Car sharing as a new dimension of transportation among Millennials

Bachelor Thesis for Obtaining the Degree in

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Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

The thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board and was not published elsewhere.

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Abstract

The main purpose of this Bachelor Paper is to discuss whether the Millennial generation possesses the intention to participate in collaborative consumption services, more precisely in car sharing within the Hungarian capital city, Budapest. It is an important topic as these newly emerging sharing businesses must be able to anticipate Millennials' demand, which can be achieved by taking a closer look into the heads of the targeted group.

With the aim of answering the research question an online survey has been conducted among international students. Moreover several motivational factors behind purchase intention of the questionnaire participants were analyzed. The three main perceived values are utilitarian, hedonic and symbolic values. Each value contributes to the feelings of customers' when they select from offerings of the market. The second part of the research focuses on the relational benefits derived from the relationship between consumers and providers of sharing economy.

The current market situation of both collaborative consumption and car sharing services are supported by academic and current business resources. Data for this research were collected among international university students dedicated to summarizing and interpreting the results. The results of this experiment show that it is in the scope of this generation to save their resources on their purchases and rather give up on their hedonic values such as enjoyment and comfort. The research question of the thesis can be positively accepted, based on the findings of the online survey. Respondents confirmed that they are open-minded to such sharing services instead of other transportation methods.

At the end of the study managerial implications are suggested, in order to help market participants to conduct their businesses in a more efficient way. The author recommended further researches, focusing on sharing business platforms. With this in mind, a better understanding on the topic would be accessible.

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List of Abbreviations

B2B	Business-to-business
B2C	Business-to-consumer
BuBi	Budapest Bike
CC	Collaborative consumption
CO_2	Carbon dioxide
MOL	Magyar Olaj és Gázipari Nyrt. - Hungarian Multinational Oil and Gas Company
P2P	Peer-to-peer
PCE	Perceived consumer effectiveness
TRA	Theory of reasoned actions
US	United States

1 Introduction

1.1 Generation Y as the essential participants in Sharing Economy

Millennials are born between the late 1980s and early 2000s and referred as Echo-Boomers. They are diverse, upscale and better educated. The ability to work in teams and put more focus on their achievement and goals via good conduct are a few of their strengths according to Howe and Strauss (2000). Regarding their consumption habits, this is the generation for whom collaborative consumption is most appealing, meaning that the need of owning and purchasing products is negligible and providing access to products or services to somebody else feels natural to them. The source of entertainment and information is the Internet, which is used actively by Millennials (Moore as cited in Hwang & Griffiths, 2017). They are tech savvy; also in order to stay connected they obsessively use their smartphones, which is the main information provider of global and social issues (Keeble, 2013). The idea of collaborative economy is a synonym for practical solutions to them. They have unlimited access to online markets which transforms the idea into reality (Head as cited in Hwang & Griffiths, 2017). Importantly, Millennials are hospitable and alternative ownership types interests them. “The other Fellow first” motto comes first and materialistic goods are less exciting. According to the trends, wasteful consumerism and greediness will not be a way of spending. In a sharing economy of collaborative consumers, empathy, conscientiousness and less materialism are the defining keywords of the current generation’s way of living. (Rifkin as cited in Hwang & Griffiths, 2017)

This Echo-boomer generation is committed to reduce the negative impacts on their environment, therefore when it comes to their daily routines, free time choices, consuming habits and way of transportation, they always tend to choose consciously and efficiently from the different possibilities available. Talking about purchasing behavior, they are highly likely to favor brands and services, which reflects their personal values instead of utilitarian preferences. These above mentioned facts, results collaborative utilization rather than self-consumption (Euro RSCG Worldwide Hwang & Griffiths, 2017).

In contrast to the Baby Boomer generation, Millennials were born into the digital era; therefore the usage of different technological tools (smartphones, computers, tablets, smart watches etc.) is truly natural. This group is the most important consumer segment for the online markets, since they have less need for the physical purchasing experience and they are aware and regular users of all the different online shopping and sharing platforms (Head ; Rebell as cited in Hwang & Griffiths, 2017). As these online surfaces are conveniently accessible, young people's needs for ownership is becoming less and less desirable. This attitude, completely changed the traditional consumer behavior, and transformed into collaborative consumption. Nowadays sharing products and services are effortlessly feasible via Internet (Botsman and Rogers, 2010).

Due to the fact, that online markets and sharing are relatively new tendencies, very few researches and studies exist, which aims to examine the underlying motivational factors and behavioral actions towards collaboration with other customers (Albinsson and Yasanthi ; Möhlmann as cited in Hwang & Griffiths, 2017). As the fact, that the Millennial generation is a "digital native" (Bess and Bartolini as cited in Hwang & Griffiths, 2017) one, new technology is crucial in their daily life, to engage in social actions as well as stay alert to upcoming trends (Eastman et al. ; Pew Research Center as cited in Hwang & Griffiths, 2017). Mentioning one of the newest trends, car sharing is one of the most rapidly growing green ideas.

One of social media's continuously disputed topics is about "sharing economy". Well-known service providers, such as Airbnb, Uber and DriveNow are instantly noticeable. The new global peer-to-peer trend has turned the world upside down, as ownership is less essential in several households, then it was before. As an example, in the most adaptive market, which is the "nest" of sharing start-ups, now according to PWC (as cited in Yang, Song, Chen, & Xia, 2016) record, nearly 20% of US residents have already participated in collaborative consumption through sharing services, moreover half of them has been on the other side as service provider as well. This market consists of intangible (labor, knowledge) and tangible (vehicles, properties) resources, which can be rented or shared. However being on the supplier side of this economy does not require any kind of professional education or experience. Besides

the lack of proficiency, peer-to-peer organizations have less supervisory authority over service providers.

These volunteers are able to try out this opportunity on a temporary basis if they would not like to be fully dedicated to this job, rather just doing it for their own sake. Why is sharing partnership appealing to consumers? Which aspects of this model create loyalty among customers? To gain better understanding from the consumers' side, the above questions are essential. Even if several studies explore the upward trend of sharing economy as well as its economical benefits from the supplier perspective (Martin et al. as cited in Yang, Song, Chen, & Xia, 2016), the whole subject is more complex and possesses numerous underlying factors.

1.2 Transportation trends and development in Budapest

1.2.1 Transportation systems in Budapest

Within this section, the current and past trends, as well as recent developments of transportation systems in Budapest (capital city of Hungary), will be explained. Just as in any other capital cities in the world, inhabitants can choose from a diverse range of transportation, from owning a car to using public transportation. Due to recent trends of being more environmentally friendly or simply saving costs, this paper will provide a closer look of the available and planned economical and ecological transportation modes in the city, like car-sharing models.

The management and improvement of such an enormous city's transportation system will always depend on the observation of transportation habits, as well as closely following the inhabitants' demand for different modes accessible. Considering, that development of such systems worth millions of euros and takes several years to carry out, improvements should always be established with long term plans, where the future trends are also considered. It may sound easy to make proper predictions and plans; in reality it is extremely challenging, as it is a very complex system with many underlying factors and drivers. In addition to that, formulating long-term plans are problematic, especially when the circumstances are changing rapidly and constantly. For instance, when the world crisis unexpectedly occurred, people lost their jobs and had to cut their costs, which resulted in fewer

cars in the city and an increased number of public transport usage (Juhász, Mátrai, & Kerényi, 2014). The public transportation companies were not prepared for this sudden change and could not cope with it for years, since they had to increase the amount of vehicles and number of employees in a very short notice. As another example, regional development can also result in changing demand for the various transportation modes. When a regions public transport system is being modernized, more and more citizens decide to use the new appealing system. Since the global recession in 2008, urban sprawl suddenly started to decrease and therefore a considerable amount of inhabitants stayed in the city, resulting in an increased usage of public transport. Before the crisis, hundred thousands of people were moving out from the capital, therefore yet again transportation companies were not able to adapt the situation, since their long term plans were built on predictions of decreasing number of users. Bicycle usage has also significantly risen, as it was the cheapest alternative for a vast majority of people, especially after the increasing taxes and fuel prices. Once again the city was not prepared for such a sudden increase in demand and they had to start increasing the number and length or bicycle roads available in the city. In addition to these factors, reactions from the government to these sudden changes will also cause secondary effects to the system. The government started their inner city reconstruction project, which also increased the number of people who use public transport (Juhász, Mátrai, & Kerényi, 2014).

Generally speaking the government and public transportation companies are aware of the changes in travel demand, caused by densely changing social and economical factors. Their objective is to predict these shifts and adapt to them as soon as possible, to be able to provide a smooth and efficient transportation system, which is enjoyable and cost effective for all the citizens. As a recently evolving trend, car sharing seems to be one of the best options for difficulties that a city can face regarding their transportation system.

1.2.2 Car sharing as a possible solution in Budapest

The Hungarian capital city is facing several challenges, when it comes to efficient transportation. The recently modernized public transportation system is the most cost effective and pleasant one; therefore it has the highest passenger volume per

day as well. However according to recent studies the level of motorization in Budapest is approximately 330 vehicles / 1000 inhabitants, which is way above the national level (Juhász, Mátrai, & Kerényi, 2014). This leads to the fact, that still an enormous portion of citizens prefers cars over public transportation. The most relevant issue for car owners in the city, besides high operating costs (fuel, tax, maintenance, insurance, etc.) is the lack of available parking places both in their living area or in the inner city. A perfect solution for this issue could be the implementation of car sharing in Budapest. It would remarkably reduce the cost of using a car in the city; nevertheless it would cut down the amount of parking spaces needed. This would also save a considerable amount of money for the government, that other vise they would spend on the improvement and maintenance of parking places and garages. In addition to that, fewer cars in the city would mean more green areas, which is greatly desired by the inhabitants and tourists. As the younger generation is quite perceptive to collaborative ideas, the Hungarian Oil and Gas Company (MOL), has already launched few years ago a bike sharing system, which enjoys fairly high popularity (Mátrai & Tóth, 2016).

Due to MOL's successful implementation and frequent utilization of their bicycles called "BuBi", a Hungarian startup company decided to introduce the first e-car sharing services in the heart of Budapest at the end of 2016. Since the recent changes in the capital's public transport trends, they believe to provide a desirable, cheap and eco-friendly service for the increasing demand among citizens without a personally owned car. After downloading the application for a smartphone, the users have to register quickly, by providing few of their basic personal data (name, date of birth, place of birth, driving license number, etc.) and they are ready to go. The users have the possibility to book a car within their close range and upon arriving to their desired location; customers can lock the car via their phone. The utilization fee, which is based on minutes, will be charged right afterwards from the driver's banking account. Although this company is still in the introduction phase with almost 50 cars fleet, based on their current turnover, their expansion plan for the next couple of years is realistic. Their enormous goal of tripling the service locations available and also increasing the fleet to approximately 500 cars, seems to be achievable as their market segmentation was a winning decision ("GreenGo: An e-car sharing service", 2017).

1.3 Research objectives and the structure of the paper

Nowadays sharing economy receives great worldwide attention as it serves as an ecological, economical and easily accessible solution for many issues.

Thus the aim of this paper is to explore the underlying relationships and benefits in the sharing-economy and to determine the motives that drive the participants in it. Furthermore these motivational factors have to be ranked in order to have a clear overview regarding the possibilities of changing consumers' attitude and achieving their loyalty. First of all an online survey was conducted in order to better understand the participants and their experiences in peer-to peer relationships. Moreover to explore their engagement towards sharing services as well as the likelihood of changing their mentality, when it comes to being environmentally friendly.

The main research question in this thesis is to explore whether and how Millennials are interested in car sharing services in the city of Budapest.

The thesis aims to answers the following sub research questions:

- Is car sharing perceived as bearing the same costs as public transportation services?
- Is there a relationship between monthly spending on transportation and the kilometers travelled on a daily basis by participants?
- Does the age matter, when it comes to car ownership?
- Is there a difference between core values for choosing car sharing options among different age groups in the generations?

In doing so, the thesis aims to provide new insights into car sharing services within collaborative consumption, whether the younger generation, namely the Millennials should be considered as the primary target group for such services. For managers this thesis provides a better insight of Millennials personal needs, therefore an opportunity for improvement within their businesses. As it is crucial for companies within the sharing economy to have a better overview about these relationships, as they will be capable of structuring and designing their business model in a more

efficient and attractive way. Especially, that this is the best way for sustaining sharing economy and attracting more participants (Yang, Song, Chen, & Xia, 2016).

The thesis is organized as follows: First of all a literature review is presented, where two parts will provide a review of the current theories and research practice in the field. In the first part, relevant definitions, such as collective consumption, car sharing and the Millenials target group will be interpreted. The second part of the literature review will focus on the underlying motivations and consumers behavior for sharing economy as well as car-sharing. In addition to that, hypotheses and conceptual models will be provided. Then the methodology chapter will be introduced, where the research methods and the design of the survey that was carried out are presented. Following that, findings of the survey will be discussed, with respect to transportation behavior and car sharing attitude and motivational factors. The last part of the paper is the conclusion, which will discuss on the findings, present managerial implications alongside the research limitations and suggestions for further research.

2 Literature review

2.1 Car sharing within collaborative consumption

2.1.1 Overview of the most important aspects within the topic

The primary part of the paper, the literature review is based on different academic, peer-reviewed journals as well as online sources, which contain information of already existing car-sharing systems. Concerning the search string, complex key-words such as sharing economy, Millennial generation, car-sharing, economic transportation, shared mobility, car ownership and collaborative consumption were used in order to investigate the most appropriate literatures for this thesis. High quality and extensive papers were found at different types of Data banks, for example Ebsco Host, Springerlink, and on Science Direct.

The first part of the literature review provides a short explanation of the most important above-mentioned key words. After the explanation of the main terms of the topic, current market situation and trends around the world with reference to

car sharing is explored. Last but not least the newly emerging Hungarian market will be analyzed, where several start-ups have entered this collaborative consumption business within the last couple of years. Following that, the second part of the literature review introduces the different motivational factors and aims to investigate additional underlying motivational factors in order to determine, what drives the younger generation towards sharing economy.

