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TRANSPORT SERVICES IN THE CREATION OF PACKAGE TOURS BY TOUR OPERATORS

Usluge transporta u kreiranju paket aranžmana od strane turoperatora

Abstract

Tour operators are the most important business systems in the international tourism market when it comes to vacations as a form of travel. The basic product of a tour operator is a package tour. Package tours connected by two or more different kinds of services are grouped into a single package of services which is sold at a unique price. Due to considerable competitive pressure in the tourism market, the competitiveness of the created package tours, as well as business success, depend directly on understanding the consumer expectations and preferences and on the degree of adaptability of the offered services. If consumer preferences are not understood and if the role of different services unified into package tours is not adequately perceived, the probability to sell those tours at a projected price is significantly reduced. When it comes to vacations, in more than 95% of cases transport services are part of the package tour. The way in which different forms of transport services are included in package tours, as well as the selected level of quality and characteristics of the chosen services, represent the key success factors for achieving competitive advantage on the market. The aim of this paper is to analyze the importance of different characteristics of transport services in package tours offered by tour operators using the AHP methodology. The analysis shall be carried out on a sample of around 400 participants in Serbia who used the package tour at least once in the last three years in order to determine the importance of different characteristics of transport services in package tours.

Keywords: *package tour, transport services, tour operators, AHP, product competitiveness.*

Sažetak

Turoperatori su najznačajniji poslovni sistemi na internacionalnom turističkom tržištu kada su u pitanju odmori kao oblik putovanja. Osnovni proizvod turoperatora su paket aranžmani. Paket aranžmani objedinjuju dve ili više različitih usluga u jedinstven paket usluga koji se prodaje po jedinstvenoj ceni. Izražen konkurentski pritisak na turističkom tržištu uticao je na to da konkurentnost kreiranih paket aranžmana, kao i poslovni uspeh, direktno zavisi od razumevanja, očekivanja i preferencija potrošača, kao i stepena prilagođenosti ponuđenih usluga. Ukoliko se ne razumeju preferencije potrošača i ako se na pravilan način sagleda uloga različitih usluga objedinjenih u paket aranžmane, u značajnoj meri je smanjena verovatnoća njihovog plasmana po projektovanoj ceni. Transportne usluge, kada su u pitanju odmori turista, u više od 95% slučajeva predstavljaju deo paket aranžmana. Način na koji će različiti oblici transportnih usluga biti uključeni u paket aranžmane, kao i odabrani nivo kvaliteta i karakteristike odabranih usluga, predstavljaju ključne faktore uspeha za ostvarivanje konkurentske prednost na tržištu. Cilj rada je da se na osnovu AHP analizira značaj različitih karakteristika transportnih usluga u paket aranžmanima turoperatora. Analiza će biti sprovedena na uzorku od oko 400 ispitanika u Srbiji koji su u poslednje tri godine minimalno jednom koristili paket aranžman, kako bi se utvrdio značaj različitih karakteristika transportnih usluga u paket aranžmanima.

Ključne reči: *paket aranžman, usluge transporta, turoperatori, AHP, konkurentnost proizvoda.*

Introduction

Tour operators are among the main actors in the tourism value chain. Their role is especially important when it comes to vacations as a form of tourism travels [13, pp. 403-412]. The origins of tour operators trace back to the period between the 1950s and 1960s, when air transport developed significantly. Expansion of air transport enabled the development of tourism in destinations far away from the source of demand, which significantly opened up the development perspective of tour operator business [8, p. 147]. Deriving from tourism agencies, tour operators widened their business activity to include organizing voyages instead of being classic intermediaries in the sale of tourism services. In modern conditions, tour operator business unifies different tourism services, thus creating complex products which are then distributed to the final users of those services [40, pp. 1-20]. Tour operators are companies which enter into negotiations with hotels, transport companies and other suppliers of tourism services in order to create package tours by combining the services they offer into tours and offering those tours as final products in the tourism market [41, pp. 349-365].

