

CONSUMER ATTITUDES TOWARDS THE POSSIBILITIES OF DEVELOPING SHARING ECONOMY IN TOURISM IN SERBIA

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Abstract

In developed countries, the importance and development of sharing economy in tourism, as a new economic model in tourism, has been increasingly discussed in recent decades. In our country, sharing economy in tourism has not yet been sufficiently explored in official reports and academic literature. On the other hand, in practice, there are several collaborative platforms used to search, book and pay for accommodation that consumers in Serbia use. Therefore, the purpose of this paper is to assess the situation and identify opportunities for developing a sharing economy in tourism in Serbia, from a consumer point of view, based on experience in developed countries. In the paper an empirical survey was conducted, using a survey method, on a sample of 500 respondents. The results obtained gave an insight into the extent to which consumers in Serbia participate in the sharing economy in tourism, which factors influence their satisfaction with using collaborative platforms and what the opportunities and challenges of participating in sharing economy in tourism are.

Key Words: *consumer, attitudes research, sharing economy, collaborative economy, tourism, ICT*

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Introduction

"Tourism services have traditionally been provided by businesses such as hotels, taxis or tour operators. Recently, a growing number of individuals are proposing to share temporarily with tourists what they own (for

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example their house or car) or what they do (for example meals or excursions). This type of sharing is referred to as the "sharing economy". It is not limited to tourism and can be found in many areas of social and economic activity, although tourism has been one of the sectors most impacted" (Juul, 2017, p. 1). Sharing economy (also referred to as collaborative economy, peer to peer economy or collective consumption) is a term that is defined in different ways in literature and practice. According to the definition of European Commission (2016, p. 3.) "sharing economy refers to business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals.

The sharing economy involves three categories of actors: (1) service providers who share assets, resources, time and/or skills – these can be private individuals offering services on an occasional basis ('peers') or service providers acting in their professional capacity ("professional services providers"); (2) users of these; and (3) intermediaries that connect – via an online platform – providers with users and that facilitate transactions between them ('collaborative platforms'). Sharing economy transactions generally do not involve a change of ownership and can be carried out for profit or not-for-profit."

Considering the impact that the development of sharing economy has on tourism in developed countries, as well as the estimates that the participation of sharing economy will be increasing in relation to the traditional economic model, in this paper we have provided an overview of current research conducted in developed countries. We focused on the opportunities and challenges that developed countries have already faced in sharing economy within tourism, as well as on consumer behavior research that they have been undertaking. Then, based on their experience, we created a questionnaire and through a pilot project we carried out a survey of consumer attitudes towards the possibilities of developing sharing economy in tourism in Serbia.

The purpose of this paper is to assess the situation and identify opportunities for developing a sharing economy in tourism in Serbia, from a consumer point of view, based on experience in developed countries. The aim is to get an insight into the extent to which consumers in Serbia participate in the sharing economy in tourism, which factors influence their satisfaction with using collaborative platforms and what the opportunities and challenges of participating in sharing economy in tourism are. Finally,

the aim is to conclude is there a potential for the development of the sharing economy in tourism in Serbia.

Literature review

"Within the EU the five main sectors of the sharing economy generated nearly EUR 4 billion in revenues and facilitated USD 28 billion in transactions in 2015, exceeding earlier expectations of growth" (OECD, 2019, p.17). In the tourism sector peer-to-peer services offer an alternative to professional tourism services on an unprecedented scale (Table 1). "As a result, some travel and tourism services, such as traditional hotel and car rental, may see new models disrupt, transform, or even replace, entire sectors of the industry" (OECD, 2016, p.91).

Table 1: *Examples of tourism-related sharing economy platforms in numbers*

Platform	Number of users	Value	Scope
<i>Accommodation</i>			
Airbnb (short-term accommodation rental and travel experiences platform, founded in 2008)	More than 2.5 million listings, 100 million guests since its founding as of January 2017	US\$30 billion (in August 2016)	In more than 191 countries (in January 2017)
Homeaway (vacation rental platform, founded in 2005)	Over 1.2 million listings (in January 2017)	US\$3.9 billion (in November 2015)	In 190 countries (in January 2017)
<i>Transport</i>			
Uber (short-distance ridesharing platform, founded in 2009)	40 million monthly active riders (in October 2016)	US\$68 billion (in August 2016)	In more than 70 countries (in September 2016)
BlaBlaCar (long distance ride-sharing platform, founded in 2006)	35 million users, 12 million travellers per quarter (in January 2017)	US\$1.6 billion (in September 2015)	In 22 countries (in January 2017)
<i>Dining</i>			
VizEat (platform for cooking classes, food tours and dinners, founded in 2013)	More than 120 000 members (in January 2017)	€3.8 million (in September 2016)	In 110 countries (in January 2017)
EatWith (shared dining platform, founded in 2012)	650 hosts, 80 000 seats filled since its founding as of January 2017	Valuation figure unavailable (received US\$8 million in recent funding rounds)	In 50 countries (in January 2017)