To begin with, the new consumption paradigm that is collaborative consumption has to be explained. During the last decade, due to economical crisis as well as the increasing awareness towards sustainability in order to save our Planet, collaborative consumption is becoming more and more popular. The main idea behind this new type of consumption is that participants gain access to goods and services instead of owning them. Another important factor of sharing economy is that money is not necessarily involved as product or service providers receive either monetary or non-monetary compensation. Thus, consumers are most likely to pay less for the goods or services received, however on the other hand providers have less responsibility, thus in case of any issue it is harder to receive any type of compensation. Collaborative consumption possesses a wide range of advantages with fewer disadvantages; consequently it is attracting new participants each year, which is important in order to obtain sustainability (Hartl, Hofmann, & Kirchler, 2016).

To move on to a more specific type of collaborative consumption, ridesharing is being interpreted with a closer look on electric vehicles. As transportation is one of the main reasons for air pollution, a lot can be changed via a more efficiently organized system as well as choosing a more ecological way of transportation mode. Although it is a relatively new trend, there are many types of economical transportation methods, depending on the market size, pricing and service type. From car-hailing companies such as Uber or Lyft, where customers can book a ride via an application on their phone, then they are picked up at their current location by the owner of the car and dropped off at their desired location, to different car sharing possibilities such as DriveNow, GreenGo, Beerides and MOL Limo. There is also a difference between the lastly mentioned service providers as DriveNow and GreenGo owns several vehicles that can be rented, while Beerides and MOL Limo are

only providing the services and the cars they offer for being rented are privately owned by other members. These services are both economical and ecological, thus they serve as a good contribution to collaborative consumption, and especially since most of the service providers are establishing an electric vehicle fleet. Recent trends suggest, that the usage of electronic vehicles is increasing worldwide in the last couple of years although is relatively low acceptance. As a consequence, consumers' paradigm has to be shifted to move towards car-sharing transportation methods and electronic vehicle usage, thus participate more actively in collaborative consumption to be less harmful to the environment (Jenn, Laberteaux, & Clewlow, 2018).

Finally yet importantly, the major part of collaborative consumption participants, the Millennial generation is being debated. This generation does not have a commonly accepted starting and ending birth years, however most of the researchers agree, that those should be considered as generation Y or Millennials whom were born between the beginning of 1980s till the end of 1990s. Thus their current age range falls between 18 to 38 years old, for this reason they are the most recent generation to enter workforce. One of the most crucial attributes of Millennials is that they are "plugged-in" 24 hours a day. They were born during the age of technological development and for that reason it is completely natural for them to use Internet via phone, laptop or any other tools for their daily activities or even during work. This level of engagement in technology results not only in a high level of social media usage and being up to date with the latest news, but also affects their consumption habits. Therefore the best channel to reach this consumption group is via Internet and applications. Moreover the spirit of teamwork as well as solving issues and sharing joy together as a team identifies this generation. Therefore collaborative consumption plays a major role in their daily life and this thesis tries to explore the different aspects of motivational values in order to understand how this generation can be reached (Çelikdemir & Tukel, 2015).

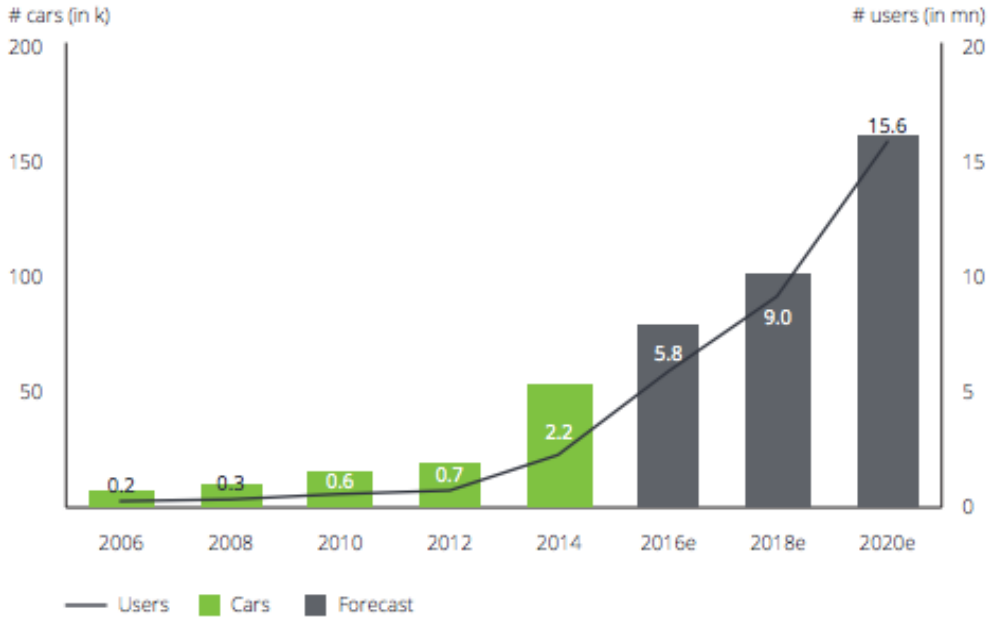
2.1.2 Car sharing in the World – Facts & Figures

There are numerous reasons for car sharing within major cities all over the world, which are economical, ecological and social. They are not only beneficial for consumers, but also for the city, as it results in less parking spaces needed, less CO2 emission and more green areas available for locals. According to findings an average

car in a city is unused 90% of the time, moreover carries only one and a half passengers upon being used. Besides the lack of efficient usage, owning a car costs €6.500 in a year on average for the owner and the total related costs from the European Union side add up to €100Bn yearly. Due to sharing economy these numbers can change, as if every person would be willing to substitute to car sharing option, then only 10% of the cars available would be required. This would also improve the quality of living in the city as 5-10 cars could be replaced by one shared car, thus the government could spend more money on building parks and green areas instead of new parking places. Sharing economy is a newly evolving market with only 1-4% of passenger-kilometers globally, although according to estimates this will chance until 2025, as the amount of cars globally available would drop from 750 million to 500 million (Bondorová & Archer, 2017).

Car sharing is booming globally, however the European market is quite significant as it accounts for approximately 50% of the global market. During recent years, there was a continuous increase both in the number of cars available for car sharing as well as the number of users. According to forecasts until 2020 these numbers will continuously increase and as Figure 1 illustrates, in 2012 only 1 million users were present at the market with less than 20,000 cars to share. Just 6 years later 10 million people are using car sharing and the number of cars available also increased to 100,000. It is clear, that there is a bright future for collaborative car sharing and that the adoption level of customers are significantly increased.

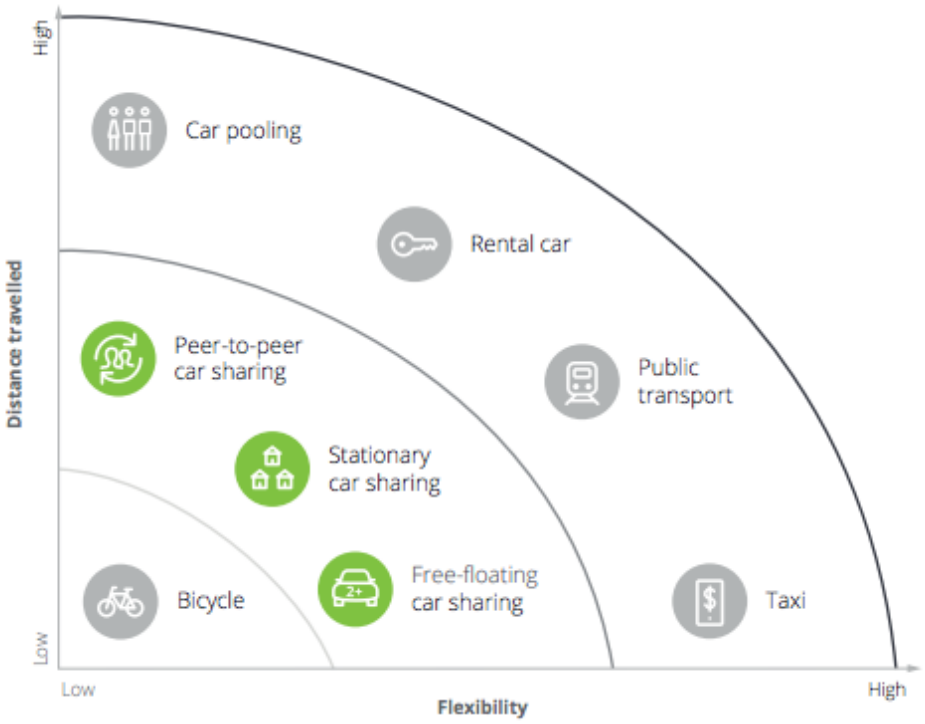
Figure 1: Car sharing market development for Europe (2006 - 2020)



(Source: 1 Deloitte, 2017)

There are several transportation modes available, thus Figure 2 aims to provide an overview about the position of car sharing in transportation market. Besides the price of transportation, there are other important factors for customers such as flexibility and distance travelled. The below image considers these two factors and visualizes the position of different car sharing possibilities from free-floating to peer-to-peer car sharing. To begin with free-floating car sharing offers great flexibility and serves as an alternative solution for expensive taxis or even new transportation providers such as Uber. Stationary car sharing on the other hand is used for longer distances; therefore it competes with car rental companies or owning a car. Stationary car sharing providers are also supplying companies, as it is beneficial for them not to manage their own fleet and their employees can access cars on a sharing basis. The last car-sharing concept is peer-to-peer car sharing, where private can owners lend their cars for users, whom needs to travel long distances, thus it is competing with car rental companies as well as car pooling (Deloitte, 2017).

Figure 2: Classification of car sharing among existing mobility concepts



(Source: 2 Deloitte, 2017)

To summarize the above-mentioned transportation methods, it is clear that car sharing has many different segments, thus it is important to differentiate between them. The three different business models can serve B2C, B2B and even P2P and can be also differentiated based on flexibility, distance travelled and costs involved (Deloitte, 2017).

Even though collaborative transportation is beneficial in short-term for users, the government and the entire city, there are not enough data and researches available yet, to make precise conclusions for the long-term range. However car sharing has a positive affect, due to reducing the amount of vehicles and kilometers driven, on the other hand it also stimulated citizens' behavior to participate less in public transportation as well as active ways of transportation such as cycling or walking. Thus further researches have to be done in order to have a clear overview of the current situation and to be able to decide if the advantages of car sharing outweigh the disadvantages (Bondorová & Archer, 2017).

2.1.3 Car sharing in the Hungarian capital city

Budapest is the capital city of Hungary with nearly 2 million inhabitants; therefore there is a remarkable car sharing market opportunity with only a few service providers. The Hungarian capital city had a very inefficient transportation system, with very few people participating in public transportation as the vehicle fleet was obsolete and most of the time late. In addition to that the condition of the roads both in and outside of the city were hazardous, thus leading to many accidents. Another important issue, which led to traffic jam on a daily basis, is congestion, as 4 lane highways turned into 2 lane roads upon reaching the city causing problems around bottlenecks. For these reasons the government decided to launch new projects, both for upgrading the transportation system with new vehicles and stations as well as restructuring the roads around and within the city. As a result citizens started to collaborate in public transportation and with the newly built highway circle around the city, most of the transportation that used to go through the city, now bypassed on it. Although the transportation system notably developed it is still far from perfectly efficient. Still way to many cars are used in the city center, therefore car sharing is a good solution for this issue in Budapest (Juhász, Mátrai, & Kerényi, 2014).

Free-floating car sharing is becoming more and more popular within the city, as Mol Limo recently entered the market, besides the already operating GreenGo being in business since 2016. The entrance of the second service provider boosted both of the parties' utilization as more and more people become familiar with this new transportation trend. According to reports, 20,000 people registered for Mol Limo since they started to operate with 300 electric cars and in addition to that, they have already had a day, where more than 2500 customers used their vehicles. Both parties are increasing their revenues and they are aiming to expand both their car fleet as well as the area, where the cars can be used in the city. Their long-term plan is to start operating with self-driving cars, as according to them autonomous vehicles will be the future as they are more convenient and safe. In brief, it can be seen that Budapest is already participating in car sharing and in the close future companies are planning to expand their services (Erdő-Bonyár, 2018).

2.2 Consumer behavior and motivation for sharing and car sharing

2.2.1 New trend within collaborative consumption

Millennials' point of view on the sharing economy phenomena will be investigated within this research, as well as connections between behavioral intentions and reactions. According to Homer and Kahle's (1988) cognitive hierarchy model and Ajzen and Fishbein's theory of reasoned action (TRA) (as cited in Hwang & Griffiths, 2017), the study reveals the motivational background of Millennials' collaborative consumption intentions. The first part of this study investigates utilitarian, hedonic and symbolic value concept towards car-sharing services. Environmental awareness is a significant concern for this generation, then any other. Wasteful consumption can be avoided, by the most commonly known ways, such as selective waste disposal, substituting to renewable energy sources, purchasing goods with low environmental impacts, usage of organic products and etc. Although, these methods are desired by our society without giving any personal benefits apart from saving our own Planet. On the other hand, the newly emerging collaborative consumption trends are providing financial benefits alongside time saving. Since these advantages are tempting for this generation, empathetic and other positive feelings appear concerning sharing businesses, thus this study examines empathetic and emotional attributes within the same topic to determine purchasing purpose (Batson et al. ; Davis as cited in Hwang & Griffiths, 2017). As it was already mentioned, Millennials' belief is that these actions are crucial in order to contribute to societal needs; in reality such attitude varies through individual values. Therefore perceived consumer effectiveness (PCE) has been reviewed, as it refers to personal opinion of positive contribution to society and its problems (Ellen et al., 1991 as cited in Hwang & Griffiths, 2017).

The next part of the study focuses on consumer innovativeness as the tendency of being open-minded in reference to consume new products and services more regularly and faster then ever (Midgley and Dowling, 1978 as cited in Hwang & Griffiths, 2017). Consumer innovativeness is greatly dependent on innovative technology, thus it is highly applicable for Millennials, who were born and raised in the age of technological boom (Goldsmith et al., 1995; Im et al., 2003 as cited in Hwang & Griffiths, 2017). Furthermore, the adaptiveness to modern technology is

discussed with reference to how consumer innovativeness influences consumer behavior within collective consumption.