Tour operators are the most powerful and influential actors in the industry of organized vacations [5, pp. 23-53]. Their importance is primarily seen in the fact that they have the ability to direct the tourism demand towards certain destinations [39, pp. 298-314], as well as the ability to control the channels of distribution and connect different actors into a unified whole [26, pp. 65-77]. A particular proof of the stated is Europe, since during the last five decades tour operators have made the greatest contribution to the realization of international journeys in the form of vacations [26, pp. 65-77]. The European market was dominantly taken over by a few tour operators as the demand was characterized by uniformity and standardization, which resulted in very similar and mutually exchangeable package tours [5, pp. 23-53]. That gave rise to a strong competition among tour operators and led to the success of the destination where tourists spend their vacation and hotels located there, which is in direct correlation with the degree of their presence in package tours of big tour operators [5, pp. 23-53]. Based on the insight into the financial reports of TUI Group or Thomas Cook, the two biggest global tour operators, these companies annually provide services to more than 56 million passengers and achieve a total income of more than 30,000 million euros [53]. In Serbia, according to YUTA, the association gathering the greatest number of tour operators and tourism agencies, in 2018, 854,311 tourists traveling for the purpose of vacation opted for package tours, and more than 70% of those tours contained transport services. Globally, the number of passengers using tour operator services, as well as package tours, has increased by 2.1% annually over the last 10 years [52].

Currently, the tourism market is undergoing significant changes, affecting the characteristics of tour operator business. Namely, it has seen an increase in the number of low-cost airlines, the appearance and development of online tourism agencies (OTA), an increase in direct sales and in the number of independently organized journeys. All of that has led to a decline in the importance of the role of tour operators in the tourism market [4, pp. 150-161]. As market conditions have changed, tour operators are also forced to change and adapt their business policies, their price policy primarily, as well as marketing strategies in order to adapt them to tourist preferences [2, pp. 375-385]. In their study, Klemm and Parkinson have demonstrated that tour operators are shifting from mass and standardized package tours to placing individual and adjusted package tours on particular market segments. Also, tour operators have been given recommendations for the formulation of business policies whose aim would be establishing fruitful cooperation and partnership among tour operators in massive markets and tourist destinations [22, pp. 367-385]. Despite these recommendations, a certain number of tour operators tend to individually develop and promote their own brands with the aim of increasing their profit margin, not paying sufficient attention to and not placing enough emphasis on the development of destinations and accommodation capacities. On the other hand, the strategies of vertical integration of tour operators with tourist agencies, airlines and accommodation capacities have introduced them to completely new spheres of business.

That way tour operators have become stock owners or hotel owners and owners of other accommodation capacities in destinations where they do business, which is why there is an increased interest for their survival and further development [22, pp. 367-385].

Package tours offered by tour operators

According to one of the market models, tourism represents an object, and the connection between the country of origin and the tourist destination is the subject [28, pp. 367-384]. By establishing the connection between the country of origin and the destination, tourists are trying to find a way to satisfy their needs for travel and vacation. One of the ways to do that is to opt for a package tour offered by tour operators [28, pp. 367-384]. By integrating different tourism products into one tour operators play an important role of an intermediary in tourism activity. Tour operators are located between supply and demand in the tourism market and strive to maximize their business results by offering package tours [38, pp. 501-512]. The intermediary role of a tour operator in the tourism market is seen in the creation of a "dream" package. This role of theirs is best seen through the possibility to inspire and meet certain aspirations of the consumer by integrating different services into a package tour [38, pp. 501-512].

There are different definitions of package tours. A package tour consists of two or more service components sold as a package in the final market. From the point of view of the European market, package tours represent a predefined combination of accommodation, transport and/ or other significant tourism services (Council Directive 90/314/EEC, 1990). The European market is characterized by a high degree of participation of package tours in the total volume of vacations as a form of tourism travel. At the beginning of the new millennium, tour operators are becoming key players in the vacation market due to successful integration of transport and accommodation capacities into package tours in a manner that significantly lowers their prices.

Scientific literature contains numerous studies whose aim is to identify the importance of individual components of the package tours for total tourist satisfaction [21, pp. 18-33]. The actors on the tourism supply side strive to offer tourists unforgettable, satisfactory, valuable experiences, thus creating value [33, pp. 343-354]. Tourism companies should create preconditions for gaining such experience, but the outcome is the direct consequence of the tourist's reaction in the process of obtaining the service [23, pp. 136-149]. Tourists see package tours as unique products and value this experience in a holistic manner, and not through particular services [47, pp. 98-110]. The majority of studies dealing with the analysis of the created value of the package tour are focused on surveys on tourist satisfaction with the package tour as a whole, and describe the relationship between the degree of tourist satisfaction and the grading of particular components as linear. On the other hand, a report published on behalf of the European Commission [36, pp. 172-194] has shown that, when one component of the value chain is inadequate, all actors shall probably suffer consequences, which derives from the fact that tourists evaluate a package tour as a whole. The findings of this study therefore support the claim that actors in the tourism value chain should work as a group, as a team, not individually [49, pp. 345-358].