<i>Travel experiences</i>			
Vayable (personal tours and travel experiences platform, founded in 2011)	Does not disclose total number of users	Valuation figure unavailable (received US\$2.1 million in recent funding rounds)	International (does not disclose total number of countries where it is active)
ToursByLocals (private tours platform, founded in 2008)	1 905 guides (in January 2017)	Valuation figure unavailable	In 155 countries (in January 2017)

Source: *Juul, 2017.*

"Sharing economy is growing and it brings many benefits and challenges regarding the national and international tourism. Such as, a change in the consumption pattern and customer perception, competition growth by lower prices and alternative accommodation, increased social welfare, new jobs, fulfilling a variety of customer needs, encouraging small entrepreneurs, better communication and collaboration between consumers and providers, increased quality, knowledge of other cultures, traditions, habits, innovative technologies and so on" (Onete et al., 2018, p. 1010). "Critics, on the other hand, claim that the sharing economy provides unfair competition, reduces job security, avoids taxes and poses a threat to safety, health and disability compliance standards" (Juul, 2017, p. 1). World bank group (2018, p. 24) point out the main opportunities of peer to peer accommodation: "Helps attract new markets and demographics to new and existing destinations; Influences the type and nature of visitor purchases and services; Builds consumer trust to visit a destination in new ways and try new products; Lowers the barriers to entry for entrepreneurship; Supports homeowners and helps prevent displacement; Enables the dispersion of tourists in a wider geographical area; Increases access to market, which is particularly helpful for community-based homestays; Provides flexible inventory to meet the rise and fall of demand and assists in times of crisis; Has a relatively small environmental footprint and Collects real-time data about visitors. The main challenges according to its research are: "May be unregistered and unregulated; May not be following tax laws; Can cause disturbances in a residential community; May cause housing prices and rents to increase; May put visitors at higher risk; May impact the job-intensive hotel sector; May benefit only a small minority; Providers lack organization and representation; Contributes to the impact of "overtourism" and Internationally located P2P platforms divert income that would otherwise be earned locally".

Vary and Ilić (2017, p. 391) emphasize the importance of the branding of the country for the tourism promotion. They point out that countries can be positioned or distinguished from various aspects, including: "characteristic architecture; unique sights; natural environment; weather; history; legend; culture; event; cuisine; wine; people; celebrity, night life, sport, scientific achievement etc". All these aspects become even more important if taking into consideration the opportunities and challenges which sharing economy brings with. Ćirić et al. (2014, p. 26) emphasized that the "Republic of Serbia nowadays has only comparative advantages in tourism, but the process of the transformation from comparative advantages to actual competitive advantages in the tourism of the Republic of Serbia is the part of overall reform processes". Hotels in Serbia are facing the additional pressure of growing competition in the world tourist market, so they have to make significant efforts to improve their business, retain existing customers and attract new ones.

Barbu et al. (2018, p. 374) investigated to what extent the sharing economy leads to a change in consumers' mentalities and behavior so as to bring about a fundamental change of paradigm, namely the transition from an economy based on ownership of goods to an economy based on the shared-use of goods and services. They concluded that can be expected that some consumers will move towards a consumption model based on access and not on ownership. According to them, "the factors that sustain the consumers' mindset and behavior shift are primarily satisfaction and intention, supported by the ease of use, trust, savings and utility". Hamari et al. (2015, p. 2056) found out that "the positive attitude toward sharing services can be predicted by the sustainability and enjoyment of these services, while the behavioral intention to access sharing services can be predicted by the enjoyment and economic benefits of these services". Brozović et al. (2019. p. 51) state that "the main motives for participating in a sharing economy be it users or providers are: saving money, an easy way to earn more, preserve the environment and build a stronger community". On the other hand, Wallenstein and Shelat (2017) find out that the principal reason customers find sharing services useful is that they provide great economic value. The two other main advantages are that the customer knows what he or she is getting and can trust the service because of ratings and reviews. Besides, variety, access to better products and services, and the ability to have a unique experience were very important reasons that attract customer to sharing economy. Reducing their carbon footprint and connecting with interesting people ranked lower. Consumers who do not use sharing services cited three main reasons: they enjoy the

convenience of ownership; they do not trust the reliability of sharing platforms that they have never used before; and they are uncomfortable sharing payment information.