This study provides a broader insight of perceived values of innovative consumers, as well as empathetic motives behind purchasing behavior. Millenials are also highlighted as a crucially powerful customer division of sharing-economy. The amount of contribution of this generation is supreme in collaborative markets compared to other segments (Rebell, 2015). Last but not least, not only the role of PCE will be viewed, but also the theoretical and practical background of winning the selected segment's loyalty for collaborative consumption.

This also contributes to evaluating short-, and long-term strategies of sharing-economy marketers for making it simpler to influence their targeted customers and increase their revenues.

The following section explains the intention of collaborative consumption alongside with key-terms, such as value, attitude, empathy and purchase intention. Also, the research model is described, followed by results of the conducted questionnaire, which is based on a significant part of collaborative consumption idea, more precisely shared mobility habits (Hwang & Griffiths, 2017).

What is collaborative consumption?

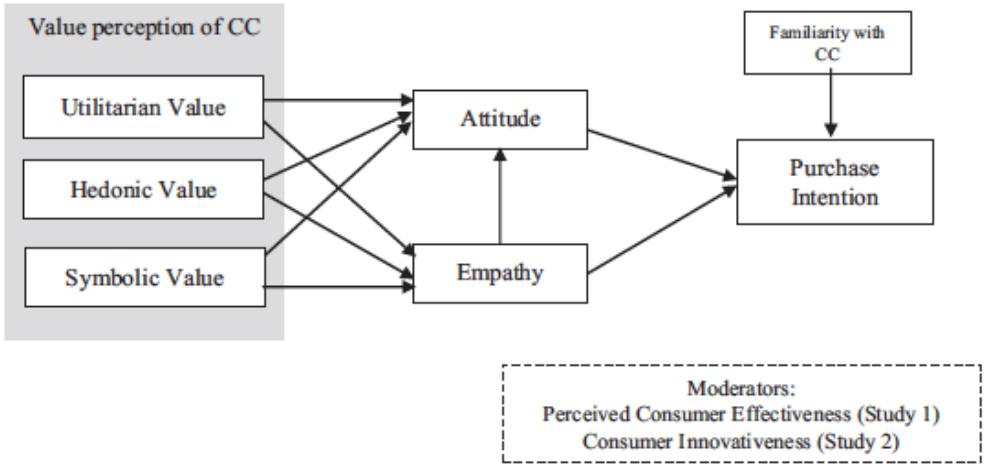
According to Möhlmann (2015), "Collaborative consumption is facilitated by digital networks through which consumers engage in a myriad of peer-to-peer commerce and sharing activities, including renting, lending, trading, bartering and swapping of goods, services, transportation solutions, space or money." The definition of collaborative consumption, which is correlated with sharing economy, is stated by Botsman (2015, as cited in Hwang & Griffiths, 2017) as ""an economic system based on sharing underused assets or services, for free or for a fee, directly from individuals". Even though the theory has changed during the years, the basis of collaborative consumption is still unchanged: This consumption mode reduces the responsibility and costs for the new owner of the product, also creates environmentally friendly way of utilization (Botsman and Rogers, 2010). Different types of movements are included in collaborative consumption, such as sharing, exchanging and gift giving. The thought of non-ownership sharing economy has a

wide range from sharing to exchange (Habibi et al. as cited in Hwang & Griffiths, 2017). As an example for pure sharing, CouchSurfing where the members provide accommodation for tourists, in exchange for receiving the same service from other users for free of charge. In contrast, Zipcar defines pure exchange service, where consumers gain temporary ownership over cars for a previously set price. The significantly influencing factors of satisfaction have been investigated by Möhlmann (2015) regarding consumer behavior. To mention crucial elements, which lead to customers' satisfaction, most important ones are: cutting costs, being familiar with the service or product, appropriate quality of service, trust and utility. For deciding in favor of sharing consumption time to time, being a member of a particular community as well as satisfaction are simply central aspects that cannot be missed. The main focus of this paper is to figure out Millennials' perception and attitude to collaborative consumption services, which includes a diverse range of compensation forms (Hwang & Griffiths, 2017).

2.2.2 Value perceptions of Millennials

First and foremost, the purchase intention of Millennials within sharing economy is discussed, as well as their value perceptions, motivational and habitual purposes. In addition to that, as Figure 3 displays, empathy is also playing a major role as an emotional variable and PCE as an important influencer.

Figure 3: Conceptual framework and hypothesis testing results



(Source: Hwang & Griffiths, 2017)

Consumers' mindset and value perception with regard to services and products is essential, when it comes to marketing. According to Zeithhaml (as cited in Hwang &

Griffiths, 2017), the definition of value is: The appraisal between the quality and price of a product or service, for the consumer upon carrying out an exchange. During a service performance, or even afterwards, the customer derives the value of the service (Babin and Attaway as cited in Hwang & Griffiths, 2017). Besides cost saving advantages, subjective factors can also influence the customer experience, such as positive interaction with the service provider also plays an important role in value perception procedure (Bloch and Bruce as cited in Hwang & Griffiths, 2017). Such subjective aspects are called "Hedonic" values, in comparison to more objective ones, which are specified as "Utilitarian" values. Utilitarian values are connected to more objective perks, for example, money and time saving and other practical benefits. It is in the focus of such objective customers, to avoid any complications and struggles, during the purchasing procedure of the desired product or service. The fact that some consumers try to find a solution for satisfying both practical and ethical desires, via acquiring shared services seems paradoxical. However a company operating with low costs and also ecologically friendly would be a great example for the above mentioned paradoxon (Eckhardt et al. as cited in Hwang & Griffiths, 2017). On the other hand, the more subjective aspects, Hedonic values are the results of emotion oriented, joy seeking purchasing experience (Babin et al.; Childers et al.; Holbrook and Hirschman ; Holbrook as cited in Hwang & Griffiths, 2017). Hedonic consumers therefore tend to look for enjoyment and personal values, in contrast to Utilitarians, whom are more practical and result oriented (Babin and Attaway; Holbrook and Hirschman as cited in Hwang & Griffiths, 2017). Consequently, the research requires a complex overview of the different value perceptions (Holbrook; Sweeney and Soutar as cited in Hwang & Griffiths, 2017). The Millennial generation is the most adaptive to sustainability as the responsibility for taking care of the society and environment is a personal issue for them. Therefore, their participation in collaborative consumption holds three different types of values namely, hedonic, utilitarian and symbolic (Keeble, 2013).

Within collaborative consumption, the main advantage is, that instead of the need for ownership, sharing is more significant for customers with possession of any values from the above-mentioned attitudes. For the utilitarian point of view, a good example is BlaBlaCar as they are saving a considerable amount of money by sharing

a ride with other consumers, instead of travelling alone. For this reason, cost saving and utility maximization are key aspects for satisfying utilitarian needs, therefore this type of consumers, willing to collaboratively purchase (Möhlmann, 2015). Moving to another value, hedonic attitude can be achieved within sharing economy, as it can provide entertainment and enjoyment by experiencing diverse options of the market (Babin and Attaway as cited in Hwang & Griffiths, 2017). To demonstrate this side of the industry, DriveNow serves as an applicable example. Upon BMW launched their sharing service, it was attractive for younger customers, since they had the opportunity to try out high class BMWs and MiniCoopers, which would normally would not be affordable for them to purchase (Spray as cited in Hwang & Griffiths, 2017). As another example, Citybike in Vienna provides the opportunity for both tourists and locals, to explore the city via bicycle, without the need of bringing it with them or owning one. Besides saving costs, it also brings entertainment and happiness for consumers. Providing one last example, one of the most famous and commonly known sharing economy participants, Airbnb, provides accommodation-sharing services. Alongside costs savings, they introduced a new way of interacting with travellers and local hosts, in the meantime also creating a more memorable and personal interaction when visiting another country. Hedonic value represents the emotional benefits for consumers during shopping and interaction with other customers and service providers. These activities serve satisfaction, not only for individuals, but also to surrounding environment (Aknin et al. as cited in Hwang & Griffiths, 2017). Therefore such social activities in the sharing economy serve as an act of kindness. To debate the last value, symbolic attitude reflects the positive feelings that arise with prosocial movements. Sustainability has many problems when it comes to consumption, as it results in extreme waste production, which is not properly recycled afterwards. In addition to that, during the production phase, in most of the cases non-renewable energy is used, which results in harmful gas emissions and toxic waste. To reduce the harm that is caused by humans to the environment, consequently consumers' awareness is continuously being raised, and consumers with symbolic value attitude will gain positive feelings when they choose from the available options, in favor of a greener Planet (Greendex, 2014). Collaborative consumption greatly reduces environmental footprint, as in the case of DriveNow, less cars are needed to be produced for an entire city, less parking spots

have to be built, which results in more green areas within the town. As another example, Citybike reduces the amount of CO_2 emission, as less public transportation vehicles will be needed, if more citizens willing to use this green transportation form. Most of the people consciously choose alternative transportation methods in order to contribute to society; thus they will perceive symbolic value of this action (Davis and Dutzik, 2012). Other indicators for prosociality can be the utility of organic products or ecological services and also incurring the costs related with those. What is more, if a third member can also take advantage from green consumption, it will serve as an additional benefit (Bird and Smith, 2005).

As Homer and Kahle's (1988) cognitive hierarchy model explains, there is a subjective ranking order between the different value and perspective importance. A consumer is more likely to choose a product or service based on economical benefits, rather than its social effects. However these three factors regarding collaborative consumption, the utilitarian (economical interest), the hedonic (enjoyment caused by shopping experience) and Symbolic (prosocial movement) values are all supposed to contribute and affect the consumers' perspective. Thus all of the values are major motivating factors for younger generation, to move towards sharing economy services.

Empathy as an influencing factor

Empathy is the capability to adopt other's perspective and also the motivational background of individuals to help on those in need, therefore it correlates with prosocial behavior (Veloutsou and McAlonan, 2012). In order to learn about consumer behavior of younger generation, empathy is incorporated into collaborative consumption, since it is a very strong emotion. Specifically, others refer to empathy as a result of conscious or unconscious reactions (Eisenberg et al., 1998 as cited in Hwang & Griffiths, 2017) to sympathy and compassion towards other people or issues (Batson, 1991; Davis, 1983; Stürmer et al., 2005 as cited in Hwang & Griffiths, 2017). By considering these different perspectives on the topic helps to distinguish between emotional and cognitive empathy (Parra, 2013 as cited in Hwang & Griffiths, 2017). In reality, it takes high level of emotional intelligence to be aware of others' perspectives in different situations (Escalas and Stern, 2003; Sheldon, 1996). When the final result is advantageous for both parties that would

mean engagement in prosocial behavior, which is a version of collaborative consumption. The most common participants among volunteers are always from Millennials, as this generation is the most concerned about saving environment as well as of the well being of other people (Batson et al., 2007, as cited in Hwang & Griffiths, 2017).

According to Batson et al. (2007 as cited in Hwang & Griffiths, 2017) empathy is continuously evolving in young consumers, as utilitarian, hedonic and symbolic values of collaborative consumption are identified. Therefore, three separate statements can be expressed, that Utilitarian, Hedonic and Symbolic values are advancing Millennials' empathy with respect to collaborative consumption.

Escalas and Stern (2003) introduced measurement tool for responses to sympathy and empathy towards TV commercials, thus they have presented that customers' empathy has affection on the attitude towards advertisements.

As a consequence a person who feels empathy is highly likely to have a positive attitude towards collaborative consumption as well. Accordingly the following hypothesis can be stated: Empathy is correlated with positive attitude within collaborative services among Millennial generation.

Attitude and empathy as an influencer for purchase intention

Within the topic of consumer behavior, the purchase intention of the customer is also referred to as the forecast for later purchase.

Positive behavioral intentions are the outcome of positive attitude according to Homer and Kahle's (1988) cognitive hierarchy model. Theory of Reasoned Action (TRA) describes and points out, that the level of intention reflects the probability, that a customer intend to make further actions and purchase the product or service (Ajzen and Fishbein as cited in Hwang & Griffiths, 2017). Consequently, consumer's purchase intention will be certainly influenced in the right way by attitude in reference to collaborative consumption.

Millennials empathy towards collaborative consumption serves as an important factor with regard to motivate them to move towards sharing services, as collaborative consumption means reduced or no ownership in order to achieve a more sustainable future. As a consequence, it can be stated, that both attitude and

empathy raises the purchasing intention of Millennials with reference to sharing economy.

Perceived consumer effectiveness as an additional influencer

When it comes to sustainability, the varying prosocial marketing movements trigger diverse emotions and actions in consumers and therefore they will act differently. People are more likely to take social actions, when they believe that even a single person's participation can add something towards sustainability, in comparison to others, who does not think that they can change anything. This tendency is referred as perceived consumer effectiveness (Ellen et al., 1991 as cited in Hwang & Griffiths, 2017). In addition to that it also moderates the level of contribution towards social activities, as a higher level of PCE results higher input within prosocial activities (Mostafa, 2007). In order to reveal the moderating factor for Millennial generations' behavioral intention towards collaborative consumption, the paper will focus on sharing economy. Bearing in mind, the proposition that attitude and empathy are influencing factors of younger generations purchase intention, now the level of PCE can also be integrated to this idea. For this reason, the new proposal holds, that the effects of Millennials' empathy and attitude on purchase intention is positively correlated with the level of PCE. Therefore in the above-posted Figure 3, Familiarity with collaborative consumption is posted above Purchase intention. According to Jain & Kaur and Kim et al. (as cited in Hwang & Griffiths, 2017), despite researches that were conducted earlier, factors such as gender, age, level of education and etc., are less influencing factors with respect to prosocial behavior. Thus regardless empathy and attitude, the consumers behavioral intention is still affected by the commitment to collaborative services.

The next part of the paper serves as a discussion about the different kind of benefits with regard to P2P relationships. Benefits to customers will vary based on the level of engagement from the customers' side within collaborative consumption. The first part of the paper focused mainly on the value perceptions of sharing economy, however relational benefits worth to be mentioned as well. There is a different level of how relational benefits can lead to customer loyalty, as the participation level within the sharing economy from Millennials generation side will vary depending on

the level of commitment, since customers will be more loyal when there is an already established relationship between them and the provider.

The second part of the paper examined the importance of relational benefits in peer-to-peer relationships as well as safety benefits in adopting new services and products within collaborative consumption, thus the previous proposal can be edited according to the new influencing factor: Consumers with higher level of consumer innovativeness will have a higher effect of value on empathy and attitude.