There is also a different approach to the analysis of influence of the package tour on the creation of value in tourism. According to the Kano two-dimensional model, the quality attributes of package tours and satisfaction have a non-symmetrical and non-linear connection. The model shows that certain elements of the package tour can cause satisfaction, but their absence does not necessarily have to lead to dissatisfaction [3, pp. 93-102]. The Kano model defined in such a manner is supplemented by a few more studies, such as those from [50, p. 77].

The importance of the package tour in tourism development is considered vital since it lowers the price, creates a unique experience and improves its quality, thus improving the quality of the entire tourism industry [37, pp. 108-117]. The analyses indicate that the created value for tourists is significantly influenced by tourist guides which enable the execution of the services defined by package tours [18, pp. 305-315]. Besides the quality of particular service processes and the role of guide, tour operators are also partially responsible for the performance of their partners, including hotels and airlines, since they are the

ones choosing the services, integrating them into package tours and offering them to clients [37, pp. 108-117].

Transport services and package tours

Tourism and transport are mutually closely connected and tourism as a branch of economy could not survive without the developed transport infrastructure [42, pp. 1767-1777]. Practically, it is impossible to consider the tourism sector without transfer. A voyage, the idea about tourism products and the entire tourism experience begin and end with transport services [29, pp. 377-385]. The constitutive element of a great number of package tours is the service of transport. A great number of authors have analyzed the role of transport in tourist satisfaction when using package tours [5, pp. 23-59]. The characteristics of transport in the sense of "ease of reaching the destination" and the "accessibility of destination" have been defined as important attributes of transport services as regards their contribution to tourist satisfaction [6, pp. 220-229].

Transport is defined as a very important part of the tourism industry bearing in mind that it connects tourists with the tourist attractions and destinations. The development of transport, transport vehicles and an increase in using new technologies in transport services have definitely led to a speedy development of tourism and tour operator business [45, pp. 5631-5640]. The statistics of the World Tourism Organization shows a significant growth in the number of tourism travels between 2005 and 2018. According to the data of the World Tourism Organization (UNWTO), the number of foreign tourists in 2017 increased by 7% compared to the previous year, i.e., 1.3 billion tourists were registered, generating 1.340 billion dollars of income from tourism, which is an increase of 5% compared to the previous year [52]. It is estimated that by 2030 the number of international tourist arrivals will reach the level of 1.8 billion [52]. The trend can be explained by different factors; however, it is often pointed out that one of the key factors for the development of the transport sector is the usage of technological innovation in transport services [14, p. 19].

The means of transport in tourism are primarily used in order to provide the tourists with transport from their places of residence to their target destination. The development of electric and diesel engine has brought about radical changes in the domain of transport, while speed has become one of the most important factors. When opting for the means of transport, a tourist considers the following factors: the length of travel, distance, comfort, security, status, benefits, price, geographic position and competition. Among multiple determinants of attractiveness of a certain location from a touristic perspective, accessibility is usually one of the three key factors. Destinations with beautiful nature, cultural and historic monuments or sunny and sandy beaches will have difficulties becoming successful tourism destinations if the adequate transport service is lacking [28, pp. 367-387].

A study was carried out by analyzing the influence of different transport characteristics on the degree of tourist satisfaction [43, pp. 136-144]. The results of the study are very similar to the results of the empirical analysis carried out by Friman more than two decades ago [15, pp. 4-12]. The following elements were identified as the most important factors of tourist transport: simplicity in usage, efficiency and security, as well as parking in an appropriate location. Friman et al. broadened the analysis by dividing the first factor into two components: simplicity of obtaining transport information and assistance of employees offering the service. The second identified factor, efficiency and security, refers to the time and security dimension of public transport. The precision and length of travel are dimensions which represent the preconditions for the realization of reliable transport [9, pp. 10-14]. These two elements influence the degree of tourism satisfaction [17, pp. 499-517]. Security in travel has been identified as one of the key categories of public transport quality indicators for tourists. Although this factor was not identified by Friman et al., it was recognized as a strong factor influencing the perception of the destination and the package tour in the qualitative part of the survey carried out by Thompson [43, pp. 136-144]. The third important factor identified by Friman et al. refers to private as opposed to public transport. Good parking is necessary for both tourists renting a vehicle at the destination and tourists using their own means of transport when arriving in the destination. That is why

it did not appear in the previously conducted research of tourist satisfaction with public transport.

The results of several studies have indicated the availability of the destination and the performance of the means of transport as the most important attributes necessary for total tourist satisfaction. Pritchard and Havitz have concluded that, in the case of Western Australia, tourists have recognized transport as the second most important factor in the total tourist product [34, pp. 25-46].

