to share. If the person has an emotional bond with particular items, such as Harley Davidson motorcycles or inherited items, there is a chance that he or she will be less willing to share. For example, the actual fears of sharing with other people, along with the insurance-

related uncertainty were identified as main barriers when it comes to car sharing (Hawlitschek et al. 2016, p. 4).

In addition, even though the sharing economy might bring economic benefits, only the occasional or random use of the platforms and uncoordinated sharing might result in increased costs and also risks (Hamari et al., 2015, p. 2055). Eckhardt, Belk, and Devinney (2010, p. 426) also claim that institutional dependency - a common problem regarding the subject matter - is a belief that institutions are the responsible authorities that should regulate the markets, which in the end can hinder sharing behavior. In their research, they focused mainly on ethical versus non-ethical behavior; however, the influence and power of institutions are also relevant for the sharing economy.

As the last factor, the nature of the product might affect the willingness to share. Figure 9 presents an overview of products arranged according to the degree of willingness to be shared that people generally feel. The green items on the left are the most shared items while red squares on the right are the least shared items.

Figure 9 Graph of items according to willingness to share
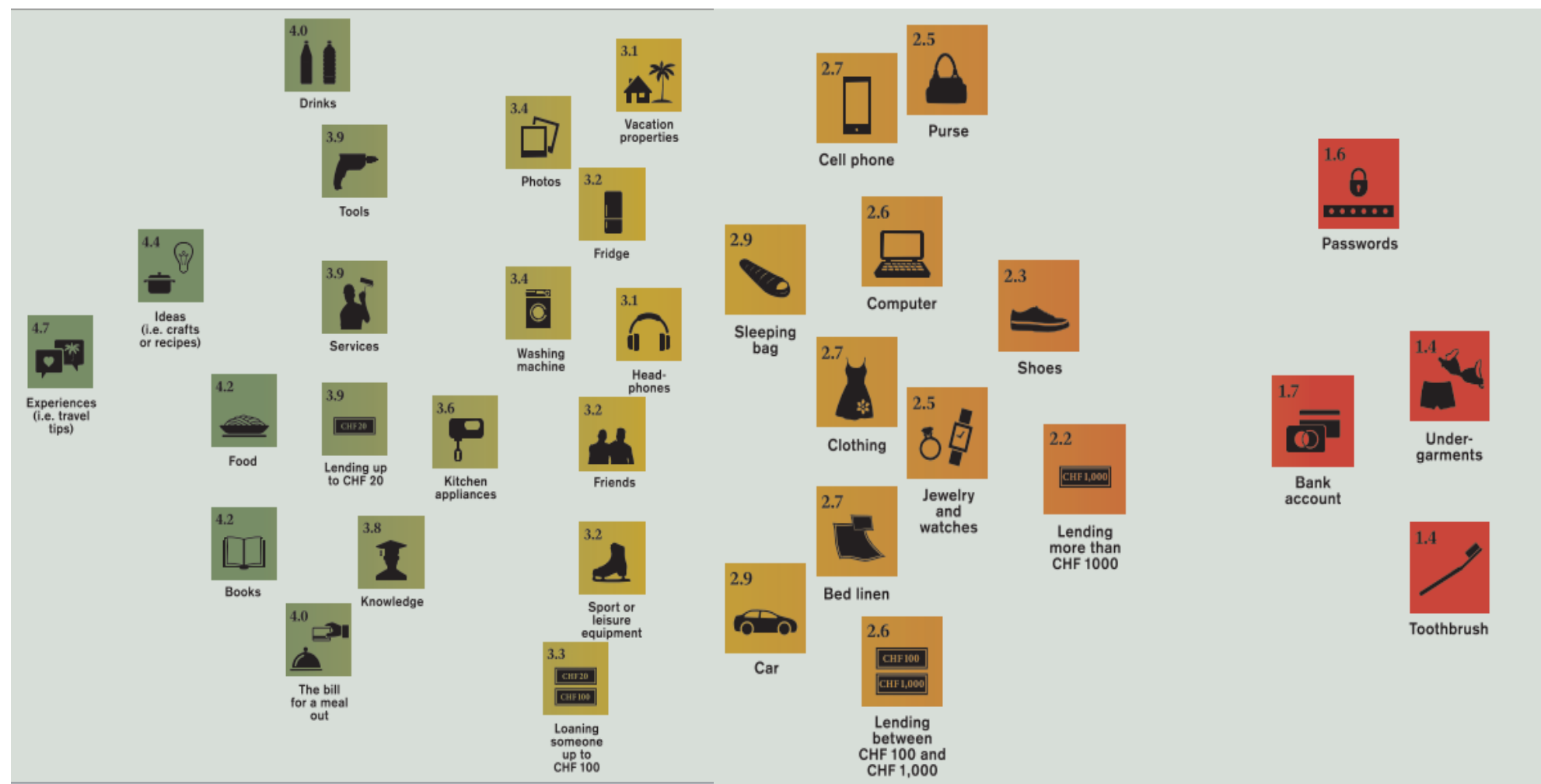
Figure 9. (Farronato et al., 2015, p. 28-29)

5   Empirical research

As was outlined in the previous section, consumer behavior is an increasingly relevant topic in connection with the sharing economy but with a lack of clear findings. Therefore, the empirical research conducted by the author of this thesis aims to contribute to this field by studying factors that shape people's behavior and their motives and opinions in connection to this trend, and especially Uber. The findings will also be considered in the analysis of the outlooks and future impacts of this trend and Uber as a company, which are other focal points of this thesis.

5.1   Research method and design

Firstly, the research was conducted through deductive approach, meaning that the existing theory served as a basis for the development of questions and hypotheses. Overall, seven hypotheses were formulated based on the theoretical overview provided, which are summarized in the section 4.3.

Quantitative research strategy was implemented, more precisely; an online survey was distributed through various online channels. Platforms that facilitated the distribution of the questionnaire were Gmail, LBS e-mail, Facebook, LinkedIn, and SurveyCicle. The sampling method was, therefore, non-probability, convenience sampling. As a result, the results will not be generalizable, however, due to the fact that the target audience of this research is users of online platforms and applications, reaching out to primarily young generation of the population through social media and e-mails seem to be an appropriate way to gain relevant respondents.

The questionnaire constituted from four parts, while each focused on a different area of the research. Some of the questions were asked conditionally, according to the past answers of the respondents. The survey started with a short introductory text and a brief presentation of the basic facts connected with the sharing economy trend. The first part of the survey included four questions covering the scope and frequency of past usage of the sharing economy applications, evaluation of the experiences, and also inclinations to share in the future. In addition, the type of application (sharing with companies, people, etc.) was specified within the questions as well as the user role (provider, consumer, etc.). The second part of the questionnaire focused on the consumer behavior with the goal to gain insights into

the drivers and barriers of people to engage in the sharing behavior. The most comprehensive part was the third one, which had Uber and ride-sharing as central points. Firstly, the comparison of the frequency of usage between Uber and other means of transport was provided. Furthermore, a question regarding user role preference (driver/customer/both/neither) determined the next set of questions that the respondent received. The main target audience was passengers of Uber, who received the highest amount of questions which covered the reasons for using Uber, the types of trips that were substituted, the evaluation of satisfaction and the assessment of relevant and irrelevant factors when ordering a ride. These factors presented topics such as price, ordering process, perceived security, standard of the cars and so forth. Also, the perceived risks and the comparison of willingness to pay for a ride along with underlying reasons were assessed. The next subsection of the questionnaire studied the awareness and opinions regarding the legal issues Uber faces, along with an assessment of their effects on the actual behavior of people. The last questions within this part provided insights into the future outlooks of the application by asking respondents regarding the inclinations towards ownership or access-sharing and replacing their own car with Uber in the future. Also, the willingness to take a ride in a self-driving vehicle was determined.

The last section provided questions about respondents' background. Gender, age, nationality, employment status and monthly income were asked while not all of the questions were mandatory due to the sensitivity of the data.

The types of questions were single choice, multiple choice, matrix questions and a choice from a drop-down list. No open-ended answers were required; nevertheless, additional text entries were allowed in particular questions to provide the opportunity to specify opinions that were not covered within the offered answers. Overall, 25 questions were prepared for the respondents, but as was already mentioned, they were filtered according to the answers specified during the survey. Furthermore, additional 5 questions provided the control variables. The complete survey is attached as Appendix B.

The survey was collecting responses for almost one month in total, more precisely for 27 days, since 19th April 2018 until 15th May 2018 while it was primarily advertised at the beginning of the time period. Overall, 100 responses were gathered.

5.2   Findings and discussion

Similarly to the division of the questionnaire, also the findings will be discussed according to the four focus areas – experiences and outlooks, consumer behavior, Uber and ride-sharing, and background of the respondents. The starting point will be the control variables. The survey was completed by both genders; slightly bigger proportion of the respondents was presented by women (56%). Regarding the age groups, as expected, the majority was young people more precisely; 86% was up to 35 years old. Numerous employment statuses were indicated, however, the most dominant were students with 42%, as well as full-time employees with 35%.
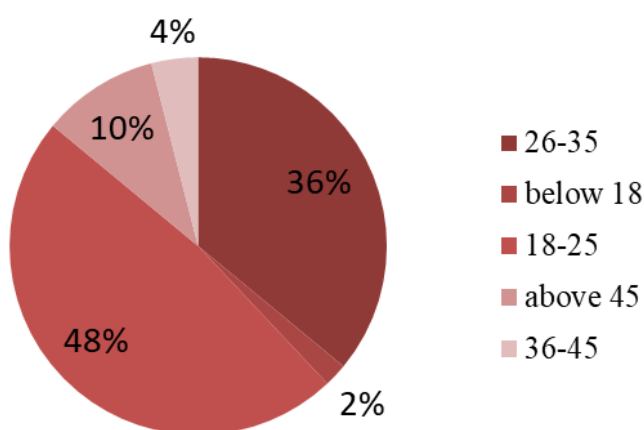
Figure 10 Age groups analysis

Figure 10. (own analysis)
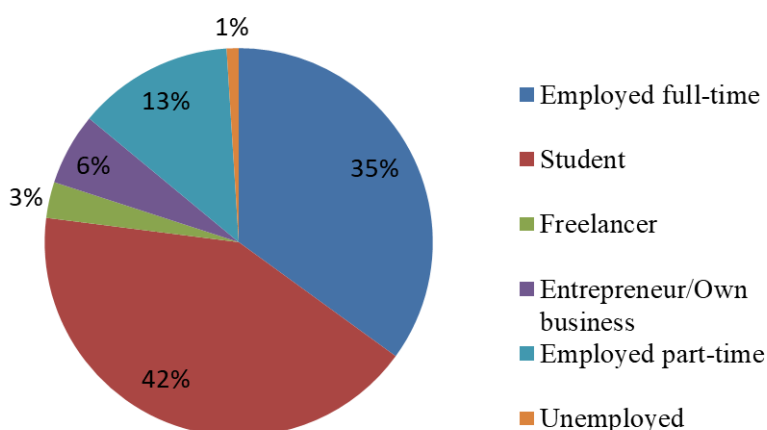
Figure 11 Employment status analysis

Figure 11. (own analysis)

These three mentioned areas were included in mandatory questions, and all 100 respondents had to mark their answer. Owing to the fact that more than 97% or more of the

respondents also indicated their country of origin, monthly income after tax and employment status, also these factors will be evaluated. Overall, 21 nationalities completed the survey, but due to the convenience sampling, the most significant proportion was from the Slovak Republic (36.7%) and Austria (14.3%). However, the current literature does not provide any proof of cross-cultural systematic differences between Slovakia, Austria, and other countries in the sharing economy context and therefore, no systematic differences are assumed.

Regarding the income after tax, the majority (38.1%) receives between 750€ and 1300€ per month, followed by a similar percentage of people earning below 750€ what corresponds to the fact that the survey was completed not only by working people but also students. This result is positive because it shows that various groups of the population are included in the audience. Even though the research does not aim to provide generalizable findings, results from only one part of the population would further decrease the representativeness of the data. However, in the same time, the income standards might have an influence people's usage preferences and especially their price sensitivity. Due to the fact the biggest proportion of people is from Slovakia, where the median net income was measured to be 6,951€ in 2016 in comparison to Austria where the results show 23,694€, and European Union with 16,561€ (Eurostat, 2018), the results of the price sensitivity results might be skewed.

When speaking about the past experiences with the sharing economy, the data clearly shows that there are prevailing favorable evaluations of these activities. None of the respondents indicated that he or she was clearly not satisfied and only 4% inclined towards rather negative evaluation of his or her experiences. On the contrary, definitely satisfied were 32% of respondents. A more detailed look at the data shows that, with the exception of one person, people who indicated rather unsatisfactory experiences with the sharing economy still showed inclinations toward trying some types of these activities in the future. This sheds a favorable light on the evolution of the collaborative consumption, even though due to the fact that the number of dissatisfied respondents is really low, this finding serves rather as a recommendation for further research.

Furthermore, the frequency of engaging in sharing activities is quite low. More precisely, only 4% indicated that they would participate more than five times per week, 11% participates up to five times per week. Conversely, almost half of the respondents (42%) generally participate less than once per month so the results suggest that sharing is rather an

occasional than a regular activity. This non-regularity and low frequency of engagement are interesting findings especially due to the young age of the respondents. The underlying reasons will be further discussed in the part analyzing the question regarding the barriers against sharing behavior, which assessed the main obstacles mentioned in the section 4.3, such as materialism, lack of trust and others. Interestingly, the non-regularity was specified as a barrier towards sharing economy behavior in the research by Hamari et al. (2015, p. 2055) because it might lead to higher costs.