2.3 Primary benefits within collaborative consumption

2.3.1 What is a peer-to-peer relationship?

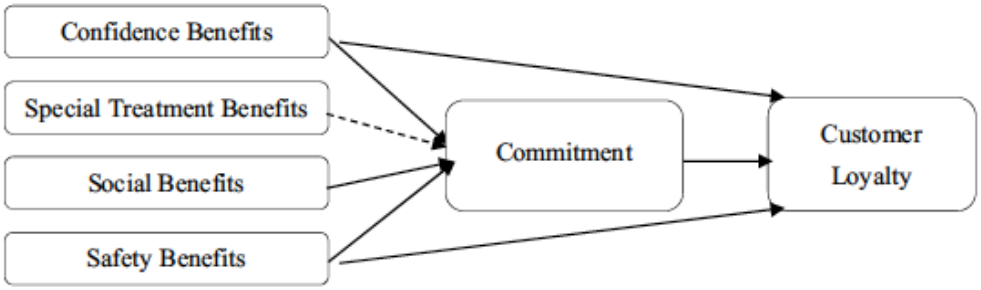
According to Hamari et al. (as cited in Yang, Song, Chen, & Xia, 2016) a community which is supported by the Internet and online services and who is engaging in peer-to-peer activities, such as acquiring, providing and sharing access to either products or services can be defined as sharing economy. The members within this community are adopting the newly emerging trends and tools, and at the same time leaving behind the traditional economy standards (Botsman and Rogers, 2010). The owners in sharing economy offer their belonging goods and services via peer-to-peer platforms, in order to serve the customer side of the market. As an example, Uber drivers provide their own car as well as their driving services, to allow customers to book a trip with them. These service providers are not only pursuing to gain profit by participating in this booming and highly popular opportunity, but also due to the additional benefit, which can be pure enjoyment in a shared experience. For instance the interaction with customers as well as some drivers also simply enjoys driving their own vehicle around in the city, as it is a great pleasure to them (Widlok as cited in Yang, Song, Chen, & Xia, 2016). From the consumers perspective the need for possession and other materialistic desires tend to disappear by this new sharing attitude (Belk as cited in Hwang & Griffiths, 2017). Furthermore, the service providers usually become involved in this experience, which means sometimes, that they will results in establishing a friendly connection between the two sides of the peer-to-peer activity (Belk as cited in Hwang & Griffiths, 2017). Due to these personal interactions, shared economy services can be clearly differentiated from the traditional services, as with a taxi the interpersonal boundaries are dividing the

participants from each other. However it has been in the scope of researchers to examine the purchasing behavior of sharing economic participants, on the other hand just a few studies exist on the relationship between peer-to-peer consumer and provider. It would be crucially important, to conduct researches based on this topic, as it would provide a better insight to the market for sharing economy business participants and therefore they could implement more effective marketing strategies (Sheth et al. as cited in Yang, Song, Chen, & Xia, 2016).

2.3.2 Conceptual model of benefits

Relational benefit marketing approach has been implemented to clarify the engagement in a relationship between clients and servers as well as the drivers of customer loyalty (Gwinner et al.; Hennig-Thurau et al. as cited in Yang, Song, Chen, & Xia, 2016). These relationships are the results of a continuous collaboration between the parties, as it is necessary, that the same parties are being constantly involved with each other (Palmatier et al.; Kinard and Capella as cited in Yang, Song, Chen, & Xia, 2016). According to Gwinner et al. (1998) there are three categories of peer-to-peer relationship benefits: confidence benefits (Bitner; Morgan and Hunt as cited in Yang, Song, Chen, & Xia, 2016), special treatment benefits (Peterson; Crosby as cited in Yang, Song, Chen, & Xia, 2016) and social benefits (Berry; Price and Arnould as cited in Yang, Song, Chen, & Xia, 2016). Moreover safety benefits are being further discussed, as safety issues have been a major bottleneck of the subject. Within the next part, a detailed explanation about the nature of the benefits will be included. The conceptual model (Gwinner et al.'s, 1998) shown on Figure 4 is being revised within collaborative consumption context, by examining the above-mentioned relational benefits, in order to measure consumers' loyalty and engagement.

Figure 4: Conceptual model of relational benefits



Source: (Yang, Song, Chen, & Xia, 2016)

The definition of commitment is based on the emotional background of long-term engagement within a relationship either personal or business oriented (Geyskens et al. as cited in Yang, Song, Chen, & Xia, 2016). Mutual commitment is the core element of a peer-to-peer relationship (Berry and Parasuraman as cited in Yang, Song, Chen, & Xia, 2016). Hence commitment is not only regarded as the current viewpoint, but also gives a hint about the direction of the relationship (Assael; Morgan and Hunt as cited in Yang, Song, Chen, & Xia, 2016). Personal interactions can lead to commitment, in case the clients are experiencing enjoyment and attracted by collaborative service providers. It is in the scope of collaborative consumption providers to pursue a valuable connection, as it will result in customer's loyalty. Loyal customers will not only re-purchase the goods or services provided by the server, but in addition to that, via word-of-mouth they will attract additional customers. For that reason, commitment is a crucial element within building trust. It is also important to mention, that dedication can vary based on diverse categories of relational benefits that will be explained within the following sections.

Confidence benefits

Confidence benefits can be elaborated as "feelings of reduced anxiety, trust, and confidence in the provider" (Gwinner et al., 1998) that highlights the consumers' call for confidence in goods and services provided and also the need for stability in such associations (Patterson and Smith, 2001). One of the main pitfalls of peer-to-peer relationships is originated from the situation, that customers are suspicious about the quality of services and goods offered for collaborative consumption (Belk as cited in Yang, Song, Chen, & Xia, 2016). So as to avoid the issue, which arises from

anxiety (e.g. guaranteed delivery of services) regarding the above mentioned advancement in confidence levels has to be reached. This will lead to higher commitment as well as absolute loyalty.

Special treatment benefits

Special treatment benefits can be related to regular consumers who are entitled to tangible benefits such as different kinds of discounts, personalized products and services as well as advanced and quicker delivery of orders (Fornell; Guiltinan as cited in Yang, Song, Chen, & Xia, 2016). The above-mentioned benefits are expected to be offered for relational consumers in exchange for their loyalty (Patterson and Smith, 2001). Service providers are aware of these expectations from customers; therefore in order to stay competitive in the market they usually incorporate special treatment benefits as part of their marketing strategy (e.g. “Miles & More” for Lufthansa) (Morgan et al. as cited in Yang, Song, Chen, & Xia, 2016). Even though Gwinner et al. (1998) states the existence of positive correlation among special treatment benefits and customer loyalty, on the other hand other researchers propose that this alliance might be insignificant. Regarding Kinard and Capella (as cited in Yang, Song, Chen, & Xia, 2016) findings, there is also an insignificant relationship between the factors. According to Frey (as cited in Yang, Song, Chen, & Xia, 2016) special treatment benefits might only result in a short-term customer loyalty and does not promote long-term advantages for the parties. These additional costs that might not even bring additional value to the service providers are called as “the hidden costs of rewards”. In addition to that collaborating with customers, results in a personalized service or product provided by sharing businesses (Luchs et al. as cited in Yang, Song, Chen, & Xia, 2016). For instance unlike traditional service offerings, Airbnb property lenders are creating a highly customized service, as the guest can enjoy a wide range of additional options, such as movie nights, home cooked meals, guided tours by the hosts, pick up from the airport and many more. Consequently as these services are already personalized by the needs of the customers, no additional special treatment would make a big difference unlike in traditional services. Accordingly, due to the lack of extra benefits, which can be included, these treatments are not significantly modifying customer loyalty.

Social benefits

According to Dagger et al. (2011) social benefits are considered as a crucial part of the connection between parties involved in sharing economy, for the reason that consumers perceive values such as quality of the service from interactions with service performers. As Gwinner et al. (1998) states, the definition of social benefit comes from the emotional background of the relationship, which can simply mean a familiar face of the opposed party or a previously established friendship in contrast to the benefits of the outcome. When it comes to collaborative exchange, it is impossible to avoid social interactions, thus it will lead to a personal connection. For that reason the customers can easily be motivated by the mutual understanding, which evolves from the consumer-provider experience and customers aim to maintain a loyal alliance (Schor as cited in Yang, Song, Chen, & Xia, 2016). Apart from the evident points of sharing economic benefits, it might be that participants sustain and develop a more personal connection outside of the business. Accordingly it can be stated, that social benefits have low impacts on the collaborative business from loyal customers side (Goodwin; Goodwin and Gremler; Hennig-Thurau et al. as cited in Yang, Song, Chen, & Xia, 2016). An improvement in service participation can be achieved by the social connection made between the customer and service provider (Bitner, 1995). This can also lead to a higher commitment towards the business itself (Berry; Goodwin and Gremler; Dagger et al. as cited in Yang, Song, Chen, & Xia, 2016). As a consequence social benefits arise from the relationship between the two parties in the sharing economy market and as it evolves the commitment from the customer side will also reach a higher level.

Safety benefits and commitment

The last element of relational benefits within sharing economy is the safety benefits received by the consumers. The explanation of safety benefits is when the consumer feels safety within the long-term relationship towards the provider of the service. It is important to clarify, that the feeling of safety does not come from the provider's talent and expertise of delivering the service, but rather the positive side of not being worried about potential criminal actions or personal injuries. Nowadays it is in the scope of collaborative businesses to improve the regulations and rules regarding the consumers' privacy, safety and admittance. Highly popular mobile applications

are providing the possibility to rent and pay for the services and goods available, such as cars, accommodation and etc. These options carry less regulations and supervision unlike traditional hospitality or transportation services (Neff and Writer as cited in Yang, Song, Chen, & Xia, 2016). For instance well famous companies such as Uber are currently undergoing governmental regulations or even being banned from several countries all around the globe (Picchi as cited in Yang, Song, Chen, & Xia, 2016). Even though that relatively very few researches exist on the perspectives of safety benefits within relationship marketing, some studies have stated that the main boosting factors for trust are security, safety and reliability in peer-to-peer markets and also these factors are able to support dedication (Leung et al. as cited in Yang, Song, Chen, & Xia, 2016). In order to keep the customers loyal to sharing economy services and get engaged in repurchasement, high safety benefits are essential as they are basic human needs. Therefore it is necessary to guarantee the safety of the customers against possible threats caused either by the providers themselves or other customers. Moreover successful proceeding, where no harm happened neither crime issues occurred, can create a positive mindset in the customer, which translates to that the service provider is able to fulfill all the needs of the consumer. In addition it gives a feeling of that particular service provide safety benefits. If the perceived value of safety grows, then it will directly increase the commitments of the customer (Grönroos as cited in Yang, Song, Chen, & Xia, 2016). It is also contributing to assurance and commitment, when there is less conscious thoughts are around whether there will be a negative outcome of this collaboration.

Altogether, the proposal of this study via the conceptual model is that attitude and empathy are influencing factors of younger generations purchase intention. Additionally confidence and social benefits are the main motivational factors for consumers to engage in a relationship within collaborative consumption through commitment. Besides of this, on one hand special treatment benefits does not influence commitment or loyalty in a considerable way, while on the other hand safety benefits are moderately affecting loyalty through commitment.

3 Methodology

3.1 Research Design

This paper consists of two major parts, first the literature review where the background of the topic is introduced and followed by the methodology and results of the Quantitative research questionnaire, which was conducted online. Main purpose of this research is to find support for hypothesis 0: the millennial generation tends to use car sharing in Budapest

A survey has been conducted among different university business students, from both bachelor's and master's program. An additional important selection criteria was, that the selected group of respondents were not originated from a single city or country, but rather diversified, international youngsters were targeted. This was done, in order to formulate a very diversified sample, so the information received from it, could reflect to various cultures and hence it would be applicable for international market environment. Besides the above mentioned, a slightly greater focus was put on the Hungarian market for the reason of being able to provide insights towards the Hungarian car-sharing market situation. This selected class, were chosen to represent the Millennial generation, whose age is between 18 and 38. The main reason for quantitative research design was appointed to collect sufficient amount of countable data to describe relevant influencing factors in connection with Millennials attitude towards different car-sharing options. In addition, a correlation among variables, like income and public transportation usage is also aimed to be explored. Thus to convey precise results of research findings, different statistical calculations for instance Spearman-correlation coefficient and two Chi-x^2 test were performed. Also an open-ended question was inserted in the survey to get a valuable picture of what respondents think about how a successful introduction of a new car-sharing company should be carried out in Budapest, as well as how these companies websites/ applications could be developed.

3.2 Survey design

The survey that was carried out to collect relevant information consists of four sections in order to make it more convenient and easily understandable both for the

participants upon answering as well as for the author when it comes to analyzing the data. Each block consists of approximately 5 questions and explores different characteristics and attitudes of the respondents. Within the questionnaire, diverse ranges of question types have been selected in order to keep people's attention and interest, therefore increasing the quality of the data received. The most frequently used type of question was "Multiple-choice" questions, for the reason of being easily answerable and simply analyzable. Almost the same amount of questions were asked as a "Likert-type scale", due to the fact that it is very flexible and allows the author to measure broad areas and to have a closer look at the specific facets of the topic. For the purpose of understanding respondents idea and opinion regarding the car-sharing business "Open-ended questions" were also attached to the survey.

To begin with, the first section consists of five general questions towards the respondent asking their nationality, age, educational level and employment status. The first part hence tries to identify the characteristic of the survey participants, as it is important to collect the data from the right age group, to be applicable for the research paper. Additionally, nationality is an important factor as well, seeing that the paper aims to make predictions and suggestions for the new Hungarian market as well. Being aware of respondents' educational level and employment status can provide a good estimate about their financial position, which can be decisive when it comes to estimating their willingness to pay for different modes of transportations.

In the second place, questions were aroused towards current transportation habits and preferences. Likert-type scales were used, in order to determine frequently used modes of transportations and to gather data more precisely, then simply receiving yes or no answer for transportation choices. The main reason for choosing transportation modes have been asked, as it is a core element of the underlying motivational factors. This section of questions allows the author to examine the most popular daily commuting trends and the main reasons for favoring one possibility over another one.