According to a survey conducted in 2015 (Brozović et al., 2019, p. 51), "32% of respondents in Europe were aware of the concept of a sharing economy and only 5% of them participated in sharing economy". However, what should be pointed out is that approximate a third of Europeans believed that they would participate more in the sharing economy in the next year, while the largest increase in consumption in the sharing economy was expected by those younger than 35 years. Just one year later a Flash Eurobarometer 438 (2016) survey showed strong consumer interest in the sharing economy: 52% of respondents were aware of the services of sharing economy platforms and 17% had used such services at least once. Respondents aged between 25 and 39 years (27%) and those who finished education aged 20 years or over (27%) were most likely to use these platforms. They find out that young people (millennials) are most likely to engage in certain forms of collaborative consumption. The similar results got Treapăt, et al. (2018) in their research. According to the report of World Bank group (2018, p. 22) "millennial guests dominate certain types of P2P accommodation. Sixty percent of all guests who book on Airbnb are between the ages of 18 and 35".

"The new approach which has overshadowed in the world of production and trade is based on consumer and his requirements" (Ilić & Tešić, 2016, p. 1158). "The essence of successful marketing is precisely the knowledge of consumer behavior in order to create appropriate marketing strategy and marketing mix, and to adequately meet the needs and desires of consumers" (Ćirić et. al., 2015, p. 629). For such reason, in the exploration of possibilities and challenges to develop sharing economy in tourism of the Republic of Serbia, we started from the consumer's point of view.

Research metod

Quantitative research has been applied to the research of consumer attitudes, in order to carry out statistical analysis and to generalize the obtained results on broader population. The applied method was the survey, and the instrument through which the survey is conducted was questionnaire that was not standardized, but it had been purposely created for this survey. The questionnaire consists of 26 questions. The questions were divided into four sections. In the first section, 5 questions were put to

give an answer if the consumers in Serbia are aware of concept of sharing economy in tourism and if they participated in it. In the second section the group of 7 questions gives an insight into the consumer satisfaction with the use of collaborative platforms, and the factors that influence consumer satisfaction. In the third section 12 questions were created to get an insight into the opportunities and challenges of participating in sharing economy in tourism, from the consumer point of view. In the fourth section 2 questions were put to get the main demographic information about respondents. The research was conducted on the territory of Vojvodina. The time interval in which the survey was carried out was the January and February 2020. In the research that Flash Eurobarometer 438 (2016. p.2) carried out in "28 Member States of the European Union, 14,050 respondents from different social and demographic groups" participated. Having in mind that our research was carried out only in one country, we decided to do a pilot project and question 500 respondents. So, the research sample represents 500 randomly selected respondents. Random selection method was used to select a representative sample. After rejecting the incomplete questionnaires, we received a final sample of 482 respondents. The data was analyzed by using the statistical software STATISTICA. The methods used were the descriptive statistics, Chi-square test and Pearson coefficient of correlation.

Research results and discussion

Research results are expressed in counts and percentages and displayed in tabular form.

Table 2: *Consumer awareness of the concept of sharing economy*

Question	Answer	Count	Percent
Are you familiar with the concept of sharing economy, Collaborative economy, Peer to peer economy, Collaborative consumption?	Yes	201	41.70
	No	281	58.30

Source: *Created by the authors based on survey*

Of the total number of respondents, 41.70% are familiar with the term of sharing economy. The result is not high, but not far behind the Flash Eurobarometer 438 (2016, p. 5), according to which 52% of respondents in Europe are familiar with the concept of sharing economy.

Table 3: *Consumer use of collaborative platforms for participation in sharing economy in tourism*

Question	Answer	Count	Percent
Have you ever used any of the platforms for participation in the sharing economy in tourism such as www.airbnb.com, www.uber.com, etc.?	Yes	411	85.26
	No	71	14.73

Source: *Created by the authors based on survey*

The result that 85.26% of respondents used one of the collaborative platforms to participate in the sharing economy in tourism is unexpected given that it is very high. It can be observed that twice as many respondents use platforms to participate in the sharing economy than is familiar with the term itself. That is opposite from the obtained results in the literature (Brozović et al., 2019), (Flash Eurobarometer 438, 2016), where the consumer awareness of sharing economy was higher than their participation in sharing economy. This can be explained by the fact that the concept of sharing economy is still extremely modestly represented in official legal acts and reports, as well as in the academic literature in Serbia, while the use of smartphones and the use of various applications is rising rapidly year by year.