Transport has a significant role in the improvement of tourist experience. Its role goes beyond the scope of simple passenger transport from one point to another. Thus, transport has become an independent element of the tourist offer and can become an attraction in itself. As such, transport is used to realize sea and river cruises, followed by thematic voyages by train, such as Orient Express, etc. [29, pp. 3777-385]. One of the important factors in making a decision about the type of transport is fun. The study carried out by Gronau and Kagermeier, based on the survey of 2000 households, pointed out two main categories of transport: fun and functionality [16, pp. 123-135]. Based on the obtained answers, seven different groups of people were identified. One of the groups comprises the so-called "calm bon viveurs" who place a great emphasis on the category of fun in transport.

Based on all the results of the previously mentioned studies carried out in the past two decades, it can be concluded with certainty that transport has a significant place in creating value and tourist satisfaction with the package tour while, on the other hand, there is no scientific consensus as to what are the key transport characteristics which greatly influence tourist satisfaction.

The aim of the present empirical research

The idea of the present empirical research is to determine the importance of the transport service for tourists traveling to summer holiday destinations. The analysis focuses on tourists who opt for package tours as a form of product for their summer holiday. The starting point of the analysis were the explained facts that transport is important because it enables reaching the tourist destination [15, pp. 4-12], but also the fact that it is an element that contributes to the attractiveness of the journey [29, pp. 377-385]. Based on literature review, several different characteristics of transport services have been identified as important for the analysis of tourist satisfaction and the competitiveness of a package tour as the basic product of a tour operator. The analyzed factors are shown in Table 1.

The present empirical research has been carried out through three connected iterations. During the first iteration the importance of different characteristics of transport services in the package tour was graded using the AHP model. The second research iteration referred to determining different segments of tourists who opt for package tours based on the grade of importance of different characteristics of transport services during travel. The process of segmentation was not analyzed employing the traditional approach, but rather it started with the assumption that different factors of attractiveness do not have the same importance for tourists who have different preferences, which is why a cluster analysis was used to identify different segments. The third iteration contained the analysis of the efficiency of segmentation based on grading the importance of different characteristics of transport services and the traditional approach to

Table 1: Different characteristics of transport services used by tourists traveling for the purpose of vacation

Research authors	Type of service	Elements of analysis
Bradlei et al., (1989) [9, pp. 10-14]; Friman et al. (1998) [15, pp. 4-12]	Transport service in general	Minimum time needed to reach the destination
Fitzsimmons et al., (2006) [14, p. 122]		Minimum effort during travel
Sorupia, (2005) [42, pp. 1767-1777]		The comfort of transport vehicles
Hensher et al., (2003) [17, pp. 499-517]	Attractiveness of locations that can be visited over the course of transport	Visiting generally known attractions on the way to the destination
Kagermeier (2007) [16, pp. 127-135]		The possibility of shopping and visiting points of interest during the journey
Pritchard et al., (2006) [34, pp. 25-46]		Stops at interesting places

segmentation. One-way ANOVA method was used for testing the efficiency of different criteria of segmentation.

AHP methodology

AHP (Analytic Hierarchy Process) is a complex mathematical model developed more than 30 years ago. The model is based on the so-called fuzzy logic. AHP model starts from the assumption that different elements bear different importance for respondents and by comparing the importance of different elements the grades of relative importance of every element can be obtained. In tourism, the AHP methodology has been applied in a great number of research studies and obtained results have a significant theoretical contribution. In his paper from 2011, Cruch determined the relative importance of different attributes of competitiveness for total competitiveness of the tourism destination. Some other important research papers where AHP methodology was implemented refer to: evaluation of natural attraction of a tourist destination [17, pp. 499–517], selection of a convention site and hotel location [11, pp. 18–33], online personalized attraction recommendation system [18, pp. 305–315], and tourist destination preference evaluation.

Fuzzy AHP is used for grading by performing a pairwise comparison of elements being graded. The fuzzy AHP methodology uses triangular fuzzy numbers based on which final grades of every graded element are calculated. The respondents compare the importance of two alternatives when grading. The importance is determined based on personal grades of every respondent in the following manner: respondents assign more importance to one alternative than to the other and specify the extent to which such alternative is more important. Based on the grades, fuzzy numbers are formed. Fuzzy numbers represent a standard fuzzy set of real numbers which belong to a limited interval.

In this empirical research, respondents compared elements on a five-grade Saaty's scale and determined to which extent one alternative has greater importance compared to the other.