The third part includes four questions, where the underlying motivational factors for choosing car-sharing services more frequently have been addressed alongside attitudes towards car sharing in general. This part of the survey is without doubt the

most important, as it addresses direct questions towards car-sharing behavior and the respondents' emotions, referring to positive feelings for car sharing services.

The last section relates to the level of smart phone applications usage for travelling purposes. Alongside multiple-choice questions, which were enquiring information concerning the most regularly used travelling applications, two Likert-scale questions were up to the respondents to rate them based on a scale from 1 to 5 where 1 portrays strong disagreement, while 5 represents strong agreement. With this in mind, respondents have been questioned of the level of satisfaction with regard to sharing applications and additional services that should be added to the system. The survey ends with an open-ended question, where respondents can express their recommendations and define central issues. Although it is difficult to analyze and sometimes less reliable, open-ended questions allow the author to better understand the respondent's true feelings and attitudes towards the survey subject.

The questionnaire begins with a short introduction, where its purpose is explained shortly, moreover highlights the fact, that the focus of the survey is on companies such as Car2Go and DriveNow. It is essential, so that participants will not confuse it with the "traditional" car renting services, which is out of the scope from this study. The whole survey can be found in the appendices part, which is at the end of the thesis.

3.3 Sample and procedure

During the sampling procedure the aim of the author was to select a portion of the population within the research context, who serves as representatives for sharing-economy participants and draw conclusions in connection with the research question. Therefore, respondents have been selected mainly by their age. This was the most important requirement as this segment of generation is receptive towards collaborative consumption, and most engaged users of social media platforms. Target sample size was 58, which was successfully achieved within the time period. The table below reflects the basic components of the sample.

Sample Source	Age Range	Gender	Country of Origin
Millennial generation	18 - 38	47% male 53% female	AUS, AUT, BGR, COL, CZE, NLD, FRA, HUN, IND, NGA, RUS, SRB, SVK, TWN, THA

The eligibility criteria for the respondents are to match the age group of Millennials as they are in the scope of the survey. The following inclusion criteria are a must in order to consider validity of their answers, such as usage of smartphones and being familiar with travelling applications. If the respondents' age is out of the above-mentioned range, it serves as exclusion criteria. A great attention had to be paid not to conduct a biased sample, as this study is not exclusively focusing on the Hungarian shared-mobility market, but rather on an international population.

There are different factors affecting the method for taking the sample, such as the nature of the population as well as time and money available, which were a more limiting factor for the author. Within quantitative studies, representativeness is a crucial element of the sample. Therefore it is in the scope of the author to reduce the margin of errors.

Regarding the sampling types there is a wide range of variety available, from which probability sampling strategy is the most suitable in this study (DeVault, 2018). Greater confidence had to be put on representativeness, therefore stratified random sampling technic was applied in this case. It is so, as the survey was distributed in two Austrian international universities, besides a Hungarian one. These universities serve as distinct groups for population and then a random sample in each group was taken.

In order to determine the perfect sample size, which could precisely represent the Millennial population, three factors had to be considered. First of all the overall population size of Millennia's, then the confidence level, where the author used 95% to ensure, that the survey participants will provide an accurate estimation of the overall population. Last but not least the margin of error was restricted to +/- 5%, yet again to secure the validity of the survey (Rucker, 2017).

4 Results

4.1 Profile –descriptive part

Upon a research is conducted among a group of people, in this case on Millennials generation, two different types of statistics is needed in this case in order to interpret the collected data. To begin with, a descriptive statistics has to be made for the purpose of analyzing numerical data like age, distance and budget, followed by inferential statistics, which aims to draw a conclusion based on the results.

In the paper's descriptive part, the results of the online survey is being analyzed in order to describe, show and summarize the survey data on Millennials attitude towards car sharing in a more understandable way and to explore any patterns that might appear in this case. It is important to note, that this type of statistics are not suitable to provide any conclusions beyond the research data or to serve as an outcome for the hypothesis. More like to simply present and describe the data in a way that is understandable for the reader even for complex questions for instance the motivational background of choosing among transportation methods and the values lying behind those decisions (Surbhi, 2017). Descriptive statistics will be further divided into two parts to describe the data. So as to find out the central tendency for the respondents' results, the researcher used the mean and median statistics, which are the most commonly used methods to measure numerical data. Once the mid point of the data is available, it is also vital to calculate the spread of the results, so the researcher and the reader know how much is the data distributed. As it was already mentioned in the previous section, the questionnaire is divided into four parts based on their subjects. Different charts are also included in order to provide a clear visualization for the reader.

To begin with, the answers from the first 5 questions provided information for the author, regarding basic personal data. As it can be seen in Figure 5, a bit more than half of the respondents were female (53.7%) and the rest were completed by male (46.3%) respondents. Even though gender was not a determinant factor within this study, participants were well distributed based on their sex. On Figure 5, the age structure of the respondents is visualized in groups. However the red group that ranges between 19-23 had more than half of the respondents (53.7%), the blue

group, which is the next age cluster, contains 34.1% of the answers. The two other groups are green with 7.3% of the respondents and yellow with only 4.9% of participants. There was no underage child among the participants. Therefore the majority (87.8%) of participants' age is between 19-28 years, which is the younger half of the Millennial generation, thus even more adaptive for technology and perhaps more committed towards collaborative consumption.

Figure 5: Sample Demographics (Gender & Age)

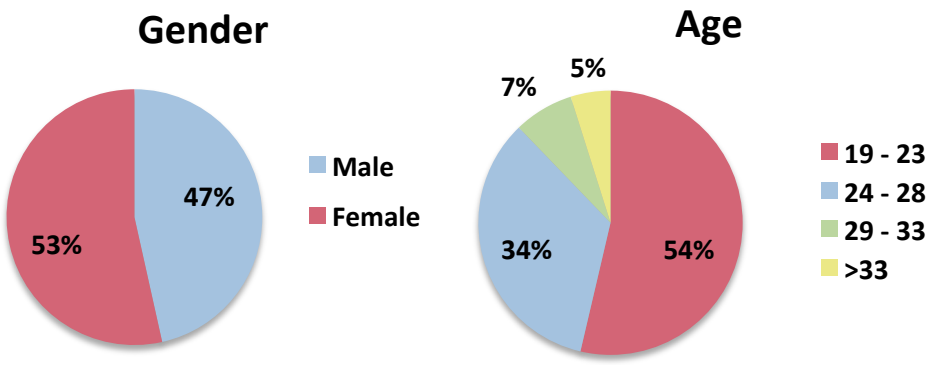


Figure 5 displays the descriptive properties of the age variable of respondents. The average age for a respondent is 24, which perfectly fits into the target population for this survey. The median value resulted 21, which is close to the mean value. The standard deviation is close to 4, which means there is a low spread among the participants' ages, thus they were mostly in their 20s.

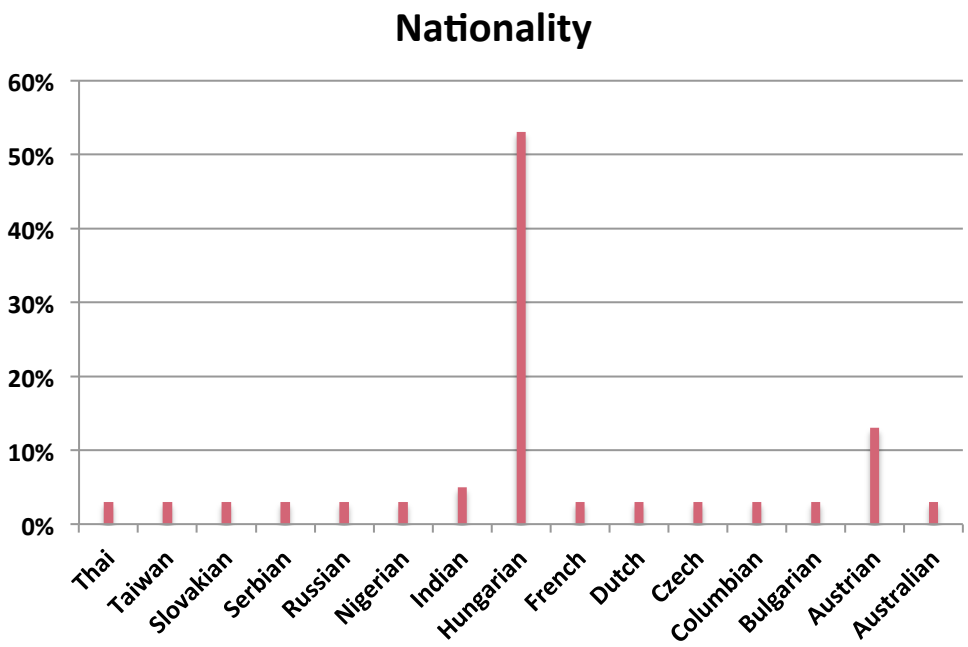
Figure 6: Age descriptive statistics

	Mean	Median	Standard Deviation
Age	24,14	21	4,01

Within the first part of the questionnaire three more questions were asked, with regard to their nationality, highest degree completed and current employment status. The nationality distribution is plotted on Figure 6 and it can bee seen, that more than half of the respondents were originated from Hungary (53%) while the second country is Austria with only 13% of the respondents. Overall 15 different nations were present in the population; therefore it represents a combination of

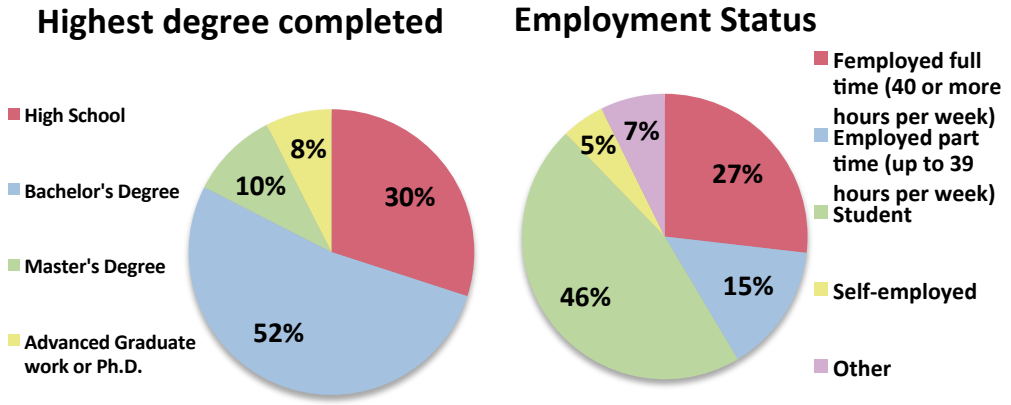
Hungarian as well as international group of Millennials. The paper aims to explore whether Millennials are interested in car sharing in Budapest, therefore it is suitable to have half of the respondents originated from the country, while the other half represent an international group of Millennials. Consequently the distribution of the sample along nationality seems to be appropriate to take further statistical procedures.

Figure 7: Sample Demographics 2 (Nationality)



Questions towards the respondents educational level and employment status were important, in order to have predections towards their financial position and intelligence. More than two-thirds of the participants were currently enrolled or finished at least a bachelor's degree, hence the population is well educated. Regarding their employement status, half of the population is a student and the other half is working either as part time, full time or as self-employees.

Figure 8: Sample Demographics (Highest degree & Employment Status)



This leads to the conclusion, that the population is the newest market workforce, thus they have sufficient financial background to be able to finance car sharing services as well as the motivation, to choose cheaper solution instead of owning a car.

Within the secocond group of questions, the author aimed to investigate the current transportation habits and preferences of the population. The Figure below shows the descriptive values of the kilometers travelled on a daily basis by the target group. The mean value resulted in almost 19 kilometers, while the standard deviation between the answers is close to 16 kilometers. The median value is much lower with 5,5 kilometers. These values indicate, that the respondents of the survey are usually commuting less daily, then the whole diameter (25km) of the targeted city. The consequence is, that people are doing their daily duties in a close range to their homes, possibly within the capital city.

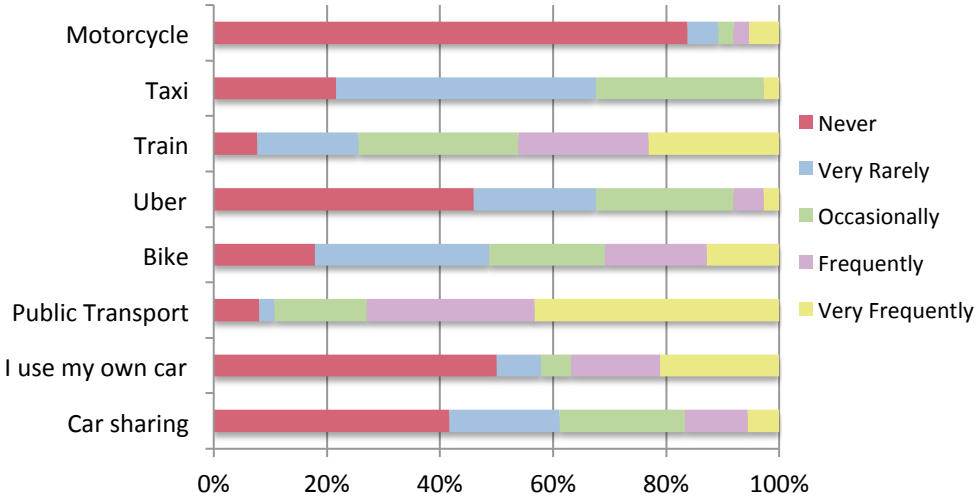
Figure 9: Kilometers statistics

	Mean	Median	Standard Deviation
Km travelled	18,95	5,5	15,84

Within the secocond group of questions, the author aimed to investigate the current transportation habits and preferences of the population. According to the results 58.5% of the respondents does not own a car, however the majority (75.6%) of them travels less than 20 kilometers on a daily basis. For that reason it can be assumed,

that for the population, the expenses related to car ownership does not compensate the comfort and flexibility in such short distances.