Table 4: *Consumer use of collaborative platforms in sharing economy in tourism in four main sectors*

Type of service	Question	Answer	Count	Percent
Accommodation	Have you ever rented accommodation through collaborative platforms such as www.booking.com, www.Airbnb.com, www.Expedia.com?	Yes	355	73.65
		No	127	26.35
Transport	Have you ever rented a car, bicycle, trotinet, taxi using collaborative platforms such as www.uber.com, CarGo?	Yes	135	28.01
		No	347	71.99
Dining	Have you ever used coolaborative platforms through which you can order food or schedule "food tours" in restaurants such as www.eatwith.com, www.donesi.com?	Yes	265	54.98
		No	217	45.02
Travel experiences	Have you ever used collaborative platforms through which you can organize personalized tourist tours in different cities in the world such as www.contexttravel.com, www.toursbylocals.com?	Yes	45	9.34
		No	437	90.66

Source: *Created by the authors based on survey*

By analyzing the types of services that are mostly used with the help of collaborative platforms in the sharing economy in tourism, we can conclude that accommodation rental services are convincingly dominant. That is in accordance with the results that Juul (2017) presented. Namely, 73.65% of respondents used one of the collaborative platforms to rent accommodation. A significant percentage of respondents, 54.98% of them, used platforms for ordering food and scheduling food tours, which stems from the fact that such applications are more common in Serbia, so consumers tend to use them more often.

Table 5: Differences in consumer use of collaborative platforms in sharing economy in tourism in four main sectors, influenced by gender

Type of service	Question	Gender	Answer	Count	Percent	Chi-square test
Accommodation	Have you ever rented accommodation through collaborative platforms such as www.booking.com, www.Airbnb.com, www.Expedia.com?	Male	Yes	164	94.25	χ^2 =16.6617 Df=1 p=0.05
			No	10	5.75	
		Female	Yes	190	80.17	
			No	47	19.83	
Transport	Have you ever rented a car, bicycle, trotinet, taxi using collaborative platforms such as www.uber.com, CarGo?	Male	Yes	55	31.61	χ^2 =0.2095 Df=1 p=0.05
			No	119	68.39	
		Female	Yes	80	33.76	
			No	157	66.24	
Dining	Have you ever used collaborative platforms through which you can order food or schedule "food tours" in restaurants such as www.eatwith.com, www.donesi.com?	Male	Yes	114	65.52	χ^2 =0.0839 Df=1 p=0.05
			No	60	34.48	
		Female	Yes	152	64.13	
			No	85	35.87	
Travel experiences	Have you ever used collaborative platforms through which you can organize personalized tourist tours in different cities in the world such as www.contexttravel.com, www.toursbylocals.com?	Male	Yes	25	14.37	χ^2 =3.6174 Df=1 p=0.05
			No	149	85.63	
		Female	Yes	20	8.43	
			No	217	91.56	

Source: *Created by the authors based on survey*

When it comes to renting transport vehicles, we can state that this percentage is less than a third of the total number of respondents. Namely,

28.01% of them used such platforms. According to Juul (2017) consumers in Europe use collaborative platforms in transportation sector more than in the dining sector. Our results are different. This is again in line with the fact that platforms in transportation sector are not adequately regulated in Serbia, they are less present on the market and therefore, their use is less in relation with accommodation and dining services. Only 9.34% of the respondents used the platforms intended for organizing personal tourist tours. Although relatively low, this data is higher than our expectations given that such platforms are poorly known in Serbia and only few are present on the market.