Figure 12 Satisfaction with sharing experiences
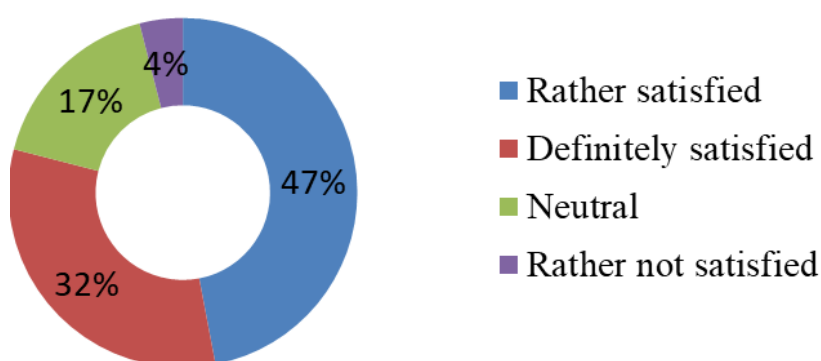
Figure 12. (own analysis)

Figure 13 Frequency of participation
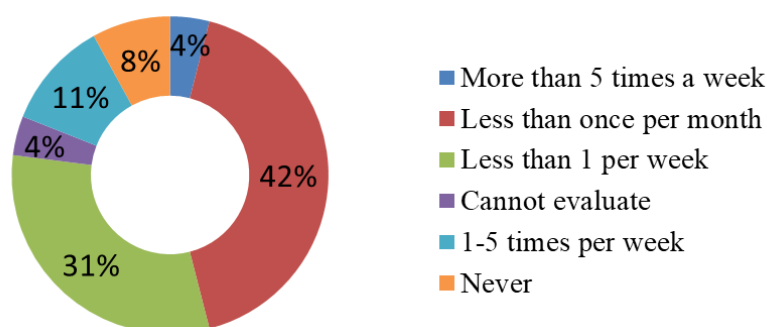
Figure 13. (own analysis)

To move further to more in-depth findings regarding people's experiences, the graph presented in Figure 14 shows an overview of the popularity and prevalence of various types of

sharing economy activities. The responses were determined based on the categorization introduced in section 2.2. The most popular form of sharing activity is outsourcing services to other people, such as Uber, what is not surprising given its sales and valuation. The same result was reached through re-selling and swapping items (69%). Interesting is the contrast between the results for renting and borrowing from companies and from other people. The results show that more than twice as many respondents tried peer-to-peer activities. These facts prove the importance of the interaction between people within the sharing economy activities, what was earlier presented in the theoretical section based on the work of Huber (2017, p. 55). The least used type of activity was crowdfunding, what can be considered as natural due to the nature of the category, which is limited mainly to entrepreneurs.

Figure 14 Popularity of various sharing activities
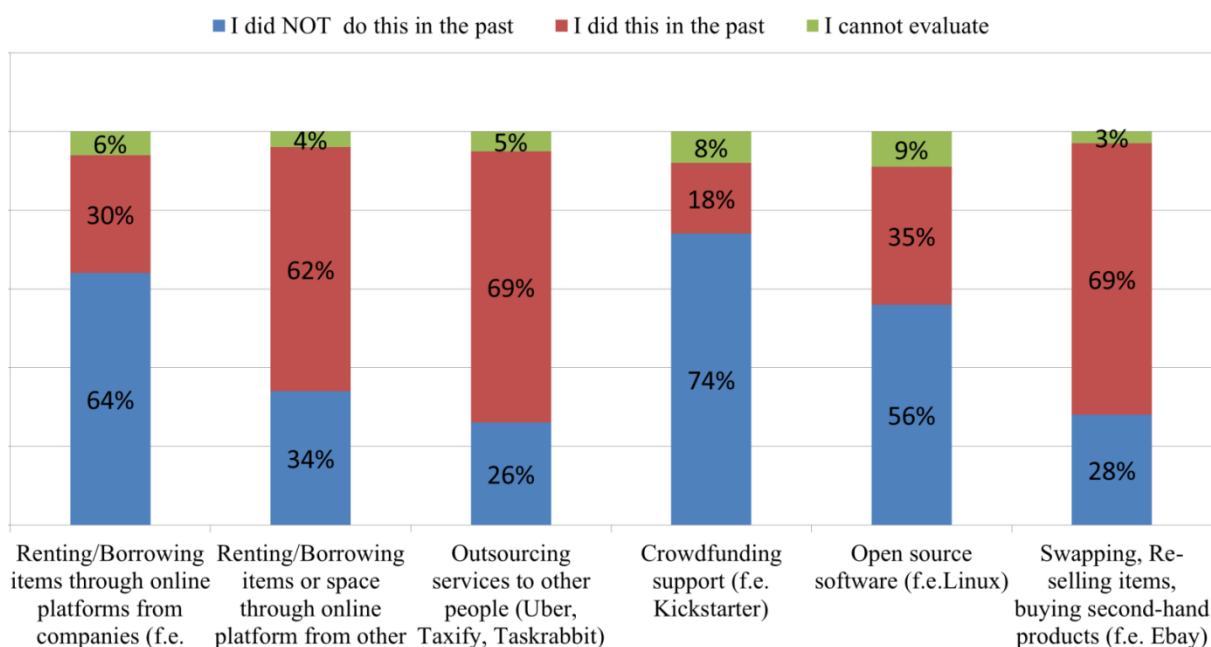
Figure 14. (own analysis)

Furthermore, the Figure 15 shows results of the same types of activities, but the focus is placed on outlooks and inclinations of people to engage in a particular activity in the future. All the sharing forms, even crowdfunding, yielded positive results due to the fact that more than half of the respondents can imagine participating in them in the future. The most promising is the situation for the swapping and re-selling activities but outsourcing and peer-to-peer renting follows with similar results. Another fact that adds on the positive outlooks of the sharing economy is based on the statistics that 63% of respondents would be willing to

engage as a customer and also as a supplier (provider) on the platforms in the future. This is a crucial fact since the participation of both sides is a necessary part of the sharing process (Botsman & Rogers, 2011, p. 70; Wahl, 2017), what was also illustrated on the Figure 2 at the beginning of section 1.2.

Even though these findings suggest a positive evolvement of the sharing economy, they only evaluate behavioral intentions of people. The translation of these intentions into actions remains questionable, but has crucial importance, especially due to the low frequency of participation which was specified earlier. This issue is referred to be the attitude-behavior gap (Zrałek, 2017, p. 282). The research regarding the attitude-behavior gap within the sharing economy is limited, but available findings suggest its existence, more precisely an existing difference between the effects of various factors on attitudes of a person and his or her actual behavior. The biggest difference in the effects was monitored in the case of perceived sustainability, which did not have a direct connection to behavior while it affected attitudes. Conversely, economic benefits proved to affect behavior, but not attitudes in the same intensity. Furthermore, the research stated that some of the attitudes have a potential to be translated into behavior later, and in some cases; actual behavior is conditioned by positive attitudes (Hamari et al., 2015, pp. 2054,2055). Therefore, this topic presents a quite complex research area and can be considered as interesting suggestion for further studies. However, within this thesis, focus is placed on the effects of various factors on the behavioral intentions. From this perspective, the results of the first part of the survey suggest that, based on the opinions and experiences of people, there is a chance for positive growth of the collaborative economy, mainly for the area of peer-to-peer transactions and reselling and lending platforms such as eBay. Moreover, in the case of slightly negative experience, there seems to be no sign of discouragement from engaging in sharing economy activities again, however, this finding needs to be confirmed with further research involving more dissatisfied participants. Furthermore, gaps are visible in the frequency of the transactions since most of the people use it rather occasionally than on a daily basis.

Figure 15 Future outlooks of various sharing applications
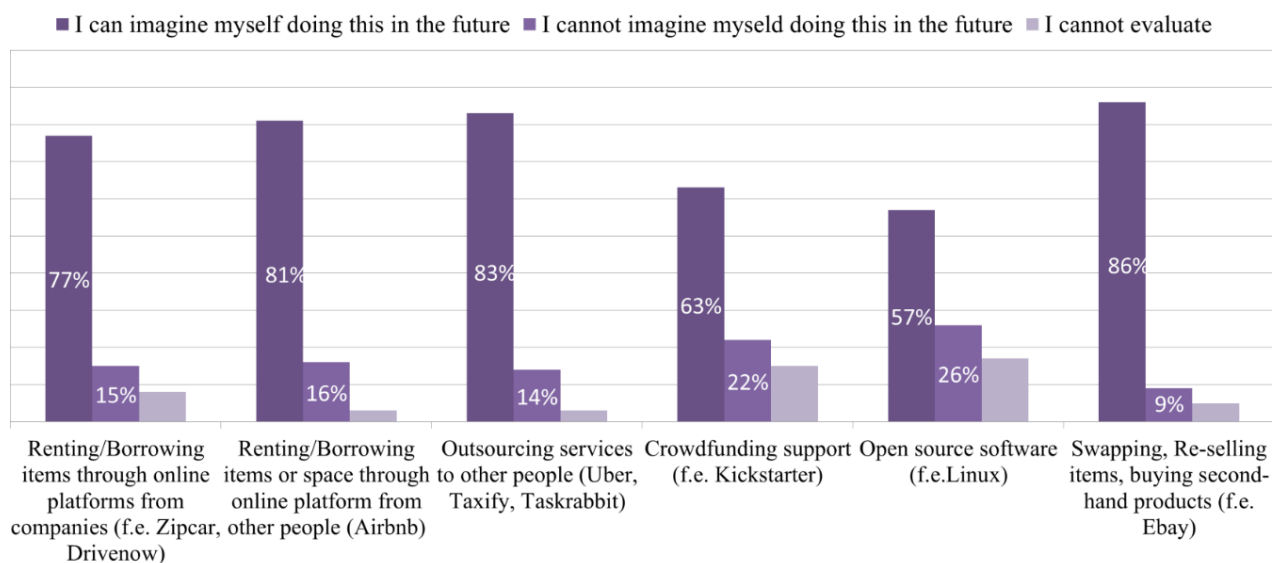
Figure 15. (own analysis)

5.2.1 Factors that shape peoples' participation

To provide more profound insights into consumer behavior in connection with the sharing economy, also the specific factors that shape people's participation in these situations will be analyzed. This part of the analysis will also test the hypotheses specified in the consumer behavior section. Based on the literature review and model specified in the part 4, the survey provided questions regarding whether and how people are affected by various factors that are relevant in the sharing context. The results are presented in Figure 16.

Figure 16 Summary of effects of various factors on the sharing behavior
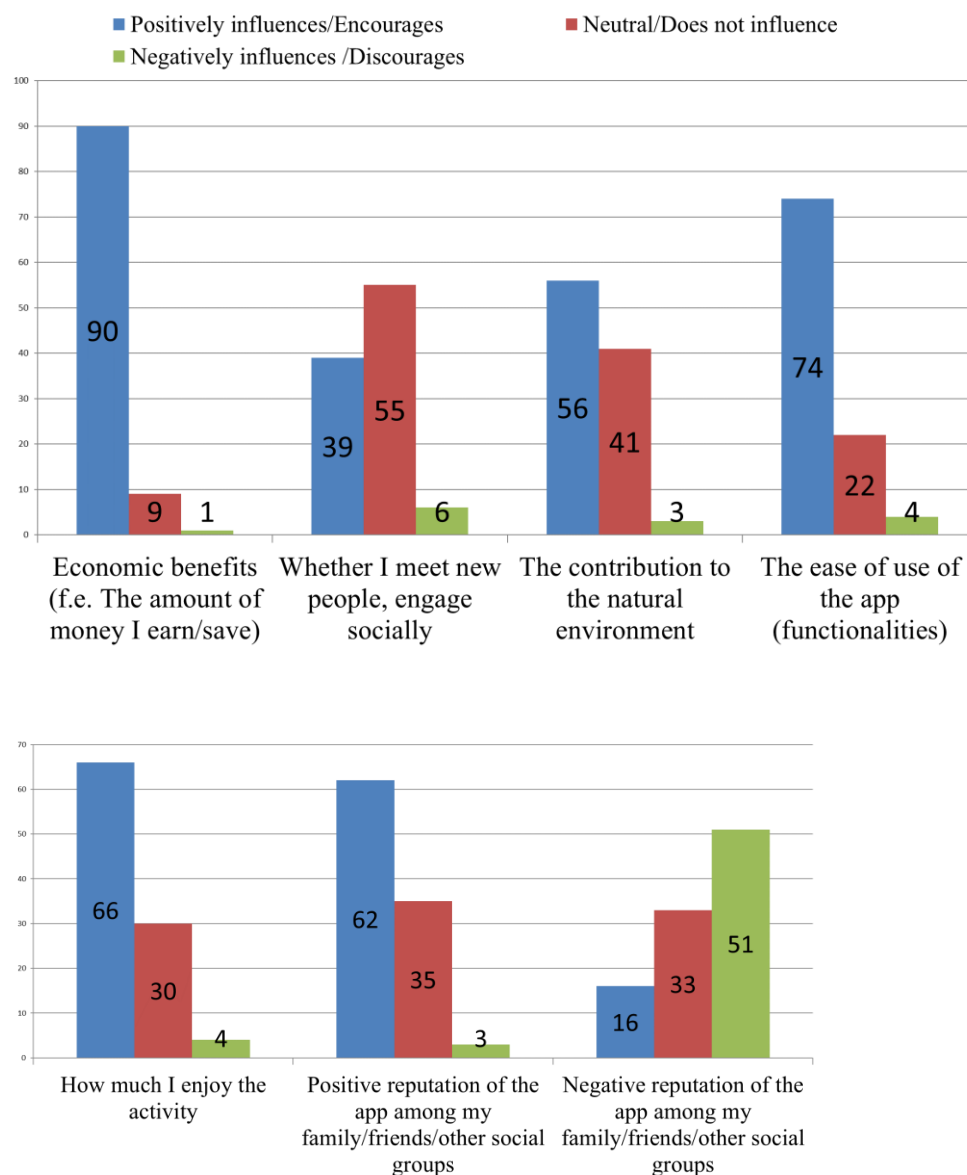
Figure 16. (own analysis)

According to the first look on the data, the economic benefits seem to affect the consumer behavior to the largest extent, while, not surprisingly, negative reputation of the application in one's social groups seems to have the highest adverse effect. This result offers a contrasting picture to the findings from the questions analyzed in the subsection above. While the respondents, except for a one person did not show any discouragement to use sharing applications in the future even in the case of slightly negative experiences, negative reputation of the applications is claimed to discourage from sharing behavior 51% of the respondents. This discrepancy might be caused by the fact that there is much lower number of respondents

that had negative experiences in comparison to those assessing the impact of the negative reputation. In addition, there might be also an attitude-behavior gap in this context, when people claim that negative reputation has negative effects on their intentions to share, however, the effect on actual behavior is different. Furthermore, the factor with the highest percentage of people that indicated no influence was the social aspect of meeting new people. There is no variable that would have the same or very similar amount of responses in two or three categories.

In order to test the hypotheses, a non-parametric one sample chi-square test was used through the SPSS software. This method was chosen because it is used to compare actual frequencies with expected, theoretical ones. Even though the chosen non-parametric tests are not as powerful as parametric tests, they are more appropriate while working with ordinal data, which are present in the questions that are currently tested. Moreover, they are recommended to be used with research focused on behavioral sciences (Singh, Roy, & Tripathi, 2013, pp. 2-3). The data were firstly organized in excel, coded and then transferred to the SPSS.