Figure 10: Transportation modes used



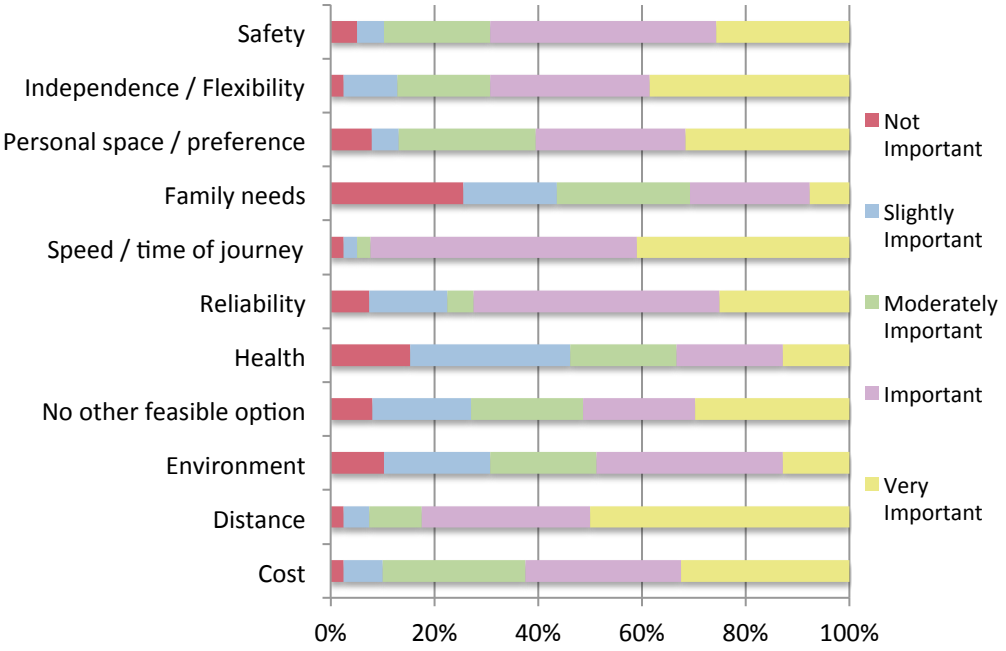
In addition to that as Figure 8 displays, the most frequently used transportation modes were public transportation, such as bus, train, tram, etc. The third most common way of transpiortation was by privately owned cars and a significant percentage of respondents also stated, that they frequently use bicycles. The least used travelling methods were motorcycle,taxi, Uber and car sharing as well, since less than 20% of the participants responded that they are using it on a regular basis.

Figure 11: Monthly spending statistics

	Mean	Median	Standard Deviation
Monthly spending	49	30,5	35,45

Moreover the 10th question of the opinion poll wanted to investigate how much the respondents spend on their daily transportation on a monthly basis. The mean of the answeres indicates, that the majority spends around 50 euros, some outliers also appeared as the distribution of the values almost equaled with average spending. Only those who spends more than this amount are the ones with private cars, which can be also another indicator, that most participants are involved in public transportation, hence that is the more economical travelling mode.

Figure 12: Main reason for choosing transportation mode



The respondents were also requested to indicate, the importance of different factors for them, when choosing from these diverse transportation modes. The above Figure 9 displays these criteria alongside the percentages of the responses. From the given data it is clear, that all these factors are playing quite an important role upon deciding for a transportation mode. The most essential factors were safety, flexibility, personal space, speed, distance and cost, since less then 10% of the respondents indicated these factors to be slightly or not important for them. According to the results no other feasible option is another factor, which is fairly important for the population, since almost 70% of the people believe, that it is also an important factor to consider. The remaining three criteria, namely family needs, health and environment were less important for the Millennials, for the reason that most of them do not have a family yet and even though they would like to participate in environment protection, their financial position might not allow them.

The third group of questions was looking into the personal attitudes and beliefs of the respondents with regard to car sharing services. The general attitude towards the services offered suggested, that half of the population possesses neutral feelings, which means that these people are still hesitant about using this new

option. In addition to mention the other half of the responses, they were clearly showing positive feelings towards the services. The following question examined how much consumers adapted to innovations and thus how Millennials are using sharing services. Therefore their product involvement is analyzed in this question. It displays hedonic, utilitarian and symbolic values towards car sharing services, as it would make them "feel good", "feel smart", "feel more responsible", "saves me money" and etc.

Figure 13: Encouraging factors towards car sharing

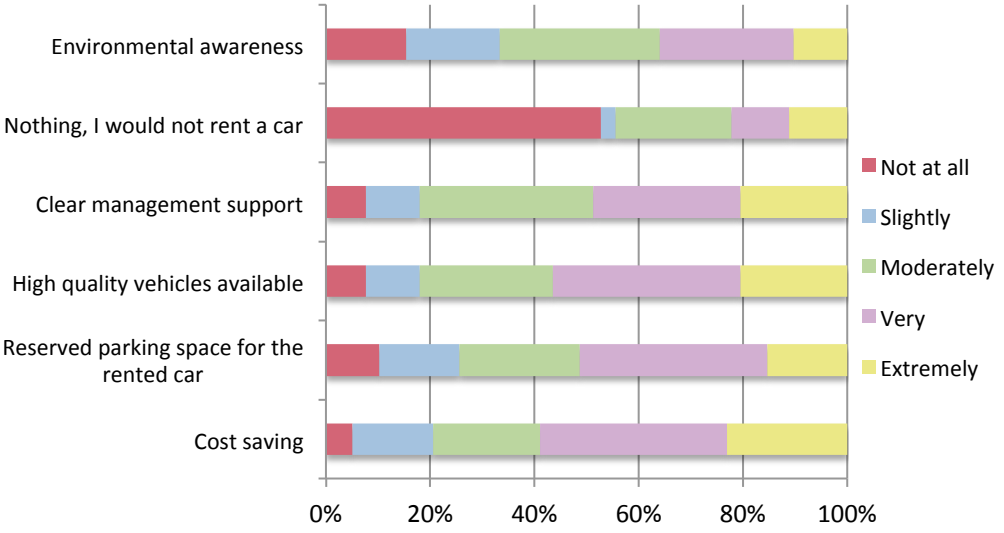
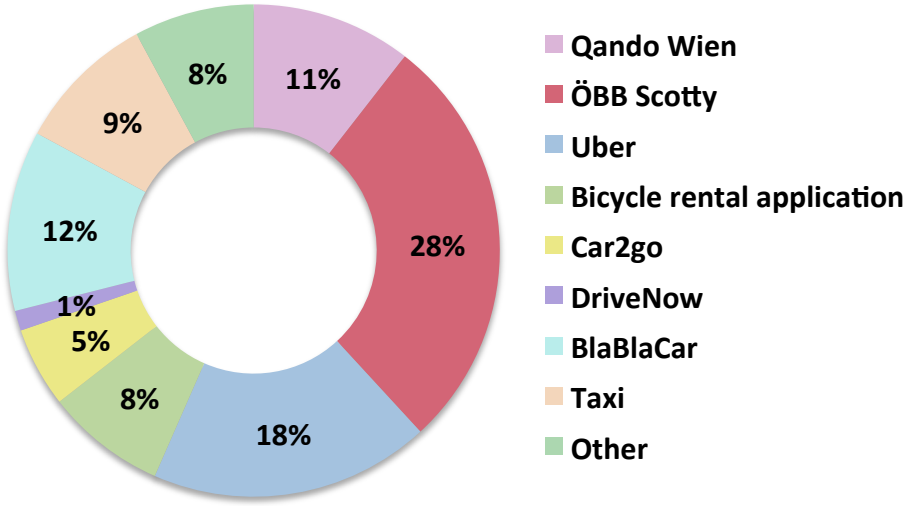


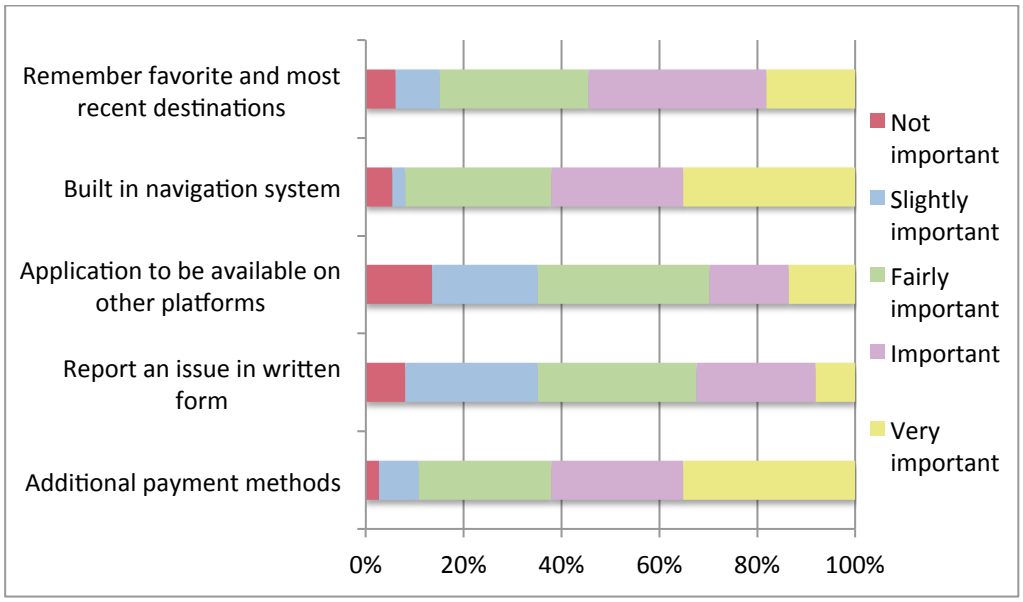
Figure 10 plots the encouraging factors of the purchasing behavior of respondents in a detailed way, as it is based on a five points scale from not being motivational to being extremely important. The three most important factors were the possibility to save costs, a clearer management support as well as high quality vehicles available to rent. The availability of reserved parking spaces for the vehicles were also quite an important factor for the population besides the environmental awareness. However approximately half of the members stated, that they would not participate at all in collaborative car sharing. This might be due to the fact that in the previous question majority of respondents showed, that they are not familiar with the available car rental services. On the other hand within the same question, they have also showed, that they would rather travel with a car instead of using public transportation.

Figure 14: Applications used for travelling purposes



The last part of the survey consisted questions, which were exploring the usage of transportation applications especially the car sharing ones. According to the results all members of the population uses smart phones and almost 90% of them were frequently using any application for travelling purposes. Interestingly, there seems to be an equal distribution among public and collaborative transportation application usage. Figure 11 demonstrates the previously mentioned equality as public transportation applications (ÖBB Scotty, Qando Wien, other categories) were used almost by 47% of the observed group, meanwhile the other 53% were added up by several different collaborative transportation modes, such as Uber, Car2go, DriveNow and etc. These results are clearly indicating, the importance of mobile applications among Millennials as they are the primary information sources for being able to participate in shared transportation. The following question was addressed to highlight the satisfaction level of the population, with respect to these travelling applications. The members of the survey had similar thought on applications just as on the provided service itself. The last two questions objectives were to provide managerial implications, based on the respondents' ideas, which should be added to car sharing services in order to improve their quality. The below Figure 12 visualizes the population's opinion on the importance of different additional services, that could be interpreted in the close future.

Figure 15: Importance of additional services to car sharing services



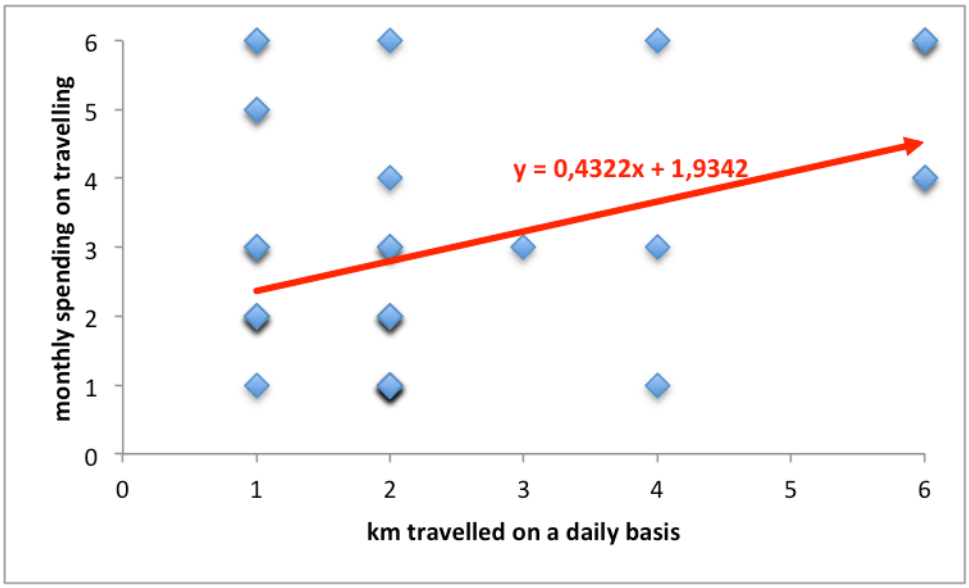
Based on the results, it can be claimed, that the three most important upgrades for the applications would be the possibility to remember their favorite and most recently used destinations, a built in navigation system and as well an additional payment methods such as debit card, PayPal, or traditional cash. Furthermore after evaluating the answers for the last question, two main ideas were arouse most of the time. In particular respondents suggested, that pictures should be uploaded of the drives and their cars and the range of vehicles as well as the number of vehicles available should be increased. These two ideas meet up with the previously observed factors, namely safety and availability, which were among the crucial factors for deciding on a transportation mode among Millennial generation.

4.2 Statistical testing of proposed observations

It has been seen that descriptive statistics provided information, via describing the population under study, in contrast to inferential statistics, which aims to provide a generalized conclusion based on the sample, that reflects to the whole population. It is utilitarian, since it would be impossible to examine each and every member of a population (Surbhi, 2017). Inferential statistics uses several statistical models and within this paper two Chi-x^2 tests and Pearson correlation coefficient were created to draw conclusions from the sample and to make predictions for future outcomes.

The final results are displayed in a form of probability that explains the likelihood of an event to occur (Surbhi, 2017). From the given data with the objective to find a relationship between kilometers travelled on a daily basis and monthly spending on travelling purposes, a Spearman correlation coefficient has been carried out.