Table 6: *Differences in consumer use of collaborative platforms in sharing economy in tourism in four main sectors, influenced by age*

Type of service	Question	Age	Answer	Count	Percent	Chi-square test
Accommodation	Have you ever rented accommodation through collaborative platforms such as www.booking.com, www.Airbnb.com, www.Expedia.com?		Yes	285	89.06	$\chi^2 = 9.5721$ Df=2 p=0.05
		18-40	No	35	10.94	
		41-60	Yes	55	78.57	
		60	No	15	21.43	
		Over 60	Yes	15	71.43	
			No	6	28.57	
Transport	Have you ever rented a car, bicycle, trotinet, taxi using collaborative platforms such as www.uber.com, CarGo?	18-40	Yes	110	34.38	$\chi^2 = 6.5538$ Df=2 p=0.05
			No	210	65.62	
		41-60	Yes	15	21.43	
		60	No	55	78.57	
		Over 60	Yes	10	47.62	
			No	11	52.38	
Dinning	Have you ever used collaborative platforms through which you can order food or schedule "food tours" in restaurants such as www.eatwith.com, www.donesi.com?		Yes	230	71.88	$\chi^2 = 35.5359$ Df=2 p=0.05
		18-40	No	90	28.12	
		41-60	Yes	25	35.71	
		60	No	45	64.26	
		Over 60	Yes	10	47.62	
			No	11	52.38	
Travel experiences	Have you ever used collaborative platforms through which you can organize personalized tourist tours in different cities in the world such as www.contexttravel.com, www.toursbylocals.com?	18-40	Yes	40	12.5	$\chi^2 = 4.4115$ Df=2 p=0.05
			No	280	87.5	
		41-60	Yes	5	7.14	
		60	No	65	92.85	
		Over 60	Yes	0	0	
			No	21	100	

Source: *Created by the authors based on survey*

Of the total sample of 482 respondents, 411 answered that they had used collaborative platforms to participate in the sharing economy. So we analyzed the difference in demographic characteristics only for those respondents who used some of the collaborative platforms. According to the results of Chi-square test, there is a statistical significant difference between men and women in using collaborative platforms for renting accommodation. Although both men and women use collaborative rental platforms in a high percentage, the percentage of men is higher 94.25% while the percentage of women who use them is 80.17%. This gender difference in consumer behavior is very important when creating an internet marketing strategy to attract new customers. When analyzing the degree of the use of transport, dining services, and services for organizing travel experience across collaborative platforms, there are no significant differences between men and women, according to the results of Chi-square test.

According to the results of Chi-square test, there is a statistical significant difference in the use of collaborative platforms for rental accommodation depending on age. The results are expected, given that 89.06% of the respondents who use most of these platforms are the youngest category dominated by millennials. With the rise of respondent age, the use of these platforms is declining. According to the results of Chi-square test, there is a statistical significant difference in the use of collaborative platforms for renting transportation vehicles and taxis depending on age, as well. Collaborative platforms for renting transportation vehicles and taxis are mostly used by people over 60, which may be explained by their greatest need for this type of service. Then, there is the youngest group of respondents, which includes millennials, because there are those among them who do not own their own vehicles.

The lowest percentage of use of this type of service is observed in middle-aged people, who are both financially best-fit and mostly own a vehicle. Chi-square test showed that there is a statistical significant difference in the use of collaborative platforms for dining services depending on age, too. The youngest age category of respondents are those who make the most of dining services through collaborative platforms. It was as expected, given the fast pace of their life and lifestyle. There is no statistical significant difference in the use of collaborative platforms for travel experience organization services depending on age, according to the results of Chi-square test.

It can therefore be concluded that the youngest group of respondents is the one which uses the most of collaborative platforms for different types of tourism services, and this is a very important result, which coincides with similar research in the world: (Flash Eurobarometer 438, 2016), (Treapăt, et al., 2018), (World bank group, 2018). This data points to the potential for more intensive use of these platforms in the future, as younger generations have a greater propensity to use them.

Table 7: *Consumer satisfaction and its antecedents in the sharing economy*

Question	Count/Percent	1	2	3	4	5
Evaluate the degree to which you find such collaborative platforms useful	Count	0	0	50	130	231
	Percent	0	0	12.16	31.63	56.21
Evaluate the degree to which you find such collaborative platforms easy to use	Count	0	5	95	180	131
	Percent	0	1.22	23.11	43.80	31.87
Evaluate the degree to which you consider such collaborative platforms to be trendy	Count	0	0	35	85	291
	Percent	0	0	8.52	20.68	70.56
Evaluate the extent to which you believe that such collaborative platforms contribute to money saving	Count	0	20	145	130	116
	Percent	0	4.87	35.28	31.63	28.22
Evaluate the extent to which you consider such collaborative platforms to contribute to environmental preservation	Count	40	30	185	80	75
	Percent	9.73	7.30	45.01	19.46	18.25
Evaluate the extent to which you have confidence in such collaborative platforms	Count	5	15	117	182	92
	Percent	1.22	3.65	28.47	44.28	22.38
Evaluate to what extent you were satisfied with the services you received using some of these collaborative platforms	Count	0	5	60	170	176
	Percent	0	1.22	14.60	41.36	42.82

Source: *Created by the authors based on survey*

Of the total sample of 482 respondents, 411 answered that they had used collaborative platforms to participate in the sharing economy. So we analyzed the consumer satisfaction and its antecedents only for those respondents who used some of the collaborative platforms.