In this case, the expected distribution according to the null hypothesis is uniform, what means that the same frequencies for each option (positive, neutral or negative effects) should occur. In that case, none of the options would be statistically prevailing. Firstly, one sample chi-square test verified whether the null hypothesis could be rejected due to the statistically significant difference in the results from the expected frequencies. Secondly, through legacy dialogs, the deviations from the expected amounts were determined and analyzed. This procedure was conducted for seven hypotheses testing the economic, social, environmental factors, the ease of use (functionalities), enjoyment and positive or negative reputation.

Firstly, the results of the test of null hypotheses (equal frequencies of all categories) will be presented. The null hypothesis in the case of all seven hypotheses was rejected what confirms that there are statistically significant differences between expected and actual frequencies. The SPSS output files from the one-sample chi-square tests are provided at Table 6. Furthermore, the prevailing effects and their types respective to each factor will be determined through taking a closer look at the deviations from the expected amounts through legacy dialogs. The results are presented in the Tables 7-14 for each of the studied factors.

Table 4 Tests of null hypotheses

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Economic occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
2	The categories of Social occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
3	The categories of Environmental occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
4	The categories of EaseOfUse occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
5	The categories of Enjoyment occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
6	The categories of PositiveReputaiton occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
7	The categories of NegativeReputation occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Table 6. (own analysis)

In the case of economic factors (Table 7), the functionalities (Table 11) and the enjoyment (Table 10), positive deviations of the "encouraged" people from the expected amounts can be spotted, while other categories (neutral and negative effect) have negative deviations. The highest difference from the expected count occurs in the case of economic benefits (56.7). These results show a higher amount of people that indicated positive effect of these three factors on their intentions to engage in the sharing economy and therefore, hypotheses H1, H4, H5 are approved. This result proves mainly the high price-sensitivity of the users; however, the sample includes mostly low- or middle-income respondents what might have affected the findings. It can be expected that a sample involving higher-income groups would place less importance on price, and more on convenience, environmental benefits, etc.

We see a similar situation, only in a different direction in the case of H7 which assumes discouragement from the sharing behavior due to negative reputation of the application in one's social group (Table 8). The most prevailing category, which is the only

one that has higher frequency than the expected amounts, is the adverse effects of the above-mentioned reputation. As a result, H7 can be approved. This offers new insights into the discussion regarding the effects of negative reputation and negative experiences on the future intentions and behavior of people in the sharing context which was started earlier and supports the conclusion that negative reputation does have adverse effects on peoples' intentions. Additional research is needed in order to assess the effects of negative experiences and the gap between intentions and behavior.

Furthermore, in the case of environmental factors (Table 12) and positive reputation (Table 9) in one's social group, the highest deviation from the expected amount is in the "positive effects" category. Even though the "neutral effects" also have higher frequencies than expected, the deviations are noticeably smaller. As a result, H2 and H6 are approved.

Table 5 Economic factors

	Observed N	Expected N	Residual
Neutral/Does not influence	9	33,3	-24,3
Positively influences/Encourages	90	33,3	56,7
Negatively influences /Discourages	1	33,3	-32,3
Total	100		

Table 7. (own analysis)

Table 6 Negative reputation

	Observed N	Expected N	Residual
Neutral/Does not influence	33	33,3	-,3
Positively influences/Encourages	16	33,3	-17,3
Negatively influences /Discourages	51	33,3	17,7
Total	100		

Table 8. (own analysis)

Table 7 Positive reputation

	Observed N	Expected N	Residual
Neutral/Does not influence	35	33,3	1,7
Positively influences/Encourages	62	33,3	28,7
Negatively influences /Discourages	3	33,3	-30,3
Total	100		

Table 9. (own analysis)

Table 8 Enjoyment

	Observed N	Expected N	Residual
Neutral/Does not influence	30	33,3	-3,3
Positively influences/Encourages	66	33,3	32,7
Negatively influences /Discourages	4	33,3	-29,3
Total	100		

Table 10. (own analysis)

Table 9 Functionalities, ease of use

	Observed N	Expected N	Residual
Neutral/Does not influence	22	33,3	-11,3
Positively influences/Encourages	74	33,3	40,7
Negatively influences /Discourages	4	33,3	-29,3
Total	100		

Table 11. (own analysis)

Table 10 Environmental factors

	Observed N	Expected N	Residual
Neutral/Does not influence	41	33,3	7,7
Positively influences/Encourages	56	33,3	22,7
Negatively influences /Discourages	3	33,3	-30,3
Total	100		

Table 12. (own analysis)

Table 11 Social factors

	Observed N	Expected N	Residual
Neutral/Does not influence	55	33,3	21,7
Positively influences/Encourages	39	33,3	5,7
Negatively influences /Discourages	6	33,3	-27,3
Total	100		

Table 13. (own analysis)

Table 12 p-values – effects of factors

	Economic	Social	Environmental	EaseOfUse	Enjoyment	PositiveReputaiton	NegativeReputation
Chi-Square	145,460[a]	37,460[a]	44,780[a]	79,280[a]	58,160[a]	52,340[a]	18,380[a]
df	2	2	2	2	2	2	2
Asymp. Sig.	,000	,000	,000	,000	,000	,000	,000

a. 0 cells (0,0%) have expected frequencies less than 5. The minimum expected cell frequency is 33,3.

Table 14. (own analysis)

Individual situation occurs in the case of social factors (Table 13) which show positive deviation in the case of positive and also neutral effects. However, the most significant difference is in the case of neutral factors (21.7) while the positive effect reached only 5.7. Therefore, it can be concluded that there is a certain positive effect of the social factors on the intention to behave and therefore, H3 can be approved, however, it should be mentioned that the degree of the effect seems to be very low.

It is also important to point out that these results are not generalizable due to the convenience sampling and the research carries particular limitations, especially the low degrees of freedom. However, it can still provide insights into the consumer behavior and help with direction for the further research and factors that deserve higher level of attention.

Within the section dedicated to the factors shaping the consumer behavior, also the barriers towards sharing were studied. The results were measured on a nominal scale while the answers presented various aspects that might present a factor discouraging people from sharing activities. According to the results, which are presented on Figure 17, the highest proportions of the respondents agreed that the need to own the items and the lacking time and opportunities to share are barriers towards sharing behavior. In addition, letting other people use their items reached similar percentage (48%). These results suggest that these factors are contributing the most to the low frequency of participation in the sharing economy activities discussed earlier in the section 5.2, however, a potential gap between the opinions and actual behavior might exist also in this context. Regarding overcoming these barriers, materialism

and unwillingness to let other people use the items present a more challenging demotivators while lacking opportunities for sharing have a potential to be solved by increasing the number of platforms or users. Also, this result might be caused by the fact that Slovakia and Austria are relatively small countries where it is more challenging to reach the critical mass. From an opposite perspective, the smallest proportion of people indicated that a barrier towards sharing behavior would be a lacking trust into foreign people (69%).

Figure 17 Barriers towards sharing behavior
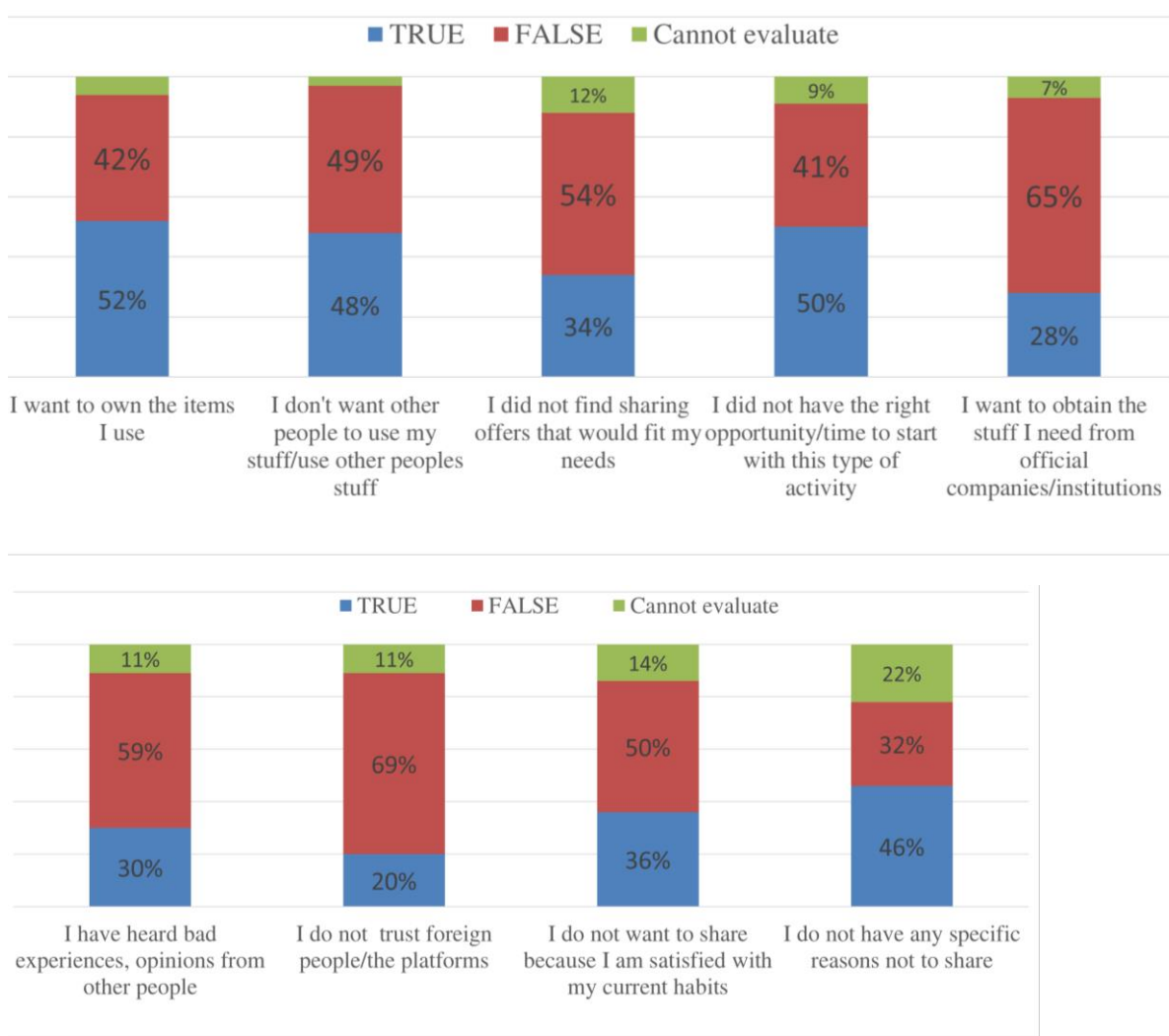
Figure 17. (own analysis)

5.2.2 Ride-sharing and Uber

As in the whole thesis, a significant part of the survey was dedicated to the topic of ride-sharing and Uber. Altogether, nineteen questions focused on this area; however, their appearance was conditional on the answers of the respondents. Firstly, the frequency of usage

was studied in connection with various transportation methods, whether it was an own car, public transportation, sharing economy applications or Uber itself. These questions were asked all the respondents, and the results are presented in Figure 18. When looking at the graph, it is visible that the usage of taxi services or ride-sharing platforms, including Uber, is rather occasional or rare than frequent. The public transit presented the most frequently used mean of transportation, while also the own car reached significant percentages (30% including very frequent and frequent users).

Figure 18 Frequency of usage of various means of transport
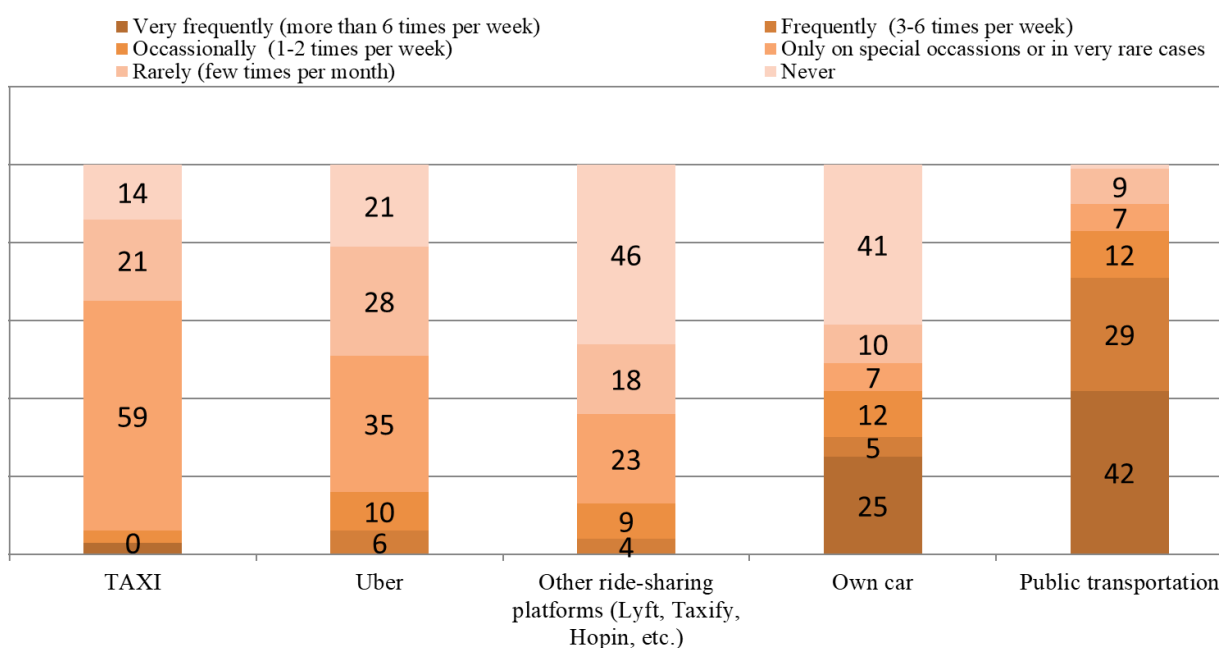
Figure 18. (own analysis)

Furthermore, when speaking about the comparison between Uber and other platforms, the valuation and evolution presented within section 3 clearly suggest that Uber should be the leader among ride-sharing applications. Nevertheless, the graph does not show huge differences between the frequencies of usage even though other ride-sharing applications have more than twice as much non-users. In this context, it is essential to point out that the demographics of respondents could have influenced these results since Uber was banned in Slovakia quite shortly before the distribution of the survey (Reuters Staff, 2018) while Slovakians presented 36.7% of respondents. Overall, the data show that people use taxis and also ride-sharing services rather on a particular occasion than on a frequent or daily basis.