Figure 16: Relationship between monthly spending and km travelled



H0: There is no association between the two variables

H1: There is an association between Kilometers travelled by passengers and monthly spending on transportation

The respective correlation provides a positive coefficient (r = 0,39045) indicating that the more they travelled in km, the more the people spent on travelling. This is a moderate uphill relationship; therefore it cannot be completely confirmed by this test, as some outliers are present. The reason behind this moderate relationship can be, that there is no linear relationship among public transportation prices and distances travelled. As an example the cost of a monthly ticket for trains are fixed, while the number of travelling occasions are unlimited. On the other hand, fuel prices are almost perfectly correlating with the exact distance travelled. A visualization of the collected data can be seen above, which shows different categories of grouped results. These groups were based on distance categories and on transportation budget groups. The table below shows a detailed version of it.

Figure 17: Groups based on distance & transportation budget

#	1	2	3	4	5	6
km travelled	Less than 10 km	11 - 20 km	21 - 30 km	31 - 40 km	41 - 50 km	more than 50 km
monthly spending €	€ 0 - 20	€ 21 - 40	€ 41 - 60	€ 61 - 80	€ 81 - 100	more than € 100

To interpret the relationship between the respondent's age and whether they own a car or not two hypotheses have been settled.

Figure 18: Relationship between car ownership and age

	Age					
Car ownership	14 - 18	19 - 23	24 - 28	29 - 33	> 33	Total
Yes	0	10	8	4	3	25
No	0	21	11	1	0	33
Total	0	31	19	5	3	58

	Age					
Car ownership	14 - 18	19 - 23	24 - 28	29 - 33	> 33	Total
Yes	0	13,36	8,19	2,16	1,29	25
No	0	17,64	10,81	2,84	1,71	33
Total	0	31	19	5	3	58

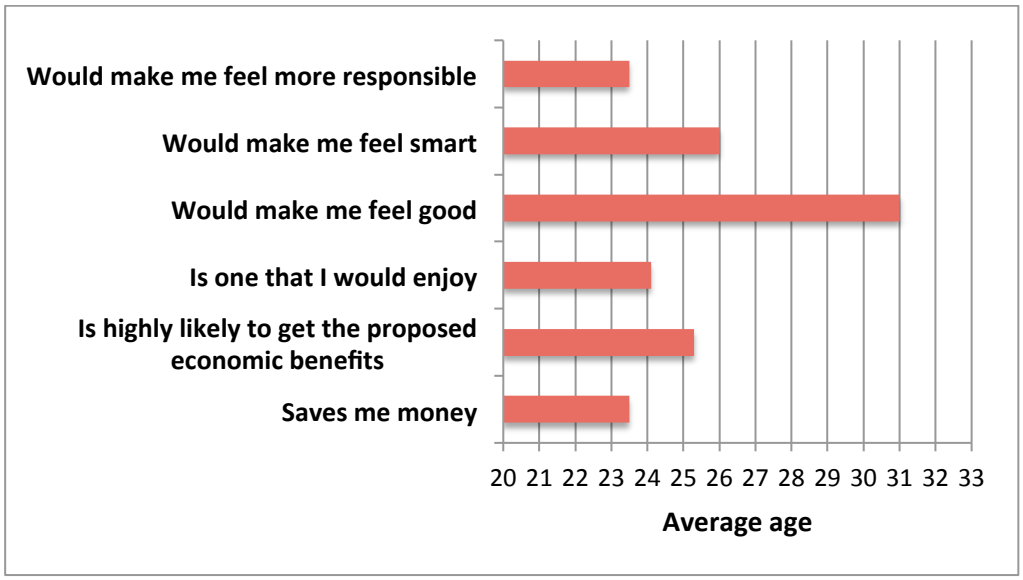
P value:	0,041489221	< 0,05

H0: there is no relationship among the variables

H1: there is a significant relationship between the age of participants and car ownership

A Chi-x^2 test provided relevant information, resulting in p = 0,04 < 0,05, hence H1 is statistically significant. In other words age is coincide with car ownership. Which is a possible reason for that younger people tend to choose public transportation as an alternative way to commute to work or school. This generation is the most relevant target group for new car-sharing business entrants, as their offerings: shared cars can be a substitute for public transport, assuming travelling costs are almost the same regarding the two available options.

Figure 19: Relationship between age and perceived values



The relationship between age and the perceived values of respondents has been also investigated. The table above shows the correlation between average age of participants and the value they have chosen according to personal importance level. Clearly, for people with the highest average age, Hedonic value, like "feeling good" was the most essential. On the other hand younger respondents chose Utilitarian values (money saving and economic benefits) as a major influencing feeling upon thinking about car-sharing options. Consequently, from this information it can be derived that younger individuals tend to unconsciously think about monetary factors, possibly because they do not have a fixed income yet. Therefore they will always pursue more economical solutions, while giving up on the Hedonic values. On the contrary elder generations will act most of the time the other way around, so monetary factors are not the most influential elements anymore. This leads to the conclusion, that younger generation would be interested in car sharing services, as they can travel comfortably with a car and still keep their costs within their budget.

Figure 20: Relationship between car ownership and monthly spending

	Monthly spending for transportation						
Car ownership	€ 0 - 20	€ 21 - 40	€ 41 - 60	€ 61 - 80	€ 81 - 100	more than € 100	Total
Yes	4	1	5	2	4	9	25
No	9	12	5	4	2	1	33
Total	13	13	10	6	6	10	58

	Monthly spending for transportation						
Car ownership	€ 0 - 20	€ 21 - 40	€ 41 - 60	€ 61 - 80	€ 81 - 100	more than € 100	Total
Yes	5,60	5,60	4,31	2,59	2,59	4,31	25
No	7,40	7,40	5,69	3,41	3,41	5,69	33
Total	13	13	10	6	6	10	58

P value:	0,002697808	< 0,05

The following two hypotheses have been proposed to figure out if whether there is an association between monthly spending on transportation and car ownership.

H0: there is no relationship among the variables

H1: there is a significant association between the monthly spending for travelling purposes and car ownership

After carrying out a Chi-x^2 test, the results revealed to be $p = 0{,}0026 < 0{,}05$. Therefore H1 is proved to be statistically significant, which means that there is a strong relationship between the variables. This is due to the fact that the most expensive transportation mode is without doubt via car, as it does not only include fix costs, which is the case with public and active transportation, but variable costs as well (fuel, highway tickets). Variable costs are most of the time significantly higher, as with a car, gas can be divided up among maximum five people. The variable costs for public transportation services are distributed equally among all the participants, therefore it is much lower. It is also worth to mention, that in public transportation the insurance and maintenance of vehicles is yet again included in the price of the ticket, thus it is much cheaper than owning a personal vehicle. Regarding car sharing services, variable costs are the same, but fix costs are yet again shared among the participants within collaborative consumption. Therefore it would still provide the feeling of owning your car, but with reduced expenses.

5 Conclusion

5.1 Answer RQ and link to theory

The target group of the research paper, namely Millennials is the most vital participant within collaborative consumption. This newly emerging market is receiving nowadays much more attention then it used to in the past. Different approaches were used, in order to test a theory and determine the vital value perceptions upon anticipating the purchase intention as well as the attitude of Millennial generation. The second part of the research included relational benefits as a new influencing factor within sharing services. Empathy is also included in the research, since it is an important emotional factor regarding social behavior. Last but not least, perceived consumer effectiveness, which is a personality element of consumers' behavior was added as a moderator. The results of this study that is both theoretical and practical can be applied within collaborative consumption in the following manners. First and foremost, that younger generation's value perception towards sharing economy has a significant importance when it comes to empathy and attitude.

The paper is following the theory of the cognitive hierarchy model by Homer and Kahle (1988), where they have claimed, that positive value relationship can develop either utilitarian (aims for monetary and functional benefits) or hedonic (aims for pleasure and satisfaction) values. However with symbolic value perception it is a different case (Homer and Kahle, 1988). The third value perception, where consumers' aim is to contribute to society and sustainability, increases empathy towards collaborative consumption just as hedonic values.

Taking utilitarian values as main motivational factors as expected a positive relationship between kilometers travelled and monthly spending for travelling purposes was confirmed. This results can indicate, that most of the members of the Millennial generation is still undergoing education, therefore they do not have a fixed income. Thus they have to give up on flexibility and comfort, as it is impossible to give up on utilitarian resources, since they do not own the necessary monetary funds. This is the main reason, why their unconscious feelings led to primarily to

utilitarian values. The test within this study has statistically significant results on the hypothesis of whether there is an association between Kilometers travelled by passengers and monthly spending on transportation. This correlation was tested with the purpose of testing whether monetary factors have a significant role when deciding on transportation methods.

Within this research, where hedonic value perception is important as it plays a crucial role in both empathy and attitude, since it contributes to collaborative consumption with fun, enjoyment and fantasy seeking upon purchasing experience. Therefore the consequence is, that Millennial generation enjoyment and satisfaction upon purchasing a product or service within collaborative consumption, is a significant factor with regard to their attitude and emotional responses. For the purpose of supporting this theory, this study hypothesized, that there is a significant relationship between the age of participants and car ownership. As a statistically significant result confirmed, with higher age people tend to prefer comfort and enjoyment over monetary benefits. It also answers why younger generation, like Millennials would choose public transportation instead of owning a car, as their priority is to save money.
Lastly, symbolic value was also present in the research, as the minority of respondents indicated that they would feel smart or feel more responsible, when engaging in collaborative consumption. Thus overall, hedonic and utilitarian values have a significant role in the process of deciding on daily transportation methods, which could include car sharing options. The first part of the study demonstrates, that Millennials are mainly pursuing utilitarian values, which is due to their financial position. On the other hand emotions and other value perceptions (symbolic and hedonic) appeared to have less impact on the context of collaborative consumption.

The second part of this study mainly focuses on the benefits that sharing economy participants gain from sustaining a long-term relationship. In addition to relational benefits (Confidence, Special treatment, Social), another type of benefits was added to engagement in collaborative consumption, as it has a significant effect on commitment and loyalty. While customer loyalty can be achieved by special treatment benefits within traditional services, like in hotels and restaurants (Yen and

Gwinner, 2003 as cited in Yang, Song, Chen, & Xia, 2016), within sharing economy these types of perks can weaken the relationship, possibly because these services are already custom-made according to consumers' needs. Therefore these special treatment benefits are might not able to deliver that "special" feeling towards the customers within sharing economy (Chen and Hu, 2010 as cited in Yang, Song, Chen, & Xia, 2016). Altogether in the market of collaborative services, customization and special caring are common treatments and rather connected to social factors, than extra ordinary prices or providing superiority to some customers.

Furthermore, commitment serves as a motivational factor with respect to customers' loyalty. Moreover confidence benefit relates to confidence towards the service provider, that he/she is able to immaculately deliver the service or product. On the other hand safety benefits provide the freedom of being worried about the negative outcomes of the engagement in collaborative services. This can be an opportunity for improvements in services for the providers, as it gives an insight to sharing economy businesses. Based on the conclusions from the discussion, it can be stated, that confidence benefits have less impact on commitment in P2P sharing, then the other benefits (social and safety). A minor set of questions were addressed to respondents regarding relational benefits, however further investigation within the topic should take place. Possibly with a further questionnaire based on this subtopic.

Overall, the research question of this study can be answered, by the above mentioned arguments. The question, whether Millennials are interested in car sharing services in Budapest can be approved by the generalized results on this particular topic. The car sharing service marketers in the Hungarian capital city should focus on the Millennial generation, as they are the main consumer group within collaborative consumption. Also it would be beneficial to get a broader overview about their value perceptions and motivational factors regarding different kinds of benefits offered by car sharing service providers.

5.2 Managerial implications

It was in the scope of this paper, to find the missing gaps between sharing economy services and the Millennial generation. It was also revealed in the current study that the most significant motivational factors from the young generation's side towards

the car sharing market. These above mentioned findings would assist managers to win new customers from the most adoptive generation. The biggest challenge for all the marketers is to find the most suitable communication channel to reach customers in the most efficient way, hereby to increase people's positive attitude towards their service. Based on the findings of this paper, one way to raise customers' purchase intention is by emphasizing utilitarian benefits, which includes monetary and practical advantages. Besides that, hedonic benefits, such as enjoyment and pleasure of car sharing should be also communicated to customers. Marketers should focus on producing advertisements, which are emphasizing these values to the customers, for example via highlighting the cost saving benefits of car sharing as it is promoting the usage of shared vehicles, thus it costs less. On the other hand hedonic value based advertisement would concentrate on the fun part of car sharing, as it allows customers to enjoy different types of luxurious vehicles, which normally would not be possible for them. An advertisement that consists both of the values, would attract a higher number of Millennials with improved empathy towards sharing services, therefore improve collaborative consumption companies' sales.

It is also important to mention, that marketers should pay more attention to the symbolic value regarding sharing services. These days it is gaining more popularity to consume environmentally friendly good and services as it contributes to the environment in a positive way. Therefore collaborative consumption service providers should include this value, in order to gain more participants for their services as those values are able to increase empathy towards their provided services.

Consistent with the previous findings, relational benefits originated from P2P relationships are vital for the future participation in sharing consumption. During the positioning process of sharing services, companies have to draw attention to confidence, social and safety benefits. Based on the discussion within this study, these benefits are crucial elements for service providers to achieve the loyalty of the consumers. One of the biggest concerns of sharing transportation travellers is connected with safety benefits, as the system is not strictly regulated compared to traditional services. There are numerous examples for improving the safety of

sharing services, such as ensuring customers that service providers are regulated and licensed. Moreover a continuously updated database, containing the service providers' general data alongside approved pictures could create positive feelings in the customers, which result in the overall feeling of safety (Solove, 2007; Masum and Tovey, 2011 as cited in Yang, Song, Chen, & Xia, 2016).

Previously discussed special treatment benefits are less important in sharing economy, as they are already customized services. Consequently companies who attempt to still attract customers via offering this benefit, are most likely to invest more, then the amount of revenues gained from these benefits. Customers who choose this service, due to the additional benefit, will only remain loyal until these advantages are still available and as soon as it comes to an end, they will also leave the company behind. Accordingly the other three benefits (confidence, social and safety benefit) should be in the center of attention, when the service systems are positioned and advertising campaigns are created.