The highest percentage of respondents (84.18%) rated their satisfaction with the use of collaborative platforms in the sharing economy with high grades 4 and 5. This result is very important as it indicates that the use of these platforms will grow in the future. Consumer satisfaction leads to loyalty of consumers, as well as positive word of mouth communication contributes to attracting new consumers of services and products.

Table 8: *Correlations between consumer satisfaction and its antecedents*

Marked correlations are significant at $p < .05000$ N=411	
	Evaluate to what extent you were satisfied with the services you received through the use of some collaborative platforms
Evaluate the degree to which you find such collaborative platforms useful	0.44
Evaluate the degree to which you find such collaborative platforms easy to use	0.57
Evaluate the degree to which you consider such collaborative platforms to be trendy	0.38
Evaluate the extent to which you believe that such collaborative platforms contribute to money saving	0.47
Evaluate the extent to which you consider such collaborative platforms to contribute to environmental preservation	0.36
Evaluate the extent to which you have confidence in such collaborative platforms	0.58

Source: *Created by the authors based on survey*

Correlation analysis showed that there were positive correlations between satisfaction and all factors examined, with intensity of intercorrelations which differs. Consumer satisfaction with the use of collaborative platforms in the sharing economy is most influenced by their confidence in such platforms (the Pearson coefficient of correlation is 0.58). This is followed by consumers' opinions on how easy these platforms are to use, followed by consumers' views on how much these platforms have an impact on saving money, followed by the degree to which consumers find such applications useful, how trendy they are, and finally how much they contribute to environmental protection. These results provide guidance to service providers and platform owners in the sharing economy what factors to focus on in order to achieve consumer satisfaction. The analysis of the obtained results shows that more than 50% of the respondents agree with all the stated assertions (grades 5 and 4) about the opportunities that participation in the sharing economy in tourism offers. The highest percentage of respondents agrees the most with the statement that collaborative platforms contribute to attracting tourists of different demographic characteristics and from different markets. The mean is 4.16. This answer indicates a great chance that such platforms give tourism development. "For example, homes with a kitchen and multiple bedrooms can attract families or other groups who might not be able to afford multiple hotel rooms, or might not use hotel services" (World bank group, 2018, p.24).

Table 9: *Consumers attitudes toward the opportunities for participating in sharing economy in tourism*

Question	Count/ Percent	1	2	3	4	5	Mean	Std. Dev.
Evaluate the extent to which you agree with the statement that collaborative platforms contribute to attracting tourists of different demographic characteristics and from different markets	Count	0	5	112	165	200	4.16	0.81
	Percent	0	1.04	23.24	34.23	41.49		
Evaluate the extent to which you agree with the statement that collaborative platforms contribute to boosting consumer confidence to visit a destination in a new way and try new products	Count	0	15	157	145	165	3.95	0.89
	Percent	0	3.11	32.57	30.09	34.23		
Evaluate the extent to which you agree with the statement that collaborative platforms contribute to reducing the barriers to entrepreneurship in this area	Count	0	30	121	221	110	3.85	0.84
	Percent	0	6.22	25.10	45.86	22.82		
Evaluate the extent to which you agree with the claim that collaborative platforms are useful innovation to manage the rise and fall of demand and help in times of crisis	Count	6	10	191	180	95	3.72	0.84
	Percent	1.25	2.07	39.63	37.34	19.71		
Evaluate the extent to which you agree with the claim that collaborative platforms have relatively small negative environmental footprint	Count	15	61	145	125	136	3.63	1.11
	Percent	3.11	12.66	30.08	25.93	28.22		
Evaluate to what extent you agree with the statement that collaborative platforms allow real-time visitor data to be collected	Count	0	30	147	160	145	3.87	0.91
	Percent	0	6.22	30.50	33.20	30.08		

Source: *Created by the authors based on survey*

The smallest percentage of respondents agrees with the statement that collaborative platforms have relatively small negative footprint on the environment. But the mean is 3.63, which is above the average grade. According to Brozović et al. (2019), 52% of Europeans emphasize environmental protection as a significant motive for participation in the sharing economy. Besides, P2P accommodation rentals provide an opportunity to use existing buildings instead of building new structures so they limit the built footprint and preserve historic buildings (World bank group, 2018).