The example of obtaining fuzzy numbers and triangular fuzzy numbers is shown in Table 2.

Based on the obtained grades, a fuzzy comparison matrix is formed using the triangular fuzzy numbers for every respondent. Normalization of the comparison matrix results in an inverse matrix, based on which the grades about the relative importance of every element graded by respondents are obtained.

In order for the grades to be valid when implementing the fuzzy AHP methodology, it is important to test the consistency in respondents' grades. Since comparison is a matter of respondents' personal estimates, they often give inconsistent answers based on which relevant conclusions cannot be drawn. Testing the consistency means determining whether respondents have been truthful in their answers or not [30, pp. 4793–4805]. The consistency is calculated based on the fuzzy comparison matrix. In order to test the consistency, the analysis uses the Saaty's consistency ratio (CR). This ratio indicates whether the respondents' grades have been consistent or not [35, p. 28]. Saaty states that the requirement of 10% cannot be reduced to 1% or 0.1% without trivializing the impact of inconsistency.

The results obtained by implementing the AHP model were then tested by a dual hierarchy analysis in order to determine whether there were differences in the preferences of different elements of value and whether based on those differences different tourist segments could be formed. Afterward, the efficiency of different segmentation criteria was tested based on the ANOVA test.

In order to obtain the necessary results to form the matrix, it is necessary to create a diagram of hierarchy (Figure 1). The hierarchy diagram presents the overview of

Table 2: The manner of obtaining fuzzy numbers on a five-grade Saaty's scale [11, pp. 353–370]

Oral answers about the comparison of the importance of two elements	Fuzzy number	Triangular fuzzy number in martini (l, m, u)
Equal importance	1	(1/3, 1, 3)
Little importance	3	(1, 3, 5)
Strong importance	5	(3, 5, 7)
Very strong importance	7	(5, 7, 9)
Extreme importance	9	(7, 9, 9)

different characteristics of transport services in a manner which clearly depicts their systematization and relations. In order to formulate the diagram of hierarchy shown in Figure 1, the starting point were the most important characteristics of transport services which are important for tourists who opt for package tours offered by tour operators when traveling.

The research sample

The research was conducted on a sample of 50 respondents in the Republic of Serbia. The criterion for the selection of respondents was their experience in using the package tour in the previous three years. It was important for the respondents to meet the necessary criteria so that they would be able to grade the importance of different characteristics of transport services. The research used stratified sampling. The total urban population of Serbia was divided into four stratums according to the geographical criterion. For each of the stratums a minimum number of respondents needed for the sample to be representative was determined according to the following criteria: (1) age, (2) personal monthly income, and (3) education.

Respondents were chosen randomly from two cities from each geographical region.

The survey was carried out by telephone, randomly choosing landline phone numbers from the databases of Telekom Serbia. Respondents gave answers to questions which were based on the demographic characteristics defined as the criteria of segmentation (gender, age, personal income and degree of education) and whose aim was to reveal their experience regarding travel. On average, every twentieth contact was suitable for survey. The reasons for not being suitable were the following: (1) not answering the phone, (2) refusing to participate in the survey; (3) not being eligible according to the criteria of experience in travel and (4) not fitting in the needed demographic profile (for example, at the final stage of the survey, only respondents who did not finish high school were required).

Discussion of the obtained results

The processing of data included analyzing the answers of every individual respondent. The consistency ratio was generated for every comparison made by respondents.