5.3 Research limitation and future research

During the process of conducting the research paper, it became obvious, that the study faces several limitations, thus further researches should take place, with the intention of understanding Millennials influencing factors towards deciding on collaborative consumption services. In the current study several values like hedonic, symbolic and utilitarian have been discussed as well as derived benefits, commitment and customer loyalty upon utilizing sharing businesses' offerings. In these days, sharing economy participants' are continuously changing their perceived values, therefore a wider and more detailed version of this study should investigated these motivational factors. Right after these viewpoints are carried out, the Millennials motivational drivers towards car sharing can be determined more accurately. With respect to collaborative consumption, those people who do not have a core understanding and they still believe that they do, it can lead to misunderstandings resulting in completely different value perceptions (Alba and Hutchinson, 2000). Furthermore to gain a more comprehensive picture of the whole society, older generations besides the Millennials should be included in the research. Along this extension of the study, the customers' habits can be discerned by examining their receptivity and purchase intention towards collaborative services. A

Global scale research with larger scale samples would be beneficial as the differences among developed and developing countries can be further investigated, since according to previous studies developed countries tend to be less caring for their environment (Greendex, 2014).

Additional attention has to be paid on the importance of collaborative platforms or mobile phone applications (Car2Go, GreenGo, Uber, etc.) since they are the bridge between the participants. As these platforms are the first thing for the customers to interact with, it is already crucial, that they will find it appealing and gain their trust. These platforms are the primary locations where customers and service providers establish long-term commitment. This current research only focuses on the engagement between customers and service providers, leaving out the important role of connecting platforms. Therefore further researches should be undertaken, with a focus on sharing platforms. The previously mentioned extensions for further researches would be adequate, as they would allow researchers to better understand and explore the relationships between market participants and the benefits received when it comes to collaborative consumption.

Bibliography

Alba, J. W., & Hutchinson, J. W. (2000). Knowledge Calibration: What Consumers Know and What They Think They Know. Journal of Consumer Research, 27(2), 123-156. doi:10.1086/314317

Bird, R. B., & Smith, E. (2005). Signaling Theory, Strategic Interaction, and Symbolic Capital. Current Anthropology, 46(2), 221-248. doi:10.1086/427115

Bitner, M. J. (1995). Building Service Relationships: Its all about Promises. Journal of the Academy of Marketing Science, 23(4), 246-251. doi:10.1177/009207039502300403

Bondorová, B., & Archer, G. (2017, June). Does sharing cars really reduce car use? Retrieved from https://www.transportenvironment.org/sites/te/files/publications/Does-sharing-cars-really-reduce-car-use-June 2017.pdf

Botsman, R., & Rogers, R. (2010). Whats mine is yours: The rise of collaborative consumption. New York: Harper Business.

Çelikdemir, D. Z., & Tukel, I. (2015). Incorporating Ethics into Strategic Management with Regards to Generation Ys view of Ethics. Procedia - Social and Behavioral Sciences, 207, 528-535. doi:10.1016/j.sbspro.2015.10.123

Dagger, T. S., David, M. E., & Ng, S. (2011). Do relationship benefits and maintenance drive commitment and loyalty? Journal of Services Marketing, 25(4), 273-281. doi:10.1108/08876041111143104

Davis, B. & Dutzik, T. (2012). Transportation and the New Generation: Why young people are driving less and what it means for transportation policy. Retrieved from.https://uspirg.org/sites/pirg/files/reports/Transportation%20&%20the%20New%20Generation%20vUS_0.pdf

Deloitte. (2017, June). Car Sharing in Europe: Business Models, National Variations and Upcoming Disruptions. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/de/Documents/consumer-industrial-products/CIP-Automotive-Car-Sharing-in-Europe.pdf

DeVault, G. (2018, March 26). How to Build a Better Representative Sample. Retrieved from https://www.thebalancesmb.com/what-is-a-stratified-random-sample-2296943

Erdő-Bonyár, K. (2018, March 14). Carsharing services on the rise in Budapest. Retrieved from https://dailynewshungary.com/carsharing-rise-budapest/

Escalas, J. E., & Stern, B. B. (2003). Sympathy and Empathy: Emotional Responses to Advertising Dramas. Journal of Consumer Research, 29(4), 566-578. doi:10.1086/346251

Greendex (2014). Consumer Choice and the Environment. Retrieved from https://images.nationalgeographic.com/wpf/mediacontent/file/NGS_2014_Greendex_Highlights_FINAL-cb1411689730.pdf

GreenGo launches e-car sharing in Budapest. (2016, November 22). Retrieved from https://bbj.hu/business/greengo-launches-e-car-sharing-in-budapest_125124

GreenGo: An e-carsharing service launched in Budapest. (2017, July 20). Retrieved from https://dailynewshungary.com/greengo-e-carsharing-service-launched-budapest/

Gwinner, K. P., Gremler, D. D., & Bitner, M. J. (1998). Relational Benefits in Services Industries: The Customers Perspective. Journal of the Academy of Marketing Science, 26(2), 101-114. doi:10.1177/0092070398262002

Hartl, B., Hofmann, E., & Kirchler, E. (2016). Do we need rules for "whats mine is yours"? Governance in collaborative consumption communities. Journal of Business Research, 69(8), 2756-2763. doi:10.1016/j.jbusres.2015.11.011

Homer, P. M., & Kahle, L. R. (1988). A structural equation test of the value-attitude-behavior hierarchy. Journal of Personality and Social Psychology, 54(4), 638-646. doi:10.1037//0022-3514.54.4.638

Howe, N., & Strauss, W. (2000). Millennials rising: The next great generation /by Neil Howe? cartoons by R.J. Matson. New York: Vintage Books

Hwang, J., & Griffiths, M. A. (2017). Share more, drive less: Millennials value perception and behavioral intent in using collaborative consumption services. Journal of Consumer Marketing, 34(2), 132-146. doi:10.1108/jcm-10-2015-1560

Itt a GreenGo, Budapest első e-carsharing szolgáltatása! (n.d.). Retrieved from https://www.greengo.hu/index.html

Jenn, A., Laberteaux, K., & Clewlow, R. (2018). New mobility service users perceptions on electric vehicle adoption. International Journal of Sustainable Transportation, 1-15. doi:10.1080/15568318.2017.1402973

Jiyoung Hwang, Merlyn A. Griffiths: Share more drive less…Millennials value perception and behavioral intent in using collaborative consumption services (2017)

Juhász, M., Mátrai, T., & Kerényi, L. S. (2014). Changes in Travel Demand in Budapest During the Last 10 Years. Transportation Research Procedia, 1(1), 154-164. doi:10.1016/j.trpro.2014.07.016

Keeble, J. (2013, April 18). Young consumers hold the key to sustainable brands. Retrieved from https://www.theguardian.com/sustainable-business/young-consumers-key-sustainable-brands

Mátrai, T., & Tóth, J. (2016). Comparative Assessment of Public Bike Sharing Systems. Transportation Research Procedia, 14, 2344-2351. doi:10.1016/j.trpro.2016.05.261

Möhlmann, M. (2015). Collaborative consumption: Determinants of satisfaction and the likelihood of using a sharing economy option again. Journal of Consumer Behaviour, 14(3), 193-207. doi:10.1002/cb.1512

Mostafa, M. M. (2007). Gender differences in Egyptian consumers? green purchase behaviour: The effects of environmental knowledge, concern and attitude. International Journal of Consumer Studies, 31(3), 220-229. doi:10.1111/j.1470-6431.2006.00523.x

Patterson, P. G., & Smith, T. (2001). Relationship benefits in service industries: A replication in a Southeast Asian context. Journal of Services Marketing, 15(6), 425-443. doi:10.1108/eum0000000006098

Rebell, B. (2015, July 14). Sharing Economy Will Grow Old for Millennials Who Want to Buy | Money. Retrieved from http://time.com/money/3957652/sharing-economy-millennials/

Rucker, M. (2017, May 01). How to Determine the Sample Size for Your Study. Retrieved from https://unstick.me/determine-the-sample-size-study/

Sheldon, K. M. (1996). Social Awareness Inventory. PsycTESTS Dataset. doi:10.1037/t63414-000

Surbhi, S. (2017, September 09). Difference Between Descriptive and Inferential Statistics (with Comparison Chart). Retrieved from https://keydifferences.com/difference-between-descriptive-and-inferential-statistics.html

Veloutsou, C., & Mcalonan, A. (2012). Loyalty and or disloyalty to a search engine: The case of young Millennials. Journal of Consumer Marketing, 29(2), 125-135. doi:10.1108/07363761211206375

Yang, S., Song, Y., Chen, S., & Xia, X. (2016). Why are Customers Loyal in Sharing-Economy Services? A Relational Benefits Perspective. Journal of Services Marketing. doi:10.1108/JSM-01-2016-0042

Appendices

Appendix 1: Shared Mobility Survey

Shared mobility habits

This survey serves as a primary research and it is a part of my Bachelor thesis. The following questionnaire aims to measure the different attitudes and habits towards shared mobility. More precisely to examine the trends, awareness and the level of satisfaction towards car sharing in the major cities.
The focus of this survey is on companies such as Car2go or DriveNow, where customers are able to rent cars via an application and search for available vehicles in their vicinity.
This questionnaire should take no longer than 10 minutes. Be assured that all answers that you provide will be kept in the strictest confidentiality.
Thank you for your time in completing this questionnaire.

* Required

1. **1. What is your nationality? ***

_____

2. **2. What is your gender? ***
   Mark only one oval.

   ◯ Male
   ◯ Female
   ◯ Other: _____

3. **3. How old are you? ***
   Mark only one oval.

   ◯ 14 - 18
   ◯ 19 - 23
   ◯ 24 - 28
   ◯ 29 - 33
   ◯ >33

4. **4. What is the highest degree you have completed? If currently enrolled, highest degree received.**
   Mark only one oval.

   ◯ Did Not Complete High School
   ◯ High School
   ◯ Bachelor's Degree
   ◯ Master's Degree
   ◯ Advanced Graduate work or Ph.D.
   ◯ Other: _____

5. **5. What is your current employment status?**
Mark only one oval.

- ◯ Employed full time (40 or more hours per week)
- ◯ Employed part time (up to 39 hours per week)
- ◯ Unemployed and currently looking for work
- ◯ Unemployed and currently not looking for work
- ◯ Student
- ◯ Retired
- ◯ Self-employed
- ◯ Other: _____

6. **6. Do you own a car?**
Mark only one oval.

- ◯ Yes
- ◯ No

7. **7. Do you use other modes of transportation? If so please indicate how frequently you use them:**
Mark only one oval per row.

	Never	Very Rarely	Occasionally	Frequently	Very Frequently
Car sharing	◯	◯	◯	◯	◯
I use my own car	◯	◯	◯	◯	◯
Public transport (Bus, Subway, Tram)	◯	◯	◯	◯	◯
Bike	◯	◯	◯	◯	◯
Uber	◯	◯	◯	◯	◯
Train	◯	◯	◯	◯	◯
Taxi	◯	◯	◯	◯	◯
Motorcycle	◯	◯	◯	◯	◯

8. **8. Main reason for choosing your mode of transportation (please rank them on the scale)**
Mark only one oval per row.

	Not Important	Slightly Important	Moderately Important	Important	Very Important
Cost	◯	◯	◯	◯	◯
Distance	◯	◯	◯	◯	◯
Environment	◯	◯	◯	◯	◯
No other feasible option	◯	◯	◯	◯	◯
Health	◯	◯	◯	◯	◯
Reliability	◯	◯	◯	◯	◯
Speed / time of journey	◯	◯	◯	◯	◯
Family needs	◯	◯	◯	◯	◯
Personal space / preference	◯	◯	◯	◯	◯
Independence / Flexibility	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯

9. **9. How much do you travel usually on a daily basis? (in kilometers)**
Mark only one oval.

- Less than 10 km
- 11-20 km
- 21-30 km
- 31-40 km
- 41-50 km
- more than 50 km

10. **10. How much do you usually spend monthly for daily transportation use? (in euros)**
Mark only one oval.

- 0 -20
- 21-40
- 41-60
- 61-80
- 81-100
- more than 100

11. **11. On a scale of 1 to 5, please indicate how (1 - very much, 5- not at all)**
Mark only one oval per row.

	1	2	3	4	5
familiar you are with the available car rental services					
likely you are to rent a car for your journeys within a major city					
satisfied you are with the range of car rental services					
you prefer cars over public transport					

12. **12. Which of the following would encourage you to use car sharing more frequently (please rank them on the scale)**
Mark only one oval per row.

	Not at all	Slightly	Moderately	Very	Extremely
Cost saving					
Reserved parking space for the rented car					
High quality vehicles available					
Clear management support (from the car rental company)					
Nothing, I would not rent a car					
Environmental awareness					

13. **13. To me, the car sharing service...(Please choose the most relevant ones)**
Check all that apply.

- [ ] Saves me money
- [ ] Is highly likely to get the proposed economic benefits
- [ ] Is one that I would enjoy
- [ ] Would make me feel good
- [ ] Would make me feel smart
- [ ] Would make me feel more responsible

14. **14. How would you describe your general attitude towards car sharing company's service?**
Mark only one oval.

	1	2	3	4	5	
Very dissatisfied	◯	◯	◯	◯	◯	Very satisfied

15. **15. Do you use a smart phone?**
Mark only one oval.

- ◯ Yes
- ◯ No

16. **16. Do you use any application on your phone for traveling purposes?**
Mark only one oval.

- ◯ Yes
- ◯ No

17. **17. If yes, which of the following applications do you use?**
Check all that apply.

- [ ] Qando Wien
- [ ] ÖBB Scotty
- [ ] Uber
- [ ] Bicycle rental application (Citybike, O-Bike, Ofo)
- [ ] Car2go
- [ ] DriveNow
- [ ] BlaBlaCar
- [ ] Taxi
- [ ] Other: _____

18. **18. On a scale of 1 to 5 please indicate how satisfied you are with car sharing applications in general?**
Mark only one oval.

	1	2	3	4	5	
Very dissatisfied	◯	◯	◯	◯	◯	Very satisfied

19. **19. Which of the following services would you like to be added to car sharing applications? (Please rank them on the scale)**
Mark only one oval per row.

	Not important	Slightly important	Fairly important	Important	Very important
Additional payment methods(Debit card, PayPal, etc)					
Report an issue in a written form					
Application to be available on other platforms (Tablets, Smartwatches, etc)					
Built in navigation system					
Remember favorite and most recent destinations					

20. **20. What would you recommend for a car sharing company, upon starting in the capital city of Hungary, Budapest ?**

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