Table 10: *Consumers attitudes toward the challenges for participating in sharing economy in tourism*

Question	Count/ Percent	1	2	3	4	5	Mean	Std. Dev.
Evaluate the extent to which you agree with the statement that collaborative platforms can be unregistered and unregulated	Count	20	91	141	105	125	3.46	1.18
	Percent	4.15	18.87	29.25	21.78	25.93		
Evaluate the extent to which you agree with the claim that collaborative platforms may not comply with tax laws	Count	20	35	121	171	135	3.76	1.07
	Percent	4.15	7.26	25.10	35.48	28.01		
Evaluate the extent to which you agree with the claim that collaborative platforms can cause a problem in the residential community	Count	56	70	121	90	145	3.41	1.35
	Percent	11.62	14.52	5.10	18.68	30.08		
Evaluate the extent to which you agree with the statement that collaborative platforms can contribute to raising apartment rental prices	Count	36	60	115	136	135	3.57	1.23
	Percent	7.47	12.45	23.86	28.22	28.00		
Evaluate the extent to which you agree with the statement that collaborative platforms can negatively affect hotel accommodation, which plays a significant role in the employment of the population	Count	16	55	150	206	55	3.47	0.95
	Percent	3.32	11.41	31.12	42.74	11.41		
Evaluate the extent to which you agree with the statement that collaborative platforms can only contribute to the profits of a smaller group of people	Count	31	50	196	115	90	3.37	1.10
	Percent	6.43	10.37	40.66	23.86	18.68		

Source: *Created by the authors based on survey*

Analyzing the results of the opinions of respondents regarding the challenges that the collaborative platforms in the sharing economy in tourism bring, the following can be noted as the biggest threats: collaborative platforms may not comply with the tax legislation, collaborative platforms can contribute to raising apartment rental prices and collaborative platforms may negatively affect hotel accommodation which has a significant role in the employment of the population. The results that we have got are in accordance with the findings in the existing literature. The rapid growth of the sharing economy raises a number of important questions for tourism policy makers. Some of them are about how they should approach the sharing economy in areas such as regulation and taxation (OECD, 2016). Many companies in the field of tourism, especially in the field of accommodation and transportation, see their businesses in danger due to the accelerated development of collaborative tourism (Stiubea, 2018). A key complaint in large cities that are

already experiencing a shortage of affordable housing is that short-term rentals are pushing up housing costs and restricting the availability of apartments to rent or lease. This drives lower-income residents farther from the city and worsens already tight housing markets (World bank group, 2018). These are some of the problems we need to think about at the macro level and look for solutions to overcome them.

Conclusion

Based on the literature review and the survey carried out in relation to the consumer attitudes in Serbia, we can conclude that sharing the economy in tourism is a business model that will surely dominate in the future. The high rate of consumer participation in the use of collaborative platforms in the area of accommodation and dining shows the importance that the sharing economy has nowadays in Serbia. However, more intensive use of such platforms can be expected in the future, as research both around the world and in Serbia has shown that these platforms are used the most by millennials but the generation Z can be expected to use them even more. In addition, it is noticeable that although males in Serbia use collaborative platforms for renting accommodation more compared to women, the differences are not so pronounced. Thus, both males and females can be characterized as significant users of these services. It is only important that service providers and company owners of collaborative platforms adapt their internet marketing strategy depending on whether they want to focus their services more on men or women. Also, the results suggest that the participation of the sharing economy will grow since consumers are showing a high degree of satisfaction with the use of collaborative platforms. Consumer satisfaction with collaborative platforms in the sharing economy is most influenced by their confidence in such platforms, then the degree to which these platforms are easy to use, how much they contribute to saving money, followed by the degree to which consumers find such applications useful, then how much they are trendy, and ultimately how much they contribute to environmental protection. These are factors that both service providers and collaborative platform owners need to focus on to ensure the satisfaction of their service users and to be able to attract new users. The evident increase in the importance of the sharing economy within tourism poses numerous opportunities to many key stakeholders in the Serbian tourism industry, as well as challenges. On the one hand, it opens up the possibility for attracting tourists of different demographic characteristics and from different markets more easily and more quickly. It opens the possibility for more intensive development of entrepreneurship in the field of tourism, enhances consumer confidence to visit different destinations in a new

way and try new products. On the other hand, the biggest problem lies in solving legal regulations, which should enable equal participation of both participants in the sharing economy and participants in the traditional economic model. In addition, hotel managers face the great challenge of coping with the increasing competition induced by the emergence of collaborative platforms and the increasing participation of individuals in rental accommodation in the future. The issue of environmental protection and conservation of natural resources in Serbia is also a segment that needs to be analyzed in the future. The recommendation for further research is to study in more detail the correlation between the development of the sharing economy in tourism and environmental footprint.