When a closer look on the data is taken, they also reveal that there are rarely customers that would be loyal to only one mean of transportation or that would not combine taxis, Uber and ride-sharing platforms. More precisely, 12% of respondents were shown to be only taxi riders, who do not use the ride-sharing application at all and 6% were only using Uber or ride-sharing services, but not taxis. Overall, the penetration of Uber seems to be quite high and not surprisingly higher than other ride-sharing applications; however, the loyalty towards the application is limited. Taking into consideration very low, or even non-existent switching costs between ride-sharing applications and taxis, this fact is not surprising. Also, in case the critical mass within a particular territory is not reached, or drivers are not available, people might easily call a taxi except for using ride-sharing applications. Therefore, the space for improvement for Uber seems to be in increasing customer retention and motivating riders to stop using other means of transportation. Currently, loyalty programs were mostly directed towards drivers, such as cash back cards for gas stations (Giambattista, 2018). Based on the results, it seems necessary to implement a loyalty program for riders. This has an increasing importance also due to the fact that Lyft already started a loyalty program for business customers in 2018 and similar initiative was monitored also in the case of Airbnb (Iyer, 2018). Therefore, it is possible that similar programs will become a new trend within the sharing economy sector.

While previous responses provided mostly insights into the consumer behavior regarding various means of transportation, the discussion regarding Uber's sustainability and future will be further elaborated through analyzing the next section of questions which was focused directly on the application. The questions were asked conditionally on the usage or non-usage of Uber and also in line with indicated preferred roles (driver, customer, or both). Although questions were also prepared for the drivers, the most significant focus was placed on customers, respectively riders. Due to the fact that insufficient number of drivers (4%) responded to the questionnaire, the results will not be analyzed, and only responses that indicated use as a rider or rider and also a driver will be taken into account.

While the company persuasively claims that they are not a provider of taxi services but a matching platform (Lindahl, 2017), consumer behavior suggests a different answer. Out of 81 respondents that filled in a question regarding the type of trips that Uber substitutes for them, 90.1% expressed that it is an alternative for taxi rides. While 55.6% also demonstrated usage instead of public transportation, which is also a significant percentage, the taxi response

is a clear leader in this matter. The potential to provide an alternative to an own car was assessed also in an individual question where 45.1% of respondents indicated that they could imagine ride-sharing application to be a replacement of their car in the future. However, the biggest threat relates to the taxi industry primarily due to the fact that 65.4% people were more satisfied with Uber services than with taxi services, while only 1.2% indicated higher satisfaction with taxis, what is a tremendous difference. The reasons behind this evaluation might be numerous. Firstly, the price is undoubtedly a big factor; however, if there would be serious and repetitive cases of delays of arrivals of the cars, insufficient coverage, or complicated ordering process, Uber could hardly become a real competitor of taxi businesses. In these areas, the ride-sharing giant has an advantage due to easier expansion to new countries, real-time tracking of the drivers and other benefits discussed in the section 3.1.4. Also, the expansion of the number of drivers is much easier and cheaper in the case of Uber and therefore, the higher availability of the cars and shorter waiting times might be other reasons that benefit the ride-sharing application. In addition, emotional or psychological factors might also play a role. Customers might prefer Uber due to the possibility to see the past reviews of the drivers what consequently affects the perceived security during the ride, or due to the fact that the drivers are more friendly and open. The next set of questions tested the importance of these mentioned factors as well as other ones that might be relevant for the users. Findings were derived from the sample of 81 respondents and are presented on Figure 19. Firstly, people were able to indicate whether the factors are important to them, rather important, rather not important, not important at all, or neutral. The most relevant factor in this category was the price, which was marked as "very relevant" by 68% of respondents but also as "rather relevant" for 26% of them, what shows high price-sensitivity of people in this context. Uber managed to address these attitudes with its pricing model since 94% agrees that Uber generally has lower prices than taxis. Referring back to the information provided in the section 3.1.3, the difference between average taxi fares and Uber fares might be significant ranging from 19.8% in Australia, 44% on airport rides around Europe, to even 60% when it comes to using ride pooling options (Deloitte Access Economics, 2016, p. 6; Stefansdotter et al., 2015, p. 7; Gorentals, 2017; own calculations). Therefore, even though the company was not able to reach sufficient financials to ensure profit, sacrificing additional funds through lower prices seems to be key success step of Uber

Figure 19 Importance of various factors
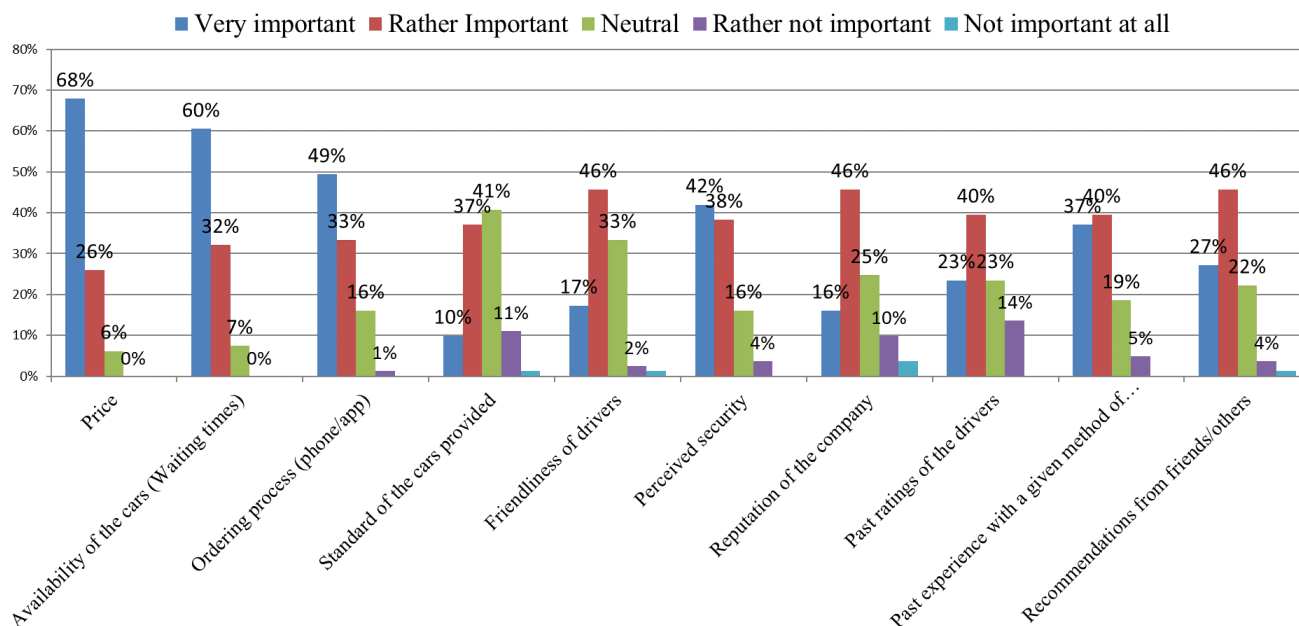
Figure 19. (own analysis)

Figure 20 Comparison of Uber and taxi
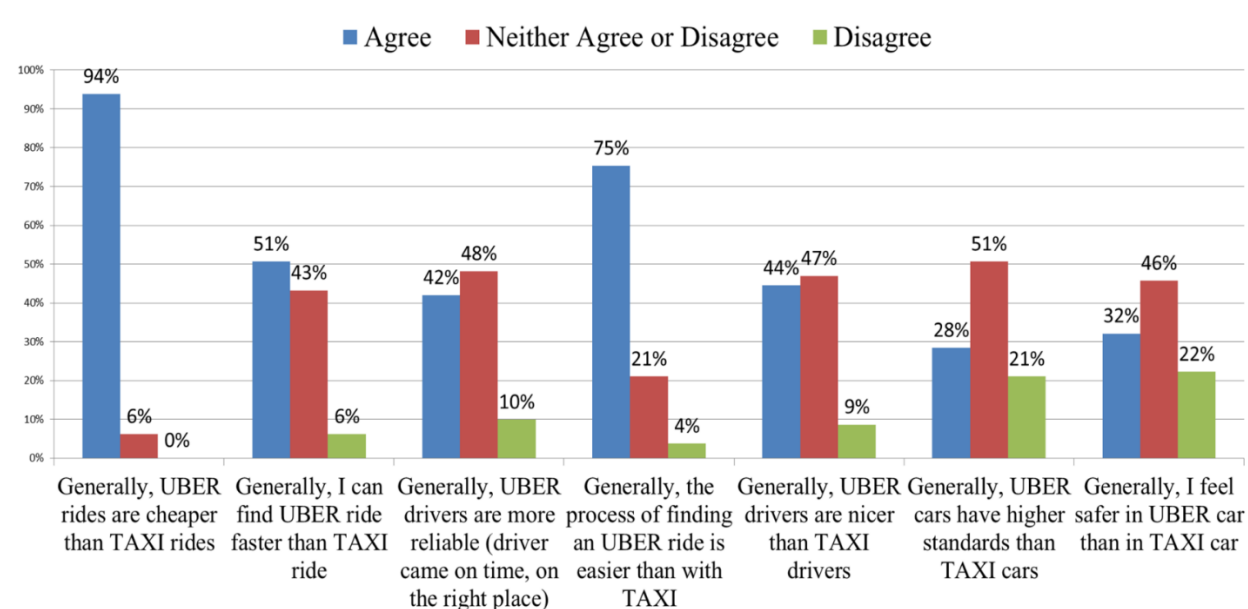
Figure 20. (own analysis)

Furthermore, the availability of the cars is specified by 60% people as a very relevant factor. Furthermore, 75% of respondents agreed that the process of finding a driver is more

straightforward with Uber, what could have also driven the result of 51% who claimed that they could find an Uber easier than a taxi. In addition, other factors such as the ordering process or the perceived security had the highest percentage proportions for people who considered them as definitely or rather important. There were very little percentages of people that would specify some factor as definitely not important, but the highest amount had the reputation of the company (4% claiming it is not relevant at all).

In order to contribute with more in-depth findings regarding importance of various factors, a non-parametric one sample chi-square test was conducted to assess the differences between the actual and expected frequencies of answers in this question. The answers were divided into three categories – important (including "very important" and "rather important" answers), not important (including "rather not important" and "not important at all" answers), and neutral. The analysis followed the same logic and process as in the section 5.2.1 – the statistical significances of the difference from the expected results were tested, the deviances from the expected amounts were determined through legacy dialogs and finally, the results were evaluated. In all the cases there was a significant difference between the expected and actual amounts what is outlined on Figure 15.

Therefore, these factors can be expected to be a part of the decision-making process of the customers, however, their importance varies. As expected, price proved to be the factor with high importance (+35.5) difference in answers indicating its importance), even though due to the merge of very important and rather important answers, higher deviations from the expected amounts were spotted in the case of the ordering process (+40) and perceived security (+38). Furthermore, past experiences (+35), availability of the cars (+34.5) as well as recommendations from peers (+32) proved to be some of the more important factors. The lowest deviances in the important answers was shown in the case of standard of the cars (+11). Detail of the results is illustrated on Tables 16-26.

Table 15 One sample chi-square test results for importance of the factors

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Price occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
2	The categories of Availability_of_cars occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
3	The categories of Ordering_process occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
4	The categories of Standard_of_cars occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
5	The categories of Friendliness_of_drivers occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
6	The categories of Perceived_security occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
7	The categories of Reputation occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
8	The categories of Past_ratings occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
9	The categories of Past_experience occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.
10	The categories of Recommendations_from_friends occur with equal probabilities.	One-Sample Chi-Square Test	,000	Reject the null hypothesis.

Table 15. (own analysis)

Table 16 Price

	Observed N	Expected N	Residual
Neutral	5	40,5	-35,5
Very or rather important	76	40,5	35,5
Total	81		

Table 16. (own analysis)

Table 17 Perceived security

	Observed N	Expected N	Residual
Neutral	13	27,0	-14,0
Very or rather important	65	27,0	38,0
Rather not important (or not important at all)	3	27,0	-24,0
Total	81		

Table 17. (own analysis)

Table 18 Ordering process

	Observed N	Expected N	Residual
Neutral	13	27,0	-14,0
Very or rather important	67	27,0	40,0
Rather not important (or not important at all)	1	27,0	-26,0
Total	81		

Table 18. (own analysis)

Table 19 Past ratings

	Observed N	Expected N	Residual
Neutral	19	27,0	-8,0
Very or rather important	51	27,0	24,0
Rather not important (or not important at all)	11	27,0	-16,0
Total	81		

Table 19. (own analysis)

Table 20 Friendliness of the drivers

	Observed N	Expected N	Residual
Neutral	27	27,0	,0
Very or rather important	51	27,0	24,0
Rather not important (or not important at all)	3	27,0	-24,0
Total	81		

Table 20. (own analysis)

Table 21 Past experiences

	Observed N	Expected N	Residual
Neutral	15	27,0	-12,0
Very or rather important	62	27,0	35,0
Rather not important (or not important at all)	4	27,0	-23,0
Total	81		

Table 21. (own analysis)

Table 22 Recommendation from friends

	Observed N	Expected N	Residual
Neutral	18	27,0	-9,0
Very or rather important	59	27,0	32,0
Rather not important (or not important at all)	4	27,0	-23,0
Total	81		

Table 22. (own analysis)

Table 23 Availability of the cars

	Observed N	Expected N	Residual
Neutral	6	40,5	-34,5
Very or rather important	75	40,5	34,5
Total	81		

Table 23. (own analysis)

Table 24 Standard of the cars

	Observed N	Expected N	Residual
Neutral	33	27,0	6,0
Very or rather important	38	27,0	11,0
Rather not important (or not important at all)	10	27,0	-17,0
Total	81		

Table 24. (own analysis)

Table 25 Reputation of the company

	Observed N	Expected N	Residual
Neutral	20	27,0	-7,0
Very or rather important	50	27,0	23,0
Rather not important (or not important at all)	11	27,0	-16,0
Total	81		

Table 25. (own analysis)

Table 26 p-values for the importance of the factors

Test Statistics

	Price	Availability_of_cars	Ordering_process	Standard_of_cars	Friendliness_of_drivers	Perceived_security	Reputation	Past_ratings	Past_experience	Recommendations_from_friends
Chi-Square	62,235[a]	58,778[a]	91,556[b]	16,519[b]	42,667[b]	82,074[b]	30,889[b]	33,185[b]	70,296[b]	60,519[b]
df	1	1	2	2	2	2	2	2	2	2
Asymp. Sig.	,000	,000	,000	,000	,000	,000	,000	,000	,000	,000

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 40,5.

b. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 27,0.