Figure 1: The hierarchy diagram of value elements in travel decision-making
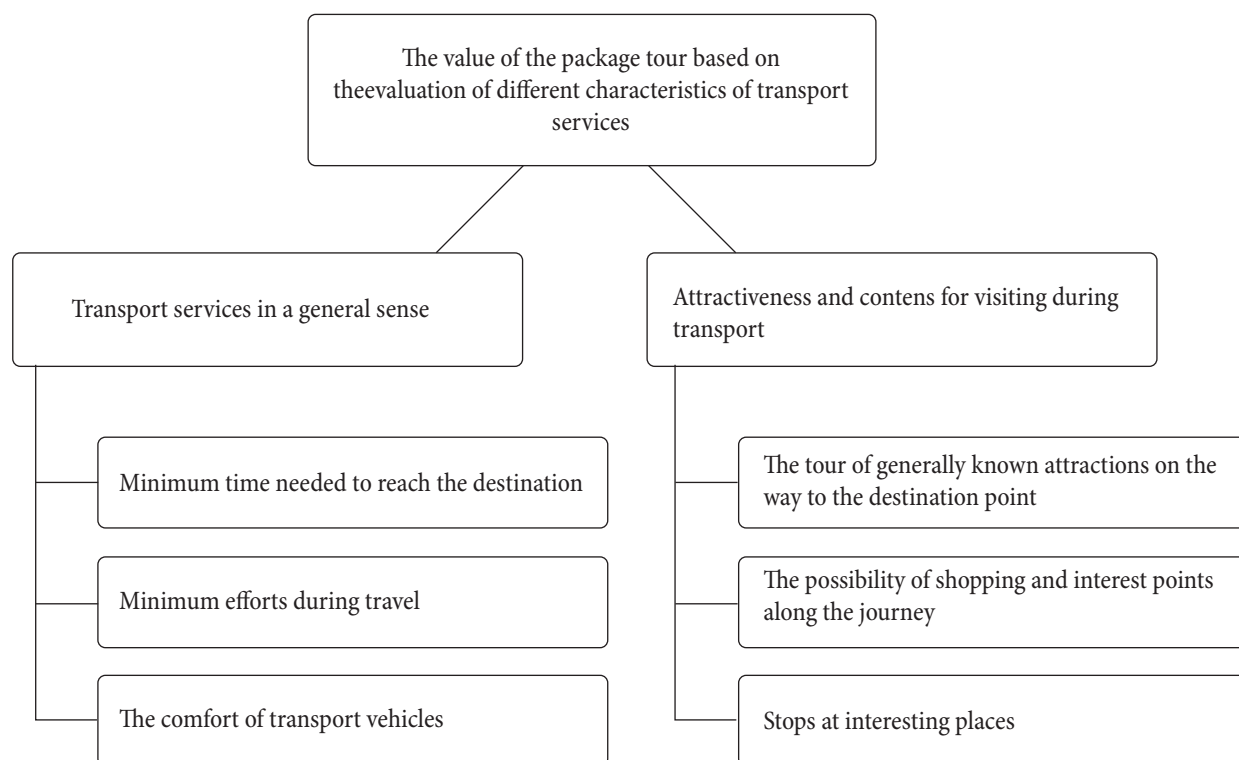
Table 3: The grade of importance of different characteristics of transport services in the package tour

	Level 1 (variables)	Grade	Level 2 (variables)	Grade	Rank
The value of the package tour based on the evaluation of different characteristics of transport services	Transport service in general	0.61	Minimum time needed to reach the destination	0.14	5
			Minimum effort during travel	0.20	2
			The comfort of transport vehicles	0.22	1
	Attractiveness of locations that can be visited over the course of transport	0.39	Visiting generally known attractions on the way to the destination	0.17	4
			The possibility of shopping and visiting points of interest during the journey	0.09	6
			Stops at interesting places	0.18	3

C. I. = 0.094, C. R. = 0.016, C. I. = 0.0089, C.R. =0.011, C.I. =0.041, C.R. = 0.012, C. I. = 0.043, C. R. = 0.032.

Every comparison with the consistency ratio greater than 0.05 (R > 0.05) was rejected as inconsistent. The respondents who had one or more inconsistent comparisons and whose consistency ratio was greater than 0.05 were not further analyzed and were, thus, excluded from the final conclusion. It was determined that there were 173 inconsistent answers given by 121 respondents. The analyses did not include respondents whose all answers were consistent, 729 respondents in total.

The research carried out implementing the AHP methodology yielded the results shown in Table 3.

Based on the obtained results it can be noted that tourist who travel to summer holiday destinations find the transport service in general (grade 0.61) more important than the attractiveness of locations that can be visited over the course of transport between two destinations (grade 0.39). The most important characteristic of a transport service is the comfort of the transport vehicle, while the least important characteristic is the possibility of shopping and visiting points of interest during the journey in order to make it as interesting as possible.

In order to analyze the degree of demand heterogeneity, a cluster analysis was performed, while a double cluster analysis was conducted to determine segments. The double cluster analysis includes two phases of clustering: (1) a priori clustering, based on which the respondents are grouped into sub-clusters and (2) hierarchical clustering, which includes observation of all clusters as individual cases and selection of the most efficient clustering based on which segments are defined. Log-likelihood was used as a distance measure, while the clustering criterion was the Schwarz-Bayesian criterion. Such an approach to clustering is recommended for samples bigger than 500 with the analysis employing continuous variables

which is the case with the results obtained in the present research.

Based on the analysis, three independent segments were identified. The size of every segment is represented in Table 4.