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References

1. Barbu, C.M., Florea, D.L, Ogarcă, R.F., Barbu, M.C.R. (2018). From Ownership to Access: How the Sharing Economy is Changing the Consumer Behavior. *Amfiteatru Economic*, Vol. 20, No. 48, 373-387.
2. Brozović, V., Hrastić, F. Meštrović, L., Bilić, H., Naletina, D., Petljak, K. (2019). Ekonomija dijeljenja: poslovni model budućnosti?. *Zbornik Ekonomskog fakulteta u Zagrebu*, Vol. 17, No. 1, 33-61.
3. Ćirić, M., Počuča, M., Raičević, V. (2014). Level of customer orientation and customer protection in hotels in Serbia. *Economics of Agriculture*. Vol. 61, No. 1, 25 – 39.
4. Ćirić, M., Ignjatijević, S., Cvijanović D. (2015). Research of honey consumers behavior in province of Vojvodina. *Economics of Agriculture*, Vol. 62, No. 3, 627 – 644.
5. European Commission (2016). *A European agenda for the collaborative economy*, 1-16, <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-356-EN-F1-1.PDF> (9 November 2019)
6. Flash Eurobarometer 438 (2016). *The use of collaborative platforms*, 1-21, https://data.europa.eu/euodp/en/data/dataset/S2112_438_ENG (9 November 2019)

7. Hamari, J., Sjöklint, M., Ukkonen, A. (2015). The Sharing Economy: Why People Participate in Collaborative Consumption. *Journal of the Association for Information Science and Technology*, Vol. 67, No. 9, 2047-2059.
8. Ilić, D., Tešić, A. (2016). The relationship between supply chain management strategy, marketing, logistics and company performance for breweries in Serbia. *Economics of Agriculture*, Vol. 63, No. 4, 1157-1168.
9. Juul, M. (2017). *Tourism and the sharing economy*, Briefing, European Parliament, 1-10. [http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595897/EPRS_BRI\(2017\)595897_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595897/EPRS_BRI(2017)595897_EN.pdf) (9 November 2019)
10. Onete, C.B., Pleșea, D., Budz, S. (2018). Sharing Economy: Challenges and Opportunities in Tourism. *Amfiteatru Economic*, Vol. 20, Special No. 12, 998-1015.
11. OECD (2016). Policies for the tourism sharing economy. In *OECD Tourism Trends and Policies 2016*, OECD Publishing, Paris.
12. OECD (2019). *The Sharing and Gig Economy: Effective Taxation of Platform Sellers: Forum on Tax Administration*. OECD Publishing, Paris.
13. Stiubea, E. (2018). New Tendencies in Tourism: The Sharing Economy. *9th International Conference of Doctoral Students and Young Researchers*, 6(1), 239-242.
14. Treapăt, L.M., Gheorghiu, A. Ochkovskaya, M. (2018). A Synthesis of the Sharing Economy in Romania and Russia. In: E.M. Vătămănescu, F. Pânzaru, eds. 2018. *Knowledge Management in the Sharing Economy*. Cham: Springer, Cham. Ch. 4.
15. Vary, A. P., Ilić, D. (2017). Country positioning with ICT – a case study of "E-stonia". In Soleša, D., Šimović, V., Rosi, B., eds. 2017. *Innovation, ICT and Education for the next Generation*, Faculty of Economics and Engineering Management, Novi Sad, 382-402.
16. Wallenstein, J., Shelat, U. (2017). BCG, *Hopping Aboard the Sharing Economy*, <https://www.bcg.com/publications/2017/strategy-accelerating-growth-consumer-products-hopping-aboard-sharing-economy.aspx> (19 November 2019)
17. World bank group (2018). *Tourism and the sharing economy*, 1-50. <http://documents.worldbank.org/curated/en/161471537537641836/pdf/130054-REVISED-Tourism-and-the-Sharing-Economy-PDF.pdf> (9 November 2019)