Table 26. (own analysis)

The next question assessed the risks perceived by Uber riders. Even though Uber has lower requirements on licenses and tests on their drivers in comparison to taxi companies (as discussed in section 3.1.4), 59% of respondents does not perceive this as a potential risk when riding with Uber. According to the perception of the people, the least risky aspect is the money transfer through the application.

Figure 21 Perceived risks
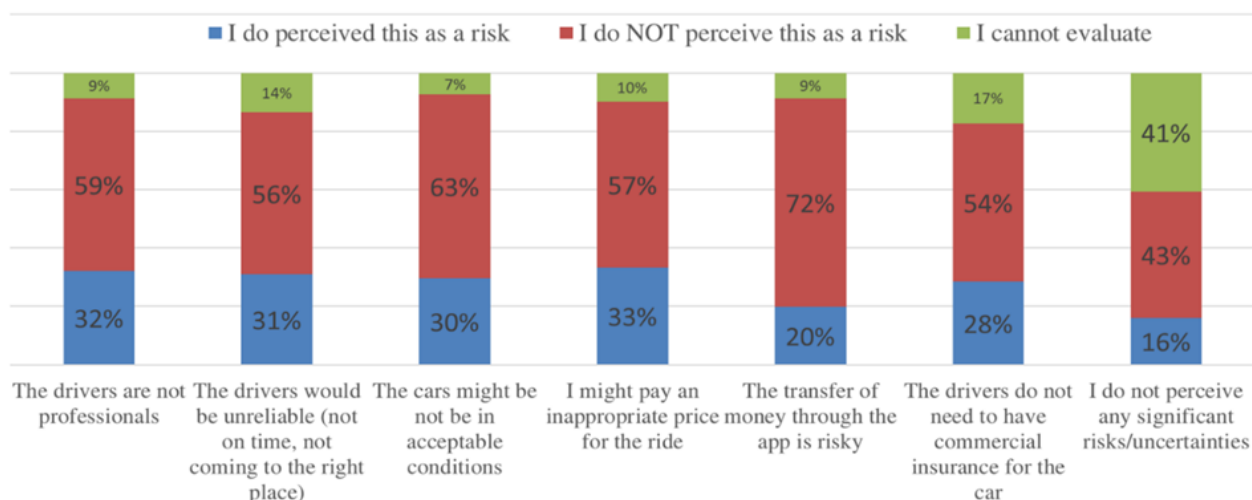
Figure 21. (own analysis)

Furthermore, the results show that 66.7% of people would only be willing to pay a lower price for Uber ride in comparison to a taxi ride. The prevalent underlying reason is the fact that the lower prices are the main reason to use Uber in the first place. These results prove the suggested high price-sensitivity of Uber customers even though the possible influence of demographics of the respondents should be kept in mind. Nevertheless, the application managed to operate a business model that enables charging lower prices, attracted drivers and improved the ordering process. While also other factors are essential to the users, such as perceived security or the ordering process, the Uber model seems to fulfil the necessary standard in these areas for the majority of people. As a result, even though the official and legally accepted categorization of Uber is often a subject of a legal discussion, the results of the empirical research suggest that the type and standard of service it provides is a potential threat to taxi drivers.

The next section of the ride-sharing part of the survey dealt with the legal problematics connected directly with Uber. The goal was to assess the awareness of people regarding these problems, the interest and the degree to which their opinion would actually affect their decision-making and behavior. The results will be concluded from data gathered from 82 respondents. According to the results presented in Figure 22, while over 83% showed awareness of these issues, only 57.3% claimed an interest in this subject.

Regarding the regulations, the results do not provide conclusive answers since almost the same proportion of people believe that Uber should and should not be regulated as taxi

companies. However, a slight majority (51%) thinks that the same regulation should apply to Uber drivers as to taxi drivers.

Figure 22 Interest and awareness regarding Uber's legal problems
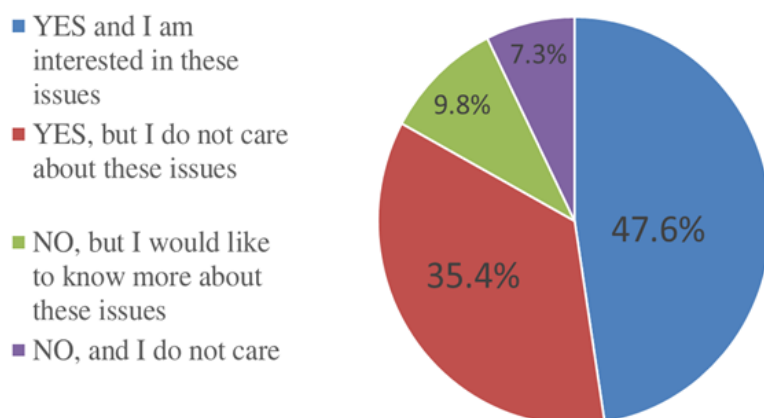
Figure 22. (own analysis)

Regarding the actual consumer choices, the most prevalent opinion was that as long as people are getting the benefits they are looking for, they would continue using the application (57.3%). As was shown earlier, in this context, the benefits that people seek are mainly lower prices. Interestingly, 18 respondents who did believe that Uber should be regulated the same way as taxi drivers claimed that they would also continue using the application as long as they are getting the benefits they are interested in. This suggests another area where a gap between the attitudes and actual behavior exists.

The last point will be dedicated to innovations that Uber might bring. The survey assessed the inclinations of people to use Uber in the future if it would provide rides with self-driving cars. Currently, this option is rather in a research state, even though it was already tested in Pittsburg (Giffi, Vitale, Robinson, & Pingitore, 2017, p. 86). With respect to the research conducted for this thesis, 42% of respondents stated that they would be willing to ride even within driver-less vehicles, while 39% is undecided. This suggests that the potential of this innovation is positive, especially if the doubtful users will receive sufficient arguments and persuasion. These findings are highly relevant also, due to the fact that arguments presented within the financial analysis of Uber stated that autonomous vehicles might be one of the ways how Uber could reach profitability. According to the research conducted in the

U.S., the main reasons hindering people from riding driverless vehicles are lack of trust and safety concerns (Smith & Anderson, 2018).

In a nutshell, the analysis within this section provided insights into the consumer behavior regarding the ride-sharing application. The results suggest that Uber successfully managed to capitalize on the price sensitivity of the customers as well as on the ineffective process of ordering a cab that is nowadays in place. Owing to that, they present an actual threat to taxi drivers despite their efforts to categorize themselves outside of the taxi industry. However, there is a space to increase the retention and usage frequency of the users, for example through loyalty programs for the riders. Furthermore, the potential exists that Uber will also serve as a substitute for public transportation and car ownership in the future. In order to fulfill its potential, it should ensure profitability and improve their financial performance. One of the ways could be done through the deployment of self-driving cars which are already in the implementation process and seems to have positive outlooks if the safety concerns will be addressed. Undoubtedly, if this development would be successful, it could be a start of a different standard within the transportation industry.

6 Critical evaluation of the sharing economy

The findings presented in the section above prove that the sharing economy is gaining momentum and even though it is not an entirely new pattern of behavior, the intensity is unprecedented. This brings a question on the potential consequences and impacts of this trend to the world as well as concerns regarding the sustainability of this behavior and applications that enable it. If some of the scholars such as Jeremy Rifkin (2014, pp. 1-2) are right, the collaborative economy could alter the regular way how people consume in the future. That would almost certainly lead to further changes in various economic, legal or environmental areas of the world and consequently, affect most of the population. This section will critically assess the impacts that the sharing economy might bring along with factors that are relevant in this context. Uber will continuously be taken as the primary example in order to illustrate more specific opportunities and threats within the transportation industry.

6.1 Economic factors

Owing to the fact that the sharing economy is a new consumption trend, the economic factors will be discussed first. The collaborative consumption has already made changes in the existing markets, affected the nature of competition in numerous industries and facilitated the entry of new players. Therefore, it is essential to discuss the actual effects and connections with the traditional markets. Authors present diverse viewpoints regarding this issue. Some claim that the effects on particular sectors are detrimental and disruptive, mainly in connection with transportation industry and short-term accommodation, where the sharing economy players managed to decrease revenues of traditional companies, pressured to reduce prices or caused a decrease of the value of taxi licenses (Bond, 2015, p. 89; Petropoulos, 2016, p. 7; Zervas, Proserpio, & Byers, 2017, pp. 5,9,16). In the same time, others state it might increase consumer welfare through pushing traditional services to improve the quality (Wallsten, 2015, p. 3). There is a lack of empirical research regarding this issue and almost any industry might take advantage or be disrupted by this trend. Due to various natures of markets and applications, it is hard to generalize the economic effects that the sharing economy will have in the future. Better and more relevant insights might be gained through focusing on one particular industry. The transportation sector, due its characteristics such as asset intensity, is especially prone to be affected by this trend (Deloitte, 2016, p. 3) which is

aligned with the focus of this thesis. The effects, more precisely the opportunities and threats that Uber presents for the transportation industry, will therefore be discussed in greater detail also using the results of the empirical research conducted for this thesis.

Even though Uber is a relatively new company; there are already findings that present disruptive effects on the taxi industry after its introduction such as decreasing taxi drivers' revenues, profit margins and working times (Chang, 2017, p. 25). This can be proven also through the results of the empirical research where 90.1% used Uber as a replacement for taxi rides. On the other hand, research by Wallsten (2015, p. 4) also showed positive effects of these changes, owing to the fact that after the entry of Uber, there was a decrease in complaints per taxi trip in New York and also in Chicago. This effect might be caused by the fact that people have more choices along with taxi companies. Previously, in case unsatisfactory taxi service occurred, the other options were either time consuming (public transport, walking) or could cause additional costs (own car). With the introduction of Uber, the switch to competition is easier than ever, what creates incentives for taxi drivers to increase the standard of their services (Wallsten, 2015, pp. 6-7). The increase in alternatives might have additional positive outcomes also outside of the economic sphere which can be proven by the fact that since the launch of Uber in California, there was a decrease in the amount of drunk driving of 60% per month (PwC, 2015, p. 19).

Furthermore, effects on other consumption possibilities, such as on the public transportation usage, are relevant areas for discussion. The results from the empirical research showed that 55.6% people used Uber instead of public transit systems. However, even though this partial substitution of public transit usage was documented, currently, there is no wide-spread knowledge or proof that Uber would be a threat to these systems. Moreover, research also shows that there are complementary effects of Uber on public transportation use, mainly in the case of small transit agencies. The underlying reason might be the fact that the flexibility and reach of people increased owing to Uber, what benefited mainly limited networks of small transit agencies which are now more easily reachable. Conversely, in the case of large agencies, the effect was rather the opposite. The question remains, whether the negative effects will not offset the positive complementary developments. More research is needed in this area in order to formulate clear findings, however, it can be concluded that Uber does and probably will have an impact not only on the taxi industry but also on the use of public transit systems whether small, or huge (Hall, Palsson, & Price, 2018, pp. 16-20).

To move further, substitution of ownership through sharing is a huge topic within the collaborative consumption. Regarding the car ownership, 24.7% out of 81 respondents stated that Uber served as a substitute for their own car. However, the future outlooks in this matter seem to be more positive because more than 45% out of 82 people claimed they could imagine ride-sharing applications to be an alternative to owning an own car in the future. Research by Carranza, Chow, Pham, Roswell, & Sun (2016, pp. 14-15) compared environmental and also economic effects of using an own car, riding solely with Uber, and using both options equally. The outcomes showed that only using Uber does create environmental benefits and decreases CO_2 emissions, but it is costlier than owning a car. Therefore, the customers that are motivated by the environmental impacts might have sufficient drive to switch to sharing economy applications; however, it is questionable whether the elimination of ownership burdens will create sufficient benefits to offset the increased costs for ride-sharing users that tend to be price-sensitive. Also, the researchers used statistics and data based on life in Los Angeles. More research on various locations around the world would be beneficial to formulate more generalizable conclusions.

Changes are taking place not only within the competitive situation of the companies and various consumption methods but also in the employment market. Collaborative consumption enabled the spread of the so-called micro-entrepreneurship which is a situation when individuals gain revenues through sharing platforms by supplying goods and services (Gururaj, Biswas, & Pahwa, 2015, p. 2; Franssen, Malfliet, Bonne, & De Maeyer, 2017, pp. 233-234) often in various fields. Undoubtedly, this has advantages for people and creates new opportunities to obtain a job and earn money. Nevertheless, some of the authors also point out the dark side of this new pattern of employment, such as Robert Kuttner (Farronato et al., 2015) who claimed that the sharing economy could be referred to a "dystopia where regular careers are vanishing, every worker is a freelancer, every labor transaction a one-night stand, and we collude with one another to cut our wages" (p. 43). Overall, it can be concluded that the sharing economy brings new standards for workers in the form of higher flexibility and autonomy (Schor, 2017, p. 264), but at the same time it decreases the employment standards through lowering wages and reducing the standards of employees' protection (Farronato et al., 2015, p. 43). Interesting is also the outcome of a qualitative research conducted by Schor (2017, p. 263), which concluded that some of the platforms might lead to a higher inequality because a lot of temporary gig jobs such as cleaning or moving are now conducted by

educated individuals with full-time jobs instead of previously rather uneducated part of the population.

Furthermore, the shift to sharing might have further impacts on the way how the economic prosperity is measured. Currently, a widespread method to measure the economic situation and growth of a country is the GDP (Kira, 2013, p. 148). However, this measure focuses purely on outputs of the country and companies and excludes activities and services based on social interactions, which are clearly manifestations of the sharing economy. For instance, compensations of a non-professional provider of space on a couch surfing platform are not captured by the GDP (Farronato et al., 2015, pp. 15-16) while they can represent a significant part of the economy, mainly in the future. In addition, the sharing economy might even have a negative direct effect on the GDP evolution. The couch surfing example can be used again to illustrate the issue. Under normal circumstances; the traveler would book a hotel or formal accommodation what would be recorded within the GDP, while the couch surfing activity is not (Farronato et al., 2015, p. 3). Also, additional market measures might create a distorted image in case the sharing economy will be prevalent such as the Consumer Price Index (CPI). The CPI is not only a tool to the alterations of the prices of products and services but also an indicator of inflation (Office for National Statistics, 2010, pp. 2-3). The problem lies in the fact that it reports only transaction made by customers from business entities and not from each other (Beck, Hardie, Jones, & Loakes, 2017, p. 17). This would create a distorted image in case the sharing economy will become more powerful and present a huge amount of transactions within the markets. This is increasingly important also due to the fact that peer-to-peer activities were proved to be more popular and used among the respondents of the empirical research than sharing activities involving a company on the other side (as is shown on Figure 14 and 15).