Table 4: The size of segments obtained by cluster analysis

	N=	%
Segment 1	470	40.1%
Segment 2	259	59.9%

Based on Table 4, it can be noted that every segment includes over 40% of the population which indicates that the segments are big enough for a more detailed analysis to be justified.

Table 5 shows the grades for every characteristic of a transport service in package tours in both defined segments. Based on the grades, ranks for both segments were determined.

Table 5: Grades for every characteristic of a transport service in package tours in both defined segments

Level 2 (variable)	Grade - Segment 1	Rank - Segment 1	Grade - Segment 2	Rank - Segment 2
Minimum time needed to reach the destination	0.13	5	0.18	3
Minimum effort during travel	0.14	4	0.19	2
The comfort of transport vehicles	0.16	3	0.23	1
Visiting generally known attractions on the way to the destination	0.21	2	0.14	4
The possibility of shopping and visiting points of interest during the journey	0.16	3	0.12	5
Stops at interesting places	0.20	1	0.14	4

The obtained results show that tourists who belong to segment 1, which is somewhat smaller (40.1% of the total population) compared to the other segment, find the possibility of shopping and visiting points of interest during the journey somewhat more important. When it comes to transport services as part of the package tour, this segment of tourists mostly prefers visiting generally known attractions on the way to the destination, followed by stops at interesting places. This segment of tourists also finds the possibility of shopping and visiting points of interest during the journey interesting. They find the transport service in general, e.g., minimum time needed to reach the destination and minimum effort during travel, less important. The most important item for this segment regarding transport services in general is the comfort of transport vehicles. Thus, this segment can be characterized as tourists whose travel adventure begins at the moment they enter the vehicle in their place of residence.

As regards tourists who belong to segment 2, which is greater (50.9% of the total population) compared to the first one, the obtained results show that they find the transport service in general somewhat more important as a characteristic. When it comes to transport services as part of the package tour, this segment of tourists mostly prefers the comfort of transport vehicles, minimum efforts during travel and minimum time needed to reach the destination. This segment finds visiting generally known attractions on the way to the destination, stops at interesting places and the possibility of shopping and visiting points of interest during the journey less important. Thus, this group can be characterized as tourists whose travel adventure begins only when they reach the tourist destination; they regard transport services only as a necessary element, without taking potentially interesting elements of the very transport into consideration.

In order to determine whether the segmentation of the tourism market based on different preferences of the users of transport services within package tours is different compared to the segmentation based on traditional criteria (gender, age, education, monthly income), the following hypothesis was tested during the course of this research:

H_0. There is a greater degree of difference between segments classified according to preferences of different characteristics of transport services within package tours compared to segments of tourists classified according to traditional criteria.

H_1. There is a lesser degree of difference between segments classified according to preferences of different characteristics of transport services within package tours compared to segments of tourists classified according to traditional criteria.

The starting assumption was that if the test results show that: (1) the similarity in grades within segments (the homogeneity within the segment) is greater, and (2) the grade difference between different segments was greater (the heterogeneity between segments) in case of the segmentation based on different preferences when it comes to the characteristics of transport services within package tours compared to the segmentation based on traditional criteria, the hypothesis H_1 can be accepted and H_0 rejected.

In order to test the significance of difference, one-way ANOVA was used. The differences in grades between two or more independent populations were analyzed. ANOVA was employed for the purpose of calculating the two levels of variance distribution of the basic population: (1) variance between samples and (2) variance within the sample.

ANOVA resulted in producing the F-statistics. In the center of analysis was the central limit theorem and it provided an F quotient for every variable, which is used to measure homogeneity within the segments and heterogeneity between the segments. If the difference between the grades within the segment is smaller (a higher degree of homogeneity within the segment) and if the difference in grades between segments is greater, the value of the F quotient is higher and vice versa. Besides the F quotient, the analysis also determines the statistical significance of difference calculated as Sig. If the Sig. value is between 0.05 and 0.01, it can be said with more than 95% of certainty that there are statistically significant differences between the subgroups of the categorical variable (the segment, gender, years, segments obtained by cluster analysis, etc.) and that these differences obtained through analysis of a sample of respondents really exist in a population represented by the sample. If the Sig. value is

greater than 0.05 due to insufficient statistical reliability, it can be stated that there is an absence of statistically significant differences between the subgroups of the categorical variables.

The hypothesis was tested using ANOVA with the help of the SPSS software. The difference between segments grouped on the basis of traditional criteria of segmentation and segments classified according to preferences of the characteristics of transport services within package tours was analyzed. The results are presented in Table 6.