6.2   Legal factors

The magnitude of the effects of the sharing economy, whether in a specific industry or not, will definitely be affected by the regulation that will be applied to these businesses. This fact shifts the attention further to legal factors, effects, and impacts of the collaborative consumption. Not surprisingly, legal frameworks that are currently in place are not sufficient and applicable to the new sharing players, mainly due to contrasting systems of online and offline markets (Petropoulos, 2016, p. 22). Several factors specified by Johal and Zon (2015,

pp. 13-16) are the reasons why the sharing economy is a challenging trend for regulatory bodies. These factors include the speed and scale of change that the platforms bring, their challenging categorization, static and rigid legal structures with slow pace of change and often also interests of key stakeholders in a country.

Often, it is claimed that the sharing economy platforms should be regulated in the same way as the traditional industries; however, this could have liquidation consequences on these companies what would result in obstructing innovation, limiting consumer choice and hindering competition. Moreover, additional regulatory costs applied on sharing economy platforms might end up being shifted on the customers through higher prices, what is an unwanted result (Petropoulos, 2016, p. 23). Also, the results of the empirical research show indicators that a modification in the regulatory framework might be necessary. Approximately half of the respondents of the ride-sharing section do not fear the unprofessionalism of the Uber drivers (lack of certificates or licenses) and neither believe that the same regulation should be applied to traditional taxis and Uber. This suggests that the entry barriers and generally high requirements on the taxi drivers might not receive adequate importance in the eyes of the customers.

Nevertheless, public interests and safety should be ensured by the sufficient regulation of the sharing economy players. Therefore, it can be anticipated that the sharing economy will bring new regulations that protect the interests and benefits of the population, presents sufficient structure to ensure fair rules for everyone at the market and at the same time, supports innovation (Johal & Zon, 2015, p. 21). The legal areas that are the most expected to be affected are: employment, taxation and data and privacy regulation (Petropoulos, 2016, p. 24). Partial solution could be presented by distinguishing between professional and unprofessional providers of the services. The criteria that would differentiate these two categories could include the motive to supply the services, frequency of the action and remuneration (Petropoulos, 2016, p. 18). As a result, an Uber driver that takes a passenger two times per month (unprofessional) could be regulated by slightly a different rule as full-time Uber drivers (professionals). However, Uber, as a privately held company is not obliged to publish its drivers' data to assess whether they provide a service that would have an intensity to be categorized as professional or unprofessional, what could block this type of legislation.
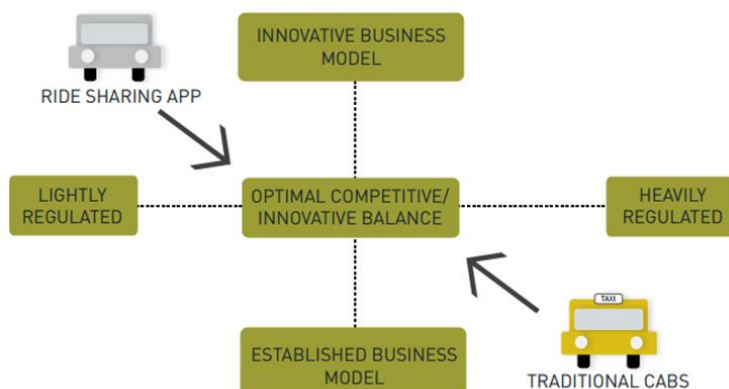
Figure 23 Uber regulatory gap

Figure 23. (own analysis)

To further elaborate on the Uber situation, the situation is problematic not only for tje regulatory bodies, but also from the point of view of the general public which was shown in the results of the empirical research. Currently, the Uber situation lies in a so-called regulatory gap, where the established players (taxis) are heavily regulated, while the innovative models are regulated only slightly which creates an unbalanced situation in the market. This situation is illustrated on Figure 23 (Johal & Zon, 2015, p. 21).

Undoubtedly, adjusting the legal structures to fit also the new trend of the sharing economy is a challenging task; nevertheless, it is highly necessary. The question which steps need to be taken to move the companies closer to the middle of the matrix remains unanswered. Uber protects itself from the regulation by well-known statements that they are only a matching platform and not a taxi service (Lindahl, 2017) and that their operations are not illegal only due to the fact that the current laws are not applicable to them (Holloway, 2015, p. 32). While these are valuable arguments, it should be pointed out that Uber sets the prices of the rides, facilitates the transactions, determines the wages of the drivers as well as the requirements to become an Uber driver while similar services, such as Blablacar let the user choose the price for the ride. As a result, Uber is actively affecting the situation in the market, has the power to change the conditions and therefore, can hardly be categorized as only the matching platform, but rather a shaper of working conditions within the industry (Lindahl, 2017). Also, in case there would be no regulations, the standards and required background checks would only depend on the platforms which might be dangerous. The complexity of the issue of employment was already introduced within the economic factors; however, it is tightly connected also with the law. The sharing economy decreases the

economic and bargaining power of the drivers (and also other providers on the sharing economy platforms) when they are being classified as independent contractors instead of employees (Harris, 2018, p. 274). One possible solution to this problem might be a new service, a so-called for-hire driver representation for collective bargaining, which was passed firstly by the Seattle City Council. It aims to help ride-sharing drivers in resolving issues related to payments, the safety of the vehicles, and similar problems. In practice, the qualified drivers of ride-sharing platforms can hire the organization to negotiate on their behalf (City of Seattle, n.a.; 2017, p. 1). This unique regulation might be one of the future ways how some of the regulatory issues connected with the collaborative consumption will be tackled. However, currently it is available only in certain territories of the U.S., and not surprisingly, Uber reacted negatively to these efforts, even threatening to abandon their operations in Seattle (Wong, 2017).

Regarding the current situation in Europe, the European Commission aims to address the issues in this area through the Digital Single Market Strategy, what is an initiative to maximize the positive impact of the digital innovations (European Commission Secretariat-General, 2017, p. 4). The online platforms are part of this strategy, while the most significant efforts are dedicated to B2B transactions, privacy issues, and transparency. These areas are undoubtedly important, however, there are definitely points of possible improvement in the future, mainly in terms of liability obligations of online platforms owing to the fact that this topic was affected only to a limited extent through the strategy. Nevertheless, it is visible that the European Commission does make steps to adapt to the changing behavior and digital trends, realizing the opportunities it brings (European Commission, Secretariat-General, 2017, pp. 22-23), however within the transportation industry there are no significant steps of improvement, other than banning Uber or restricting its use in particular regions. The focus should be placed on the creation of an EU-wide approach to address the regulatory issues and provide a general framework since the platforms are often expanding globally, but sufficient space and flexibility should also be left for local laws to ensure the greatest possible benefits for the local economies (Petropoulos, 2016, p. 7).

6.3 Environmental factors

Within this chapter, the attention will be further shifted to the possible environmental effects of the sharing economy. Even though it is a challenging task to estimate the effects

precisely due to the fact that the environmental sustainability of P2P economies has been identified as a "blind spot" in the literature (Westerbeek, Ubacht, Van Der Voort, & Ten Heuvelhof, 2016, p. 230) what might be addressed to the fact that these effects will undoubtedly depend on the business models that will sustain, laws and regulations as well as on the consumer behavior. Nevertheless, some research in this area was conducted and it can shed some light on this issue.

Relevant points within this area are definitely waste and emissions. There are more theoretical viewpoints on this controversy. While some authors claim that waste is a result of a "buy more" philosophy that the retailers are pushing (Botsman & Rogers, 2011, p. 21) others state that it can be defined as useful things at a wrong place. The sharing economy can help to eliminate exactly the second cause of waste through redistribution, circulation, and usage maximization of items (Botsman & Rogers, 2011, p. 129). Currently, the model based on individual ownership can lead to significant amounts of excess capacity. Some authors even claim that 80% of our possessions are used not more than once per month and reusing already purchased items would lead to significant environmental benefits in this context (Wharton University of Pennsylvania, 2015, pp. 8-9).

Furthermore, a study conducted in the Nordic countries found out that the most dominant environmental improvements were beheld in the transportation industry through lowered emissions, but positive outlooks are also associated with the accommodation industry and small capital goods sharing. The source of the improvements is the change of behavior, using products more, and switching to less emission-intensive activities. However, this study also points out that the savings resulting from the sharing economy behavior (such as buying less new things) could be invested into other activities with the potential to offset the initial environmental benefits (Skjelvik, Haavardsholm, & Erlandsen, 2017, pp. 67-68).

Interesting insights are also provided by the study on the impact of car-sharing on emissions in North America where it was concluded that even though overall emissions decreased, there is roughly the same proportion of people that increased and decreased their respective amount of emissions. The fact that drives the positive result is the small amount of increase in the emissions (Martin & Shaheen, 2011, p. 1085). This can be related to the research of (Haider et al., 2015, p. 14) who documented in their analysis of benefits and drawbacks of Uber that it might lead to negative environmental impacts due to replacement of public transportation by ride-sharing. Obviously, the magnitude of the negative effects seems

to be much weaker than the degree of positive effects, which is a positive sign for the ride-sharing applications. In particular for Uber, the conclusions are more problematic due to the lack of data (Wharton University of Pennsylvania, 2015, p. 8). Insights can be gained through the fact that Uber was proven to decrease the traffic congestion in urban areas (Li, Hong, & Zhang, 2016, p. 24) what could lead to a further decrease in the emissions. However, in order to gain environmental benefits from the ride-sharing application, attention should be dedicated into enabling the replacement of car ownership. While 45.1% of respondents of the empirical research claimed they can imagine sharing economy applications to replace their own car, only 24.7% has used Uber as a substitute for these types of trips. Moreover, further 23.2% claimed that they are not sure whether ride-sharing application could replace their cars, but they did not exclude this option what signifies that there is a space to persuade them. The major source of uncertainty or reluctance seems to be the limited flexibility that would result from the loss of car ownership. This suggests that the number of available cars would have to increase in order to provide sufficient alternatives for users seeking to replace their car. Currently, Uber is still unprofitable, and drivers present the biggest (as was shown in the section 3.1.3), however, after development and implementation of self-driving vehicles this might become more realistic.

To sum up, even though it is challenging to provide an estimate of the impact of the sharing economy on the environment, it seems natural that there are environmental benefits brought by the sharing activities due to the elimination of ownership and re-use of items. However, contribution to the natural environment has been indicated as a driver towards sharing behavior only by 56%, what is not a lot in comparison to economic benefits (90%), functionalities (74%) or enjoyment (66%). Therefore, it seems to be rather a side benefit than a major driver for people. In addition, in order to fully exploit the potential environmental benefits of ride-sharing applications, replacement of car-ownership by their use should be supported. One of the most effective methods to reach it might be to increase the number of available cars; however, in the case of Uber, this might be realistic only after improvements in the financial situation or implementation of a new innovation, such as self-driving cars.

7   Success in the sharing economy

Not only external factors such as the legal framework or the economic situation, but also the internal management, the strategy, and the decisions of a firm affect its future, and it is no different in the case of sharing economy players. Companies must evaluate which strategic and operational elements will be incorporated into their business model in order to reach and sustain success. This section will deal with the crucial elements and principles of a business that is based on the collaborative economy. Of course, there is no single correct way how to be successful in this area, and it is even more challenging to provide a recommendation for companies operating in such a new and innovative trend. However, there are principles that are cornerstones of these businesses that should be summarized in order to provide recommendations that would be directly applicable to practice. The discussion and recommendation will be guided by the results of my empirical research as well as insights from available literature sources and secondary research to provide a comprehensive picture.

Firstly, there are various categories of sharing economy platforms and their overview was provided in the section 2.2; however, the basic underlying principle of these transactions is illustrated on Figure 2. The platforms aim to connect the supplier with an offer and a seeker with a particular request, whether it is another person or a company. In order to execute this matching, a sufficient number of suppliers and also requestors should be available to reduce the waiting time and increase the amount of choices and the flexibility of the services provided by the application. This factor has crucial importance what was shown in the section 5 where the lack of flexibility was determined as the main factor discouraging people from replacing car ownership with Uber. Therefore, acquiring and maintaining sufficient number of users is the first success criterion for a sharing platform. Furthermore, it is necessary to point out that there is a need to have a sufficient number of providers and also consumers in order to ensure smooth operation. The empirical research showed that 63% of respondents could imagine participating in both roles. Therefore, ideally, the platforms should simplify the process of registration and possibly also switching between accounts or duplicating the roles of the users, however, this should not go on the expense of the security of the platform (such as background checks of the users). Within the literature, the minimum number of alternatives customers need to switch from established principles and ways of consumption is referred to be a point of critical mass (Botsman & Rogers, 2011, pp. 78-79). One of the means to reach it

is placing focus on areas and places with high urban density due to the fact that within non-urban areas, the costs of switching to sharing economy platforms might be higher than the perceived benefits (Dervojeda, Verzijl, Nagtegaal, Lengton, Rouwmaat, Monfardini, & Frideres, 2013, p. 11). Moreover, big cities with high urban density typically have a population that is more diverse and receptive to innovations. Of course, reaching critical mass is possible also in smaller regions, but it is more likely to increase costs for the company (Buczynski, 2013, p. 27). Secondly, mainly the young population is rapidly adopting technologies into their everyday life and therefore, they might be the right target group to focus on when trying to reach a critical mass. Moreover, young people tend to adopt new technologies in order to change or improve their lifestyle and fulfil their needs and wants, which is exactly what the sharing economy aims to provide (Carroll, Howard, Vetere, Peck, & Murphy, 2002, p. 8). The amount of people necessary to reach a critical mass varies according to the specific applications and context, however, Geddes (2011, pp. 124-125) provided a calculation that is used for estimating the amount for social networks, what is an area very similar to sharing economy applications. According to his research, at least 15% of the community should be penetrated in order to ensure success. After reaching this level, the innovation is very likely to sustain in the market, which is illustrated on the Figure 24.