Based on Table 6, it can be concluded that the statistically significant difference between segments obtained on the basis of preferences of characteristics of transport services within package tours compared to segments obtained by implementing the traditional criteria of segmentation - gender, age income, geographic location, education, which means that the H_1 hypothesis is accepted.

The conclusion on the acceptance of H_1, based on the results presented in Table 6, can be drawn from the fact that there is a statistically significant difference for all 6 variables included in the analysis, in case of segments based on preferences of different value elements. In case of segments obtained based on other criteria, there are fewer variables for which there is a statistically significant difference: (1) gender – 0; (2) age – 3; (3) personal income – 2; (4) income per member of household – 2; (5) geographic location – 0; and (6) education – 2. Based on all stated facts, H_1 can be accepted and it can be concluded that the segmentation based on the importance of different attractiveness factors in the process of decision-making is more efficient compared to the usage of traditional criteria.

Concluding remarks

The research carried out employing the AHP method clearly indicates that the process of market segmentation of users of tour operator services needs to be based on the importance of different characteristics of services which are a part of the package tour. The analysis according to preferences and the market needs segmented based on it yield better results than analysis according to the traditional criteria of segmentation (gender, age, etc.). Tourists traveling for the purpose of vacation who opt for package tours of tour operators have different preferences regarding the characteristics of transport services. When analyzing the significance of particular characteristics of transport services, tour operators need to start from two segments. The second segment attaches more importance to the speed of arrival to the tourist destination and the comfort of the transport vehicle. The emphasis on these services in the package tour enables tour operators to achieve competitive advantage within this segment of tourists. The first segment considers visiting generally known attractions on the way to the destination, stops at interesting places and the possibility of shopping and visiting points of interest during the journey more important compared to the speed of arriving to the destination. Both segments care about the comfort of transport vehicles. The

Table 6: ANOVA - F statistics

	Segments according to the preferences		Gender		Age		Personal income		Income per member of household		Geographic Location		Education	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
Transport service in general	2266.5	0.00	0.2	0.65	2.1	0.06	1.0	0.40	2.4	0.05	0.4	0.72	1.6	0.19
Attractiveness of locations that can be visited over the course of transport	2266.5	0.00	0.2	0.65	2.1	0.06	1.0	0.40	2.4	0.05	0.4	0.72	1.6	0.19
Minimum time needed to reach the destination	258.0	0.00	0.0	0.88	0.4	0.86	1.0	0.39	1.5	0.20	1.3	0.28	1.5	0.20
Minimum effort during travel	525.1	0.00	1.2	0.28	1.8	0.12	0.7	0.62	2.7	0.03	1.4	0.24	0.5	0.70
The comfort of transport vehicles	683.6	0.00	0.0	0.93	1.6	0.15	2.3	0.06	3.2	0.01	0.5	0.66	2.1	0.11
Visiting generally known attractions on the way to the destination	524.6	0.00	0.6	0.45	3.1	0.01	3.3	0.01	1.7	0.15	0.1	0.96	4.9	0.00
The possibility of shopping and visiting points of interest during the journey	242.1	0.00	0.1	0.72	3.0	0.01	2.3	0.06	0.5	0.73	1.0	0.41	4.4	0.00
Stops at interesting places	569.0	0.00	0.2	0.70	3.7	0.00	0.3	0.90	2.4	0.05	0.4	0.73	0.2	0.87

two specified segments can represent a starting point for the definition of characteristics of transport services within package tours. Tourist preferences can be analyzed in more detail within each segment, after which an adequate offer of the package tour for the summer holiday destinations can be defined. Since competitive pressure on the market is building up, tour operators have to search for the factors which will secure them competitive advantage. Transport services contained in the majority of package tours can represent a significant factor of achieving competitive advantage.

Although the issues of management and business policies of tour operators are not part of this research, they must not be forgotten. By creating adequate package tours with the right choice of transport services, the managers might partially alleviate the main challenges they are faced with in business, such as strong seasonal concentration, the issue of unused capacities out of season and the issue of demand fluctuation.

This research has several limitations which can be summed up in the following manner: (1) only tourists traveling to summer holiday destinations for vacation have been researched, which is why the conclusions cannot be generalized to all types of package tours (for example, travels to winter destinations, city tours, etc.); (2) the analysis focused on tourists from Serbia, which is why its results cannot be applied to all tourists, although the conclusions are certainly relevant for tour operators which do business on the Serbian market; and (3) the research did not encompass the price of travel which can make the importance of particular characteristics of transport services relative to a large extent, if their inclusion would lead to a rise in the prices of package tours.

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