Figure 24 Threshold for community penetration to ensure success

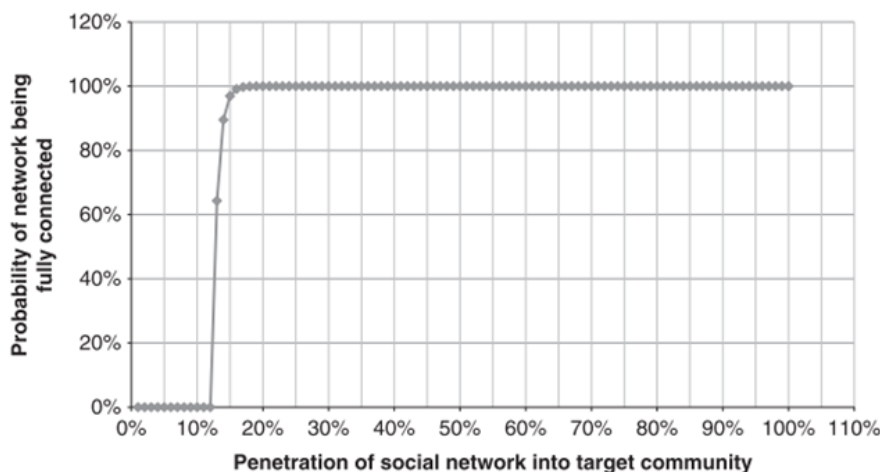

Figure 24. (Geddes, 2011, p. 124)

Furthermore, the empirical research revealed that not regularity of use is a problematic point and sharing tends to be rather occasional than regular activity. In this context, the acquisition of the users should be combined with appropriate user retention mechanisms. Otherwise, sharing will remain only a rare activity, what was visible on the case of Uber

where the penetration of the markets proved to be high, but the loyalty towards the application and frequency of usage has been limited. In practice, a sharing economy platform might capitalize on one-time benefits for signing up on an application or through recommending it to a friend, what is quite common practice already, or through already mentioned loyalty programs rewarding users with points, bonuses, discounts or other additional benefits.

Secondly, the trust between strangers will be discussed as another success factor for sharing applications. This concept is fundamental owing to the fact that within the collaborative consumption, the middlemen between production and consumption are eliminated. Consequently, trustworthy agents such as sales representatives, distributors, stores and others are missing, and buyers need to start trusting the other side of the potential transaction, who is often a complete stranger (Botsman & Rogers, 2011, p. 91-92). This implies that mechanisms providing a necessary level of assurance to stimulate this trust should be in place. This is in line with the fact that the empirical research showed the perceived security, which might be affected by the trust in a great extent, has been proven to be a very relevant factor for 42% of respondents and rather important for another 38% of them.

The available research discusses two types of trust in the context of online marketplaces – institution-based trust and trust towards the community of sellers. These two elements, if secured successfully, replace the drivers of trust that are missing in comparison to traditional industries (Pavlou & Gefen, 2004, pp. 37-39). In addition, according to Zucker (as cited in Pavlou & Gefen, 2004, p. 41), trust is important especially while acquiring new customers from various backgrounds and cultures which is the case of globally expanding sharing economy platforms. There are numerous ways how trust can be built. These mechanisms can be distinguished to market-driven and common legally binding factors. To provide examples, market driven factors include feedback mechanism, which has already been implemented by some of the biggest sharing players, such as eBay. The principle lies in the fact that the buyers evaluate and describe their past experience with sellers to provide insights for future buyers (Pavlou & Gefen, 2004, p. 42). Another example of a market-driven mechanism is the establishment of institutional trust, which is the ability of the platforms to ensure reliability, integrity, elimination of opportunistic behavior of the sellers, assistance in case of problems, and other similar aspects. The main sources of this trust are the familiarity with a given platform, the reputation, and the behavior of the application such as updates, e-

mails, assistance (Pavlou & Gefen, 2004, p. 44). Furthermore, common legally binding mechanisms are conducted through cooperation with third parties, such as escrow services. These benefits provide third-party guarantees of a safe transaction to the buyer, for example through cooperation with PayPal. Establishing business cooperation also with credit card providers, for example Mastercard, and therefore offering credit card guarantees is another third-party trust building mechanisms that platforms might use (Pavlou & Gefen, 2004, p. 41).

Uber as one of the biggest sharing platforms proves the importance of the concept of trust. It managed to put feedback mechanism in place which is based on stars that, along with the background check, seems to be a sufficient replacement of official taxi certifications and licenses for the users. This was also a clear result of my empirical research, where 59% of respondents did not perceive risks connected to unprofessionalism of the drivers. This shows the potential and importance of the trust-building mechanisms, which are essential primarily for the sharing economy players but possibly also for other institutions.

Botsman and Rogers, as crucial authors in the field of sharing economy, provide useful guidance in determining another relevant principle for sharing platforms. They categorize the presence of idle capacity, which is the unused potential and capacity of products resulting from ownership of products, but their rare usage (Botsman & Rogers, 2011, p. 83) as another crucial element. This idling capacity can be connected to tangible or to intangible assets, for instance time or skills (Botsman & Rogers, 2011, p. 86). Therefore, this principle can be used as a general recommendation since it is connected not only with products, but also services. Using previously idle capacity and sharing it with others can result in additional economic returns for the users, whether through sharing the costs of ownership for the providers, or through eliminating the acquisition costs for the seekers. 90% of the respondents of the questionnaire claimed that economic benefits positively affect their sharing intentions what confirms the importance of this factor. The ways how the idling capacity can be reached depends on the product or service the application aims to offer. This brings the discussion back to the division of business models presented in section 2.2. In case of peer-to-peer economy, on-demand economy or crowdfunding, the idling capacity is connected with the critical mass due to the fact that the users are those who create the capacity. However, in case of the rental economy the company is directly responsible for ensuring the capacity by investments, such as in the case of Zipcar or bike sharing.

A last principle that will be discussed is the belief in the commons, which is categorized within the recommendations because the practices of the sharing economy in real life are connected with the ways how people behave in relation to the so-called commons. Commons were initially capitals that belong and served everyone. This term refers not only to basic resources as water and air but also to knowledge, skills and also the internet (Botsman & Rogers, 2011, pp. 89-91). Within the collaborative consumption, "the commons" is referred to be "a new paradigm for creating value and organizing a community of shared interests" (Botsman & Rogers, 2011, p. 90). It is executed through capitalizing on network effects, which happen when the value or a benefit of a particular technology escalates with an increasing amount of people that use it (Rachel Botsman & Rogers, 2011, p. 90). As a result, the more people adopt the technology, the more value it has to each of them. This can be reached through focusing on so-called non-rival goods, which provide higher returns when being shared because the cost of providing it to an additional person is minimal or zero. Perfect non-rival good might be used and consumed by any amount of people without any loss. Even though these perfect cases are rare in real life, Spotify playlists or online games are some of the best examples of non-rival goods (Olleros, 2018). It is probably not realistic for companies to focus only on non-rival goods within the sharing economy. However, the concept of product rivalry or non-rivalry can be concluded as one of the success factors of a sharing business.

To sum up, this section provided insights into key aspects of a business based on the sharing economy as well as various recommendations for concrete steps and strategies that might be used. The recommendations were based on the results of the empirical research, but due to the fact that it focused mainly on ride-sharing and Uber, to provide more generalizable findings, the recommendations were supplemented by secondary research and literature, mainly by Rachel Botsman and Roo Rogers, who are crucial authors in this field.

7.1 Recommendations for Uber

Except for the general recommendations, due to the fact that Uber has been the focal point of the theoretical and also the empirical part of this thesis, a separate subsection will summarize a possible action plan for the company, based on the analysis provided in earlier sections. Firstly, regarding the features of the application, the empirical research showed that people are more satisfied with Uber rides than with taxi rides (65.4%). For the majority of the

people, the rides are cheaper (94%), the process of finding a car is easier (75%), and the waiting times are also often shorter (51%). These facts prove a superior position of the application; however, people use it mostly occasionally or rarely, and are not loyal towards this mean of transportation. Therefore, the user retention and frequency of usage are areas with space for further improvements. As was noticed in previous parts of this thesis, loyalty programs or additional benefits for riders might improve these statistics. A source of new, regular riders might also be car owners that would be willing to replace the ownership with the ride-sharing application. The inclinations to do this switch seem to be quite promising, but the number of available rides would have to increase to provide sufficient flexibility of the service. However, as was discussed in the section 3.1.3., the drivers are very concerned about their salaries, the majority of them feel underpaid, and competitive applications often have better commission policies than Uber (Campbell, 2018, pp. 4-7). As a result, Uber would have to find ways how to motivate more drivers to work for them, however, the salaries of drivers are already the biggest cost element (Efrati, 2018) and increasing it further might lead to deterioration of the profitability problems. Secondly, the price is a highly important factor for the customers and in the case of the replacement of car ownership with Uber, its importance is expected to be even higher. Only 6% of Uber riders consider price as a neutral factor according to my empirical research and no one market it as not relevant. Even though the results might be skewed due to the lower-income respondents, this result is still very persuasive. This suggests there is not a big space for price increases, even though they are already significantly cheaper than taxi rides (on average 19.8% in Australia, 44% in Europe) (Deloitte, 2016a, p. 6; Gorentals, 2017).

In light of these facts, the most significant opportunity for the company seems to lie in the implementation of self-driving vehicles that would eliminate the salaries of drivers. Moreover, if this innovation would decrease the cost per ride, it could lead to further price deductions what might attract more customers. However, at the initial stages, this type of innovation is expected to cause high research and development cost and therefore, Uber will be dependent on capital from external sources. In addition, it is questionable how high will be the new costs connected with operating ride-sharing applications with driver-less vehicles and whether they will not offset the savings reached through the elimination of the drivers. On a more positive note, implementing such innovation would bring entirely new standards into the taxi and the whole transportation industry and for sure attract numerous users who would

increase the customer base of Uber and possibly also new investors. Also, the social benefits and the aspect of meeting new people was the least relevant factor from all that were tested in my empirical research. Therefore, this innovation seems to have positive outlooks; however, proper attention should be dedicated to the correct implementation from the legal point of view to avoid further costs and disputes.

The discussion will continue talking about the legal issues. The company's operations are getting into conflict with laws and jurisdictions of various countries. Owing to the fact that the majority of these issues are connected with taxi drivers and that no effective solution to these problems was found, the company should be prepared to fight against new regulatory battles or bans in the future. Currently, it is not realistic for Uber to match the requirements on drivers that are set in the official taxi regulations, and moreover, according to my empirical research, a lack of these requirements is not a huge threat perceived by the users. Nevertheless, it might be the right step for the company to choose more cooperative approach with the legal entities to avoid further legal costs which are damaging the company's financial performance. For example, categorization of drivers to professional and non-professional might be one of the solutions, as was presented in section 6.2. Also, Uber should aim to improve other relevant areas such as missing commercial insurance of the drivers. Partnering with insurance companies and negotiating affordable deals for part-time drivers might be even a trust-building mechanism for Uber according to the information provided in section 7 (Pavlou & Gefen, 2004, p. 41). Also, the surge pricing has received questionable feedback from drivers and also passengers and 48.8% of the respondents of the empirical research claimed that in case they would find out that Uber would manipulate with the prices, they would stop using the application. As a result, even though this pricing method has not been categorized as a legal problem, Uber should evaluate whether is not necessary to communicate more clearly and openly regarding the pricing schemes as well as commissions of the drivers which tended to be quietly changed (Huet, 2015) to improve their reputation.

Overall, although Uber enjoys great evaluations from its users and provides new benefits, however, the situation from the legal and financial point of view is complicated. Capitalizing on innovations that have the potential to decrease costs as well as introducing new features building customer retention might be promising alternatives for the ride-sharing company. However, in order to eliminate threats to their operations as well as tremendous

legal costs that might have liquidation consequences for the company, the legal issues and disputes should receive appropriate attention, and more cooperative approach might be necessary.

8   Conclusion

From the research conducted for this thesis, it can be summarized that there are numerous sharing activities that are currently enabled, and various terminologies connected with them. Even though there are no officially accepted definitions, the phrase "sharing economy" presents an umbrella term involving also the practices of collaborative consumption, collaborative economy, gig economy and others. The core principle of sharing activities is in a transaction between an owner (supplier) and a customer through an online application. This online platform might have various roles and diverse levels of intervention in the process. Moreover, there are numerous types of sharing economy activities. The most widely used division is the product-service system, collaborative lifestyles and redistribution markets. The product-service systems are based on sharing access without ownership change, while redistribution markets aim to change the owner of the items and capitalize on reselling and reusing old products instead of pushing people to buy additional new items. Furthermore, collaborative lifestyles involve sharing intangible assets such as skills, time, or space.

Sharing has roots already in the history when it was conducted through barters and it is a part of natural human behavior; however, current technological innovations enabled the fast spread of this activity and very low transaction costs. This trend is becoming so prevalent that it started to challenge not only traditional industries, but also the traditional buyer decision-making models. Therefore, consumer behavior in connection to the sharing economy became a new research field. The study conducted for the purpose of this thesis showed that economic, environmental benefits, functionalities of the applications, enjoyment and positive reputation of a company present encouraging influence on the sharing intentions of people while the most significant effect was shown in the case of economic benefits. The social benefits proved to be also relevant, however only to a very low extent. Conversely, negative reputation does have proven adverse effects on the sharing intentions. Further barriers towards sharing were proven to be materialism and lacking opportunities and time to share, while literature review supplements these findings by additional factors such as personal connections and emotional bonds to items, institutional-dependency, and sometimes even the nature of a product.

When analyzing the future of this trend, according to the results I derived from my empirical research, people tend to have positive inclination towards using the sharing

economy applications and generally there is willingness to participate on both sides of the transaction, while the most prevalent are peer-to-peer activities. These facts prove positive outlooks for the sharing trend. However, not only consumer choices, but also various external factors will affect its future and impact. According to the analysis that was provided, the sharing economy has a potential to affect the economic situation in numerous ways. Firstly, the effect on traditional industries might be positive, through increasing competition, consumer choice, and pushing the suppliers to offer higher quality, but also very disruptive and detrimental by significantly decreasing the accepted standards within the industries and threatening the existence of traditional companies. Furthermore, the measures of economic prosperity might have to go through a change due to the fact that the principles of sharing transactions are different than the traditional purchases. Consequently, measures such as the GDP or CPI might not provide a completely accurate picture anymore. On a more positive note, more jobs, higher flexibility and a so-called micro-entrepreneurship are becoming more and more accessible owing to this trend. However, the area of employment presents one of the biggest challenges for the regulatory bodies. Due to the fact that the current legal frameworks are usually not sufficient to regulate sharing economy players, new laws and regulations are expected to be created, also in the area of taxation and data privacy.

Furthermore, the sharing economy might affect the environmental situation of the planet. Even though the majority of the effects seem to be positive, such as reduction of waste or emissions, this area is still considered to be a "black hole" with no clear findings.

More specific examples of possible effects, impacts, opportunities and threats might be illustrated on the case of Uber which is one of the most successful sharing economy players. Uber is an example of a company that completely disrupted the taxi industry, managed to raise significant revenues, brought new customer benefits, offered new pricing models, and penetrated various key markets. In the same time, this business model got into conflict with numerous jurisdictions, provoked strikes of taxi drivers, got banned in various territories and did not manage to be profitable. In the future, Uber seems to have an ambition to continue in their expansion, not only through expanding to more markets, but also through the development and implementation of self-driving vehicles which could present even more significant change in the transportation industry. The platform also showed ambition to provide diversified services, such as packaging deliveries, food deliveries or carpooling and therefore, it can be expected that they will continue in the same trend in the future.

Except for these opportunities, Uber presents also numerous threats for the transportation industry. Even though consumers do not necessarily fear the un-professionality of the drivers, the requirements and standards for the independent contractors are significantly lower than for taxi drivers; in addition, the employment standards and employee protection also became weaker. In addition, Uber does not show willingness to cooperate with regulatory bodies and refuses to admit responsibility through hiding behind "a matching platform" definition what might lead to additional issues in the future.

Nevertheless, even though Uber did not manage to earn profits, it attracted huge amount of capital, maintains continuously increasing revenues and except for the legal disputes, has stable position in the market. In order to ensure similar success, features and functions of sharing platforms by the recommendation provided in the section 7 such as building trust, enabling using idling capacity, reaching critical mass and ensuring sufficient number of users to increase flexibility of the service, and capitalizing on non-rival goods. These elements can be implemented in practice through features such as feedback mechanism, escrow services, collaborations with credit card providers, targeting urban areas and young people, as well as analyzing the level of product rivalry.

To sum up, this research provided insight into the theoretical and also the practical sphere of the sharing economy through analyzing the available literature and research findings, as well conducting own quantitative empirical research through an online survey. Therefore, it should be beneficial for scientific and also non-scientific readers. However, it does carry certain limitations such as using non-probability sampling method and using non-parametric tests with low degrees of freedom. Conducting this research with a representative sample of the population could eliminate the bias caused by the prevalence of respondents from Slovakia and from a lower- or middle-income group. This could have an effect mainly on the results of the price sensitivity, even though economic factors are still expected to play a role in the consumer behavior in connection with the sharing economy. Also, involving more respondents from countries where Uber was not banned yet might improve the statistics regarding the frequency of usage and improve the rates. However, it should be pointed out that the switching costs between various means of transportation are very low (excluding buying an own car) and therefore, high loyalty towards one particular ride-sharing application or a taxi company is not expected. In addition, the respondents of my research have been

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primarily young people up to 35 years old. Involving older respondents could again decrease the frequency of usage of the applications.

Also, when studying the consumer behavior, focus was placed mainly on the intentions to behave in a particular manner, but the rate of translation of these intentions to behavior is an interesting field for further research to assess whether the sharing economy has such positive outlook to the future as the behavioral intentions suggest.

Last but not least, future environmental impacts of the sharing economy are also a recommendation for further research, such as the consequences resulting from replacing cars or public transportation by ride-sharing platforms.

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10   Appendix A

Figure 25 Model of the Theory of Reasoned Actions
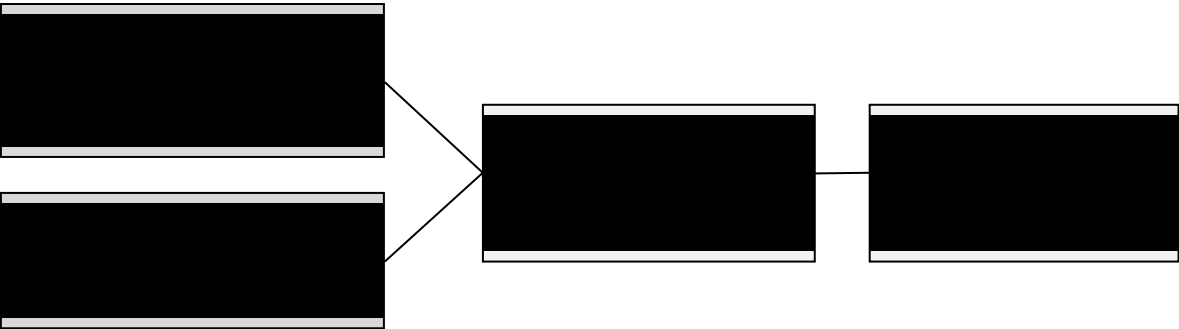
Figure 25. (Pedrosa & Costa, 2011, p.4)

Figure 26 The original sharing economy consumer behavior model
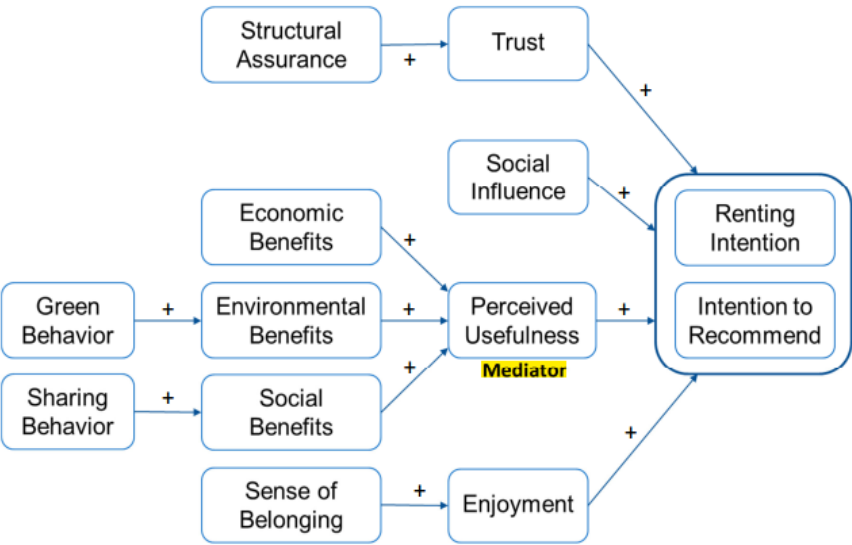
Figure 25. (Barnes & Mattsson 2017, p.10)

11   Appendix B

1)   Generally, how often do you engage in some kind of sharing economy activity?

More than 5 times a week	j
1-5 times per week	j
Less than 1 per week	j
Less than once per month	j
Never	j
Can't evaluate	j

2) Please indicate how satisfied you were with your past sharing economy experiences

Definitely satisfied	j
Rather satisfied	j
Neutral	j
Rather not satisfied	j
Not satisfied	j

3) Please indicate the response(s) that apply to you in the respective types of activities:

	I did this in the past	I did not do this in the past	I do this regularly	I can imagine myself doing this in the future	I cannot imagine myseld doing this in the future
Renting/Borrowing items through online platforms <u>from companies</u> (f.e. Zipcar, Drivenow)	j	j	j	j	j
Renting/Borrowing items or space through online platform <u>from other people</u> (Airbnb)	j	j	j	j	j
<u>Outsourcing services</u> to other people (Uber, Taxify, Taskrabbit)	j	j	j	j	j

Crowdfunding support (f.e. Kickstarter)	j	j	j	j	j
Open source software (f.e.Linux)	j	j	j	j	j
Swapping, Re-selling items, buying second-hand products (f.e. Ebay)	j	j	j	j	j

4) In the future, can you imagine yourself being:

Provider (renting my products/services to other people)	j
Customer (buying, renting products/services from other people)	j
Both	j
Neither	j

5.)Please, indicate whether and how the following factors influence your intention to engage in sharing economy activities:	Positively influences/Encourages	Neutral/Does not influence	Negatively influences /Discoutages
Economic benefits (f.e. The amount of money I earn/save)	j	j	j
Whether I meet new people, engage socially	j	j	j
The contribution to the natural environment	j	j	j
The ease of use of the app (functionalities)	j	j	j
How much I enjoy the activity	j	j	j
Positive reputation of the app among my family/friends/other social groups	j	j	j
Negative reputation of the app among my family/friends/other social groups	j	j	j
Other: please state	j	j	j

6.)Please, choose the answers you agree with: **I do NOT want to share because:**	Checked (True)/Not checked (False)
I want to own the items I use	j

I don't want other people to use my stuff/use other peoples stuff	j
I did not find sharing offers that would fit my needs	j
I did not have the right opportunity/time to start with this type of activity	j
I want to obtain the stuff I need from official companies/institutions	j
I have heard bad experiences, opinions from other people	j
I do not trust foreign people/the platforms	j
I do not want to share because I am satisfied with my current habits	j
I do not have any specific reasons not to share	j
Other: please state	j

7.)How often are you using following services?	Very frequently (more than 6 times per week)	Frequently (3-6 times per week)	Occassionally (1-2 times per week)	Rarely (few times per month)	Only on special occassionsor in very rare cases	Never
TAXI	j	j	j	j	j	j
Uber	j	j	j	j	j	j
Other ride-sharing platforms (Lyft, Taxify, Hopin, etc.)	j	j	j	j	j	j
Own car	j	j	j	j	j	j
Public transportation	j	j	j	j	j	j

8.)How much on average are you spending on following services PER MONTH?	More than 150€	Less than 150€, more than 100€	Less than 100€, more than 50€	Less than 50€ more than 25€	Less than 25€
TAXI	j	j	j	j	j
Uber	j	j	j	j	j
Other ride-sharing platforms (Lyft, Taxify, Hopin, etc.)	.	j	j	j	j
Own car	j	j	j	j	j
Public transportation	j	j	j	j	j

9.)What is your preference when using the application Uber?	
To use it as a customer (order a ride)	j
To use it as a driver	j
To use it as both	j
Not to use it	j

10A). For what types of trips do you use Uber?		10B). What is the biggest benefit for you when driving for Uber?	
As a subsitute for taxis	j	The money earned	j
As a subsitute for my own car	j	Time flexibility (I can choose when I work)	j
As a subsitute for public transportation	j	Meeting new people	j
As a subsitute for walking	j	Trying new things	j
Other:	j	Other	j

11.)When comparing Uber and Taxi services, overall you were?	
More satisfied with Uber services	j
More satisfied with Taxi services	j
Equally satisfied	j
Cant evaluate	j

12.)When comparing Uber and Taxi services, which statements do you agree with according to your experiences?	Agree	Neither agree or disagree	Disagree
Generally, UBER rides are cheaper than TAXI rides	j	j	j
Generally, I can find UBER ride faster than TAXI ride	j	j	j
Generally, UBER drivers are more reliable (driver came on time, on the right place)	j	j	j
Generally, the process of finding an UBER ride is easier than with TAXI	j	j	j
Generally, UBER drivers are nicer than TAXI drivers	j	j	j
Generally, UBER cars have higher standards than TAXI cars	j	j	j
Generally, I feel safer in UBER car than in TAXI car	j	j	j
Other	j	j	j

13.)How important are these factors for you when riding with Uber/Taxi ?	Very important	Important	Moderately Important
Price	j	j	j

Availability of the cars (Waiting times)	j	j	j
Ordering process (phone/app)	j	j	j
Standard of the cars provided	j	j	j
Friendliness of drivers	j	j	j
Perceived security	j	j	j
Reputation of the company	j	j	j
Past ratings of the drivers	j	j	j
Past experience with a given method of transport	j	j	j
Recommendations from friends/others	j	j	j
Other: please state	j	j	j

14.)Did you perceive or experience these factors as risks when riding with UBER?	I do perceived this as a risk	I do not perceive this as a risk	I can't evaluate
The drivers are not professionals	j	j	j
The drivers would be unreliable (not on time, not coming to the right place)	j	j	j
The cars might be not be in acceptable conditions	j	j	j
I might pay an inappropriate price for the ride	j	j	j
The transfer of money through the app is risky	j	j	j
The drivers do not need to have commercial insurance for the car	j	j	j
I do not perceive any significant risks/uncertainties	j	j	j
Other: please state	j	j	j

15.)How much would you be willing to pay for an Uber ride in comparison to a taxi ride?	
More	j
Equal	j
Less	j

16A).Why would you be willing to pay less?		16B.)Why would you be willing to pay more?	j
The drivers are not professionals	j	Becasue of the ease of use of the app (cashless payments, tracking of vehicles)	j
The services are worse	j	The cars are generally nicer, with	j

		higher standard	
Paying less is the reason why I use Uber	j	The drivers are generally nicer	j
Because of the questionable reputation of the company	j	I dont want to use official taxi services	j
Other: please state	j	Other: please state	j

17.)Are you aware that UBER faces legal problems due to the fact that their operations are often in conflict with national laws, regulations, taxation policies, etc?:

YES and I am interested in these issues	j
YES, but I do not care about these issues	j
NO, but I would like to know more about these issues	j
NO, and I do not care	j

18.)Do you believe Uber should be regulated in the same way as regular Taxi services?

Yes	j
No	j

19.)Please, identify the scenarios you agree with:

If I would find out that an Uber driver does not have a valid commercial insurance, I would cancel the ride	j
If I would find out that an Uber driver would not pass the tests required for taxi drivers in my country, I would cancel the ride	j
If I would be proven that the policies of Uber are not in line with national laws and regulations, I would stop using the app	j
If I would find out that Uber manipulates with the prices, I would stop using the app	j
If I would find out that Uber is shortening taxes, I would not use the app	j
As far as I am getting the benefits I am looking for, I would use Uber	j
Other (please state)	j

20.)Can you imagine a sharing economy platforms (Zipcar, Drivenow, Uber, Lyft, etc.) being an alternative to owning your own car?

Yes	j

No	j

21A).What would be the main benefits for you when switching from owning your car to a sharing economy platform? (multiple choice)	
Less responsibility/burden (insurance, repairs, etc.)	j
I don't use my car sufficiently	j
I want be more environmentally friendly	j
Other (please state)	j

22.)Why would you be willing to take a ride with Uber if it would use self-driving cars?	
Yes	j
No	j
I dont know	j

23.)Please, identify your gender

Male	j
Female	j

24.)Select your date of birth from the drop-downlist

25.)Select your nationality from the drop-downlist

26.)Please, state your monthly income after tax

less than 750€	j
more than 750€, less than 1300€	j
more than 1300€, less than 2,200€	j
more than 2,200€	j

27.)Identify your employment status	j
Employed full-time	j
Employed part-time	j
Entrepreneur/Own business	j
Student	j
Unemployed	j
Freelancer	j